

New Jersey Department of Environmental Protection Division of Water Monitoring and Standards Bureau of Water Quality Standards and Assessment



2010 New Jersey Integrated Water Quality Monitoring and Assessment Report



January 2012

State of New Jersey Chris Christie, Governor Kim Guadagno, Lt. Governor NJ Department of Environmental Protection Bob Martin, Commissioner

2010 New Jersey Integrated Water Quality Monitoring and Assessment Report

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Bob Martin, Commissioner, New Jersey Department of Environmental Protection John Plonski, Assistant Commissioner, Water Resources Management Jill Lipoti, Ph.D., Director, Division of Water Monitoring and Standards Debra Hammond, Chief, Bureau of Water Quality Standards and Assessment

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Primary Authors/Editors

Kevin Berry, Bureau of Water Quality Standards and Assessment Sandra Cohen, Bureau of Water Quality Standards and Assessment

Primary Water Quality Data Assessors/Database Managers

Kevin Berry, Bureau of Water Quality Standards and Assessment Danielle Donkersloot, Bureau of Water Quality Standards and Assessment Mike Kusmiesz, Bureau of Marine Water Monitoring Leigh Lager, Bureau of Freshwater and Biological Monitoring Paul Morton, Division of Water Monitoring and Standards Coleen Weber, Bureau of Freshwater and Biological Monitoring Anne Witt, Bureau of Environmental Analysis and Restoration

Water Quality Data Assessment/Database Input Assistance

Jason Allen, Bureau of Environmental Analysis and Restoration Christina Aiello, Division of Water Monitoring and Standards (intern) Ariane Giudicelli, Bureau of Environmental Analysis and Restoration Patricia Ingelido, Bureau of Environmental Analysis and Restoration Frank Kaplinski, Bureau of Environmental Analysis and Restoration Helen Pang, Bureau of Environmental Analysis and Restoration Carol O'Donnell-Key, Bureau of Freshwater and Biological Monitoring Victoria Vanable, Bureau of Water Quality Standards and Assessment (intern) Coleen Weber, Bureau of Freshwater and Biological Monitoring

GIS Mapping and Coverages, and Other Data Assessments

Chris Kunz, Bureau of Freshwater and Biological Monitoring Leigh Lager, Bureau of Freshwater and Biological Monitoring Judy Louis, Office of Science Gigi Mallepalle, Bureau of Water Quality Standards and Assessment John Sell, Bureau of Freshwater and Biological Monitoring William Heddendorf, Bureau of Marine Water Monitoring

WQDE Data System Administrator Paul Morton, Division of Water Monitoring and Standards

New Jersey Assessment Database Development

Jack Pflaumer, Bureau of Water Quality Standards and Assessment (on Active Military Duty)

Report Coordination, Design, and Layout Sandra Cohen, Bureau of Water Quality Standards and Assessment

Contributing Authors (Department of Environmental Protection):

Sunila Agrawal, Air Quality Permitting Mary Jo Aiello, Bureau of Pretreatment and Residuals Christina Aiello, Division of Water Monitoring and Standards (intern) Mike Aucott, Office of Science Katherine Axt, Bureau of Water Quality Standards and Assessment (intern) Tom Belton, Office of Science Alena Baldwin-Brown, Division of Water Monitoring and Standards Theresa Bottini, Land Use Management Raymond Bousenberry, New Jersey Geological Survey Fred Bowers, Bureau of Nonpoint Pollution Control (retired) Gary Buchanan, Office of Science Kimberly Cenno, Bureau of Environmental Analysis and Restoration Bob Connell, Bureau of Marine Water Monitoring (retired) Ruth Ehinger, (formerly) Land Use Management Marc Ferko, Office of Quality Assurance Bruce Friedman, (formerly) Bureau of Nonpoint Pollution Control Barbara Greenhaugh-Weidman, Office of Land Use Planning Nancy Hamill, Publicly Funded Site Remediation Program Bill Heddendorf, Bureau of Marine Water Monitoring Sarah Helble, Bureau of Water Quality Standards and Assessment (intern) Robin Heston, Solid and Hazardous Waste Management Barbara Hirst, Bureau of Environmental Analysis and Restoration Kathleen Hitchner, Office of Land Use Planning Jeffrey Hoffmann, New Jersey Geological Survey Kyra Hoffmann, Land Use Management Steve Jandoli, Green Acres Victoria Jenkins, Municipal Finance and Construction Branden Johnson, Division of Water Supply Eric Knudsen, Green Acres Al Korndoerfer, Bureau of Freshwater and Biological Monitoring (retired) Chris Kunz, Bureau of Freshwater and Biological

Helaine Liwacz, Bureau of Marine Water Monitoring Sue Lockwood, Land Use Regulation Virginia Loftin, Bureau of Marine Water Monitoring Judy Louis, Office of Science Tali MacArthur, (formerly) Coastal Management and Watershed Restoration Bob Mancini, Coastal Management and Watershed Restoration William Mates, Office of Economic Analysis Dave McPartland, Coastal Management and Watershed Restoration Mark Miller, Bureau of Nonpoint Pollution Control Harold Nebling, Coastal Management and Watershed Restoration Carol O'Donnell-Kee, Bureau of Freshwater and Biological Monitoring John Olko, Water Compliance and Enforcement Tanya Oznowich, Environmental Education Pilar Patterson, Bureau of Surface Water Permitting Victor Poretti, Bureau of Freshwater and Biological Monitoring Kerry Pflugh, Constituent Relations Terry Pilawski, Land Use Management Ron Rossi, Division of Water Monitoring and Standards (retired) Bruce Ruppel, Office of Science Christine Schell, Office of Climate and Energy Mike Serfes, New Jersey Geological Survey Scott Shymon, Municipal Finance and Construction Mary Smith, (formerly) Office of Constituent Relations Kim Springer, Coastal Management and Watershed Restoration John Tyrawski, Land Use Regulation John Vile, Bureau of Freshwater and Biological Monitoring Mike Vrancick, Budget and Finance Kathleen Walz, Office of Natural Lands Management Debbie Watkins, Bureau of Marine Water Monitoring Coleen Weber, Bureau of Freshwater and Biological Monitoring Katrina Wessling, (formerly) Land Use Management Anne Witt, Bureau of Environmental Analysis and Restoration Dan Zeppenfeld, Municipal Finance and Construction

Other Contributors

Jennifer Adkins, Executive Direction, Partnership for the Delaware Estuary L. Stanton Hales, Jr., Ph.D., Program Director, Barnegat Bay National Estuary Program Danielle Kreeger, Science Director, Partnership for the Delaware Estuary Bob Nyman, USEPA Region 2, Director, NY-NJ Harbor Estuary Program

Photography (Cover, clockwise from top left) Tom Miller, Bureau of Freshwater and Biological Monitoring: AMNET Monitoring at Panther Branch, Vineland, 2007 Division of Water Monitoring and Standards: Barge Electrofishing for Fish IBI, Clinton Brook (FIBI010) in West Milford Township, June 2005 Sandra Cohen, Bureau of Water Quality Standards and Assessment: Russell Aaron Cohen Hicswa at Take Our Kids to Work Day/Earth Day Celebration, NJDEP Headquarters, Trenton, April 2010 Barnegat Bay Estuary Partnership: Hard Clams, Barnegat Bay, 2009 Virginia Loftin, Bureau of Marine Water Monitoring: Mantoloking Beach, August 2007 Johannus Franken, (formerly) Bureau of Freshwater and Biological Monitoring: Anchor Lake, Winslow Township, 2005

Photography (Inside Report)

Virginia Loftin, Bureau of Marine Water Monitoring: Sea Girt, July 2006 Division of Water Monitoring and Standards: Round Valley Reservoir, Clinton Township, August 2007 Virginia Loftin, Bureau of Marine Water Monitoring: Island Beach State Park, April 2006 Division of Water Monitoring and Standards: Brook Trout, November 2007 Division of Water Monitoring and Standards: Shellfish, June 2007 Bureau of Freshwater and Biological Monitoring: Flat Brook, Walpack Township, July 2007 Kaycee Coleman, Bureau of Freshwater and Biological Monitoring (intern): Big Flat Brook, Stokes State Forest, July 2007 Virginia Loftin, Bureau of Marine Water Monitoring: Stormwater outfall to Toms River, Beachwood Beach, Beachwood, 2011 Bureau of Freshwater and Biological Monitoring: September 2005 New Jersey Department of Environmental Protection: Barnegat Bay Lighthouse State Park, Barnegat Light, June 2011 Virginia Loftin, Bureau of Marine Water Monitoring: Atlantic Ocean

Division of Water Monitoring and Standards: Batsto River, New Jersey Pinelands, August 2007



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Executive Summary

New Jersey is the fifth smallest and most densely populated state in the Nation, with approximately 8.8 million people living within 7,500 square miles of land area. New Jersey is also one of the most geologically and hydrogeologically diverse states, with over 18,000 miles of rivers and streams; over 50,000 acres of lakes, ponds, and reservoirs; 950,000 acres of wetlands; 260 square miles of estuaries; 127 miles of coastline; and over 450 square miles of ocean under its jurisdiction. The combination of population density, diversity of natural resources, and a wide range of industries and land uses, presents unique challenges to protecting New Jersey's water resources.

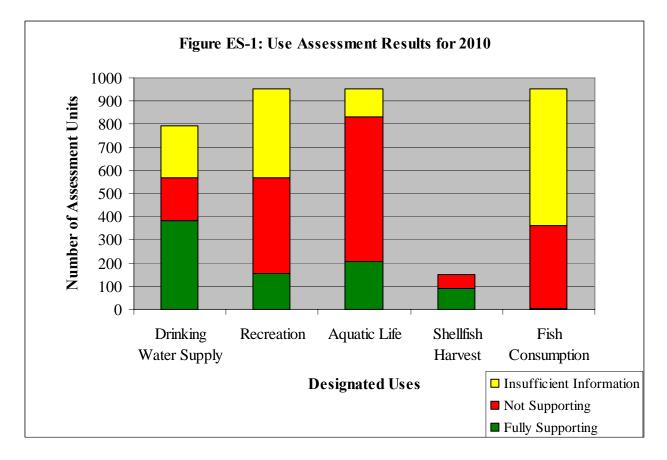
Water quality standards, monitoring, and assessment provide the scientific foundation for the protection of New Jersey's water resources and implementation of the federal Clean Water Act and the New Jersey Water Pollution Control Act. The 2010 Integrated Water Quality Monitoring and Assessment Report (Integrated Report) describes the overall quality of New Jersey's surface waters based on data collected between January 1, 2004 and December 31, 2008. This data is generated by various different monitoring organizations and is then compiled and evaluated by the Department to verify that the data meets the Department's data quality requirements. Data is then assessed using scientific methods developed specifically for the applicable type of parameter, use, and waterbody to determine compliance with New Jersey's surface water quality standards (SWQS).

The SWQS establish stream classifications and the designated uses for all waters of the State. Designated uses include aquatic life support (maintenance, migration, and propagation), recreation, fish consumption, shellfish harvest for consumption, drinking water supply, industrial water supply, and agricultural water supply. The Department assesses each applicable designated use for all of the State's 952 subwatersheds (assessment units), to determine whether each subwatershed is "fully supporting" the use, "not supporting" the use, or if insufficient information is available to assess the use.

The Department assesses each use by comparing the key ("minimum suite") parameters associated with that use with the applicable SWQS criteria. A subwatershed is "fully supporting" a designated use only if data for the minimum suite of parameters are available and there are no exceedances of the applicable criteria for each parameter in the suite. If data are available for only some of the minimum suite of parameters, the use is not assessed due to insufficient information. If any one parameter associated with a designated use exceeds the applicable

criteria, then the subwatershed is "not supporting" the designated use. (Assessment methods are explained in more detail in Appendix F.)

The results of the data evaluation and use assessment are used to identify healthy watersheds that fully support designated uses, as well as watersheds that do not support designated uses and watersheds that need more monitoring. The use assessment results and other information presented in the 2010 Integrated Report are designed to answer basic questions and educate the public about the quality of New Jersey's water resources, and to guide and support regulatory and public policy decisions regarding how our water resources are managed.



Each of New Jersey's 952 subwatersheds has a different set of designated uses, depending on the classification of the waters located there. In 2010, over 4,200 designated uses were assessed out of a statewide total of over 6,400 possible assessments. Use assessment results are summarized in Figure ES-1. Subwatersheds shown as "Not Supporting" include those where a Total Maximum Daily Load (TMDL) has been developed as well as subwatersheds on the 2010 303(d) List that require a TMDL. A TMDL identifies the sources (point and nonpoint) contributing a pollutant of concern and sets load reductions needed to meet surface water quality standards.

Statewide, 355 miles of rivers and streams, and 1,465 acres of lakes located within 23 subwatersheds (two percent) fully support <u>all</u> designated uses (except for fish consumption). Approximately 12,400 miles of rivers and streams (60 percent) and 33,000 acres of lakes do not support the aquatic life use, mostly due to nutrient over-enrichment. Only 256 miles of rivers and

streams, and 67 acres of lakes located in 42 subwatersheds are not assessed at all. Results for key designated uses are as follows:



Water Supply: Almost half (48 percent) of waters designated for the drinking water supply use fully support the use. All New Jersey freshwater streams and lakes are designated for potential use as drinking water supply; however, most of the waters that do not support this use are not used for drinking water purposes. Sixty percent of waters designated for the agricultural and industrial water supply uses fully support these uses. Less than six percent of waters designated for them.

Recreation: All waters of the State are designated for recreational use (e.g., swimming, boating). Most recreation occurs in ocean bathing beaches. All of New Jersey's ocean bathing beaches fully support swimming. Seventeen percent of all New Jersey waters, including lakes, ponds, rivers, and streams, fully support recreational uses; 43 percent do not support recreational uses, and 40 percent are not assessed. TMDLs have been developed to reduce levels of pathogens (fecal coliform, *E. coli, Enterococcus*) in most of the waters that did not support recreational uses.





Aquatic Life: All waters of the State are designated for general aquatic life use and almost 90 percent have been assessed for this use. Twenty-two percent of State waters fully support the general aquatic life use, 66 percent do not support the use, and twelve percent are not assessed. Twenty-two percent of waters designated for the trout aquatic life use fully support this use, 64 percent do not support this use, and fourteen percent are not assessed.

Shellfish Harvest for Consumption: Ninety percent of shellfish waters are classified as harvestable. Harvestable waters include: approved with no restrictions, seasonal harvest, and special restrictions. Only shellfish waters approved with no restrictions are considered to fully support the designated use. Sixty percent of New Jersey's shellfish waters fully support this use; 40 percent do not support this use. TMDLs have been developed for most of waters that do not support the shellfish harvest for consumption use.





Fish Consumption: All New Jersey waters are designated for fish consumption. A very small percentage (0.3 percent) of waters fully support the fish consumption use and sixty-two percent of waters are not assessed. Thirty-eight percent of fish in assessed waters contain levels of mercury or PCBs above what is safe to consume. The Department issues both statewide and waterbody-specific fish consumption advisories for the general population and for high-risk groups including infants, children,

pregnant or nursing mothers, and women of childbearing age.

Water quality trends in rivers and streams indicate that water quality in New Jersey has improved dramatically over the past 30 years, likely the result of elimination of point sources, upgrades in wastewater treatment and natural attenuation of toxic substances. Long-term trends in chemical water quality data show generally stable water quality conditions statewide, with improving conditions for some parameters (e.g., total phosphorus) and declining conditions for others (total dissolved solids and nitrates). Long-term water quality data also show that nutrient levels and dissolved oxygen conditions statewide have significantly improved over time.



Analysis of biological data over the past ten years indicates that water quality has generally remained stable with a slight negative trend. Almost as many stations are showing improvement as are exhibiting degradation over a ten-year time period. Biological data also indicate a correlation between benthic macroinvertebrate community impairment and different physiographic land types, land uses, and other anthropogenic factors such as total urban land, total upstream wastewater flow, increase in impervious surface, and decrease in forests and wetlands in a stream's drainage basin. Biological data for fish communities also showed a

correlation between impairment and human activity, such as increased impervious cover, siltation, and increased run-off from stormwater outfalls.

While overall statewide water quality has improved or remained stable over time, localized changes in water quality also occur and they are usually associated with changes in land use. Generally, water quality declines as the intensity of land use increases; this applies to agricultural uses as well as urban/suburban development. Some conditions are transitory. Road or building construction can increases the release of sediment into nearby waterways. Other conditions are more permanent, such as the impacts of increased impervious cover and the loss of natural vegetation and riparian corridors caused by land development. Water quality may be restored, and impacts of land use on water quality may be minimized, where appropriate best management practices for development, nonpoint source pollution control, and stormwater management are employed in addition to traditional soil erosion, sediment control, and wastewater management requirements.



Photo courtesy of the USDA NRCS

The largest concentrations of high quality waters are located in the least developed regions of the State, specifically the upper northwest and the Pinelands region. Waters supporting endangered and threatened species require special protection. Trout production waters populated by native brook trout are particularly sensitive to the impacts of climate change. New Jersey's Category One antidegradation provisions of the Surface Water Quality Standards are designed to provide special protection for waters of exceptional ecological significance, as well as exceptional

fisheries resources, and waters of exceptional water supply significance (see www.state.nj.us/dep/wms/bwqsa/swqs.htm).

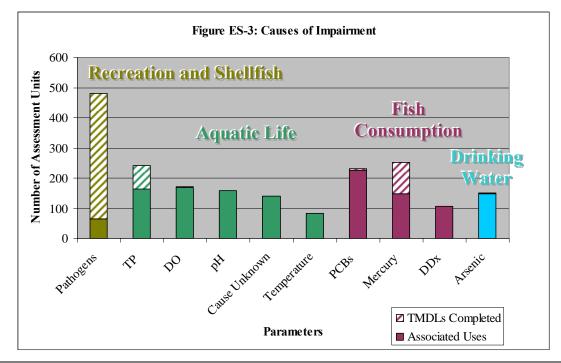


Figure ES-2: Big Flat Brook

Big Flat Brook is located in a relatively pristine area in Northwestern New Jersey, mostly within Stokes State Forest or High Point State Park. The watershed is relatively undeveloped and mostly forested with few roads and a small amount of agricultural land use; thus explaining its high quality waters. Big Flat Brook is classified as trout production waters and designated as Category One. Some of its tributaries are classified as FW-1 waters. Big Flat Brook (NJ02040104140010-01) is the only one of New Jersey's 952 subwatersheds that fully supports all applicable designated uses, including fish consumption (see Figure ES-

2). Twenty-two other subwatersheds fully support all applicable designated uses, except for fish consumption (see Table 4.3 in the full report). These "healthy watersheds" contain the highest quality of all waters assessed for the 2010 Integrated Report.

The 2010 Integrated Report identifies waters of the State that do not fully support their designated uses, as well as the pollutants causing water quality impairment (Chapter 4). The most frequent causes of water quality impairment are shown in Figure ES-3. This includes waters where a TMDL has been established but water quality is still impaired. Pollutants causing impairment that are not addressed by a TMDL are identified in the 303(d) List of Water Quality Limited Waters (303(d) List).



The 2010 303(d) List identifies 38 pollutants causing water quality impairment in one or more assessment units for a total of 1,831 listings, of which 140 are attributed to "cause unknown". Two hundred and sixty AU/pollutant combinations were removed from the 303(d) List because water quality was restored (36), improved assessment methods verified that water quality standards were attained (14), or a TMDL was established (210).

The most frequent causes of water quality impairment are pathogens, which include *E. coli*, *Enterococcus*, fecal coliform, and total coliform. Pathogens are the primary cause of recreational use impairment as well as shellfish harvesting restrictions. Sources of pathogens include nonpoint sources, stormwater discharges, combined sewer overflows (CSOs), and illicit discharges. Six subwatersheds were delisted for pathogens because water quality was restored. Another 56 subwatersheds were delisted for pathogens because they are covered by



approved TMDLs. Generally, these TMDLs identified various control measures included in the Municipal Stormwater Permit to reduce bacteria loadings. These permits require municipalities to eliminate "illicit connections" of domestic sewage and other waste to the stormwater collection system, adopt and enforce a pet waste ordinance, prohibit feeding of unconfined wildlife on public property, clean catch basins, perform good housekeeping at maintenance yards, and provide related public education and employee training.

Mercury, polychlorinated biphenyls (PCBs), and dichlorodiphenyltrichloroethane (DDT) and its metabolites (collectively referred to as "DDx") are the predominant pollutants causing nonsupport of the fish consumption use. PCBs and DDT have been banned and consumer products containing mercury are being eliminated; these pollutants are commonly referred to as "legacy contaminants". A PCB TMDL has been established for the Delaware Estuary and requires NJPDES-permitted facilities to implement "pollutant minimization plans" (PMPs). The Department imposes PMP requirements in NJPDES permits for facilities that discharge to PCB-impaired waters. A statewide mercury TMDL has also been established, which identifies the predominant source of mercury in fish tissue as air deposition, including sources from other states and countries. One hundred twenty-one subwatersheds were delisted for mercury because they are covered by this TMDL. Another fourteen subwatersheds were delisted for mercury because they meet the water quality target established in the TMDL. Additional subwatersheds may be delisted in the future due to this TMDL, once the Department conducts a more thorough analysis of statewide mercury data.

Total phosphorus (TP), dissolved oxygen (DO), and pH are often interrelated and reflect the inputs of excessive nutrients into waterways from both point and nonpoint sources. Where biological data indicate that the aquatic life use is not supported but chemical data are unavailable or show no exceedance of applicable SWQS criteria, the cause of non-support is identified as "cause unknown". Further study may identify the actual cause of biological impairment as habitat alteration, hydrologic



modification, other environmental stressors, nutrients, or other chemical pollutant(s). Five subwatersheds were delisted for phosphorus because water quality was restored. An additional 28 subwatersheds were delisted for phosphorus because they were covered by an approved TMDL.

Temperature exceedances are generally due to, among other things, loss of riparian buffers and tree canopies, the presence and expansion of impervious cover throughout the watershed, and the abundance of small run-of-the-river impoundments common in New Jersey watersheds. Three subwatersheds were delisted for dissolved oxygen because they were covered by an approved TMDL and one subwatershed was delisted for temperature because applicable water quality standards were met.

Arsenic is the predominant pollutant causing impairment of the drinking water supply use. The levels of arsenic found in waters of the State generally reflect natural conditions. The Department is currently working with USGS to determine regional background concentrations. These values will be used to delist waters where arsenic levels are consistent with natural background concentrations. Two subwatersheds were delisted for arsenic because they were covered by an approved TMDL. Additional subwatersheds with arsenic levels above natural background concentrations will remain on the 303(d) list until TMDLs have been developed for those waters.

Studies show that the impact of nutrients on water quality is strongly influenced by other environmental factors such as sunlight availability, stream velocity and water clarity. The Department has developed a new nutrient assessment method to evaluate the site-specific variability of TP impacts. The new method assesses waters impaired for aquatic life use based upon biological monitoring to determine if the impairment was due to nutrients or other causes. Due to a lack of sufficient information, only a small number of assessments were conducted using this new method, and none resulted in a delisting for TP. Thus, TP remains one of the most frequent pollutants causing use impairment. New Jersey has also developed a Nutrient Criteria Enhancement Plan (Nutrient Plan) for enhancing the existing nutrient criteria for freshwaters and developing new nutrient criteria for other (estuarine, marine) waters of the State. Nutrient criteria (including numeric criteria and translators of narrative criteria) will be developed to address and prevent nutrient-related use impairment in New Jersey waters (Chapter 9). Nutrients are also suspected of being the source of water quality problems in the Barnegat Bay. On December 9, 2010, Governor Chris Christie announced a comprehensive action plan to address the health of Barnegat Bay. In response, the Department has deemed the waters of the Barnegat Bay Estuary a top priority for restoration (see Chapter 9).



Photo courtesy of the USDA Natural Resources Conservation Service

In addition to the water quality standards, monitoring, assessment, and TMDL programs, the Department administers numerous other programs to restore, maintain, and enhance water quality (Chapters 5-7). The success of these programs is supported by the results of the water quality trends analysis, which shows improving and stabilizing conditions over time (Chapter 3). These improvements are the result of significant financial investment, including millions of dollars in grants awarded for water quality planning, restoration, land acquisition, and wastewater facility infrastructure improvements, operations, and maintenance. Since 1987, more than \$6 billion dollars has been spent to upgrade wastewater treatment facilities, reduce infiltration/inflow, control discharges from Combined Sewer Overflows (CSOs), construct sludge handling facilities, improve stormwater runoff, and close landfills. Public entities continue to collectively spend well over \$1 billion per year to provide clean water - money that is generated through local taxes and user fees. These investments have made a difference - increased beach days, more miles of trout waters, and increased areas for shellfish harvest. These investments also yield economic benefits for the entire State. The Jersey Shore, for example, is vital to the overall State economy and clean water is vital to tourism at the Jersey Shore - for swimming, recreational and commercial fishing, clean fish and shellfish for seafood, etc. Sixty-two percent of the State's \$28 billion tourism dollars in 2008 were spent at the Jersey Shore. New Jersey's fisheries and shellfisheries generated \$168 million dollars in revenue from landings and employed over 40,000 people in 2008 alone.

Sources of pollutants causing water quality impairment in New Jersey waters are many and varied and represent the product of highly dynamic and interconnected systems. A regional or drainage basin approach may be required to successfully manage these complex systems. As evidenced by the new Barnegat Bay Initiative, such an approach is needed to identify and manage all the sources contributing to water quality impairment (including point and nonpoint sources of pollution), land use planning, and other resource management tools. Public participation and local commitment to a common goal of water quality restoration is needed to achieve fully supported uses in all waters of the State. The current Barnegat Bay Initiative recognizes that all activities occurring within the Barnegat Bay Estuary are interrelated and have a cumulative impact on the quality of the Bay; therefore, these impacts must be addressed collectively if water quality in the Bay is to be restored. If successful, the Barnegat Action Plan will serve as a model for water quality restoration throughout the State of New Jersey.



Chapter 1: Introduction

"Water is the spring of life. It nurtures our bodies. It sustains our most precious natural resources." ¹

Water quality standards, monitoring, and assessment provide the scientific foundation for the protection of New Jersey's water resources and implementation of the federal Clean Water Act and the state Water Pollution Control Act. Monitoring and assessment of water quality data directs and supports the New Jersey Department of Environmental Protection's (Department) efforts in developing and refining water quality standards that provide measurable targets for identifying and protecting high quality



waters, identifying and restoring impaired waters, issuing and enforcing discharge permits, managing nonpoint sources of pollution, setting priorities for water resources management, and evaluating the effectiveness of restoration and protection actions. A summary of these programs is provided in Chapter 2. Standards, monitoring, and assessment programs are administered by the Department's <u>Division of Water Monitoring and Standards</u>, which is responsible for preparing the New Jersey Integrated Water Quality Monitoring and Assessment Reports.

1.1 The 2010 Integrated Report

Goal of the Integrated Report

The goal of the Integrated Report is to provide information about the quality of New Jersey's waters that will inform water resource managers and the public on the status of designated use attainment as well as the actions needed to achieve attainment of all designated uses in all waters of the State. As illustrated in Figure 1.1, the Integrated Report is a key part in the iterative process of managing and protecting the State's water resources. This process, as described in the federal Clean Water Act, includes standards development and monitoring (Chapter 2); assessment (Chapters 3 and 4); identification and implementation of management strategies maximum (including total daily loads (TMDLs), point and nonpoint source controls, and other water quality programs described in

Permit Limits & NPS Controls TMDLs UNTEGRATED REPORT

Figure 1.1: Water Resource Management

¹ New Jersey Department of Environmental Protection (NJDEP). January 2007. NJDEP Priorities and Action Plan,

[&]quot;Clean and Plentiful Waters", p.18

Chapter 5), and compliance and enforcement (Chapter 5). The public is afforded the opportunity to participate in each step of the process (Chapter 8).

Federal Reporting Requirements

The federal Clean Water Act mandates that states submit biennial reports to the U.S. Environmental Protection Agency (USEPA) describing the quality of their waters. The biennial Statewide Water Quality Inventory Report or "305(b) Report" must include the status of principal waters in terms of overall water quality and support of designated uses, as well as strategies to maintain and improve water quality. The 305(b) reports are used by Congress and USEPA to establish program priorities and funding for federal and state water resource management programs. The biennial List of Water Quality Limited Waters or "303(d) List" identifies waters that are not attaining designated uses because they do not meet surface water quality standards despite the implementation of technology-based effluent limits. States must prioritize waters on the 303(d) List of Water Quality Limited Waters for Total Maximum Daily Load (TMDL) analyses and identify those high priority waters for which they anticipate establishing TMDLs in the next two years. Since 2002, New Jersey has developed and submitted its 303(d) List as part of the Integrated Report. The Integrated Report satisfies the reporting and public participation requirements of Sections 303(d), 305(b), and 314 of the federal Clean Water Act.

The 2010 Integrated Report

The 2010 New Jersey Integrated Water Quality Monitoring and Assessment Report (Integrated Report) describes the quality of New Jersey's surface waters in terms of overall water quality and support of designated uses. Data used in the 2010 Integrated Report was generally collected between January 1, 2004 and December 31, 2008. The Integrated Report identifies high quality waters that fully support designated uses, lower quality waters that do not support designated uses, and waters for which insufficient information is available to assess water quality and use attainment. The Integrated Report also identifies strategies implemented by the State to maintain high quality waters, improve lower quality waters, and gather additional information where needed to assess all waters of the State. The information provided in the Integrated Report is used by Congress, USEPA, and the State of New Jersey to establish program priorities and funding for federal and state water resource management programs. The Integrated Report includes the following information to inform and guide water resource management at statewide, regional, and local levels:

- Surface water classifications and water quality criteria established in the New Jersey Surface Water Quality Standards (N.J.A.C. 7:9B) to protect the designated uses: aquatic life; recreation; drinking, industrial, and agricultural water supply; fish consumption, and shellfish harvest for consumption;
- Methods used to assess attainment of the designated uses;
- Results of designated use assessments based primarily on surface water quality monitoring conducted between January 1, 2004 and December 31, 2008; including data provided by other agencies in response to the data solicitation notice;

The Integrated Report also answers the following questions, which serve as the basis for regulatory and public policy decisions regarding how our water resources are managed:

- What is the overall quality of the State's waters and is it changing over time? (Chapter 3)
- Is water quality getting better or worse, where, and why? (Chapter 3)
- Do waters meet the applicable water quality standards and criteria needed to support the designated uses? (Chapter 4)
- Where are high quality or threatened waters that need increased protection? (Chapter 4)
- Where are poor quality waters that need restoration? (Chapter 4)
- What are the causes and sources of water quality problems and threats? (Chapter 4)
- Where are water quality management programs and projects already underway to restore water quality and have they been successful? (Chapter 5)

1.2 New Jersey's Water Resources

New Jersey is the fifth smallest state in the nation and is one of the most geologically and hydrogeologically diverse. New Jersey contains a wide variety of land use types, water resources, geologic characteristics, and natural biota. Approximately 8.8 million people live within New Jersey's 7,505 square miles of land area, making it the most densely populated state in the nation. Land use in New Jersey can be broadly categorized into urban/suburban, agricultural, and undeveloped. Highly concentrated and expanding urban and industrial centers along with shrinking agricultural and undeveloped areas characterize New Jersey's current land use trends. Because of the high population and variable land uses, the State's streams, lakes, ponds, bays, ocean and ground water are impacted to varying degrees by point and nonpoint sources of pollution. A summary of the State's population, total area, and water resources is presented in Table 1.1.



Resource	Extent
State Population (2010)	8,791,894 ²
State Total Area (square miles)	8,204
State Total Land Area (square miles)	7,505
Rivers and Streams:	
Miles of nontidal rivers and streams	11,702
Miles of tidal rivers and streams	6,424
Miles of rivers and streams (total)	18,126
Border miles shared rivers/streams (nontidal and tidal)	197
Lakes, Ponds and Reservoirs;	
Number of named lakes and ponds	1,747
Acres of named lakes and ponds	37,834
Number of Reservoirs	43
Acres of Reservoirs	14,970
Total Acres of named lakes and ponds and reservoirs	52,804
Number of significant publicly owned lakes/reservoirs/ponds	380
Acres of significant publicly owned lakes/reservoirs/ponds	24,000
Estuaries and Ocean:	
Square Miles of Estuaries	260
Miles of Ocean Coast (linear miles)	127
Miles of Ocean Coast (sq. mi. of jurisdictional waters)	454
Wetlands:	
Acres of Freshwater Wetlands	739,160
Acres of Tidal Wetlands	209,269
Total Acres of Wetlands	948,429

Table 1.1: New Jersey Population, Area, and Water Resources*

*Note: Figures are based on a high resolution scale of 1:24,000. Although a more detailed resolution of 1:2,400 is available, the 1:24,000 scale is used for the Integrated Report to maintain consistency between reporting cycles, allowing for direct comparison of use assessments and trend analysis over time. A GIS coverage of New Jersey hydrography at this scale is available on the Department's Web site at http://www.nj.gov/dep/gis/stateshp.html#STATERIV.

1.3 New Jersey's Assessment Units

New Jersey's assessment units are delineated based on 14-digit Hydrologic Unit Code (HUC) boundaries. HUCs are geographic areas representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by USGS in cooperation with the National Resources Conservation Service (NRCS). The HUC system starts with the largest possible drainage area and progressively smaller subdivisions of that drainage area are then delineated and numbered in a nested fashion.

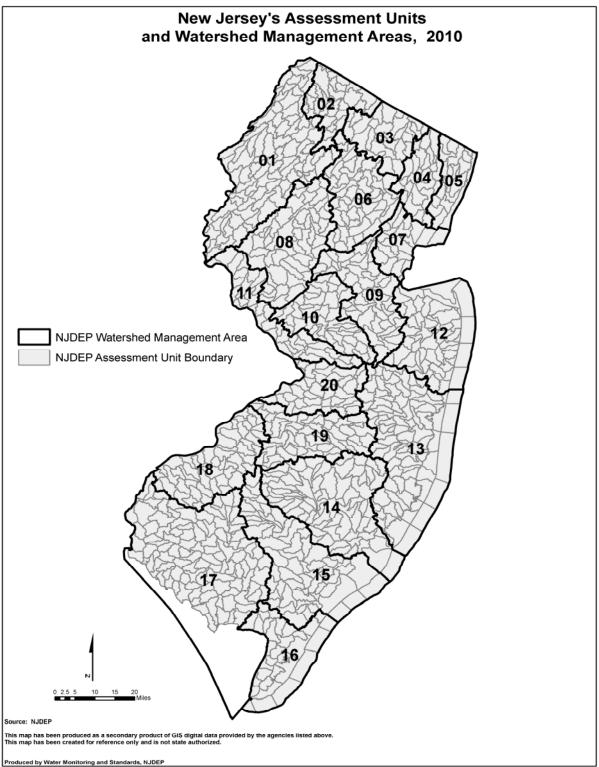
In 2009, the Department revised the HUC 14 boundaries to be more consistent with the new federal HUC 12 boundaries, which are based on 1:24,000 base maps for elevation control and a

² State of New Jersey Department of Labor and Workforce Development Web site. Available at <u>http://lwd.dol.state.nj.us/labor/lpa/dmograph/Demographics Index.html</u>. Viewed on May 31, 2011.

new 1:2,400 hydrography coverage. A coverage containing discrete polygons for each of New Jersey's HUC 14 subwatersheds is available for download and interactive applications on the Department's Geographic Information System (GIS) and other on-line tools available on the Department's Web site at <u>www.nj.gov/dep/gis/</u> and <u>www.nj.gov/dep/gis/newmapping.htm</u>. The Department's report explaining the changes to the HUC 14 boundaries (NJGS Technical Memorandum (TM09-2) entitled, "Revision to New Jersey's HUC 14s, 2009, with a correlation to HUC 12s", is available for download from the Department's Web site at <u>http://www.state.nj.us/dep/njgs/pricelst/tmemo/tm09-2</u>. New Jersey's assessment units for the 2010 Integrated Report are based on the updated HUC 14 boundaries, excluding interstate waters under the jurisdiction of the Delaware River Basin Commission, which totals 952 assessment units in New Jersey (see Figure 1.2). These assessment units range in size from 0.7 to 42 square miles, with an average size of 8.7 square miles.

The Delaware River Basin Commission (DRBC) assesses water quality data for the Delaware River mainstem, Estuary, and Bay. DRBC's assessment results and corresponding methods are published in the 2010 Delaware River And Bay Integrated List Water Quality Assessment Report available on DRBC's Web site at: <u>http://www.state.nj.us/drbc/10IntegratedList/</u>. Shared waters that are water quality limited based on DRBC's assessment are shown in a sub-table of the New Jersey 2010 303(d) List (Appendix B) but are otherwise not addressed in this report.





Chapter 2: Summary of Water Quality Standards, Monitoring, and Assessment

Water quality standards development, monitoring, and assessment are performed in accordance with the objectives of the federal Clean Water Act, which are to "restore and maintain the chemical, physical and biological integrity of the Nation's waters". To that end, the Department routinely develops, adopts, and amends the water quality standards that are used to assess the quality of the State's waters, oversees the extensive monitoring networks that generate much of the State's water quality data, and assesses that data for compliance with the standards based on sound, scientific methods for data collection, compilation, and evaluation.



2.1 Water Quality Standards

The Bureau of Water Quality Standards and Assessment, in the Department's Division of Water Monitoring and Standards, is responsible for promulgating New Jersey's surface and ground water quality standards (N.J.A.C. 7:9B and 7:9C, respectively), including waterbody classifications, designated uses, water quality criteria, and antidegradation policies. The New Jersey Water Quality Planning Act (N.J.S.A. 58:11A-1 et seq.) requires the State to maintain water quality in existing high quality waters and to restore water quality in impaired waters. The Department accomplishes this by developing and implementing Surface Water Quality Standards (SWQS) and Ground Water Quality Standards (GWQS) for New Jersey's waters. The SWQS establish the designations, classifications, and criteria by which the quality and health of New Jersey's waters are measured.

Surface Water Quality Standards (SWQS)

The SWQS establish a stream classification and an antidegradation designation for all surface waters of the State. The stream classifications reflect the designated uses assigned to individual surface waterbodies. Designated uses include aquatic life support (maintenance, migration, and propagation), recreation, fish consumption, shellfish harvest for consumption, drinking water supply, industrial water supply, and agricultural water supply. The SWQS also specify the water quality criteria that correspond with the waterbody classifications, which are necessary to achieve the designated uses.

The SWQS are utilized by the <u>New Jersey Pollutant Discharge Elimination System (NJPDES)</u> discharge to surface water permitting program (see Section 5.4) in the development of water quality-based effluent limitations (WQBELs) to protect or improve the existing water quality and designated uses. The SWQS also contain policies on design flows, mixing zones, antidegradation, and nutrients, which specify how the surface water quality criteria are to be applied through NJPDES permits. The Department is required, pursuant to Section 303(d) of the federal Clean Water Act, to identify waters that do not meet SWQS after the implementation of technology-based effluent limitations, and to develop total maximum daily loads (TMDLs) to

restore these impaired waters. The SWQS serve as water quality restoration targets to be achieved by TMDLs (see Section 5.6).

The SWQS are also utilized by the Site Remediation Program to ensure that ground water remediation activities that discharge to surface waters comply with the SWQS. The Department's Division of Land Use Regulation, through the Freshwater Wetlands Program, the Coastal Permitting Program, and the Flood Hazard Area Control Program (formerly known as the Stream Encroachment Program) also utilizes the stream classifications and antidegradation designations adopted in the SWQS to regulate activities under these programs' respective jurisdictions. Additional information about the SWOS is available in Section 5.3 and on the Department's Web site at http://www.state.nj.us/dep/wms/bwqsa/swqs.htm.

Ground Water Quality Standards

The Ground Water Quality Standards (GWQS) establish ground water classifications and antidegradation policies for all ground waters of the State. The GWQS specify the water quality criteria and designated uses for ground water in New Jersey. The criteria are numeric values assigned to ground water constituents (i.e., pollutants) and implemented to protect the ambient ground water quality and associated designated uses. The GWQS also contain technical and general policies to ensure that the designated uses are protected.

The GWQS serve as the basis for setting ground water discharge standards under the NJPDES Discharge to Ground Water Permit Program (see Section 5.4), and for establishing remediation standards for ground water cleanups under the Site Remediation Program. Other relevant programs using the GWQS include, but are not limited to, those implemented pursuant to the Spill Compensation and Control Act, Solid Waste Management Act, Industrial Site Recovery Act, Underground Storage of Hazardous Substances Act, Realty Improvement Sewerage and Facilities Act, and Pesticide Control Act of 1971. Additional information about the GWQS is available in Section 5.3 and on the Department's Web site at http://www.state.nj.us/dep/ wms/bwqsa/gwqs.htm.

2.2 Water Quality Monitoring

Water quality monitoring provides the scientific foundation for the implementation of federal and state Clean Water Act programs. Monitoring data supports the Department's efforts in developing and refining water quality standards, reporting on water quality conditions, listing impaired waters, issuing and enforcing discharge permits, managing nonpoint sources, protecting good quality waters, setting priorities for water quality management, tracking changes in water quality over time, and evaluating the effectiveness of restoration and protection actions in achieving Clean Water Act goals to "restore and maintain the chemical, physical and biological integrity of the Nation's waters".

The Department oversees the operation of the primary water quality monitoring networks for the State of New Jersey. Monitoring strategies employed by the Department are comprised of multiple water quality assessment techniques including: habitat assessments, in-stream biological monitoring such as fish population surveys, collection of physical/chemical data on a variety of matrices (surface water, ground water, sediment), identifying pollution sources in the coastal and freshwater environment (discharges, stormwater, marinas), and sediment toxicity testing. Monitoring conducted by other entities may be used to supplement these networks and expand the range and scope of information available for water quality assessment.

NJDEP Monitoring Programs

The Department's water monitoring programs are described in New Jersey's Water Monitoring and Assessment Strategy (2005-2014) (Appendix G). The Division of Water Monitoring and Standards (WMS) is responsible for ambient monitoring of the State's fresh, ground, and marine waters and overseeing the various water quality monitoring networks for the State of New Jersey. The Strategy was developed in accordance with USEPA guidance and includes a comprehensive, ten-year, long-term water monitoring strategy for implementing a statewide water monitoring program that will ultimately cover all waters of the State, including streams, rivers, lakes, reservoirs, estuaries, coastal areas, wetlands, and ground water. Program information and status is periodically updated in the NJ Water Quality Monitoring Networks *Report*, which is also published by WMS. Additional information about these water monitoring activities and networks is available on the Department's Web site at: http://www.nj.gov/dep/wms/.

Monitoring Partners

Many different organizations and entities conduct water quality monitoring that may supplement the Department's own efforts. Monitoring partners work with the Department to gather information about New Jersey's waters and share their data with the Department for water quality assessment purposes. Monitoring partners generally include:

- Federal agencies, alone or in cooperation with NJDEP (e.g., U.S. Environmental Protection Agency (USEPA), National Oceanic and Atmospheric Association (NOAA) or U.S. Geological Survey (USGS);
- Interstate commissions (e.g., DRBC);
- Regional, county, and municipal government agencies (e.g., county health departments, utilities authorities);
- Private entities (e.g., dischargers, water purveyors, academic institutions);
- Volunteer monitoring organizations (e.g., watershed associations and civic/community groups.

The Department provides technical support and capacity building for our monitoring partners. The Department also convenes the New Jersey Water Monitoring Coordinating Council, established on October 24, 2003, which serves as a statewide body to promote and facilitate the coordination, collaboration, and communication of scientifically sound, ambient water quality and quantity information to support effective environmental management. The Council consists of representatives from various Divisions within the Department; USGS; USEPA Region 2; the DRBC, Pinelands, and Meadowlands Commissions; the Interstate Environmental Commission; county health departments, academia; and the volunteer monitoring community, and provides the opportunity to exchange information and data among its participants.

2.3 Data Sources for the 2010 Integrated Report

The 2010 Integrated Report was developed using all "readily available data", which included water quality data generated by the Department's water quality monitoring networks as well as water quality data from other sources who complied with the Department's data requirements, including an approved Quality Assurance Project Plan, accurate monitoring sites locations, electronic data format, citable report, and contact information. The Department's data requirements and data assessment methods are explained in detail in Appendix F.

The Department received data from a variety of entities in response to the Department's solicitation of water quality data collected between January 1, 2004 and December 31, 2008 (see Chapter 8: Public Participation). The vast majority of the data assessed for the 2010 Integrated Report was generated by the Department's ambient monitoring networks. A complete list of entities providing data used in the 2010 Integrated Report is presented in Appendix E.

For the first time, the Department was able to utilize its new Water Quality Data Exchange (WQDE) system to centrally receive and compile electronic water quality data for the 2010 Integrated Report. The WQDE system includes both the main WQDE module for entering or uploading large quantities of data as well as a Volunteer Monitoring module with online data entry forms and reports specifically designed for New Jersey's volunteer monitoring community. The WQDE system includes reporting and mapping capabilities to make ambient water quality data available to the public. The WQDE system was designed to reduce the burden on both data generators and Department staff by providing a common format and nomenclature for managing and exchanging ambient water quality monitoring results and eliminating the need to translate and reformat data from multiple organizations using different data standards. Over time, the WQDE system will significantly expand the universe of "readily available data" generated throughout the State and assessed by the Department for the Integrated Report.

2.4 Water Quality Assessment Methods

USEPA requires that each state have a methodology for assessing attainment of designated uses and compliance with water quality standards based on analysis of various types of data from various sources for all waterbody types. The methods used to develop New Jersey's 2010 Integrated Report are described in the 2010 Integrated Water Quality Monitoring and Assessment Methods (Methods Document). The purpose of the Methods Document is to articulate the objective and scientifically sound methods employed by the Department for monitoring and assessing the quality of New Jersey's waters, in accordance with Sections 305(b) and 303(d) of the federal Clean Water Act. The 2010 Methods Document (Appendix F) includes:

- A description of the data the Department uses to assess attainment of the designated uses; •
- The quality assurance aspects of the data;
- A detailed description of the methods used to evaluate designated use attainment;
- The rationale for the placement of waterbodies on the Integrated List.

The Department updates the Methods Document every two years, prior to development of the Integrated Report. The final 2010 Methods Document, along with the Department's responses to

public comments on the draft and revised draft 2010 Methods Document, is provided in Appendix F of this report. Assessment methods for the Delaware River, Estuary, and Bay were developed by the Delaware River Basin Commission (DRBC). DRBC's 2010 Methods Document is available on their Web site at http://www.state.nj.us/drbc/10IntegratedList /index.htm. Major changes reflected in the final 2010 Methods Document are outlined below. A more detailed summary of these changes is provided in Section 1.2 of the 2010 Methods Document.

- Assessment Units: The Department revised the boundaries of its HUC 14 subwatersheds to correlate with USEPA's new HUC 12 boundaries as well as new hydrology and elevation coverages. These revisions resulted in changes to the number and delineation of assessment units used as a basis for water quality assessment.
- Fish Consumption Use Assessment and 303(d) Listing: The Department modified the fish consumption use assessment method to reflect the direct assessment of concentrations of bioaccumlating toxic parameters in fish tissue.
- Nutrients: The Department developed a new aquatic life use assessment method for ٠ wadeable streams to evaluate nutrient impairment of freshwaters based on response indicators using a "weight of evidence" approach, where such data is available, that will determine whether phosphorus causes non-attainment of the aquatic life use.
- **Temperature:** The Department developed a method for assessing compliance with the new acute and chronic criteria.

Chapter 3: Water Quality Trends and Related Assessments

The Department's Office of Science publishes periodic "State of The Environment" reports that provide general information on trends and conditions for a variety of environmental factors which, together, comprise an overall assessment of New Jersey's environmental health. These reports are currently published as a collection of fact sheets explaining the current status and trends for different environmental concerns that the Department is working to address. These fact sheets are available on the Department's Web site at http://www.state.nj.us/dep/dsr/trends2005. Fact sheets on water quality-related trends include the following:

- <u>Atmospheric Deposition: Acidity and Nutrients</u>
- Beach Closings
- Dissolved Oxygen Levels in Coastal Waters
- Estuarine Algal Conditions
- Fish: Concentrations of Key Contaminants
- Fresh Water Pollution: Lakes
- Fresh Water Pollution: Streams Ambient Biomonitoring Network & Fish Index of Biotic Integrity Network
- Ground Water
- <u>Marine Water Pollution: Estuarine Sediment Concentrations</u>
- Marine Water Pollution: Harmful Algal Blooms
- <u>Marine Water Pollution: Shellfish Waters</u>
- Surface Water Quality; Streams; Chemical and Physical Measurements

The federal Clean Water Act requires states to determine whether their waters meet the objectives of the Act and attain state water quality standards. This is done through a biennial assessment of water quality data collected over a five-year period, to determine which waters of the State are meeting applicable water quality standards and supporting applicable designated uses (see Chapter 4). States are also required to assess and report changes in water quality over time. This is done through the analysis of trends in water quality data collected over longer periods of time. The following sections present the results of water quality trends analysis conducted using chemical water quality data, biological monitoring data (macroinvertebrates and fish), and other assessments.

3.1 Chemical Water Quality Trends of New Jersey Streams

A trend analysis was conducted in 2010 by the U.S. Geological Survey (USGS) using long term data for six physical and chemical constituents at 70 sampling stations located throughout the State covering all physiographic regions and a variety of land uses (see Figure 3.1). The period of review for the trend analysis represents relatively recent conditions, 1998 to 2007. Data was collected by the Ambient Surface Water Quality Monitoring Network (ASWQMN) which has been operated cooperatively by the Department and the USGS since 1985. Trend results were adjusted to correct for seasonal variation and possible impacts from flow variations on instream concentrations over time. The full report is available on the USGS Web site at http://pubs.usgs.gov/sir/2010/5088/. The constituents assessed as independent indicators of water quality trends were: dissolved oxygen (DO), pH, total dissolved solids (TDS), total phosphorus

(TP), total organic nitrogen plus ammonia (N+NH3), and dissolved nitrate plus nitrite (NO3+NO2).

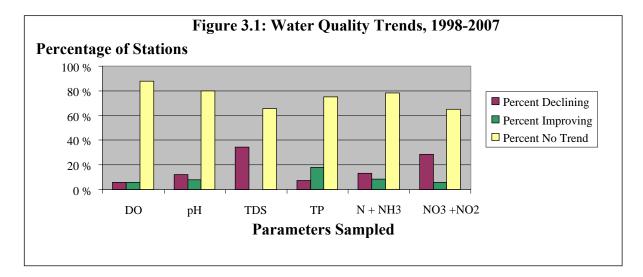
Nitrogen and phosphorus are required nutrients for plant growth and as such, are principally responsible for the growth rate of aquatic algae and vegetation. Water bodies affected by eutrophication (i.e., excessive primary production) are characterized by significant algae and weed growth and episodes of low DO. Low DO episodes occur when algae die off and bacteria consume the dissolved oxygen in the process of decomposition. DO is necessary for almost all aquatic life; consequently, concentrations of DO in water provide a good indicator of the health of aquatic ecosystems. Under low DO conditions, fish are more susceptible to the negative impacts of other pollutants. In addition, at very low DO levels, trace metals from sediments are released into the water column.

A summary of the trend analysis results between 1998 and 2007 is displayed in Table 3.1 and Figure 3.1. The results show that overall water quality has remained relatively stable, with the majority of stations showing no trend in water quality conditions for most parameters. The exceptions were TP, which exhibited improving conditions at some stations; and TDS and NO3+NO2, which exhibited declining conditions at some stations.

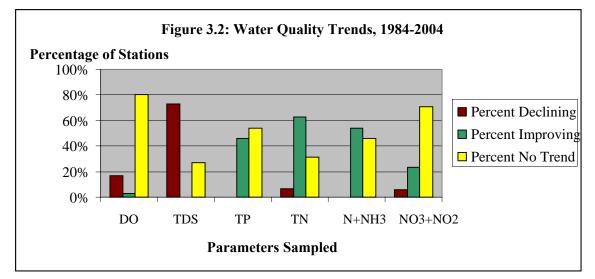
Tuble Unit Trends in Chemieur Water Quanty, 1990 2007						
Water Quality Trend	DO	pН	TDS	TP	N+NH3	NO3+NO2
Declining condition	4*	3	24	5	9	19
Improving condition	4*	2	0	12	6	4
No trend	57	20	46	52	54	43
Total	65	25	70	69	69	66

 Table 3.1: Trends in Chemical Water Quality, 1998-2007

*DO results in this table are for the growing season (April to September) only.



These results stand in contrast to earlier trend studies. Trends analysis for the years 1984 through 2004 were reported in the 2008 Integrated Report. These water quality changes showed more instances of improving conditions with respect to nutrients and DO compared to the more recent analysis (see Figure 3.2). The 1998 to 2007 analysis reflects more stable conditions, albeit over a much briefer time period (nine years vs. 20 years). The 1984 to 2004 analysis reflects the impacts of wastewater treatment plant upgrades and regionalization that occurred throughout the State in the late 1980's through the early 1990's, which established a higher water quality baseline for the more recent analysis.



Of concern in both trend studies are statewide increases in TDS. TDS is comprised of minerals and other substances dissolved in water. Higher levels of TDS may impact drinking water supplies. In addition, changes in TDS can affect organisms by altering the flow of water through cell membranes, which can retard growth or even cause death. These changes can also make water unfit for other uses. While these TDS trends represent all types of land uses (urban, agricultural, mixed, and undeveloped) and physiographic regions, TDS exceedances have been associated with runoff from urban and agricultural areas, including runoff of salt used to control ice on roadways. Discharges from wastewater treatment facilities, including septic systems, may also contribute to increased TDS loadings. While dissolved solids come from both point and nonpoint sources, road salting and improper salt storage are major contributors of this constituent and need to be better addressed by the Department's water quality management programs (see Chapter 5).

3.2 Trends in Biological Health of New Jersey Streams

Ambient Biological Monitoring Network (AMNET)

In 1996, the Department established a statewide Ambient Biological Monitoring Network (AMNET) to collect and assess benthic macroinvertebrate populations (insects, worms, mollusks, and other indicator species) in the State's freshwater streams. As of 2010, the network consisted of over 760 non-tidal stations distributed equally throughout the State's five water regions (Atlantic, Raritan, Lower Delaware, Upper Delaware, and Northeast regions - see Figure

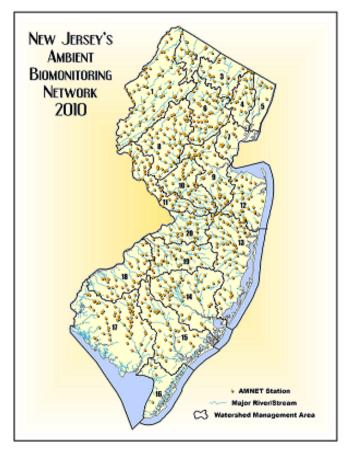
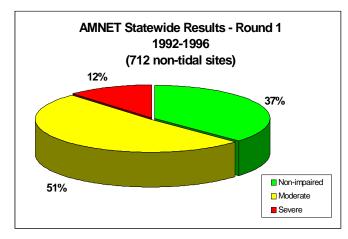


Figure 3.3: Biological Monitoring Stations

Figure 3.4: AMNET Results Round 1



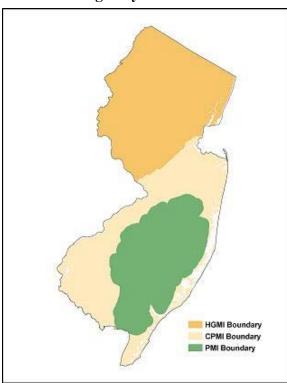
3.3). Stations are sampled once every five years in each region on a rotating basis. Procedures for field sampling, sorting, and identification of benthic macroinvertebrates, and determination of the degree of impairment, include detailed protocols that must be carefully followed to ensure consistency in the collection and analysis of data. The data generated by AMNET is used to assess support of the aquatic life use for the Integrated Report and to determine if waters qualify for Category One antidegradation designation based on exceptional ecological significance. The Category One designation provides special protections against degradation for waters of exceptional ecological significance (see Chapters 2 and 5, Surface Water Quality Standards).

In 1996, the first round of statewide AMNET sampling was completed, with 712 non-tidal stations each sampled once. The results, generated using the original multi-metric approach known as the New Jersey Impairment Score (NJIS), showed that approximately 37 percent of the waters statewide were non-impaired, approximately 51 percent were moderately impaired, and approximately 12 percent were severely impaired (see Figure 3.4).

After the first round of data collection, the Department recognized that the diversity of ecological habitats in New Jersey required multiple statistical methods for the interpretation of the raw

benthic macroinvertebrate data to serve as a more meaningful environmental indicator. Accordingly, the Department worked with USEPA Region 2 to develop ecologically-based Rapid Bioassessment Protocol multi-metric indices covering all the waters of the State (see Figure 3.5).

Figure 3.5: Boundaries for Ecologically-based Indices



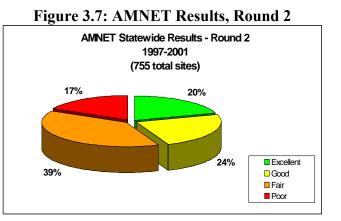
In 2001, the second round of statewide AMNET sampling was completed with 755 non-tidal stations sampled. The results showed that, statewide, 20 percent of the waters exhibited "excellent" water quality, 24 percent exhibited "good" water quality, 39 percent exhibited "fair" water quality, and 17 percent exhibited "poor" water quality based upon the condition of the benthic macroinvertebrate community (see Figure 3.7).

In 2007, the third round of statewide AMNET sampling was completed, with 758 non-tidal stations sampled. The results showed that, statewide, 18 percent of the waters exhibited "excellent" water quality, 23 percent exhibited "good" water quality, 42 percent exhibited "fair" water quality, and 17 percent exhibited "poor" water quality based upon the condition of the benthic macroinvertebrate community (see Figure 3.8).

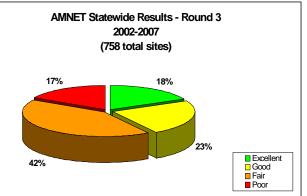


Multimetric Index	Assessment Rating Score
HGMI – High Gradient Macroinvertebrate Index	Excellent
CPMI – Coastal Plain Macroinvertebrate Index	 Good Fair
PMI - Pinelands Macroinvertebrate Index	• Poor

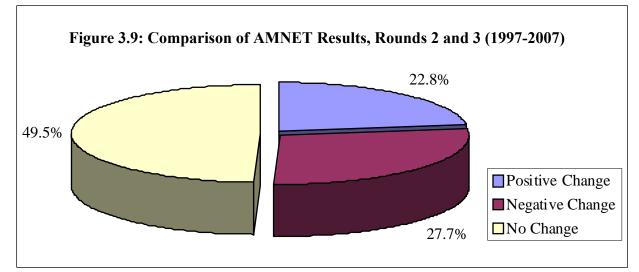
The High Gradient Macroinvertebrate Index (HGMI), the Pinelands Macroinvertebrate Index (PMI), and the Coastal Plains Macroinvertebrate Index (CPMI) each provides four tiers of assessment and are applicable to headwater streams (see Figure 3.6). These new indices, as well as the NJIS index, are not applicable to tidal streams. Therefore, stations determined to have been inadvertently located on tidal portions of streams were omitted from the current analysis.







A comparison of the assessment ratings for the 750 common AMNET sampling sites in the second and third monitoring rounds (Figure 3.9) reveals 171 stations (22.8%) exhibiting a positive change in rating, 208 stations (27.7%) exhibiting a negative change in rating, and 371 stations (49.5%) exhibiting no change in rating. Furthermore, 31 stations appear to have jumped two impairment ranges (12 negative, and 19 positive). On the whole, these trends indicate water quality generally maintaining "status-quo" over time, with a slight negative trend. Almost as many stations are showing improvement as are exhibiting degradation over this ten year time period.



Further investigation is necessary to determine why a site's biological assessment has declined or improved, and if these changes are related to water quality or to events such as droughts and floods. Ongoing site-specific evaluations, such as stressor identification studies, explore changes in water quality to determine causes of impairment at selected sites; however, the AMNET data show a correlation between benthic macroinvertebrate community impairment and different physiographic land types, land uses, and other anthropogenic factors.³ Recent data analysis⁴ concludes the following:

- Invertebrate communities and fish were commonly impaired in urban streams;
- Invertebrate community impairment was related to total urban land and total wastewater flow upstream of a site;
- Changes in aquatic community structure were statistically related to environmental variables. For example, an increase in impervious surfaces was related to a negative response in the aquatic invertebrate community. Conversely, the same data analysis also demonstrated that the more forests and wetlands in a stream's drainage basin, the more protection there was for invertebrate community health.

Given the expectations of population growth in New Jersey (an estimated 900,000 more residents by the year 2020) land use changes may have a measurable effect on water quality and aquatic

³ U.S. Geological Survey. 1998. *Relation Of Benthic Macroinvertebrate Community Impairment To Basin Characteristics In New Jersey Streams*. Fact Sheet FS-057-98. USGS. West Trenton, New Jersey.

⁴ Ayers, M., Kennen, J., Stackleberg, P., Kauffman, L. 2000. Building A Stronger Scientific Basis For Land Use Planning And Watershed Management Effects On Water Quality And Aquatic Communities In NJ Streams. USGS. West Trenton, New Jersey.

communities. The AMNET network will continue to monitor the effects of that population growth on the aquatic biota of the state's waterways, and provide a measure of success for sound land use practices and mitigation efforts.

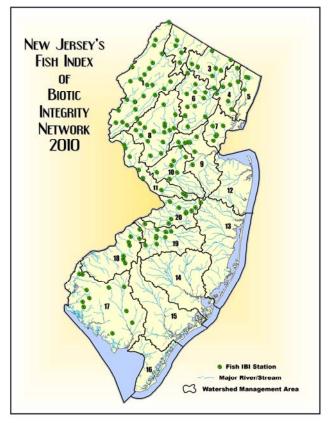
Fish Index of Biotic Integrity Network

As discussed above, monitoring of benthic macroinvertebrate populations is widely practiced in New Jersey; however, these species generally are reflective of relatively short-term and local impairment. In summer 2000, the Department began using a fish index of biotic integrity (FIBI) to monitor New Jersey's streams. FIBI measures the health of a stream based on multiple attributes of the resident fish, such as species type and number, and the presence of disease. Each site sampled is then scored based on its deviation from reference conditions and classified as "poor", "fair", "good", or "excellent". In addition, habitat is evaluated at each site and classified as "poor", "marginal", "suboptimal", or "optimal". The primary objectives of fish collection for this network are to obtain samples with representative species and abundances, at a reasonable level of effort. Using similar stream lengths, collection methods, and habitat types allows standardization of sampling efforts. Stream segments selected for sampling must have a

minimum of one riffle, run, and pool sequence to be considered representative.

As of summer 2004, the FIBI network consisted of 100 sampling stations in northern New Jersey (see Figure 3.10), which are visited once every five years as part of the Department's stream-monitoring efforts. During the summers from 2007 to 2009, data were collected for the planned expansion of the network to include portions of southern New Jersey, with the goal of having a statewide network of at least 200 stations by the end of calendar year 2010. The Northern FIBI Network was reevaluated in 2005 using Round 1 data (2000-2004) to ensure sensitivity to anthropogenic stressors. This recalibration resulted in modifications in scoring criteria and species lists for several metrics. The 2007 season is the third year in which the revised metrics were utilized. Previous years' data (2000-2004) have been rescored for the purposes of trends analysis.

Figure 3.10: FIBI Monitoring Stations



The data provided by the FIBI network has become another component of the Department's suite of environmental indicators and helps assess attainment of aquatic life uses and the Clean Water Act goal of "fishable" waters. FIBI data is also being used to develop biological criteria, prioritize sites for further studies, provide biological impact assessments, and assess status and trends of New Jersey's freshwater fish assemblages. Data collected from the Northern FIBI Network are used, in part, to determine if waters qualify for Category One antidegradation designation based on exceptional ecological significance (see Chapters 2 and 5, Surface Water Quality Standards).

Northern FIBI Results:

The Department sampled 92 FIBI sites in the northern portion of the State covering the Counties of Sussex, Warren, Hunterdon, Passaic, Bergen, Union, Essex, Mercer, Middlesex, and Somerset between years 2000 and 2004. The Department sampled 63 FIBI sites in the same counties but added Morris County in 2005-2007. Results for these two rounds are shown in Figure 3.11.

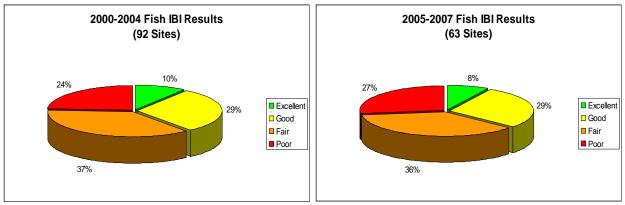


Figure 3.11: FIBI Results, Rounds 1 and 2

The water quality trend was determined by comparing the 58 common sites between the first (2000-2004) and second (2005-2007) rounds of FIBI monitoring. This comparison showed that 27.6 percent of the common sites sampled exhibited a positive change in impairment rating, 24.1

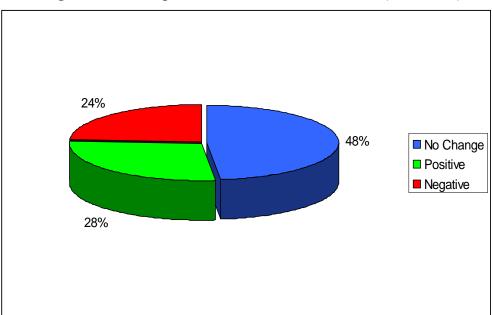


Figure 3.12: Comparison of FIBI Rounds 1 and 2 (2000-2007)

percent exhibited a negative change, and 48.3 percent exhibited no change (see Figure 3.12). In addition, both the negative and positive trends were marginal ones, reflecting shifts in impairment to an adjoining category; for example from a "poor" rating to a "fair" rating or the reverse. Since almost as many stations exhibited improvement as exhibited decline over a five-year time period, and since the changes were marginal, this indicates generally stable water quality conditions with a slight improvement over time.

Further analysis of the FIBI data concluded that fish biotic integrity is highly sensitive to anthropogenic stressors including impervious cover, siltation, and increased run-off from stormwater outfalls, based on the following:

- There was a significant ($r^2 = 0.37$) decline in fish biotic integrity with increasing impervious cover.
- Benthic fish species exhibited a sharp decline $(r^2 = 0.34)$ with increasing urbanization.
- Round 2 FIBI data detected a higher occurrence of external deformities (deformity, eroded fins, lesions, tumors; collectively referred to as "DELT" anomalies) in urbanized streams.

More Information

All published AMNET reports, as well as data and reports for all eight years (2000-2007) of the FIBI, are available on the Department's Web site at <u>www.state.nj.us/dep/wms/bfbm</u>.

3.3 Statewide Statistical Surveys of New Jersey Waters

Background

The Department employs two different types of assessment methodologies to characterize New Jersey's water quality: site-specific targeted monitoring and statewide statistical surveys. The site-specific targeted assessment uses data collected from fixed monitoring locations to characterize the water quality at specific locations. This method can be used for regulatory purposes, such as identifying impaired waterbodies that require TMDLs under Section 303(d) of the federal Clean Water Act, and to quantify change in water quality over time (i.e., trends) at targeted locations. Statewide statistical surveys use data collected from monitoring stations selected probabilistically so that every location has the same likelihood of being selected and monitored as any other location within that region. The results from the selected statistical survey generates spatial quantification of water quality conditions and can be used to characterize the "overall" water quality of an entire region or state, as required under Section 305(b). Statewide statistical surveys provide a practical approach for studying an extensive resource, such as all rivers in the State.

Each type of design and assessment method has distinct advantages. The site-specific targeted assessment can identify the specific location within New Jersey that exceeds the SWQS criterion for a particular pollutant and can be used to support listing of water-quality limited waters, as required under Section 303(d) of the federal Clean Water Act. The statewide statistical survey assessment can indicate that a certain percentage of all the river miles in New Jersey are

expected to exceed the SWQS criterion for a particular pollutant. Statistical surveys provide broad-brush characterizations that can be applied to an entire region with a known level of confidence. These surveys can be used to support assessment of designated use attainment, as required under Section 305(b) of the federal Clean Water Act.

Statewide Statistical Assessment of Streams

The Department's first statistical assessment for freshwater streams was based upon sampling protocols developed cooperatively with USGS and published in the <u>2000 New Jersey Water</u> <u>Quality Inventory Report</u>. Between 2000 and 2007, a total of 108 sites were sampled and assessed, with results converted to river miles. While the sites employed in this assessment were not randomly selected from all possible locations (a true probabilistic design), the 830 fixed sites from which they were selected were considered to be extensive enough to approximate the entire population of all possible sites. Results for this assessment were published in Section 3.4 of the <u>2008 Integrated Report</u>. Unfortunately, this site selection methodology did not meet USEPA requirements for a true probabilistic design; therefore, the Department has been working with USEPA's Office of Research and Development to develop site selection protocols for wadeable streams that concur with USEPA's Generalized Random Tessellation Stratified (GRTS) Spatially-Balanced Survey Design, the method USEPA prefers states to use. Data collection is scheduled to begin in Summer 2011. The results will be published in future Integrated Reports.

Statewide Statistical Assessment of Lakes

The Department's lake monitoring network is also based on the USEPA-recommended GRTS Spatially-Balanced Survey Design. This network involves the testing of 200 lakes selected randomly from a list of 635 named lakes over two hectares (5 acres) or greater in surface area, which serve to statistically represent all lakes of that size in the State. Water supply reservoirs are excluded because the water levels are closely managed by the water supply authorities. Sampling is conducted in five panels of 40 lakes each. Each panel is sampled once every five years. Each lake within a panel is sampled three times per year (Spring, Summer, and Fall). Three parameters are used to assess the general aquatic life use: total phosphorus (TP), dissolved oxygen (DO), and pH. The lake selection and monitoring protocols employed by the Department are described in more detail on the Department's Web site at http://www.state.nj.us/dep/wms/ bfbm/lakes.html. Of the 199 lakes assessed, 142 lakes fully support the aquatic life use and 57 did not support the use. Non-support of the aquatic life use may be caused by more than one parameter within a single lake. For example, many lakes that exceed the DO criterion also exceed the TP criterion. Of the 57 lakes that did not support the aquatic life use, 30 exceeded the TP criterion, five exceeded the DO criterion, and 28 exceeded the pH criterion. These results reflect sampling for all five panels (199 lakes). Final results, including the statistical results applied to all New Jersey lakes - as calculated by USEPA - will be presented in the 2012 Integrated Report.

Statewide Statistical Assessment of Estuarine Waters

During the years 2000-2006, the estuarine waters of New Jersey and other coastal states were assessed under USEPA's National Coastal Assessment program (NCA). The Department was a

full partner in design and sampling for NCA in New Jersey's estuarine waters. This program has a probabilistic design that was developed by USEPA's Office of Research and Development (ORD) to estimate the percentage of a state's or the Nation's waters that are in good, fair, or poor condition. This project is now run by USEPA's Office of Water as part of the National Resource Surveys and, as such, operates on a five-year assessment cycle. In 2010, during an index period of July through September, 27 locations throughout New Jersey's estuarine waters were sampled for water quality, sediment quality, benthic community, fish assemblage, and fish pathology. Raw data are expected to be available by the end of 2011. Currently the Department does not fully concur with the assessment methods used for the NCA reports because of the limited nature of the sampling protocol. USEPA's methodology uses a one-time grab sample to represent a location within an entire season. The Department prefers more frequent sampling within a season to obtain more precision in the assessments. Specifics about the design and other aspects of the NCA program are available on USEPA's Web site at http://www.epa.gov/emap/nca/.

To further enhance these coastal assessments, New Jersey is working in partnership with USEPA's Atlantic Ecology Division (AED) and USEPA Region 2's Monitoring and Assessment Program to develop additional biological assessment methods for New Jersey's marine and estuarine waters. The Department, USEPA AED, USEPA Region 2, and Rutgers University are working together to develop a biological index, similar to the one developed by USEPA Region 2 for the New York/New Jersey Harbor Estuary, for the Atlantic Coastal estuarine waters and for the nearshore New Jersey ocean waters. Sample collection for this effort began in 2007. In developing the ocean index, preliminary findings suggested that the nearshore ocean benthos looked healthy, but lacked the necessary range in the data (representing disturbed to pristine conditions) to support the development of an index. In 2008, an additional 53 stations were sampled with a focus on finding some impaired sites to give the necessary range of data to better support index development. The 2008 dataset results are currently being processed, with an index expected to be completed by December 2011. An index for estuarine waters is expected to be completed by December 2012, and will be based upon the merging of multiple years of data from different projects.

3.4 Assessment of Freshwater Sediment Samples

Sediment samples have been collected in a number of the State's rivers and streams as part of the Department's Ambient Surface Water Monitoring Network, as follow-up monitoring to confirm impairment in 303(d)-listed waters, or as part of stressor biologically-impaired identification for waters. A total of 282 stations were sampled in 244 assessment units (AUs) since 1997 (see Figure 3.13). Parameters sampled varied from station to station depending on the monitoring network used and the previous data collected and included: pH, chloride, total solids, total kjeldahl nitrogen (TKN), ammonia, phosphorous, petroleum hydrocarbons, polychlorinated biphenyls (PCBs), polyaromatic hydrocarbons (PAHs), arsenic. beryllium, boron, cadmium, chromium, hexavalent chromium, cobalt, copper, cyanide, iron, lead, manganese, mercury, nickel, selenium, silver, thallium, The Department has not and zinc. promulgated sediment standards; therefore, this data was evaluated based on other

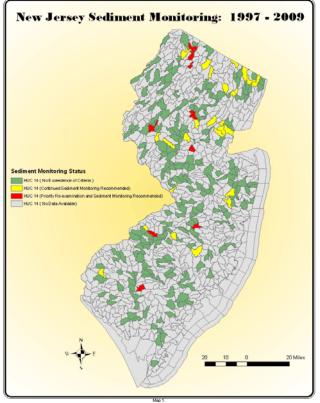


Figure 3.13: Sediment Monitoring Stations

criteria and/or guidelines as a screening tool to identify stations and/or parameters of concern. This data was not used for designated use assessment or in generating the Integrated List of Waters or 303(d) List of Water Quality Limited Waters.

The sediment samples were evaluated by comparing the monitoring location data with the Department's Ecological Screening Criteria in accordance with the Technical Requirements for Site Remediation at N.J.A.C. 7:26E-3.11. The Department's Environmental Toxicology and Risk Assessment (ETRA) Unit developed an Ecological Screening Criteria Table from various sources to allow ease of reference for ecological screening criteria (ESC) for surface water, sediment, and soil. This table is available on the Department's Web site at http://www.nj.gov/dep/srp/guidance/ecoscreening. With the exception of the surface water quality standards (N.J.A.C. 7:9B), the ecological screening criteria are not promulgated standards, but are used as screening values in ecological assessments. When multiple ESC are provided for the same contaminant and same media, generally the most conservative criterion is used.

The following parameters could not be evaluated for lack of applicable sediment criteria: beryllium, boron, hexavalent chromium, selenium, thallium, and a number of PAHs. An exceedance of a ESC indicates the potential for adverse ecological effects to the benthic community. PAHs were evaluated as total PAHs and compared with a screening criterion of 4.0

mg/kg. If the sum total of PAHs exceeded 4.0 mg/kg, then a station was identified as "of concern". Levels of PAHs (sum total) in the range of 1 to 2 mg/kg, and lead in the range of 50 to 100 mg/kg, were considered typical levels for urban areas. Iron and manganese levels above the screening criteria were not of concern unless they were related to a known discharge. For all other parameters, a station was determined to be of concern if the concentration of an individual parameter was higher than the applicable screening criterion by a significant amount (generally, an order of magnitude), using best professional judgment.

As shown in Figure 3.13, most (210) of the assessment units (AUs) sampled had sediment concentrations below levels used as screening values in ecological assessments. These AUs depicted as green on the map. Sediment quality in 34 AUs exceeded screening values and could contribute to aquatic life use impairment (yellow and red); however, only nine (red) of these were high enough to be recommended for priority attention. All but three of the 34 AUs were assessed as not supporting the aquatic life use. Several stations were sampled over multiple years and, in some cases, parameter values varied significantly. In one case, the variation may be attributed to clean up activities. The North Branch Rancocas Creek at Hanover Furnace (01465950) was sampled in 1998, 2000, and 2009. In 1998 and 2000, lead and copper levels were elevated and staff found pieces of spent ammunition (made of lead and copper) in the sediment, which was found to have originated upstream in Fort Dix. In 2009, parameter concentrations were below the applicable screening criteria, indicating that the upstream munitions clean-up may have been successful. In the remaining cases where sample results varied from year to year, it is suspected that samples may have been collected after storm events with significant scouring effects, or that samples were collected from slightly different subsections (composite samples are made from several sub-sections across a transect).

3.5 Assessment of Coastal Phytoplankton

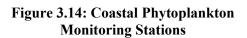
Phytoplankton are microscopic plants that float in coastal waters. Under normal conditions, they are beneficial and form the base of the food chain on which most other marine life depend. The Department's Bureau of Marine Water Monitoring (BMWM) monitors phytoplankton assemblages and looks for the presence of blooms each summer in New Jersey's coastal waters and major estuaries (see Figure 3.14) as part of the State's compliance with the National Shellfish Sanitation Program (NSSP). The National Shellfish Sanitation Program requires that each coastal state develop a contingency plan that includes control measures for marine biotoxins. Filterfeeding molluscan shellfish, known as bivalves (clams, oysters, and mussels) are capable of accumulating toxins that may be produced by certain algal species. The phytoplankton-monitoring program provides surveillance of shellfish growing areas for possible toxin-producing algal species, which are identified and enumerated along with other phytoplankton present.

The primary purpose of this program is to ensure that shellfish harvested in New Jersey are not toxic for human consumption due to the presence of certain phytoplankton known to produce toxins. However, algal blooms may have other harmful effects, including marine fauna kills, mild toxicity to bathers, and reduced aesthetic quality. This information is obtained cooperatively with USEPA Region 2 during their summer New York Bight Water Quality helicopter survey. The BMWM has also implemented an <u>aircraft remote sensing program</u> for estimating

chlorophyll levels in New Jersey's coastal waters. This program provides a valuable perspective on algal conditions and trends.

Historical information on algal conditions in New Jersey's estuarine and coastal waters is available in the "Annual Summary of Phytoplankton Blooms and Related Conditions in New Jersey Coastal Waters Summer" reports for each year, which are available on the Department's Web site at <u>http://www.state.nj.us/dep/wms/bmw/reports.htm.</u> It should be noted that data for the summers of 2006 and 2007 was not available due to technical problems with the USEPA helicopter. No acutely toxic species were detected in any of the waters sampled during the reporting period. Other notable results are summarized below:

- <u>Hudson/Raritan Estuary:</u> Three potentially toxic species were detected below bloom or toxic concentrations on two occasions.
- <u>Barnegat Bay:</u> Mild blooms in 2004, 2005 and 2008; however, there has not been a "brown tide" bloom since 2003.
- Great Bay: Waters were clear with sparse algal concentrations, except for three localized blooms in 2004 and 2008.
- <u>Great Egg Harbor:</u> Sparse algal concentrations were observed except for a localized bloom in August 2004.
- <u>Delaware Bay:</u> Experienced a moderate bloom in 2005 and two in 2008.
- <u>Northern New Jersey Coastal Waters:</u> Clear with sparse algal concentrations, although potentially toxic species were detected below bloom or toxic concentrations in 2005 and 2008.





• <u>Southern New Jersey Coastal Waters:</u> Generally clear, with sparse algal concentrations although potentially toxic species were identified below bloom or toxic concentrations in 2008.

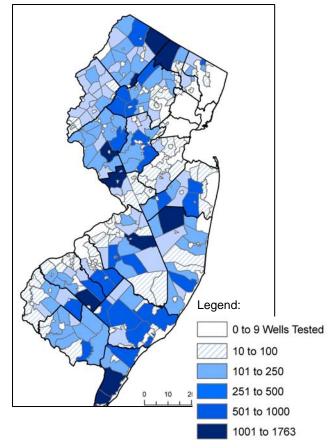
3.6 Ground Water Quality Assessment

Approximately 400,000 private wells (about 13 percent of New Jersey residents) are used for drinking water in New Jersey. There are no federal regulations regarding the quality of private

wells and, before the Private Well Testing Act (PWTA) was passed in 2001, state regulations focused on well construction. Since September 2002, testing of private wells for a list of contaminants has been required when the property is sold or leased. All samples are raw water samples taken before any treatment. Wells statewide are now required to be tested for bacteria (total coliform, fecal coliform, and E. coli), nitrates, 26 volatile organic compounds, and lead (see Figure 3.15).

The following is a summary of the Department's assessment of private well data compared with the federal and state drinking water standards for potable supplies. This analysis shows that naturally-occurring contaminants (i.e., arsenic, gross alpha particle counts, manganese, and iron) frequently exceeded drinking most water primary/secondary standards in private wells, followed by contaminants entering ground water via nonpoint sources of pollution (i.e., nitrates and fecal coliform). Contaminants associated with point sources of pollution (i.e., VOCs and mercury) were the least frequently found in concentrations above drinking water maximum contaminant levels (MCLs).

Figure 3.15: Number of Private Wells Tested Statewide



Fecal Indicator Bacteria: All private wells in the

State were tested for the presence of a group of bacteria called total coliform (TC). TC was detected in 50,800 private wells, which were further tested for fecal coliform (FC) and E. coli (EC) bacteria. The presence of either FC of EC bacteria is strong evidence that a well has been contaminated with fecal wastes, which can come from a variety of human (septic tanks, leaking sewer lines) or animal (surface water infiltration) sources. FC or EC were detected in 2.2 percent (1,136) of the TC-positive wells. Table 3.2 shows the breakdown of the number and percent of wells in which either FC or EC were detected, by physiographic provinces. The Coastal Plain had the lowest percentage of wells in which FC or EC was detected. This may be because the sand and clay layers of the Coastal Plain protect wells from fecal contamination better than the sedimentary, igneous, or metamorphic rocks that comprise the three bedrock provinces in the north.

Province	No. of TC Pos Wells	No. FC- or EC-positive	Percent
Valley and Ridge	3,874	165	4.3
Highlands	11,517	326	2.8
Piedmont	9,835	392	4.0
Coastal Plain	25,574	253	1.0
Totals	50,800	1,136	2.2

 Table 3.2: Number and Percentage of Total Coliform-Positive Wells

 With Fecal Coliform or E. coli Detected

Nitrate: Nitrate and its reduced form, nitrite, are found in ground water due to natural deposition, runoff from fertilizer use or manure, leaching from septic tanks, and leakage from sewer lines. The drinking water maximum contaminant level (MCL) for nitrate is 10 mg/l. Table 3.3 shows a breakdown of the number and percent of wells sampled that exhibited levels of the nitrate above the MCL, by physiographic province. Of the 62,986 private wells sampled, 2.7 percent (1,688) contained nitrate levels above the drinking water MCL. The Coastal Plain had the highest percentage (3.6 percent) of wells containing nitrate levels above the drinking water MCL. As more data becomes available, it may be possible to evaluate trends in nitrate concentrations over time.

Table 3.3:	Number and	Percentage of	of Wells	With Nitra	te Above	The MCL	(10 mg/l)

Province	No. of Wells	No. of Wells Above 10 mg/L	Percent
Valley and Ridge	4,778	57	1.2
Highlands	14,176	415	2.9
Piedmont	12,079	83	0.7
Coastal Plain	31,953	1,133	3.6
Total	62,986	1,688	2.7

Arsenic: Arsenic in New Jersey ground water has mainly geologic origins; however, in some areas it may be related to land use practices. The Department found that high arsenic concentrations occur when the dissolved oxygen concentration is low and pH values are greater than 7.5⁵. All of the northern New Jersey counties are required by the PWTA to monitor for arsenic. Table 3.4 shows the breakdown of wells sampled that contained arsenic levels above the New Jersey drinking water MCL of 5 ug/l, by physiographic province. Of the 17,524 private wells sampled, 10.8 percent (1,884) contained levels of arsenic above the New Jersey MCL. The Piedmont region had the highest percentage of wells (19.0 percent) with arsenic levels above the MCL (see Figure 3.16).

⁵ New Jersey Geological Survey. New Jersey Department of Environmental Protection. *Arsenic in New Jersey Ground Water*. 2004. Information circular available at <u>http://www.state.nj.us/dep/njgs/enviroed/infocirc/arsenic.pdf</u>.

Province	No. Wells	No. Wells Above 5 ug/l	Percent
Valley and Ridge	548	7	1.3
Highlands	7,095	81	1.1
Piedmont	9,439	1,791	19.0
Coastal Plain	442	5	1.1
Totals	17,524	1,884	10.8

Table 3.4: Number and Percentage of Wells With Arsenic Above The MCL (5 ug/l)

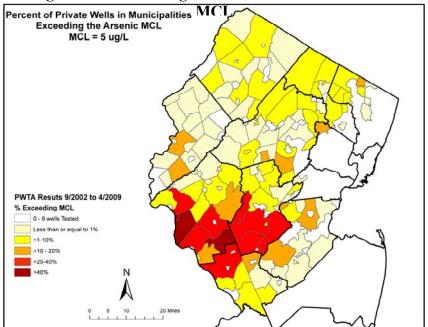


Figure 3.16: Percentage of Wells With Arsenic Above

Mercury: Mercury concentrations were measured in 31,411 wells in southern New Jersey's nine counties, which are all located within the Coastal Plain. Less than one percent of the wells contained mercury levels above the drinking water MCL for mercury (2 mg/l). The source of mercury in these private wells is not clear.

Radium (Gross Alpha): Gross alpha particle activity (pCi/l) is used as a surrogate measurement for radium due to the high cost of radium isotope testing. It is a measurement of all alpha activity present, regardless of the specific radionuclide source. The federal MCL for gross alpha is 15 pCi/l minus the contribution of uranium. In the Coastal Plain, where only radium is present, this screening test works quite well; however, in northern New Jersey, where samples may contain uranium, radium, or a combination of both, gross alpha measurements do not provide sufficient information to evaluate whether a particular sample exceeds the drinking water MCL. Table 3.5 shows the breakdown of private wells sampled that contained levels of gross alpha above the federal MCL, by physiographic province. Of the 33,174 private wells sampled, 9.3 percent (3,091) contained gross alpha levels above the federal MCL; however, only the results for the Coastal Plain are considered accurate, as explained above. Approximately eleven percent (2,853)

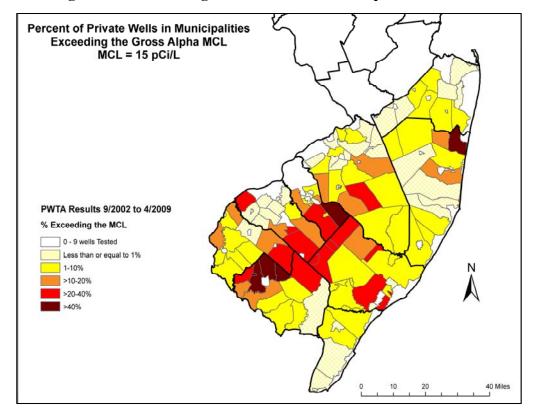
of private wells tested in the Coastal Plain contained levels of gross alpha above the federal MCL (see Figure 3.17).

Table 3.5: Number and Per	rcentage of Wells With Gro	ss Alpha Above The MCL (15 pCi/l)

Province	No. Wells	No. Well Above 15 pCi/l	Percent
Coastal Plain	26,605	2,853	10.7
Piedmont*	5,305	206	3.9
Highlands*	1,264	32	2.5
Totals	33,174	3,091	9.3

* Piedmont and Highlands samples may contain Radium and/or Uranium.

Figure 3.17: Perc	centage of Wel	ls with Gross A	Alpha above MCL



Manganese: Manganese is commonly found in ground water. High concentrations of manganese may cause the water to become brown or black, resulting in staining and a bitter metallic taste. USEPA has set a secondary MCL for manganese of 0.05 mg/l. USEPA has also set a lifetime health advisory of 0.300 mg/l manganese based on the occurrence of neurological effects. Table 3.6 shows the breakdown of private wells sampled that contained manganese levels above the federal secondary MCL of 0.05 mg/l and the lifetime health advisory for manganese, by physiographic province. Overall, 19.5 percent of the private wells tested contained manganese levels above the secondary standard; 3.1 percent contained levels above the lifetime health advisory were present most frequently in private wells in the Highlands and Ridge and Valley physiographic provinces.

Province	No. of	No. Wells	% above	% above No. Wells Above	
	Wells	Above 0.05 mg/l	0.05 mg/l	0.300 mg/l	0.300 mg/l
Valley and Ridge	4,774	1,250	26.2	261	5.5
Highlands	14,173	2,690	19.0	958	6.8
Piedmont	12,075	1,100	9.1	205	1.7
Coastal Plain	31,926	7,219	22.6	529	1.7
Totals	62,948	12,259	19.5	1,953	3.1

Table 3.6: Number and Percentage of Wells with Manganese above the Secondary MCL
(0.05 mg/l) and the Lifetime Health Advisory (0.300 mg/l)

Iron: Iron is a common problem in private wells. Iron-bearing ground water is often noticeably orange in color, causing discoloration of laundry, and has an unpleasant taste. Iron dissolved in ground water is in the reduced iron II form. This form is soluble and normally does not cause any problems by itself. Iron II is oxidized to iron III upon contact with oxygen in the air or by the action of iron-related bacteria. Iron III forms insoluble hydroxides in water. These are rusty red and cause staining and blockage of screens, pumps, pipes, reticulation systems etc. USEPA has set a secondary standard for iron of 0.300 mg/l. USEPA has not set a lifetime health advisory for lead. Table 3.7 shows the breakdown of private wells tested that contained iron concentrations above the secondary standard, by physiographic province. Of the 62,953 private wells sampled, 29.2 percent (18,353) contained iron concentrations above the federal secondary standard. The acidic Coastal Plain exhibited the highest percentage of wells (39.1%) with iron concentrations above the secondary standard.

Table 3.7: Number and Percentage of Wells with Iro	on above the Secondary Standard (0.3 mg/l)
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Physiographic Province	No. Wells	No. Wells Above 0.300 mg/l	Percent
Valley and Ridge	4,777	1,021	21.4
Highlands	14,170	3,476	24.5
Piedmont	12,079	1,374	11.4
Coastal Plain	31,927	12,482	39.1
Totals	62,953	18,353	29.2

Volatile Organic Compounds: Volatile organic compounds (VOCs) are often found in ground water. All wells in New Jersey are required to be tested for the 26 VOCs that have state or federal MCLs. Table 3.8 shows the number of wells in which each of the 26 VOCs was detected at concentrations greater than 0.5 parts per billion (ppb), and the percentage of detections of each VOC out of the 63,036 private wells sampled. The highest percentage of VOCs detected (over the 0.5 ppb were MTBE (7.6%) and toluene (5.1%), which are components of gasoline; and the solvents trichloroethylene (0.8%) and tetrachloroethylene (0.7%). This table also shows the corresponding MCL for each VOC and the number of private wells sampled that contained concentrations of each VOC above its MCL. Of the 63,063 private wells tested statewide, 1.5 percent (969) contained VOCs in concentrations above the corresponding drinking water MCL.

	Number of Wells with	Percentage of	Applicable	Number of Wells	Percentage of Wells
	Detections	Wells with	MCL	Above	Above
VOC	(over 0.5 ppb)	Detections	(ppb)	MCL	MCL
Benzene	425	0.67	1	70	0.1
Carbon Tetrachloride	271	0.43	2	74	0.1
Chlorobenzene	40	0.06	50	0	0.0
1,2-Dichlorobenzene	34	0.05	600	0	0.0
1,3-Dichlorobenzene	32	0.05	600	0	0.0
1,4-Dichlorobenzene	85	0.13	75	0	0.0
1,1-Dichloroethane	222	0.35	50	1	0.0
1,2-Dichloroethane	116	0.18	2	36	0.1
1,1-Dichloroethylene	155	0.25	2	41	0.1
<i>cis</i> -1,2-					
Dichlorothylene	148	0.23	70	2	0.0
trans-1,2-					
Dichlorothylene	10	0.02	100	0	0.0
1,2-Dichloropropane	129	0.20	5	28	0.0
Ethylbenzene	100	0.16	700	0	0.0
Methylene Chloride	397	0.63	3	58	0.1
MTBE	4758	7.55	70	40	0.1
Naphthalene	256	0.41	300	0	0.0
Styrene	87	0.14	100	1	0.0
1,1,2,2-					
Tetrachloroethane	28	0.04	1	10	0.0
Tetrachloroethylene	457	0.72	1	282	0.4
Toluene	3185	5.05	1000	0	0.0
1,2,4-					
Trichlorobenzene	26	0.04	9	0	0.0
1,1,1-Trichloroethane	254	0.40	30	1	0.0
1,1,2-Trichloroethane	19	0.03	1	3	0.0
Trichloroethylene	531	0.84	1	312	0.5
Vinyl Chloride	53	0.08	2	10	0.0
Xylenes (Total)	206	0.33	1000	0	0.0
Totals	12024	19.04	4775	969	1.5

 Table 3.8: Volatile Organic Compounds Detected in NJ Private Drinking Water Wells

Chapter 4: Results of the 2010 Water Quality Assessment

Every two years, the federal Clean Water Act requires states to determine whether their waters meet the objectives of the Act and attain state water quality standards. This is done through the water quality monitoring and assessment process. This chapter describes the overall quality of New Jersey's surface waters, including level of designated uses in all waters of the State, based on data collected between January 1, 2004 and December 31, 2008. This data is generated by various monitoring entities, including federal, state, regional, county, and local government agencies; private entities; academic institutions; watershed associations; and civic/community groups. Data is then compiled and evaluated by the Department to verify that the data meets the Department's data quality requirements. Data is then assessed using scientific methods developed specifically for the applicable parameter, use, and waterbody type (see Appendix F) to determine compliance with New Jersey's surface water quality standards (SWQS). The following sections explain the designated uses of the waters of New Jersey and how they are assessed, summarizes the assessment results for each use on a statewide basis, and explains how those results are used in generating the Section 305(b) Integrated List of Waters, the Section 303(d) List of Water Quality Limited Waters, and the priority ranking for TMDL development.

4.1 Designated Uses of New Jersey's Waters

New Jersey's surface water quality standards (SWQS) establish stream classifications and antidegradation designations for all surface waters of the State. The stream classifications reflect the designated uses assigned to individual surface waters. Designated uses include aquatic life support (maintenance, migration, and propagation), recreation, fish consumption, shellfish harvest for consumption, drinking water supply, industrial water supply, and agricultural water supply. The SWQS also specify the water quality criteria that correspond with the waterbody classifications, which are necessary to achieve the designated uses (see Appendix L).

As explained in Chapter 1, New Jersey is divided into 952 assessment units (AU) for the 2010 Integrated Report. New Jersey's designated uses and their corresponding water body classifications are listed in the Surface Water Quality Standards at N.J.A.C. 7:9B-1.12 and 1.13. Each use is assessed using the scientific methods applicable to the use and waterbody type to evaluate associated parameters and/or biological indicators (see Appendix F: 2010 Methods Document). Some designated uses apply to all AUs (e.g., recreation) while other uses apply only to some AUs (e.g., drinking water supply). Therefore, in assessing the percentage of uses assessed and attained statewide, the total number of applicable AUs will vary from use to use.⁶ Table 4.1 shows the number of assessment units (AUs) to which each designated use applies.

⁶ Note: Some of the totals shown in Table 4.0 are different than the totals published in the 2008 Integrated Report, Table 4.1-1. Some of these differences resulted from modifications made to New Jersey's HUC 14 boundaries and assessment unit delineations, which reduced the total number of New Jersey assessment units from 970 to 952 (see Section 1.3). Some differences resulted from amendments to the SWQS, which reclassified certain waters of the State (see the Department's Web site at <u>http://www.state.nj.us/dep/wms/bwqsa/rule archives.htm</u>). Some differences resulted from annual amendments to the Shellfish Classification rules at N.J.A.C. 7:12, which reclassified certain shellfish waters (see the Department's Web site at <u>http://www.state.nj.us/dep/wms/bmw/info01.htm</u>).

For the 2010 Integrated Report, the Department based its water quality assessments on five categories of designated uses. These categories are explained briefly below.

Aquatic Life Uses: refers to the "maintenance, migration, and propagation of the natural and established biota." In some limited cases (i.e., waters classified as FW1), it also means "set aside for posterity to represent the natural aquatic environment and its associated biota." For assessment purposes, these aquatic life uses are grouped into two categories. The first category, "Aquatic Life Use - General" (ALG), is a general level of support and is applied to all waters. The second category, "Aquatic Life Use - Trout" (ALT), applies exclusively to waterbodies classified for Trout Production (TP) and Trout Maintenance (TM). Assessment criteria are generally more restrictive for the ALT uses than for ALG use. Both physical/chemical and biological data are used. Methods for assessing both categories of the aquatic life use are explained in Section 6.1 of the Methods Document (Appendix F).

Recreational Use (REC): refers to suitability for recreation on or in the water. All New Jersey waters are designated for some type of recreational use. Most are designated for primary contact recreation whether activities described below occur or not. Methods for assessing the recreational use are explained in Section 6.2 of the Methods Document, as well as Section 4.2, "Pathogenic Indicators" (see Appendix F).

- Primary contact recreation includes those water-related recreational activities that involve significant ingestion risks and includes, but is not limited to, wading, swimming, diving, surfing, and water skiing. Of primary concern for these activities is the ingestion of water containing pathogens that can cause illness and even death; therefore, SWQS criteria for primary contact recreation are based on human health rather than ecology.
- Secondary contact recreation is defined as recreational activities where the probability of water ingestion is minimal and includes, but is not limited to, boating and fishing. SWQS criteria have been promulgated for primary contact recreation in saline coastal (SC), saline estuary (SE)1, Pinelands (PL), freshwater (FW)1, and FW2 waters. SWQS criteria have also been promulgated for secondary contact recreation in SE2 and SE3 waters.

Water Supply Uses: refers to the use of water for potable, agricultural, or industrial water supplies. All FW2 and Pinelands waters are designated for the drinking, agricultural, and industrial water supply uses whether or not the waters are actually used for these purposes. Methods for assessing these water supply uses are explained Sections 6.5-6.7 of the Methods Document (Appendix F).

- <u>Drinking Water Supply (DWS)</u>: refers to water that is safe to ingest after conventional filtration treatment (i.e., filtration, flocculation, coagulation, and sedimentation) and disinfection. Many of these waters do not contain drinking water intakes due to stream size and other considerations.
- <u>Agricultural Water Supply (AWS)</u>: refers to water used for field crops, livestock, horticulture, and silviculture. Many of the waters designated for AWS are not used for these purposes due to stream size and land use constraints.

• <u>Industrial Water Supply (IWS)</u>: refers to water used for processing or cooling. Many of the waters designated for IWS are not used for these purposes due to stream size and land use constraints.

Fish Consumption Use (FC): refers to ability to catch and consume fish that are safe for human consumption. While this use is not expressly identified in the New Jersey Surface Water Quality Standards, "fishable waters" is a goal of the federal Clean Water Act. Therefore, the Department assesses the fish consumption use as part of the Integrated Report. All waters of the State are designated for the fish consumption use. Assessment methods for the fish consumption use are explained in Sections 4.3 and 6.3 of the Methods Document (Appendix F).

Shellfish Harvest for Consumption Use (SF): refers to the harvest of mollusks (commonly known as clams, oysters, or mussels) that are safe for human consumption without further treatment such as depuration and seasonal restrictions. Only saline coastal (SC) and saline estuary-1 (SE1) waters classified as "Approved" shellfish waters pursuant to the Shellfish Classification rules at N.J.A.C. 7:12 are assessed as fully supporting this use. Assessment methods for the shellfish harvest for consumption use are explained in Section 6.4 of the Methods Document (Appendix F).

Stream Classification	ALG	ALT	DWS	AWS	IWS	REC	FC	SF
FW1	X					Х	Х	
FW1 (TP, TM)	X	X				X	Х	
PL	X		Х	X		Х	Х	
PL(TM)	X	Х	Х	X		Х	Х	
FW2-NT	Х		Х	Х	Х	Х	Х	
FW2-TM	Х	Х	Х	Х	Х	Х	Х	
FW2-TP	Х	Х	Х	Х	Х	Х	Х	
SE1	Х					Х	Х	X
SE2	X					Х	Х	
SE3	X					Х	Х	
SC	Х					Х	Х	Х
Total # Applicable AUs	952	203	794	815	665	952	952	151

Table 4.1: Designated Uses Applicable to Stream Classifications and Assessment Units

4.2 Reporting Assessment Results Using ADB

The results of these individual designated use assessments are entered into the USEPA Assessment Database (ADB). ADB is a relational database application for tracking water quality assessment data for thousands of waterbodies, such as use assessment results, causes and sources of non-attainment and impairment, and integrating it into meaningful reports. ADB was designed to make reporting under Sections 305(b) and 303(d) of the CWA automated, accurate, straightforward, and user-friendly for participating States. The Department used ADB to generate the Section 305(b) Integrated List of Waters (Integrated List), the Section 303(d) List of

Water Quality Limited Waters (303(d) List), and the List of Delisted Waters (Delisting Document) for the 2010 Integrated Report. USEPA integrates the information collected through its TMDL and assessment databases and then provides this information to the public through "ATTAINS" (Assessment Total Maximum Daily Load Tracking and Implementation System), which is available on USEPA's Web site at <u>http://www.epa.gov/waters/ir</u>.

The Delaware River is not included in the 2010 Integrated List. The Delaware River Basin Commission (DRBC) publishes a water quality report for the Delaware River, Estuary and Bay, which is available on its Web site at <u>http://www.state.nj.us/drbc/ 10IntegratedList/index.htm</u>. Interstate waters that are assessed by DRBC as water quality limited are displayed as a subtable in the New Jersey's final 2010 303(d) List (Appendix B).

The 2010 Status of Designated Uses by Subwatershed

The 2010 Integrated List of Waters is now called the "The 2010 Status of Designated Uses by Subwatershed" (Status Report) and appears in Appendix A. The Status Report shows the use assessment results, along with other compiled information, for each of New Jersey's 952 AUs. The report title refers to AUs as "subwatersheds" since assessment units are delineated based on New Jersey's HUC 14 subwatershed boundaries. Since this report uses a different format than previous Integrated Lists, the Department has also published a fact sheet explaining how to use the report (see http://www.state.nj.us/dep/wms/bwqsa/2010 Fact Sheet Draft Status Report. pdf). The Status Report includes, in tabular format, the assessment results for all designated uses assigned to each AU, along with information such as assessment unit identification number (ID), assessment unit name, and waterbody type and size. Use assessment results are displayed for each applicable designated use as "fully supporting", "not supporting", or "insufficient information". For uses that are not supported, the Status Report identifies the pollutant causing non-support and displays the status of any TMDLs completed for that pollutant, along with potential sources of the pollutant (e.g., urban runoff as a source of fecal coliform). Pollutants shown with a "date completed" are already covered by an approved TMDL.

2010 303(d) List, Priority Ranking, and Two-Year TMDL Schedule

As stated above, TMDLs are required for all pollutants identified on the Integrated List of Waters (Integrated List) as causes of designated use non-support. The Integrated List identifies all causes for which TMDLs have already been completed and approved. The 2010 303(d) List (Appendix B) shows all the AU/pollutant combinations for waters that are not fully supporting applicable designated uses and are not covered by an approved TMDL. (Delaware River waters are included in the 2010 303(d) List as a separate subtable.) The 303(d) List includes the priority ranking ("high", "medium", or "low") of these waters for TMDL development. A detailed explanation of the priority ranking process can be found in Section 8 of the 2010 Methods Document. The Department has developed a Two-Year TMDL Schedule based on these priorities, which identifies the AU/pollutant combinations for which a TMDL will be developed during the next two years. The 2010 Two-Year TMDL Schedule can be found in Appendix D.

Delisting Document

The Department generated a report displaying all assessment unit/pollutant combinations from the 2008 303(d) List that are not included in the 2010 303(d) List for one of the reasons shown in Table 4.2. This report, entitled: "2010 Final Delisted Waters", can be found in Appendix C.

Delisting Reason	Detailed Description
TMDL approved or established by EPA (4A)	The waterbody no longer needs a TMDL because a TMDL exists and can therefore be removed from Category 5 (the 303(d) list).
Applicable WQS attained; due to change in WQS	The waterbody is currently found to attain the applicable water quality standard because the original water quality standard has been changed.
Applicable WQS attained; according to new assessment method	The waterbody is currently found to attain the applicable water quality standard because water quality data are being interpreted with a new assessment method.
Applicable WQS attained; threatened water no longer threatened	The waterbody is currently and has in the past attained the applicable water quality standard, however it is no longer considered to be at risk of becoming impaired before the next listing cycle.
Applicable WQS attained; reason for recovery unspecified	The waterbody is currently found to attain the applicable water quality standard but the reason for recovery is unknown.
Applicable WQS attained; original basis for listing was incorrect	The waterbody is currently found to attain the applicable water quality standard because the original basis for an impairment decision was incorrect.

Table 4.2: Delisti	ng Reasons and	Description
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4.3 2010 Integrated Water Quality Assessment Results

Physical, chemical, and biological monitoring data collected by many organizations between 2004 through 2008 were used to generate the 2010 Status Report and 303(d) List. The Department's assessment of all readily available data in all 952 AUs resulted in a total of 4,187 individual use assessments (out of 6,439 possible designated use/assessment unit combinations), and the evaluation of another 2,252 combinations that had insufficient information to assess uses. Only forty-two of New Jersey's 952 AUs were not assessed for any designated uses; which means that 96 percent (910 AUs) were assessed for at least one designated use. Assessment results for key designated uses are summarized in Figure 4.1 and explained further below. AUs shown as "Not Supported" in Figure 4.1 include those for which a TMDL has been developed as well as AUs on the 2010 303(d) List that still require a TMDL.

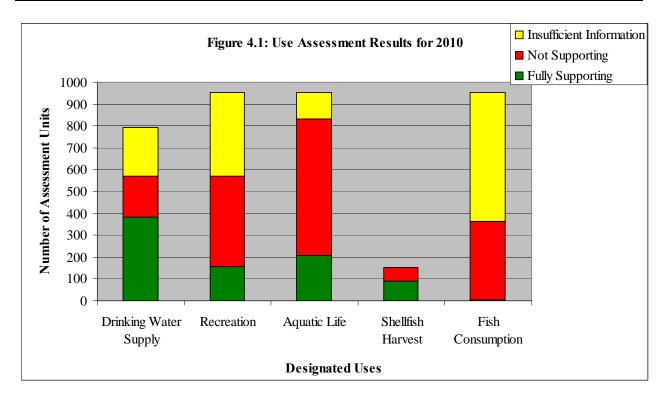


Figure 4.2: Big Flat Brook



The Big Flat Brook Watershed (NJ02040104140010-01) is the only one of New Jersey's 952 AUs that applicable fully supports all designated uses, including fish consumption (see Figure 4.2). Big Flat Brook is located in a relatively pristine area in Northwestern New Jersey, mostly within Stokes State Forest or High Point State Park. The watershed is relatively undeveloped and mostly forested with few roads and a small amount of agricultural land use; thus explaining its high quality waters. Big Flat Brook is classified as trout production waters

and also designated as a Category One waterbody. Some of its tributaries are classified as FW-1 waters. Twenty-two other AUs fully support all applicable designated uses, except for fish consumption, which was not assessed for the majority of these AUs (see Table 4.3). These "healthy watersheds" contain the highest quality of all waters assessed for the 2010 Integrated Report.

AU ID AU Name				
NJ02040104140010-01	Big Flat Brook (above Forked Brook)			
NJ02040104140030-01	Big Flat Brook (Kittle Rd to Forked Bk)			
NJ02040206170050-01	Buckshutem Creek (below Rt 555)			
NJ02040301090030-01	Cedar Creek (74-16-38 to Chamberlain Br)			
NJ02040301090020-01	Chamberlain Branch			
NJ02040104240020-01	Dunnfield Creek (incl UDRV)			
NJ02040104140020-01	Forked Brook/Parker Brook			
NJ02040301110020-01	Forked River NB(below old RR grade)			
NJ02040302050100-01	Gibson Creek / Jackson Creek			
NJ02040202030070-01	McDonalds Branch			
NJ02040202030030-01	Mount Misery Bk MB/NB (below 74d27m30s)			
NJ02040202030020-01	Mount Misery Bk NB (above 74d27m30s dam)			
NJ02040202030040-01	Mount Misery Brook SB			
NJ02040301180070-01	Oswego River (below Andrews Road)			
NJ02040301110050-01	Oyster Creek (below Rt 532)			
NJ02040301180050-01	Papoose Branch (Oswego River)			
NJ02040301180030-01	Plains Branch (Oswego River)			
NJ02040301150020-01	Skit Branch (Batsto River)			
NJ02040301060070-01	Toms River (Rt 70 to Hope Chapel Road)			
NJ02040301190070-01	Wading River WB (Oswego R to Jenkins Rd)			
NJ02030103070030-01	Wanaque R/Greenwood Lk(aboveMonks gage)			
NJ02040206210020-01	West Ck (above Rt 550)			
NJ02040206210030-01	West Ck (Paper Mill Rd to Rt 550)			

 Table 4.3: New Jersey Healthy Watersheds

- Water Supply Uses: Almost half (48 percent) of waters designated for the drinking water supply use fully support the use, a one percent decrease from 2008. Twenty-four percent of waters designated for this use do not support the use, a one percent increase over 2008; twenty-eight percent are not assessed. All New Jersey freshwater streams and lakes are designated for potential use as drinking water supply; however, most of the waters that do not support this use are not used for drinking water purposes. Over 60 percent of waters designated for the agricultural and industrial water supply uses fully support these uses. Less than six percent of waters designated for these uses do not support them.
- **Recreational Uses:** All waters of the State are designated for recreational use (e.g., swimming, boating). However, most recreation occurs at ocean bathing beaches. All of New Jersey's ocean bathing beaches fully support swimming. (Complete information about ocean beaches in New Jersey is available on the Department's Web site at http://www.njbeaches. org.) Sixteen percent of all New Jersey waters, including lakes, ponds, rivers, and streams, fully support recreational uses, a one percent decrease from 2008. Forty-four percent of State waters do not support recreational uses, a one percent increase over 2008; 40 percent are not

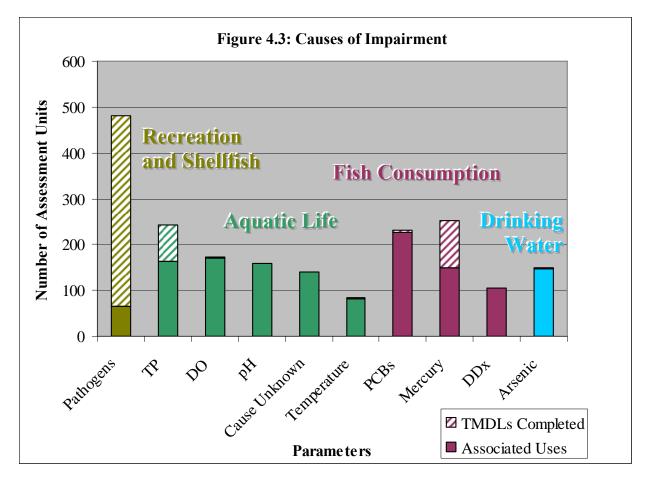
assessed.

- Aquatic Life Uses: All waters of the State are designated for general aquatic life use and almost 90 percent have been assessed for this use. Twenty-two percent of State waters fully support the general aquatic life use, four percent less than in 2008. Sixty-six percent do not support the use, three percent more than in 2008. Thirteen percent are not assessed, two percent more than 2008. Twenty-two percent of waters designated for the trout aquatic life use fully support this use. Sixty-four percent of waters designated for trout use do not support this use and fourteen percent are not assessed.
- Shellfish Harvest for Consumption: Ninety percent of shellfish waters are classified as harvestable. Harvestable waters include: "approved with no restrictions", "seasonal harvest", and "special restrictions". Only shellfish waters approved with no restrictions are considered to fully support the designated use. Sixty percent of waters designated for shellfish harvest for consumption fully support the use, a two percent increase over 2008. Forty percent of designated waters do not support unrestricted shellfish harvest, a two percent decrease from 2008.
- Fish Consumption: All New Jersey waters are designated for fish consumption. Thirty-five percent of waters do not support this use, generally due to mercury and/or PCBs. Sixty-five percent of waters are not assessed for this use. A very small percentage (0.3 percent) of waters fully support the fish consumption use; no waters supported this use in 2008. While the Department uses fish tissue data where available, consumption advisories restrict the amount and/or the type of fish consumed. The Department issues both statewide and waterbody-specific advisories for the general population and for high-risk groups including infants, children, pregnant or nursing mothers, and women of childbearing age.

Waters that do not fully support a designated use are placed on the 303(d) List along with the pollutant(s) causing water quality impairment (i.e., does not support the use). A "pollutant" is a chemical constituent that causes water quality impairment. If chemical data are unavailable or show no exceedance of applicable criteria, but other data (i.e., biological) indicate that the designated use (i.e., aquatic life) is not supported, the cause of the use impairment is identified on the 303(d) List as "cause unknown" until a pollutant can be identified.

4.4 Causes and Sources of Water Quality Impairment in New Jersey Waters

The most frequent causes of water quality impairment are shown in Figure 4.3 and are associated with the recreation, aquatic life, fish consumption, and drinking water supply uses. This includes waters where a TMDL has been established but water quality is still impaired.



Pathogens

The pollutants responsible for causing most of New Jersey's water quality impairment are the bacteria collectively referred to as "pathogens" but which are actually indicators of pathogenic bacteria (*E. coli, Enterococcus*, fecal coliform, and total coliform). Pathogens are the primary cause of impairment for recreational and shellfish harvest for consumption uses. Sources of pathogens include nonpoint sources, stormwater discharges, combined sewer overflows (CSOs), and illicit discharges. Sixty-two AUs were delisted for pathogens; six attained applicable water quality standards and 56 were covered by approved TMDLs. Generally, these TMDLs identified various control measures included in the Municipal Stormwater Permit to reduce bacteria loadings. Municipal stormwater permits require municipalities to eliminate "illicit connections" of domestic sewage and other waste to the stormwater collection system, adopt and enforce a pet waste ordinance, prohibit feeding of unconfined wildlife on public property, clean catch basins,

perform good housekeeping at maintenance yards, and provide related public education and employee training.

Fish Tissue Contaminants

Mercury, PCBs, and DDT and its metabolites (collectively referred to as "DDx") are the predominant pollutants causing non-support of the fish consumption use. Sources of these pollutants are primarily discharges that are no longer allowed. PCBs and DDT have been banned and consumer products containing mercury are being eliminated. A PCB TMDL has been established for the Delaware Estuary and requires NJPDES-permitted facilities to implement "pollutant minimization plans" (PMPs). The Department also imposes PMP requirements in NJPDES permits for facilities that discharge to other PCB-impaired waters. A statewide mercury TMDL has also been established, which identifies the predominant source of mercury in fish tissue as air deposition, including sources from other states and countries. One hundred and thirty-five AUs were delisted for mercury; 121 were covered by this TMDL and 14 met the water quality target for mercury established in the TMDL.

Nutrient-related parameters

Nutrients are not generally harmful and are necessary to promote healthy ecosystems. Excessive nutrients may cause changes in the biological community. Chronic over-enrichment can result in large diurnal swings in dissolved oxygen and/or pH, the replacement of the natural flora and fauna with nutrient tolerant biota, and low dissolved oxygen levels which can lead to fish kills. Parameters associated with nutrient-related impairment - total phosphorus (TP), dissolved oxygen (DO), and pH, are the predominant causes of aquatic life use non-support. Many of the listings for "cause unknown" may actually be due to excessive nutrients. These parameters are often interrelated and reflect the inputs of nutrients into waterways from both point and nonpoint sources. Both phosphorus and nitrogen are considered "nutrients" that contribute to eutrophication. Historically, the focus for controlling eutrophication in freshwaters has been on reducing total phosphorus (TP) concentrations rather than nitrogen because phosphorus is usually the "limiting nutrient". Studies demonstrate that the impact of nutrients on water quality is strongly influenced by other environmental factors such as sunlight availability, stream velocity and water clarity, meaning that the same amount of TP can have varying impacts (biological responses) in different waters. Total suspended solids (TSS) and temperature exceedances are generally due to, among other things, loss of riparian buffers and tree canopies, the presence and expansion of impervious cover throughout the watershed, and the abundance of small run-of-the-river impoundments common in New Jersey watersheds. Thirty-three AUs were delisted for phosphorus; 28 were covered by phosphorus TMDLs and five attained applicable water quality standards. Three AUs were delisted for DO because they were covered by an approved TMDL. (Note: The Passaic River TMDL to address phosphorus impairments also addressed other nutrient-related impairments, including DO, in these three AUs.) One AU was delisted for temperature because it attained applicable water quality standards.

In addition to these TMDLs, the Department has developed a new nutrient assessment method to evaluate the site-specific variability of TP impacts. In the past, if TP exceeded the numeric phosphorus criteria, the water was deemed impaired regardless of the actual impact of the nutrient on the designated use. The new method assesses waters impaired for aquatic life use based upon biological monitoring to determine if the impairment was due to nutrients or other causes. Due to a lack of sufficient information, only a small number of assessments (37) were conducted using this new method, but none resulting in a delisting for TP. Thus, TP remains one of the most frequent pollutants causing use impairment.

In addition to the new nutrient assessment method, New Jersey has developed a <u>Nutrient Criteria</u> <u>Enhancement Plan</u> (Nutrient Plan) for enhancing the existing nutrient criteria for freshwaters and developing new nutrient criteria for other (estuarine, marine) waters of the State. Nutrient criteria (including numeric criteria and translators of narrative criteria) will be developed to address and prevent nutrient-related use impairment in New Jersey waters (Chapter 9).

Nutrients are also suspected of being the source of water quality problems in the Barnegat Bay. The waters of the Barnegat Bay Estuary have been deemed a top priority for restoration (Chapter 9). Current concerns are based on observed loss of sea grasses such as eel grass and widgeon grass, collectively referred to as Submerged Aquatic Vegetation (SAV), episodic occurrences of macroalgae and brown tides, decline of hard clams, and increasing numbers of invasive species such as sea nettles. The full suite of stressors and biological, chemical, and physical processes responsible for habitat alteration, loss of biological diversity and loss of support of designated uses, are not entirely known. Alteration of the shoreline, hydrologic modification, resource harvesting, boating, the effects of the Oyster Creek nuclear generating facility and declining water quality are all suspected causes. On December 9, 2010, Governor Chris Christie announced a comprehensive action plan to address the health of Barnegat Bay. The Department, in cooperation with Barnegat Bay stakeholders, is initiating a study that will provide water quality data to determine the locations and extent of water quality impairments, identify numeric criteria or loading targets for nutrients, and calibrate and validate modeling tools that can be used to direct water quality restoration of the bay. Additional information about this effort is available on the Department's Web site at http://www.state.nj.us/dep/barnegatbay/plan-wqstandards.htm. Additional information concerning the management of Barnegat Bay can be found in Chapters 5 and 9 of this report.

Cause Unknown

Where biological data indicate that the aquatic life use is not supported but chemical data are unavailable or show no exceedance of applicable SWQS criteria, the cause of non-support is identified as "cause unknown". Further study may identify the actual cause of biological impairment as habitat alteration, hydrologic modification, other environmental stressors, or a chemical pollutant. A pollutant replaced "cause unknown" on the 2010 303(d) List in 35 AUs. Nineteen AUs were delisted for "cause unknown" because water quality was restored and the AUs are now fully supporting the aquatic life use.

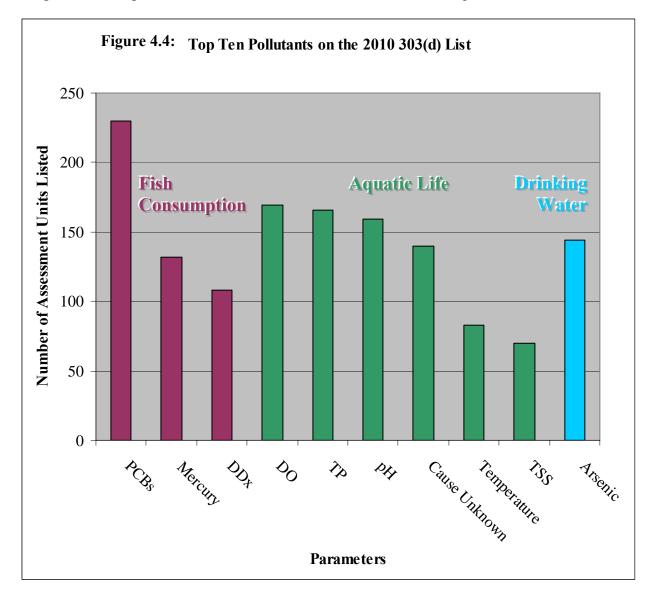
Arsenic

Arsenic is the predominant pollutant causing impairment of the drinking water supply use. The levels of arsenic found in waters of the State generally reflect natural conditions. The Department is currently working with USGS to determine regional background concentrations.

These values will be used to delist waters where arsenic levels are consistent with natural background concentrations. Waters with arsenic levels above natural background concentrations will remain on the 303(d) list and subject to TMDL development. Two AUs were delisted for arsenic because they were covered by a TMDL.

303(d) Listed Parameters

Pollutants causing impairment that are not addressed by a TMDL are identified on the 303(d) List. The 2010 303(d) List identifies 38 pollutants causing water quality impairment in one or more assessment units for a total of 1,831 listings. The "top ten" most frequent pollutants comprise over 75 percent of the 2010 303(d) List and are shown in Figure 4.4.



Delisted Parameters

The 2010 Final Delisted Waters (Delisting Document) identifies 260 AU/pollutant combinations removed from the 303(d) List because water quality was restored (36), improved assessment methods verified that water quality standards were met (14), or a TMDL was established (210). Table 4.4 shows the number of assessment units delisted for each pollutant and the reason for delisting. A large percentage of the delistings resulted from the adoption of a statewide TMDL for mercury. One hundred thirty-five AUs were delisted in 2010; 121 AUs were delisted for mercury because the TMDL was adopted (placing these AUs on Sublist 4A in ADB) and 14 AUs were delisted because the mercury concentrations were below the water quality target established in the TMDL (see Section 5.6, "TMDL Program").

			WQS Attained			
Parameter	#AUs Delisted	TMDL	Reason Unknown	Incorrect Listing	New Method	Total
Arsenic	2	2	0	0	0	2
Cause Unknown	20	0	20	0	0	20
Enterococcus	12	11	0	1	0	12
Escherichia coli	39	34	5	0	0	39
Mercury	21	21	0	0	0	21
Mercury in Fish Tissue	111	97	0	0	14	111
Mercury in Water Column	3	3	0	0	0	3
Nitrates	1	0	0	1	0	1
Oxygen, Dissolved	3	3	0	0	0	3
рН	1	0	1	0	0	1
Phosphorus (Total)	33	28	2	3	0	33
Temperature, water	1	0	0	1	0	1
Total Coliform	11	11	0	0	0	11
TDS	1	0	0	1	0	1
Turbidity	1	0	0	1	0	1
TOTALS	260	210	28	8	14	260

Table 4.4: Delisted Parameters

In addition, the Department removed twelve AUs listed for "Unknown toxic" from the 2008 303(d) List. Historically, the Department used this parameter to identify waters where biological data suggested higher than normal rates of exoskeleton deformities in selected benthic macroinvertebrates. However, the Department has not formally established a scientific method to assess the impacts of toxic substances on biological communities. Therefore, all twelve AUs placed with "unknown toxic" listed as the cause on the 2008 303(d) List remain on the 2010 303(d) list as "cause unknown" or a known pollutant associated with the aquatic life use.

Even though TMDLs have been established that address many of the most predominant pollutants causing water quality impairment in New Jersey waters, impaired waters will continue to be assessed as not supporting designated uses until the measures required by the TMDLs are implemented and water quality is restored. A significant period of time may elapse between TMDL establishment and new water quality data is available to reevaluate the conditions. The waters will continue to be assessed as not supporting designated uses (even though they will not appear on the 303(d) List). For example, if a TMDL is adopted in 2010 and permits are issued in 2011 with a three-year compliance schedule, improvements might not be observed until 2014. Water quality data reflecting improved water quality conditions would not be assessed until at least the 2016 Integrated Report.

Chapter 5: Water Quality Management

"Since water sustains life, effective management of water resources demands a holistic approach, linking social and economic development with protection of natural ecosystems. Effective management links land and water uses across the whole of a catchment area or groundwater aquifer."⁷

5.1 Overview of Water Quality Management Programs

The New Jersey Department of Environmental Protection (Department) is dedicated to restoring, enhancing, and protecting the quality of New Jersey's water resources, as well as ensuring equitable and beneficial uses of the State's waters. The policies expressed in the federal Clean Water Act; the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq.; the New Jersey Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq.; and the New Jersey Water Supply Management Act, N.J.S.A. 58:1A-1 et seq., provide the foundation for the environmental programs that protect New Jersey's waters. Other State laws also play important roles, including the Freshwater Wetlands Protection Act, N.J.S.A. 13:9B-1 et seq.; the Stormwater Management Act, N.J.S.A. 40:55D-93 through 99; the Watershed Protection and Management Act, N.J.S.A. 58:29-1 et seq.; the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq.; the Wetlands Act of 1970, N.J.S.A. 13:9A-1 et seq.; and the Coastal Area Facility Review Act, N.J.S.A. 13:19-1 et seq.

New Jersey's Water Quality Management Programs extend beyond the traditional water pollution control programs identified in the federal guidance for the Integrated Report. The Department's Water Assessment Program and the Coastal Zone Management Program emerged from the federal Safe Drinking Water Act and the federal Coastal Zone Management Act, respectively, rather than the federal Clean Water Act. New Jersey's water quality planning, watershed management, and stormwater management statutes require comprehensive water resource management and planning that address issues such as land use and cumulative impacts to water resources, consideration of regulatory and non-regulatory approaches to environmental restoration, and consideration of environmental factors such as alteration of habitat, flow, substrate, climate, and tree canopy on aquatic life and other water resources.

The Department's Statewide Water Quality Management Planning Program remains, along with the Section 319(h) Nonpoint Source Pollution Control Grant Program and the 604(b) Water Quality Management Planning Grant Program, with the Assistant Commissioner for Land Use Regulation. Water Quality Permitting and Water Monitoring and Standards (including TMDLs), along with Water Supply and the New Jersey Geological Survey, are now under a new Assistant Commissioner for Water Resources Management. Chapter 5 contains individual sections that summarize these and other programs that constitute Water Quality Management in New Jersey.

⁷ From Guiding Principle #1 of the Dublin Statements and Principles, signed at the United Nations Conference on Environment and Development in Rio de Janeiro in June 1992

5.2 Statewide Water Quality Management Planning Program

The Department administers New Jersey's Statewide Water Quality Management Planning Program pursuant to the New Jersey Water Quality Planning Act (N.J.S.A. 58:11A-1 et seq.), the New Jersey Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.), and the Water Quality Management Planning rules (N.J.A.C. 7:15). The New Jersey Water Quality Planning Act (Act) was adopted in 1977 and provided the authority needed for New Jersey to implement sections 201, 208, and 303 of the federal Clean Water Act. The purpose of the Act is to restore, maintain, and preserve the quality of the waters of the State, including both surface and ground water, for the protection and preservation of the public health and welfare, food supplies, public water supplies, propagation of fish and wildlife, agricultural and industrial uses, aesthetic satisfaction, recreation, and other beneficial uses. The Act endeavors to achieve this purpose by instituting a continuing planning process through the adoption of areawide Water Quality Management (WQM) plans, which coordinate and integrate water quality and wastewater management plans with related federal, state, regional, and local land use plans. The WQM planning program is now administered under the Assistant Commissioner for Land Use Management, by the Division of Land Use Planning.

Wastewater management plans (WMPs) are key components of the WQM plans and are formally adopted by the Department as amendments to the WQM plans. WMPs identify appropriate wastewater management measures to accommodate future development without degrading surface and ground water quality. WMPs contain written and graphic descriptions of existing and future wastewater-related jurisdictions, wastewater service areas, and selected environmental features and treatment works. WMPs also delineate sewer service areas to protect environmentally sensitive areas and must also comply with Department requirements for addressing wastewater, water supply, nonpoint source pollution (including controls related to stormwater, riparian zones, and steep slopes), and habitat of threatened and endangered species.

On May 20, 2008, the Department readopted the Water Quality Management Planning (WQMP) Rules at N.J.A.C. 7:15 with amendments that became effective on July 7, 2008. The amendments include reassignment of wastewater management planning responsibility to the County Boards of Chosen Freeholders; withdrawal and re-designation of wastewater service areas where the applicable WMP is not in compliance with the mandatory update schedule contained in the rules; a requirement that updated WMPs address septic density in a manner that demonstrates compliance with a 2 mg/L (ppm) nitrate planning standard; and a requirement that municipalities pass an ordinance designed to assure septic system maintenance. The amendments also establish clear standards for delineating sewer service areas to protect environmentally sensitive areas as well as clear, environmentally protective standards for the review of WQM plan amendments. The latter include standards to address wastewater, water supply, nonpoint source pollution (including controls related to stormwater, riparian zones, and steep slopes), and habitat of threatened and endangered species. WMPs must now delineate water supply service areas by water purveyor and address septic density in a manner that demonstrates compliance with a 2 mg/L (ppm) nitrate planning standard. Municipalities must demonstrate that areas served by septic systems are subject to a mandatory maintenance program.

Pursuant to the WQM Planning rules, the Department shall not undertake, or authorize through the issuance of a permit, any project, or activity that affects water quality or conflicts with the applicable sections of adopted WQM plans or the WQM Planning rules. Total Maximum Daily Loads (<u>TMDLs</u>) are adopted as amendments to the WQM plans.

Water Quality Planning Grants (604b)

Each year, the State of New Jersey receives funds under Section 604(b) of the federal Clean Water Act (Act) to carry out planning under Sections 205(j) and 303(e) of the Act. Section 205(j) describes water quality management planning to include, but not be limited to:

- (A) Identifying the most cost effective and locally acceptable facility and nonpoint measures to meet and maintain water quality standards;
- (B) Developing an implementation plan to obtain state and local financial and regulatory commitments to implement measures developed under (A) above;
- (C) Determining the nature, extent, and causes of water quality problems in various areas of the state and interstate region, and reporting on those annually; and
- (D) Determining those POTWs which should be constructed with assistance (under that title), in which areas and in what sequence, taking into account the relative contributions to water quality of other point or nonpoint sources, and the consideration of alternatives to such construction, and implementing section 303(e) of the Act (the continuing planning process).

Section 604(b) also requires that at least 40 percent of the State's funds awarded under this program be allocated as pass-through grants for water quality management planning activities. During the reporting period of 2004-2008, over \$800,000 in 604(b) grant funds were awarded to 14 recipients for water quality management planning and related activities, including wastewater management plans (WMPs), as shown in Table 5.1.

More Information

Additional information about the Statewide Water Quality Management Planning Program is available on the Department's Web site at or <u>www.nj.gov/dep/watershedmgt/wqmps.htm</u>. Additional information about the 604(b) Grant Program is available on the Department's Web site at <u>www.nj.gov/dep/watershedmgt/financial_resources.htm</u>.

Recipient/Grantee	RP Number	Project Description	Amount Funded	
SFY2005/FFY2004				
North Bergen Twp.	RP06-023	WMP Infiltration and Inflow Study	\$53,376.12	
Jefferson Township	RP06-033	Development of an On-Site Wastewater Treatment System Management Plan for Jefferson Township - Phase 1	\$24,565.00	
Middlesex County	RP06-025	Comprehensive Review/Revision of the Lower Raritan-Middlesex County WMP	\$88,600.00	
Sussex County	RP06-026	Amendment to the Sussex County WMP	\$24,565.00	
Mercer County	RP09-050	Adoption of WMP	\$27,708.88	
TOTALS	5 Grants		\$218,815.00	
SFY2006/FFY2005	-			
Jefferson Township	RP06-033	Development of an On-Site Wastewater Treatment System Management Plan for Jefferson Twp - Phase 2	\$59,700.00	
Burlington County	RP09-013	Development of County WMP	\$10,000.00	
West Milford Township	RP07-005	Development of an On-site Wastewater Treatment System Management Plan for the New Jersey End of the Greenwood Lake Watershed	\$108,217.00	
TOTALS	3 Grants		\$177,917.00	
SFY2007/FFY2006				
Burlington County Board of Chosen Freeholders	RP07-080	Onsite Wastewater Management Program for North Branch Rancocas Creek	\$144,584.00	
TOTALS	1 Grant		\$144,584.00	
SFY2008/FFY2007	1 01 111		<i>Q</i> 11.900.000	
Morris County	RP09-026	Adoption of WMP	\$100,000.00	
Middlesex County	RP06-025	Adoption of WMP	\$11,400.00	
Gloucester County	RP09-030	Adoption of WMPs	\$65,314.00	
TOTALS	3 Grants	· ·	\$176,714.00	
SFY2009/FFY2008			, , ,	
Gloucester County	RP09-030	Adoption of WMP	\$34,686.00	
Hunterdon County	RP09-027	Adoption of WMP	\$77,666.00	
TOTALS	2 Grants		\$112,352.00	
TOTALS FOR 2004-2008:	14 Grants		\$830,382.00	

Table 5.1: Section 604(b) Grant Awards, 2004-2008

5.3 Water Quality Standards Program

The Bureau of Water Quality Standards and Assessment, in the Department's Division of Water Monitoring and Standards, is responsible for promulgating New Jersey's surface and ground water quality standards (N.J.A.C. 7:9B and 7:9C, respectively), including waterbody classifications, designated uses, water quality criteria, and antidegradation policies. The New Jersey Water Quality Planning Act (N.J.S.A. 58:11A-1 et seq.) requires the State to maintain water quality in existing high quality waters and to restore water quality in impaired waters. The Department accomplishes this by developing and implementing Surface Water Quality Standards (SWQS) and Ground Water Quality Standards (GWQS) for New Jersey's waters.

Surface Water Quality Standards (SWQS)

The SWQS establish a stream classification and an antidegradation designation for all surface waters of the State. The stream classifications reflect the designated uses assigned to individual surface waterbodies. Designated uses include aquatic life support (maintenance, migration, and propagation), recreation, fish consumption, shellfish harvesting for consumption, drinking water supply, industrial water supply, and agricultural water supply. The SWOS specify the water quality criteria that correspond with the waterbody classifications, which are necessary to achieve the designated uses. The antidegradation designation specifies to what degree a lowering of water quality may be authorized for a new or expanded activity. There are three antidegradation designations in the SWQS: Outstanding Natural Resource Waters (the most protective antidegradation designation), Category One Waters, and Category Two Waters. Outstanding National Resource Waters (ONRWs) are maintained in their natural state and are protected from manmade activities that might cause a change in water quality. ONRWs include freshwaters in preserved open spaces (FW1) and Pinelands (PL) waters. Category One Waters are protected from measurable changes in water quality. Category Two Waters may be subjected to a lowering of water quality to levels that still support all existing uses based upon a social and/or economic justification. All waters not specifically identified in the SWQS as ONRWs or Category One Waters default to the antidegradation designation of Category Two Waters.

Changes to the Surface Water Quality Standards including stream reclassifications and Category One designations occur through an administrative rulemaking process, affording the public an opportunity to comment and provide input into these decisions. The rule proposal is published in the New Jersey Register followed by a 60-day public comment period. During the public comment period, a public hearing is held to provide an opportunity for the public to present oral testimony. After the close of the public comment period, the Department evaluates the comments received and, if appropriate, proceeds to adoption. The amendments are published as an adopted rule in the New Jersey Register along with the Department's responses to the public comments received. These changes are effective when the rule appears in the New Jersey Register. The entire process takes approximately six to nine months. Since 2002, the Department has proposed and adopted several rules amending the SWQS to upgrade stream classifications and/or antidegradation designations of the surface waters of New Jersey. As a result of all these amendments, approximately 30 percent of New Jersey's waters are currently designated as Category One, including several water supply reservoirs. Details on these rule amendments, as well as maps of the Category One waters, may be viewed on the Department's Web site at http://www.state.nj.us/dep/wms/bwqsa/rule_archives.htm.

Ground Water Quality Standards

The Ground Water Quality Standards (GWQS) establish ground water classifications and antidegradation policies for all ground waters of the State. The GWQS specify the water quality criteria and designated uses for ground water in New Jersey. The criteria are numeric values assigned to ground water constituents (i.e., pollutants) and implemented to protect the ambient ground water quality and associated designated uses. The GWQS also contain technical and general policies to ensure that the designated uses are protected.

Under the GWQS, ground water is classified according to its hydrogeologic characteristics and designated uses. Ground water within watersheds of FW1 surface waters, state-owned Natural Areas, and the major aquifers of the Pinelands Region, are designated as Class I ground waters. The designated use for Class I ground waters is the maintenance of special ecological resources. Secondary uses include potable, agricultural, and industrial water supply. The designated use of Class II ground waters is to provide potable water supplies using conventional treatment. Both existing and potential potable water supply uses are included. Class II criteria specify the levels of constituents above which the water would pose an unacceptable risk for drinking water. Class II includes all areas that are not designated as Class I or Class III. Class III ground waters can be used for anything other than potable water. Most ground waters of the State fall under the Class II-A designation, whose primary designated use is potable water supply and conversion to potable water supply.

The GWQS serve as the basis for setting ground water discharge standards under the NJPDES Discharge to Ground Water Permit Program (see Chapter 5, Section 5.4), and for establishing remediation standards for ground water cleanups under the <u>Site Remediation Program</u>. Other relevant programs using the GWQS include, but are not limited to, those implemented pursuant to the Spill Compensation and Control Act, Solid Waste Management Act, Industrial Site Recovery Act, Underground Storage of Hazardous Substances Act, Realty Improvement Sewerage and Facilities Act, and Pesticide Control Act of 1971.

The specific ground water quality criteria and practical quantitation levels (PQLs) for Class II-A ground waters are found in Appendix Table 1 of the GWQS rules at N.J.A.C. 7:9C. They are also Department's http://www.state.nj.us/dep/wms/bwqsa/ posted on the Web site at Appendix Table 1.htm. PQLs are defined at N.J.A.C. 7:9C-1.4 as the lowest concentration of a constituent that can be reliably achieved among laboratories within specified limits of precision and accuracy during routine laboratory operating conditions. There are instances when the health-based criterion for a particular constituent cannot be quantified by certified methods. In these cases, the GWQS criterion is set at the PQL. The Department can also establish interim specific ground water quality criteria for constituents for which health-based criteria do not yet exist in the GWQS. In addition, where the Department believes that the existing specific ground water quality criteria found in Appendix Table 1 should be updated based on new scientific information available on the USEPA Integrated Risk Information System database (IRIS), the Department may administratively update the criteria. The specific ground water quality criteria for two constituents, barium and toluene, were revised through administrative change to the GWQS rules, and effective on July 27, 2007.

Interim specific criteria are posted, along with their associated PQLs and related support documentation, on the Department's Web site at <u>http://www.state.nj.us/dep/wms/bwqsa/gwqs interim criteria table.htm</u> as they become available, along with any interim generic criteria that are reevaluated but for which sufficient information is not available to develop an interim specific criterion. Interim generic criteria are posted in Appendix Table 2 at <u>http://www.state.nj.us/dep/wms/bwqsa/gwqs table2.html</u>. To date, interim specific ground water quality criteria have been established by the Department for fourteen constituents. Four other constituents have also been evaluated for interim specific criteria but remain subject to interim generic criteria due to lack of sufficient scientific information.

On July 7, 2008, the Department adopted amendments to the GWQS antidegradation policy. The new GWQS rule was adopted as a companion to the amended Water Quality Management Planning (WQMP) rules at N.J.A.C. 7:15. By amending the GWQS rule in conjunction with the WQMP rule, the Department extended its antidegradation policy beyond NJPDES-permitted facilities.

Intra-Departmental Standards Coordination Committee:

An intra-departmental committee was convened for the purpose of ensuring department-wide consistency for human health-based standards. The goals of this work group are to understand the process of standard development that each affected program follows in the development of new standards or the modification of existing standards and to develop a process to ensure as much consistency as possible, where appropriate. To date, the Committee has developed a Standard Operating Procedure for the internal coordination of the request and development of new ground water quality criteria and PQLs. The Committee has also developed an <u>electronic compendium</u> of standards for water and soil promulgated by the New Jersey Department of Environmental Protection. Included are Surface Water Quality Standards, N.J.A.C. 7:9B; Ground Water Quality Standards, N.J.A.C. 7:9C; Drinking Water Quality Standards, N.J.A.C. 7:10; and soil remediation standards from the Remediation Standards, N.J.A.C. 7:26D. The compendium includes the standards and information about the basis for the standards contained in the above referenced rules. The standards in these rules are used by the Department's regulatory programs to establish site-specific requirements in accordance with the appropriate regulations.

More Information:

Additional information about the Surface and Ground Water Quality Standards is available on the Department's Web site at <u>www.state.nj.us/dep/bwqsa</u>.

5.4 Water Pollution Control Programs (NJPDES)

The discharge of pollutants to waters of the State is regulated by the Department under the authority of the New Jersey Water Pollution Control Act (WPCA), N.J.S.A. 58:10A. The WPCA specifies, "No person shall discharge any pollutant except in conformity with a valid NJPDES

permit." The Department implements the New Jersey Pollutant Discharge Elimination System (NJPDES) Program pursuant to the NJPDES regulations at N.J.A.C. 7:14A. The NJPDES Program protects New Jersey's ground and surface water quality by assuring the proper treatment and discharge of wastewater (and its residuals) and stormwater from various types of facilities and activities. To accomplish this, NJPDES permits are issued - primarily by the Department's Division of Water Quality which now reports to the Assistant Commissioner for Water Resources Management. The NJPDES program publishes an annual fee report which includes a summary of program highlights, permit actions, costs and fees. This report is available at: www.nj.gov/dep/dwq

Discharge to Surface Water Permits

The Division of Water Quality's Bureau of Surface Water Permitting regulates the discharge of treated effluent from various municipal and industrial facilities directly into a river, stream, or the ocean. These facilities operate under the authority of a NJPDES permit which limits the mass and/or concentration of pollutants discharged. The NJPDES permit program is operated under the additional authority of the federal Clean Water Act delegated to New Jersey by USEPA to implement the National Pollutant Discharge Elimination System (NPDES). Permittees include various industries; federal, state, county, and municipal facilities; private companies; private residential developments; hospitals; and schools. Collectively, the facilities regulated by this bureau serve the wastewater treatment needs of millions of people and hundreds of industries. Additional information about surface water discharge permits is available on the Department's Web site at http://www.nj.gov/dep/dwq/sw.htm.

On December 18, 2006, the Department adopted amendments to the NJPDES rules that require major facilities discharging to polychlorinated biphenyl (PCB)-impaired waters to monitor their wastewater discharge for PCBs using method 1668A (see 37 N.J.R. 4723(a)). Based on the results of the monitoring, some facilities will be required to develop and implement a PCB Pollutant Minimization Plan (PMP). Since PCBs are no longer used in industrial processes, the Department expects that most pollutant loading will likely be from PCB-contaminated areas near dischargers' facilities. The PMP will lead to the identification and elimination of such sources of PCBs. Technical Guidance for PCB PMPs is available on the Department's Web site at http://www.state.nj.us/dep/dwq/techmans/pcb_pmp_techman.pdf.

On October 1, 2007, the Department adopted a new rule targeted at reducing the levels of mercury discharged to POTWs. The adopted amendments to the NJPDES rule, entitled "Requirements for Dental Facilities" at N.J.A.C. 7:14A-21, were published at 39 N.J.R. 4117(a). Dental facilities contribute as much as 35 to 45 percent of the mercury entering publicly owned treatment works. Mercury from these facilities results from dental amalgam (approximately 50 percent mercury by weight) being rinsed down the drain, where it usually enters a municipal wastewater system, and then enters the POTW. Mercury not removed by the POTW's treatment process is discharged into the surface waters of the State. Mercury that is removed at the POTW by wastewater treatment is concentrated in sludge that may be incinerated, which releases the mercury into the air where it can be deposited into surface waters. Therefore, reducing/eliminating the amount of mercury entering POTWs from dental amalgam will reduce the amount of mercury entering surface waters.

Under most circumstances, the new rule will exempt a dental facility from the requirement to obtain an individual permit for its discharge to a POTW if it implements dental amalgam best management practices (BMPs) listed in the new rule and installs and properly operates an ISO certified amalgam separator. These measures should prevent about 99 percent of the mercury-containing wastes from dental facilities being sent to the POTW. Dental facilities were given one year (by October 1, 2008) to implement the required BMPs and two years (by October 1, 2009) to install the separator. The Department required major POTWs to conduct effluent testing for mercury using EPA method 1631E both before and after implementation of the Dental Rule, to better ascertain the impact of this rule and determine if further actions need be undertaken. Technical guidance for this monitoring is available on the Department's Web site at http://www.nj.gov/dep/dwq/pdf/Mercury_Monitoring_Guidance.pdf. Additional information on the Dental Rule is available on the Department's Web site at http://www.nj.gov/dep/rules.

Discharge to Ground Water Permits

The Division of Water Quality's Bureau of Nonpoint Pollution Control regulates facilities that discharge sanitary and industrial wastewater to ground water. The pollution control requirements contained in NJPDES discharge to ground water (DGW) permits are those conditions necessary to restrict the discharge of pollutants to ground waters of the State and to protect the public health and the environment.

The types of discharge activities that are regulated by the NJPDES DGW program include surface impoundments, infiltration/percolation lagoons, overland flow systems, spray irrigation systems, and various types of subsurface disposal systems that are classified as underground injection systems. The types of facilities regulated include: mines, pits and quarries; schools and hospitals; potable water treatment plants; large corporate office buildings; industrial manufacturing facilities; campgrounds and mobile home parks; food processors; and sewage treatment plants and other discharges of wastewater that can impact ground water, including the management of dredged materials at upland locations. Additional information about the NJPDES Program DGW Permit available on the Department's Web site is at www.state.nj.us/dep/dwq/dgw home.htm.

Stormwater Permits

The Stormwater Permitting Program was mandated by Congress in the 1987 amendments to the federal Clean Water Act under Section 402(p). Consistent with the corresponding federal regulations, New Jersey's Stormwater Permitting Program is divided into two sections: Industrial Stormwater Permitting ("Phase I") and Municipal Stormwater Regulation ("Phase II"). Both programs emphasize pollution prevention techniques and source control rather than "end-of-pipe" treatment. Implemented primarily through the issuance of individual permits and innovative general permits, the stormwater permitting program is the Department's most ambitious effort in making pollution prevention part of the permitting process. New Jersey's stormwater permitting program relies primarily on pollution Prevention Plans. These plans stress the development of reasonable and cost effective best management practices (BMPs)

that eliminate or minimize the contact between source materials and stormwater, preventing pollution and saving industry money by reducing inventory and material losses.

Industrial Stormwater Permitting Program (Phase I)

USEPA defined eleven categories of industry that may be subject to regulation under the Phase I Industrial Stormwater Permitting Program. All subject facilities must have a NJPDES permit for stormwater discharge unless all of the facility's stormwater is combined with other wastewater and discharged to a POTW, is discharged to a wastewater treatment plant that has a NJPDES Permit, or is excluded because of "permanent no exposure" of industrial activities and materials to stormwater pursuant to N.J.A.C. 7:14A-24.6. Industrial stormwater permits include the basic industrial stormwater general permit, industry-specific stormwater general permits, and individual industrial stormwater permits. The large majority of regulated industrial facilities currently permitted by the Industrial Stormwater Permitting Program are authorized under one of several General Permit, including industry-specific General Permits or the Basic Industrial Stormwater General Permit (NJ0088315). In general, facilities are eligible for authorization under the Basic Industrial General Permit if exposure of all industrial materials, activities or source materials to stormwater can be eliminated through the implementation of BMPs during an 18-month period.

How a facility will eliminate or minimize contact of source materials with stormwater is usually described in a Stormwater Pollution Prevention Plan (SPPP). For the Basic Industrial Stormwater General Permit, the SPPP is a simple plan that calls for removing pollutants from contact with stormwater. Many of the pollution prevention techniques discussed in the guidance manual may already be practiced at the regulated facility. Many companies that have implemented their SPPP have found that the cleaner and more organized work area needed to prevent stormwater contamination resulted in more efficient, safer, and cost-effective operations.

Facilities that are not eligible for, or cannot meet the requirements of, the general permits must obtain an individual industrial stormwater discharge permit from the Department. Individual NJPDES permits are issued to facilities that cannot eliminate exposure of pollutants to stormwater. These facilities have to develop and implement SPPPs to minimize or eliminate contact between pollutants and stormwater as well as comply with other permit conditions, such as monitoring stormwater discharges for pollutants. In some cases, effluent limitations may be imposed on the industrial stormwater discharge.

Additional information about the industrial stormwater permitting program is available on the Department's Web site at <u>www.state.nj.us/dep/dwq/ispp_home</u>.

Municipal Stormwater Regulation Program (Phase II):

The Municipal Stormwater Regulation Program addresses pollutants entering waters of the State from storm drainage systems owned or operated by local, state, interstate, or federal government agencies. USEPA regulations refer to these systems as "municipal separate storm sewer systems" or "MS4s." This Program regulates, typically under NJPDES municipal stormwater general permits, most municipalities within the State, as well as public complexes and highway agencies.

The most recent Status Summary Report, which summarizes compliance with these stormwater general permits, is available on the Department's Web site at <u>www.njstormwater.org</u>.

Municipalities within the State are designated as either Tier A or Tier B municipalities. Tier A municipalities (457) are generally located within the more densely populated regions of the State, or along or near the coast. Tier B municipalities (101) are generally more rural and in non-coastal regions. Public complexes (75) include large, publicly owned or operated facilities, military bases, colleges, and hospital complexes. Highway agencies (33) include those operated by counties or by transportation agencies such as the New Jersey Department of Transportation, Port Authority of New York and New Jersey, New Jersey Expressway Authority, and the South Jersey Transportation Authority. The four general municipal stormwater permits (Tier A, Tier B, Public Complex, and Highway Agency) address stormwater quality and quantity issues from new and existing development and redevelopment through the implementation of specific permit requirements referred to as Statewide Basic Requirements.

Statewide Basic Requirements (SBRs) address things such as post construction stormwater management, local public education, improper disposal of waste, illicit connections and outfall mapping, solids and floatable controls, maintenance yard operations (good housekeeping), and employee training. All stormwater general permits, except Tier B, require the preparation and implementation of a stormwater pollution prevention plan. New development and redevelopment are addressed, in part, by requiring municipalities to adopt and enforce a municipal or regional stormwater management plan and stormwater control ordinance(s) in accordance with the Department's Stormwater Management Rules at N.J.A.C. 7:8. The Tier B general permit focuses on post-construction stormwater management and local public education.

Compliance with these requirements has been steadily increasing since 2004. By 2008, stormwater management plans were adopted in 98 percent of New Jersey's municipalities and stormwater control ordinances were adopted in 99 percent of municipalities. Through implementation of infrastructure maintenance requirements between 2004 and 2008, over one million miles of roads and highways were swept and over 300,000 tons of trash and debris were removed from New Jersey streets and another 300,000 tons of sediment, solids, and trash were removed from catch basins that would have otherwise been discharged via storm sewers to waters of the State.

New Jersey's general permits describe implementation of BMPs, providing minimum standards, measurable goals, and schedules for each category of stormwater discharge. This ensures a consistent approach to stormwater management statewide, reduces costs for regulated entities, and provides a simple process for requesting authorization.

Additional information about the Municipal Stormwater Regulation Program is available on the Department's Web site at <u>http://www.state.nj.us/dep/dwq/msrp_home.htm</u>. Information about stormwater and nonpoint source pollution (see Section 5.5) is also available on the Department's Web site at <u>http://www.njstormwater.org</u>.

Residuals, Biosolids, Sewage Sludge

Residuals are generated by both domestic treatment plants (sewage sludge) and industrial treatment plants (industrial residuals). Residuals are managed in a variety of ways, including the development of Marketable Residuals Products (often referred to as biosolids) used to fertilize or condition the soil. Examples include pellets, compost, and alkaline materials. Residuals are also incinerated in New Jersey and managed in a variety of ways at out-of-state facilities. Beneficial use of residuals as a fertilizer or soil conditioner is regulated under a NJPDES permit issued by the Division of Water Quality's Bureau of Pretreatment and Residuals and may require site-specific approvals, depending upon the nature of the residual. Incineration of residuals is regulated under New Jersey's Air Pollution Control Program (see the Department's Web site at http://www.nj.gov/dep/aqpp/). Residuals managed in other states are regulated by the receiving state.

The Bureau of Pretreatment and Residuals also oversees the Statewide Sludge Management Plan (a component of the Statewide Solid Waste Management Plan) and reviews and approves long-term generator residuals management plans. Through the implementation of the Sludge Quality Assurance Regulations (N.J.A.C. 7:14C), residuals generators must test their residuals and report the results to the Department on a regular basis. This data is available to assure compliance with the appropriate residuals management criteria in much the same way that the surface water program uses effluent data to assure compliance with wastewater discharge requirements. Additional information about residuals management is available on the Department's Web site at http://www.state.nj.us/dep/dwq/sludge.htm.

Significant Industrial Users

Some industrial dischargers do not discharge their wastewater directly into a surface waterbody like a stream or river, but rather discharge into a sanitary sewer system or publicly-owned treatment works (POTW). The wastewater is conveyed to a local agency's treatment plant where it is treated and usually discharged into a river or stream. These dischargers are known as "indirect users." Although not all indirect users require individual NJPDES permits, all must comply with at least minimum regulatory requirements under N.J.A.C. 7:14A-21.2, as well as the rules and regulations or sewer use ordinance of the local agency. When this type of discharge meets one or more specific criteria, the discharger becomes a significant indirect user (SIU), and requires a permit. The criteria include discharging from specific operations, discharging high strength or high volume wastewaters, being subject to Federal Categorical Pretreatment Standards, and failure to comply with regulatory requirements under N.J.A.C. 7:14A-21.2. The Division of Water Quality's Bureau of Pretreatment and Residuals issues permits for SIUs discharging to POTWs.

The Bureau of Pretreatment and Residuals may grant "delegated" status to a local agency that demonstrates to the Department that it has the legal authority, procedures, and resources to adequately administer an SIU permitting program, as required under the Federal General Pretreatment Regulations (40 CFR Part 403) and NJPDES regulations. Such a program requires setting appropriate discharge limits for SIUs, enforcing those limits to ensure compliance, conducting site inspections, and performing sampling of the regulated SIUs. Once a pretreatment

program has been delegated to a local agency, SIU permits are no longer issued by the Department in that service area.

The Bureau of Pretreatment and Residuals is responsible for overseeing the administration of pretreatment programs by delegated local agencies. Each delegated local agency must submit annual reports that include, among other things, an overview of the agency's implementation of its pretreatment program and information about the status of the SIUs it regulates. The Bureau also conducts an on-site audit of each program at least once every two years.

Additional information about pretreatment program requirements is available on the Department's Web site at <u>http://www.nj.gov/dep/rules</u>. Additional information about SIUs is available on the Department's Web site at <u>http://www.state.nj.us/dep/dwq/sius.htm</u>.

Combined Sewer Overflow Program

Combined Sewer Systems (CSSs) are wastewater collection systems designed to carry sanitary sewage, industrial and commercial wastewater, and stormwater runoff in a single system of pipes to a publicly owned treatment works (POTW). During periods of rainfall or snowmelt, the total wastewater flows entering the collection system can exceed the capacity of the system or the treatment facility. Under such conditions, CSSs are designed to overflow at predetermined Combined Sewer Overflow (CSO) Points and result in discharges of excess wastewater flows, known as Combined Sewer Overflows (CSOs), directly to surface waterbodies such as rivers, estuaries, and coastal waters.

CSO discharges contain raw sewage consisting of a combination of untreated human waste and pollutants discharged by commercial and industrial establishments. CSOs also have a significant stormwater component that includes pollutants from urban and rural runoff. The pathogens, solids, and toxic pollutants carried by CSOs may be discharged directly to the waters of the state during wet weather events. CSOs are a human health concern because they can create the potential for exposure to disease-causing pathogens including protozoa, bacteria, and viruses. Exposure to CSO contaminants through swimming or other contact can lead to infectious diseases such as hepatitis, gastrointestinal disorders, dysentery, and swimmer's ear infection. Other forms of bacteria can cause typhoid and cholera. Human health can also be affected by ingesting fish or shellfish contaminated by CSO discharges.

CSOs are point sources subject to federal NPDES permit requirements, including both technology-based and water quality-based requirements of the federal Clean Water Act (CWA). The National Combined Sewer Overflow Control Policy (National Policy) requires CSO permittees to develop Combined Sewer Overflow Long Term Control Plans (CSO-LTCPs) that include the evaluation of alternatives for attaining compliance with the CWA, including compliance with surface water quality standards and protection of designated uses of waters of the state. The objectives of the National Policy are to ensure that if CSOs occur, they result only from wet weather; bring all wet weather CSO discharge points into compliance with the technology-based and water quality-based requirements of the CWA; and minimize water quality, aquatic biota, and human health impacts from CSOs. The overall planning approach outlined in the National Policy consists of three major steps: system characterization;

development, and evaluation of alternatives; and selection and implementation of controls.

The Department is implementing a Statewide Combined Sewer Overflow Control Strategy consistent with the National Policy. As a first step, New Jersey has required its owners and operators of CSSs to develop and implement the Nine Minimum Control Measures (NMCs), specified in the National Policy. NMCs are actions or measures that can reduce CSO discharges and their affect on receiving water quality. NMCs can be implemented in a relatively short timeframe and do not require significant engineering studies or major infrastructure modifications. Furthermore, the Department required permittees to characterize their CSSs by developing land-based models of their CSSs.

New Jersey requires all CSO Permittees to capture and remove solids and floatables above a certain size at every CSO Point. As of May 2010, 87 percent of the planned solids and floatables control facilities have been constructed and are operating. It is estimated that New Jersey's CSO Solids/Floatables Control Facilities currently capture, remove, or otherwise prevent the discharge of over 700 tons of solids and floatables materials per year. Additionally, over 60 CSO Points were eliminated since the onset of the program. (The following section on Nonpoint Source Pollution Control Programs also discusses other floatables control programs implemented by the Department.)

To further the development of CSO-LTCPs, the Department required CSO permittees to evaluate the feasibility and cost of effecting pathogen controls on all CSO Points. The permittees also projected the quantity of other pollutants that may be removed incidental to the control of pathogens. Additional information on New Jersey's CSO Program is available on the Department's Web site at <u>www.state.nj.us/dep/dwq/gp_cso.htm</u>.

5.5 Nonpoint Source Pollution Control Programs

Nonpoint source (NPS) pollution is caused by precipitation moving over and through the land and carrying natural and synthetic pollutants into surface and ground water. The significance of NPS loadings can vary widely depending upon the watershed and the pollutant.

NPS pollution is diffuse in origin, can emanate from anywhere in the watershed and is most often the result of human activity. NPS pollution may include chemicals and pathogens carried into streams by rainfall, such as oil and grease from roadways and parking lots; fertilizers from lawns, golf courses, and agricultural fields; and bacteria from improperly maintained septic systems, pet waste, and large congregations of waterfowl. However, NPS pollution can also include impacts not typically thought of as pollution, such as increased water temperature resulting from the clearing of streamside vegetation, or significant changes in the hydrology of the stream resulting from either increased stormwater runoff, which can erode the stream bed and banks, or the loss of water in the stream during dry weather resulting from the loss of recharge in a watershed under development and/or increased water withdrawals within a water supply watershed. Because of the diffuse and intermittent nature of nonpoint sources of pollution, traditional monitoring and permitting approaches are not as effective as they are for point sources. Additional information about the Department's NPS Program is available on the Department's Web site at <u>http://www.nj.gov/dep/watershedmgt/nps_program.htm</u>.

Section 319(h) Nonpoint Source Pollution Control Grants

Since 1990, Congress has annually appropriated monetary grants to states under Section 319(h) of the federal Clean Water Act to assist in implementing programs to control NPS pollution. The majority of the 319(h) funds received by the State of New Jersey are passed through to eligible entities to implement NPS pollution control projects. While early projects focused on streambank restoration, projects in this reporting period focused on developing and implementing watershedbased plans (i.e. plans that are regional or area-wide in scope rather than a study of one location). The Department awarded over \$16 million dollars in Section 319(h) grant funds for 57 nonpoint source pollution control-related projects, as follows:

- In state fiscal year (SFY) 2004, the Department awarded almost \$2 million dollars for nine projects focusing mainly on Regional Stormwater Management Plans.
- In SFY 2005, the Department awarded over \$3.6 million dollars for 11 projects that focused mainly on development of Watershed Restoration and Protection Plans⁸.
- In SFY 2006, the Department awarded over \$3.3 million dollars for 20 projects that focused mainly on development of Regional Stormwater Management Plans and Watershed Restoration and Protection Plans.
- In SFY 2007, the Department awarded over \$3.2 million dollars to eight projects that focused mainly on implementation of stormwater management and watershed restoration measures.
- In SFY 2008, the Department awarded over \$4 million dollars for nine projects that focused mainly on implementation of stormwater management and watershed restoration measures.⁹

Additional information about New Jersey's Section 319(h) NPS Grant Program is available on the Department's Web site at <u>http://www.nj.gov/dep/watershedmgt/nps_program.htm</u>.

Stormwater Management

The Stormwater Management rules (N.J.A.C. 7:8) provide the basis for municipalities to develop stormwater management plans and specify stormwater management standards that are mandatory for new major development. The rules also amend the requirements contained in the Residential Site Improvement Standards (RSIS) at N.J.A.C. 5:21-1.1 and establish new requirements for permits issued by the Department's Division of Land Use Regulation. The New Jersey Stormwater Best Management Practices Manual (BMP manual) has been developed to provide guidance to review agencies and the regulated community on complying with the standards in the Stormwater Management rules. The BMP manual is available through the Department's Web site at <u>njstormwater.org</u>.

⁸ Watershed Restoration and Protection Plans are designed to identify specific measures to be taken to restore impaired waters and to protect and maintain unimpaired waters. Funding priority was given to the development of Watershed Restoration Plans for waterbodies listed as impaired on Sublist 5 of the Integrated Report, or containing waters designated or proposed to be designated as Category One waters.

⁹ The Department awarded an additional \$7,700,000 in Watershed Protection and Management Grant funds, pursuant to N.J.A.C. 7:15-9, to provide additional funding for 10 of the projects awarded 319(h) grant funds in SFY 2007 and 2008.

The Stormwater Management rules also establish performance standards for ground water recharge to increase the integrity of the State's aquifers and protect dry weather base flow in streams. The rules require that 100 percent of the average annual ground water recharge be maintained for new development projects, to help mitigate future droughts and flooding. For the most part, these requirements are waived in urban areas. In addition to recharge standards, the rules promote smart growth techniques by requiring consideration of non-structural design methods for stormwater management. These include maintaining natural vegetation, reducing unnecessary loss of trees, minimizing existing drainage surfaces, preventing large contiguous areas of impervious surfaces, and maintaining existing drainage characteristics and patterns. Consideration of these techniques will require that stormwater management be considered early in the project design and not as a secondary concern. Once nonstructural measures have been fully integrated into the site design, any remaining water quality concerns must be addressed through the use of best management practices to reduce runoff of total suspended solids (TSS) by 80 percent and other pollutants up to the maximum extent feasible.

One of the most significant provisions of the Stormwater Management rule is the requirement for a 300-foot buffer to minimize the impact of stormwater runoff from new major development along a Category One (C1) waterbody. A 300-foot buffer or "Special Water Resource Protection Area" is required for all "Major Development" (defined as a ¼ acre increase in impervious surface or 1 acre of disturbance), that is adjacent to a C1 waterway or to an upstream tributary within the same HUC 14 as a C1 waterway and that is mapped on either the County Soil Survey or the USGS Quad map. The Department's Stormwater Management Program is now administered by the Division of Water Quality's Bureau of Nonpoint Pollution Control. Additional information about the Stormwater Management rules is available on the Department's Web site at http://www.njstormwater.org.

Coastal Nonpoint Source Pollution Control Program

The Coastal Nonpoint Source Pollution Control Program (Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990) addresses NPS pollution in coastal waters. This program is administered jointly by the US Environmental Protection Agency (USEPA) and the National Oceanic and Atmospheric Administration (NOAA). Section 6217 requires the 29 states and territories with approved Coastal Zone Management Programs to develop Coastal Nonpoint Pollution Control Programs (CNPCP). A CNPCP describes how a state will implement NPS BMPs to reduce pollution associated with several sources such as forestry practices, urban development, marinas and boating activities, hydromodification, and others.

Recognizing that, in New Jersey, all land use activities can ultimately impact the State's estuaries, beaches, and marina resources, it was determined that the entire state should be included in the Section 6217 management area. When the New Jersey CNPCP was created in 1995, it found that a vast majority of the required management measures were already addressed through existing programs, rules, regulations, and enforceable policies within and outside the Department. Some management measures were met through voluntary programs. In 1997, New Jersey's CNPCP was conditionally approved by USEPA and NOAA. Since that time, New Jersey has met all conditions. The final issue, related to on-site sewage disposal systems, was satisfied with the readoption of the Water Quality Management Planning Rules N.J.A.C. 7:15

with amendments regarding individual subsurface sewage disposal systems (ISSDs). The amended rules confirm New Jersey's commitment to managing ISSDs to protect ground and surface waters of the State from the adverse effects of pollution (see "Statewide Water Quality Management Planning" earlier in this Chapter). The Department successfully demonstrated that, with the readoption of these rules, New Jersey's Coastal Nonpoint Pollution Control Program satisfies Section 6217 of the Coastal Management Reauthorization Amendments. NOAA and the USEPA agreed and granted New Jersey's CNPCP full approval in March 2010. For a complete description of New Jersey's Coastal Management Program, see Chapter 5, Section 5.7.

Floatables Control

Clean Shores Program:

The Clean Shores Program is administered by the Department's Bureau of Marine Water Monitoring. The Clean Shores Program uses inmates from state correctional facilities to remove wood and garbage from tidal shorelines. Cleaning up these wastes helps prevent the deleterious effects of marine debris upon recreational ocean bathing beaches and the coastal environment. Since its inception in 1989, the total amount of wastes removed from New Jersey beached under this program totals 126.7 million pounds:

- In 2004, the program removed 4.8 million pounds of floatable debris from 131 miles of beaches and shorelines.
- In 2005, the program removed 4.7 million pounds of floatable debris from 119 miles of beaches and shorelines.
- In 2006, the program removed 5.3 million pounds of floatable debris from 155 miles of beaches and shorelines.
- In 2007, the program removed 4.1 million pounds of floatable debris from 130.5 miles of beaches and shorelines.
- In 2008, the program removed 4.1 million pounds of floatable debris from 135 miles of beaches and shorelines.

The program is funded entirely from the sale of "Shore to Please" shore protection license plates. The sponsoring municipalities and state/federal parks provide support to the program and lay out the initial costs of the cleanup. The Clean Shores program in turn reimburses the sponsors for the cost of waste disposal and contracted services incurred during cleanup activities. The program is also responsible for building dune fencing and planting dune grass in several oceanfront communities and one state park. In an average year, cleanups are carried out with the cooperation of more than 45 municipalities, seven county agencies, two state parks, one federal park, and the Department of Corrections. In 2010, the Clean Shores Program won the U.S. Environmental Protection Agency's Environmental Quality Award for demonstrating an outstanding commitment to protecting and enhancing environmental quality and public health. Additional information about the Clean Shores Program is available on the Department's Web site at http://www.nj.gov/dep/bmw/cleanshores/csindex.html.

Adopt-A-Beach Program:

The goal of the Adopt-A-Beach program is to foster volunteer stewardship of the State's coastal beaches and reduce the threat of marine debris to marine fish and wildlife. The Department partners with the New Jersey Clean Communities Council and Clean Ocean Action to conduct the twice-a-year program. Participants are encouraged to adopt one of New Jersey's ocean beaches and become responsible for cleaning up debris and floatables that wash up on the shore. Since 1993, Adopt-A-Beach volunteers have been cleaning up litter and debris from about 60 beaches statewide. The cleanup results are forwarded to our national partner the Ocean Conservancy for analysis and inclusion in national and international marine debris databases. The results are used to gauge the type of education and outreach activities needed to change public attitudes and behavior about litter and the importance of keeping our waterways clean. Adopt-A-Beach volunteers have removed approximately 40,000 pounds of trash since 2004 that would have otherwise become pollution in our coastal waters:

- In 2004, over 1,000 volunteers from 60 groups collected more than 58,000 items of trash.
- In 2005, volunteers collected more than 30,000 items of trash.
- In 2006, 37 groups composed of 565 people removed more than 32,000 items of trash (5600 pounds), covering 62 miles of beach.
- In 2007: over 400 volunteers removed over 18,500 items of trash (almost 7000 pounds) covering just under 50 miles of beach.
- In 2008, over 2,000 volunteers removed over 58,000 items of trash (over 14,000 pounds) covering 80 miles of beach.

Additional information about the Adopt-A-Beach Program is available on the Department's Web site at <u>www.state.nj.us/dep//seeds/aabeach.htm</u>.

Passaic River/Newark Bay Restoration Program:

The Passaic River/Newark Bay Restoration Program was created in 1998 to promote the recreational and economic uses of Newark Bay, the Passaic River and its tributaries. The Program is comprised of three elements: shoreline clean-ups, floatables removal, and "in-house" clean-ups. The shoreline clean-up element has been among the most successful programs of its kind in the nation.

Since 1998, the Passaic Valley Sewerage Commissioners (PVSC) Restoration Program has conducted or assisted volunteers in more than 250 shoreline clean-ups that have removed over 650 tons of floating matter and over 2,000 tons of shoreline debris. In 2000, PVSC created a department of 15 full-time personnel to conduct larger shoreline clean-ups in addition to those organized by volunteer groups and community agencies. In 2005, PVSC was awarded the New Jersey Clean Communities Council Special Recognition Award for its assistance in the clean-up of the Kearny Marsh in conjunction with the New Jersey Meadowlands Commission. In 2006, PVSC was awarded the New Jersey Clean Communities Program Clean Water Award for waterway clean up activity in Paterson and Newark and the New Jersey Association of Environmental Authorities Wave Award for its River Restoration Program. In 2006, PVSC acquired a skimmer facility site that was formerly a contaminated boatyard and needed environmental remediation. The land was remediated and the new facility was built using federal grant money that was distributed to PVSC through a state Department of Transportation grant; the total value of the grant was \$838,000. A loan from the Department helped fund the project as well.¹⁰ Additional information about the Passaic River/Newark Bay Restoration Program is available on PVSC's Web site at <u>http://www.pvsc.com/rr/index.htm</u>.

Agricultural Nonpoint Source Pollution Control Program

The Department continues to foster a partnership with the New Jersey Department of Agriculture (NJDA), the United States Department of Agriculture - Natural Resources Conservation Service (USDA-NRCS), and other agricultural organizations to achieve New Jersey's water quality goals. In some of New Jersey's more rural watersheds, agricultural land uses have been identified as a major nonpoint source of pathogens and nutrients. Implementing best management and conservation practices on agricultural lands is an important component of New Jersey's nonpoint source pollution control strategy because it will improve water quality, conserve water and energy, prevent soil erosion, and reduce the use of nutrients and pesticides,. The following conservation programs that address nonpoint source pollution from agricultural activities are described in detail in the Department's "State of New Jersey Nonpoint Source Report".¹¹

Farm Security and Rural Investment Act (Farm Bill) Funding Programs

The United States Department of Agriculture - Natural Resources Conservation Service (USDA-NRCS) provides technical and financial assistance to private landowners and land managers to promote quality soils, clean and abundant water, healthy plant and animal communities, and working farm lands. Much of the NRCS conservation technical assistance (CTA) is provided in cooperation with New Jersey's 21 counties and 15 Soil Conservation Districts. New Jersey receives funds under the Farm Bill that are administered through the following USDA voluntary programs for eligible New Jersey landowners and agricultural producers (see descriptions below). A new Farm Bill was enacted in 2008, entitled "The Farm Security and Rural Investment Act of 2008."

Statewide Agricultural Nonpoint Source Pollution Control Funding Programs:

- Agricultural Management Assistance (AMA): provides cost share assistance to voluntarily address issues such as water management, water quality and erosion control.
- Environmental Quality Incentives Program (EQIP): provides financial assistance for permanent measures or management strategies that address existing resource concerns.
- Grassland Reserve Program (GRP): offers private landowners the opportunity to protect, restore, and enhance grasslands on their property.
- Farm and Ranch Lands Protection Program (FRPP): provides matching funds to purchase conservation easements to keep productive farmland in agricultural uses.

¹⁰ Anderson, Brian, "Skimmer home on Passaic River opens in North Arlington", *Bergen Record*, July 15, 2010. Available from <u>http://www.northjersey.com/news/98480744 River cleaner boat now launching closer to home.</u> <u>html</u>. Accessed July 19, 2010.

¹¹ New Jersey Department of Environmental Protection. 2009 State of New Jersey Nonpoint Source Report. June 2011. Available from the Department's Web site at <u>http://www.nj.gov/dep/watershedmgt/nps_program.htm</u>.

- Wildlife Habitat Incentives Program (WHIP): provides financial assistance to create, enhance, or maintain five priority wildlife habitat types on nonfederal lands. Creation or improvement of wildlife habitat is generally as effective as buffers at controlling nonpoint source pollution.
- Wetlands Reserve Program (WRP): provides technical and financial assistance to enhance wetlands in exchange for retiring marginal land from agriculture.
- **Conservation Security Program (CSP):** rewards farmers who have demonstrated high levels of conservation and management on their farms by protecting soil and water quality.
- Conservation Effects Assessment Project (CEAP): a new (as of 2007) national effort through which the NRCS works with the Department and other partners to monitor and quantify the effects and benefits of conservation practices.

Since the enactment of the 2002 Farm Bill, New Jersey has received over \$114 million in conservation program funding that has been transferred directly to over 800 New Jersey landowners and managers for conservation measures on almost 70,000 acres of farm land. Total funding for each program received by New Jersey in 2004 - 2008 is shown in Table 5.2.

Program Totals for 2004 - 2008						
AMA	52	1,319	\$1,001,411			
EQIP	493	39,427	\$20,793,407			
CIG	7	10,000	\$432,217			
GRP	17	913	\$469,327			
FRPP	112	12,875	\$28,102,261			
WHIP	138	8,822	\$2,745,223			
WRP*	4	2,920	\$6,602,283			
CSP	23	6,133	\$1,499,186			
CEAP	n/a	n/a	n/a			
Totals	846	82,409	\$61,645,315			

 Table 5.2: Statewide Agricultural NPS Funding Per Program

Farm Service Agency (FSA) Programs

NRCS provides technical assistance to applicants and contract holders working with the FSA Programs, which include the following:

Conservation Reserve Program (CRP): USDA's largest environmental improvement program on private lands allows producers to retire highly erodible or marginal cropland or pastureland and receive rental payments as well as financial assistance to convert the land to grass or trees. In 2007, New Jersey farmers received \$109,277 in annual rental payments for removing highly erodible land and environmentally sensitive cropland from production. Newly enrolled program participants received \$120,397 in CRP cost-share payments. Cost-sharing is provided to cover part of the cost to establish conservation measures on the land. This may include re-establishing native or perennial grasses, planting trees or fencing animals out of streams. Incentive payments totaling \$100,743 were paid out under CRP. Incentive payments are offered in some cases to encourage participation and to protect highly sensitive land surrounding waterways. As of March 31, 2008, CRP contracts total 199 in New Jersey, providing financial support to 141 farms across the State.

Conservation Reserve Enhancement Program (CREP): The Department, along with the New Jersey Department of Agriculture (NJDA), and the U.S. Department of Agriculture's Farm Service Agency (FSA), jointly designed New Jersey CREP to help farmers reduce nonpoint source pollution caused by agricultural runoff in an effort to improve water quality in New Jersey. Under NJ CREP, farmers receive financial incentives from the USDA's Farm Service Agency and the New Jersey Department of Agriculture to voluntarily remove marginal pastureland or cropland from agricultural production and convert the land to native grasses, trees and other vegetation. The vegetation can then serve as a buffer to filter or contain agricultural runoff and prevent polluted stormwater runoff generated by farms from reaching neighboring water bodies. The program provides a 10-year enrollment period and targets the installation of riparian buffers, filter strips, contour buffer strips, and grass waterways. As of April 15, 2008, 103 NJ CREP contracts have been approved totaling 493.3 acres. This represents 256.3 acres of filter strips, 68.7 acres of grassed waterway, and 168.3 acres of riparian forest buffer.

Cooperative Conservation Partnership Initiative (CCPI): In 2006, The North Jersey Resource Conservation and Development Council was awarded \$84,715 in CCPI grants to restore buffers on river and stream banks, and wetlands on farmland, in the Raritan River Basin through the development and implementation of riparian restoration plans on agricultural lands throughout the Basin.

Soil Erosion and Sediment Control Act Implementation

The State of New Jersey adopted the Soil Erosion and Sediment Control (SESC) Act, Chapter 251 Program, on January 1, 1976, to be administered by the State's 15 Soil Conservation Districts (SCDs) as a means to minimize soil erosion from construction sites, reduce nonpoint source pollution from sediment, and enhance water quality and stormwater quality. Conservation practices such as stormwater inlet protection, silt fencing, stabilized construction access, and temporary soil stabilization are just a few of the many measures that help reduce soil erosion on active construction sites. The SCDs review development and site plans to ensure that they are in compliance with SESC Standards, after which they received Chapter 251 certification from the SCD. SCDs also conduct a detailed review of stormwater management runoff designs to ensure runoff will not contribute to long term stormwater quality degradation. When work begins on a project, SCD staff routinely inspect the site to make sure the soil erosion and sediment control measures in the plan are carried out in the correct construction sequence on the site. When construction is finished, SCD inspectors perform a final site inspection to ensure that the site has been properly and permanently stabilized.

Since the inception of the SESC Program, 119,957 applications were received and 117,422 certifications were issued on projects involving more than 851,557 acres of land. Through the implementation of the State Soil Conservation Committee Standards for Soil Erosion and Sediment Control in New Jersey on all projects in the Chapter 251 Program since 1976, tens of

millions of tons of soil were prevented from causing damage to streams, lakes, and downstream properties. Thus it is important to acknowledge the vital role of the Chapter 251 Program in New Jersey's NPS pollution control strategy to protect water quality. Table 5.3 shows the number of plan applications received and, of those, the number of plans that were certified by the districts and the number of acres represented in all of the certified plans for all of New Jersey's 15 Soil Conservation Districts from 2004 to 2008.

FY	SFY	Applications Received	Certifications Issued	Acres Under Development
2004	2005	5,225	4,832	36,372
2005	2006	5,908	6,016	28,648
2006	2007	5,877	6,067	31,565
2007	2008	5,408	5,386	19,927

 Table 5.3: Number of SESC Plan Applications, 2004-2008

Additional information about these Farm Bill (and other USDA) programs is available on the USDA Web site at <u>www.state.nj.us/agriculture/grants/farmbill.html</u>.

5.6 Total Maximum Daily Load (TMDL) Program

Total Maximum Daily Loads (TMDLs) represent the assimilative or carrying capacity of the receiving waterbody taking into consideration point and nonpoint sources of pollution, natural background water quality, and surface water withdrawals. A TMDL identifies the sources (point and nonpoint) contributing a pollutant of concern and sets load reductions needed to meet surface water quality standards. Section 303(d) of the federal Clean Water Act requires TMDLS to be developed for the pollutant(s) of concern in waterbodies that cannot meet surface water quality standards after the implementation of technology-based effluent limitations.

In New Jersey, the Department's Bureau of Environmental Analysis and Restoration is responsible for establishing TMDLs for all waters identified on the Section 303(d) List of Impaired Waterbodies, in accordance with a priority ranking (see Appendix B for the 2010 303(d) List). For the 2010 Integrated Report, the Department has prioritized 72 assessment units for TMDL development within the next two years (see Appendix D). Each TMDL is first proposed as an amendment to the applicable areawide Water Quality Management Plan (see Section 5.2) and published in the New Jersey Register, followed by a public comment period. Together with the response to comments, a TMDL is established upon submittal to USEPA for approval. Once USEPA approves the established TMDL, it is adopted into the areawide Water Quality Management Plan pursuant to N.J.A.C. 7:15. Each TMDL includes an implementation plan, which identifies a suite of completed, ongoing, and planned activities needed to achieve the identified load reductions. In many cases, the completed and ongoing projects have been made possible through USEPA 319(h) grant awards. This funding is used in conjunction with state funds such as those generated from the Corporate Business Tax (CBT), other federal funds (EQIP, CRP and CREP), and local funds to address nonpoint sources of pollutants. Additional information on the 319(h) NPS Pollution Control Grant Program is provided in Section 5.5.

New Jersey has established a total of 519 TMDLs since the year 2000, of which 154 address water quality-limited waters on the 2008 303(d) List. New Jersey has committed to developing additional TMDLs at a reasonable pace that USEPA describes as "expeditious", prioritizing those that address active sources of pollutants and locations where TMDLs drive regulatory outcomes. Recent accomplishments are listed below:

- On April 24, 2008, the Department adopted amendments to the areawide Water Quality Management Plans (described earlier under "Statewide Water Quality Management Planning Program") establishing TMDLs to address phosphorus impairments in the non-tidal Passaic River Basin affecting the following waterbodies: Wanaque Reservoir, Dundee Lake, Pompton Lake, and the Ramapo River. The amendments also established watershed criteria, expressed in terms of the response indicator chlorophyll-*a*, for the Wanaque Reservoir and Dundee Lake, the two critical locations identified through the TMDL study. Phosphorus was determined to be causing excessive primary productivity at these locations within the non-tidal Passaic River Basin study area. Establishing watershed criteria at these locations was determined to be the best way to ensure protection of designated uses in these locations.
- On September 25, 2009, the USEPA approved New Jersey's statewide TMDL for Mercury Impairments Based on Concentration in Fish Tissue Caused Mainly by Air Deposition addressing 122 HUC 14s. The majority of mercury contamination through air deposition in New Jersey comes from out of state, with only 12.5 percent coming from New Jersey sources. Global sources comprise about 25 percent, half of which is natural background. The remaining mercury from air deposition comes from other states. The TMDL showed that, to meet the goal of safe unlimited consumption of fish for the average population and one fish meal per week for the high risk population (pregnant women, nursing mothers, and children), virtually all anthropogenic sources of mercury must be eliminated. A Clean Water Act 319(g) conference was held in June 2010 between the New England states and New York to address non-point sources of mercury (air deposition) from outside these states. Additional information on mercury contamination of fish is provided in Chapter 6: Public Health Concerns.

The Bureau of Environmental Analysis and Restoration became part of the Department's Division of Water Monitoring and Standards in June 2010. Additional information about New Jersey's TMDL Program is available on the Department's Web site at <u>http://www.nj.gov/dep/watershedmgt/tmdl.htm</u>.

5.7 Coastal Management Program

Concerted coastal management efforts began in New Jersey in 1970 with the passage of the Wetlands Act of 1970, N.J.S.A. 13:9A, followed by the Coastal Area Facility Review Act (CAFRA), N.J.S.A. 13:19, in 1973. In response to the 1972 passage of the federal Coastal Zone Management Act, New Jersey developed and gained federal approval of the New Jersey Coastal Management Program, which addresses the complex coastal ecosystem as a whole. The Coastal Management Program defines goals and standards for the purpose of integrating protection and enhancement of natural resources, appropriate land use and development, and public access to, and use of, New Jersey's coastal resources. The program, which was first approved in 1978,

brings together the above laws as well as the Waterfront Development Law, the Freshwater Wetlands Protection Act, the Public Trust Doctrine for access to, and use of, state-owned tidelands, and the regulatory activities of the New Jersey Meadowlands Commission. These laws establish a set of over-arching policies that guide implementation of the New Jersey Coastal Management Program.

A primary mission of the Coastal Management Program is ensuring that coastal resources and ecosystems are conserved as a vital aspect of local, state, and federal efforts to enhance sustainable coastal communities. The coastal zone boundary of New Jersey encompasses the CAFRA Area and the New Jersey Meadowlands District. It also includes coastal waters to the limit of tidal influence, including the Atlantic Ocean (to the limit of New Jersey's seaward jurisdiction); Upper New York Bay, Newark Bay, Raritan Bay and the Arthur Kill; the Hudson, Raritan, Passaic, and Hackensack Rivers, and the tidal portions of the tributaries to these bays and rivers. The Delaware River and Bay, and other tidal streams of the Coastal Plain, are also in the coastal zone, as is a narrow band of adjacent uplands in the Waterfront Development Area outside of the CAFRA Area. Through the Coastal Management Program, the Department manages the State's diverse coastal zone, which includes portions of 17 counties and 245 municipalities.

New Jersey is required by the federal Coastal Zone Management Act to assess its Coastal Management Program every five years and provide a strategy for program enhancements in nine areas. The required assessment areas are aquaculture, coastal hazards, coastal wetlands, cumulative and secondary impacts, energy and government facility siting, marine debris, ocean resources, public access, and special area management planning. The New Jersey Coastal Assessment and Strategy for fiscal years 2006-2010 was approved by the National Oceanic and Atmospheric Administration (NOAA) on August 17, 2006. This five-year strategy ranked the following enhancement areas as either high or medium priority: coastal hazards, cumulative and secondary impacts, ocean resources, and public access.

The New Jersey Coastal Management Program is currently in the process of assessing its Coastal Management Program for fiscal years 2011-2015. Following public meetings on the assessment elements, the Program will finalize the assessment and a strategy for program enhancements. The required assessment areas remain aquaculture, coastal hazards, coastal wetlands, cumulative and secondary impacts, energy and government facility siting, marine debris, ocean resources, public access, and special area management planning. Additional information about New Jersey's Coastal Management Program, as well as the Assessment and the Strategy, are available on the Department's Web site at <u>http://www.nj.gov/dep/cmp</u>.

5.8 New Jersey Environmental Infrastructure Trust Financing Program

Clean Water Projects

In the 1987 amendments to the federal Clean Water Act (CWA), Congress required states to establish a Clean Water State Revolving Fund (CWSRF) program to qualify for federal capitalization grants. The CWSRF provides financial assistance for the construction of projects

that protect, maintain, and improve water quality. Established in 1988, New Jersey's CWSRF program is included in the New Jersey Environmental Infrastructure Financing Program (NJEIFP), a partnership between the Department and the New Jersey Environmental Infrastructure Trust (NJEIT), an independent state financing authority. NJEIFP is a revolving loan program that offers low-cost financing to local government agencies and private water purveyors for the construction of wastewater and drinking water infrastructure, landfill construction and closure, and stormwater management and nonpoint source pollution control projects. Nonpoint source projects may include open space acquisition and remedial action, such as a brownfields cleanup, that produce a water quality improvement. (See Section 5.10 for more details on NJEIFP funds for open space acquisition.)

A priority ranking system was created to decide which clean water projects should be funded in a given funding cycle. The system was first developed in 1982 and is constantly evolving. Every year the Department develops a "Proposed Priority System, Intended Use Plan, and Project Priority List" as required by federal and State law. The Priority List identifies projects targeted for financial assistance from the CWSRF and identifies the estimated total eligible building costs under the appropriate project category. The Department ranks projects based on the nature of the wastewater problem. Table 5.5 summarizes the Clean Water Loan Awards issued in 2004 through 2008.

Type of Loan Project	Number of Loans	Amount of Loans
Clean Water	168	\$1,450,877,159.00
CW-Land Acquisition	20	\$49,782,463.00
Drinking Water	68	\$305,593,320.00
Total Projects	256	\$1,806,252,942.00

Table 5.4: Clean Water Loan Awards, 2004-2008

Additional information about NJEIFP is available on the Department's and NJEIF's Web sites at www.state.nj.us/dep/dwq/mface.htm#finance, www.state.nj.us/dep/dwq/cwpl.htm, and njeit.org.

5.9 Land Acquisition for Water Quality Protection

Open space preservation is essential to protecting and enhancing the quality of life in New Jersey's communities. Poorly designed development threatens our precious water supplies and other vital natural resources by increasing the amount of pavement and impervious cover, and preventing rainfall from replenishing underground aquifers. New roads and large, scattered housing sites create currents of stormwater runoff that carry trash, road salts, oil, and other contaminants into our streams and rivers. Preserving open space protects land from development, safeguards our water supplies and other natural resources, and provides outdoor recreational opportunities.

As of June 30, 2010, there were 1,238,917 acres of land statewide being used for conservation and public recreation purposes, of which federal, state, county, and municipal agencies have preserved 1,163,850 acres for public recreation and open space uses. The rest is preserved by

private conservation interests. The statewide total does not include 184,183 acres of preserved farmland acreage. The National Park Service and the United States Fish and Wildlife Service manage over 114,000 acres of land or 9 percent of the State's open space. State government agencies administer 769,779 acres or 62 percent of New Jersey's preserved recreation land and open space. County and municipal governments are responsible for over 214,000 acres or 17 percent of public parkland across the State. Nonprofit conservation organizations have preserved 75,000 acres of land statewide. Conservation organizations manage six percent of New Jersey's open space.

The Green Acres Program

The Green Acres Program (Green Acres) was created in 1961 to meet New Jersey's growing recreational and conservation needs. As the principal land acquisition agent for the Department, Green Acres acquires land for state parks, forests, natural areas, and wildlife management areas. The Program also provides matching grants and low interest (two percent) loans to municipal and county governments, and matching grants to nonprofit conservation organizations, to acquire open space and develop outdoor recreational facilities. To date, Green Acres has protected more than 647,000 acres of open space and developed hundreds of public parks, bringing the statewide system of preserved open space and farmland to more than 1.42 million acres. Green Acres also administers the "Tax Exemption Program," which provides exemption from local property taxes to eligible nonprofit organizations that own recreation or conservation lands and allow public access. Green Acres acquired a total of 98,166 acres of land for preservation between January 1, 2004 and December 31, 2008.

New Jersey has long recognized the importance of protecting headwater areas of rivers, streams, lakes, reservoirs, wetlands and associated buffers, and coastal waters. These lands protect ecological resources and water quality, provide water-based recreational opportunities, and serve as linear open space linkages. Public Law 2002, Chapter 76, directs the Green Acres State Land Acquisition Program to prioritize land for acquisition for the protection of water resources and flood prone areas. As a result of this legislation, Green Acres has revised the ranking system used to evaluate state land projects based on water resource features, biodiversity, and other relevant factors. The new ranking system assigns three times the weight for water resource lands and two times the weight for flood prone areas as compared to other priority criteria. While the protection of water resources through land preservation has been a goal of Green Acres since its inception, this legislation further focuses Green Acres preservation efforts on lands that protect important water resources.

Green Acres also published *The Land Preservation Plan for 2005-2007*, which explains the criteria and process by which Green Acres considers land for acquisition, and sets forth policy to guide Green Acres in its state land acquisition efforts. During the preparation of this plan, several other plans and studies were consulted and reviewed to ensure that the State was undertaking a comprehensive approach in its water resource and open space planning. While the plan does not list individual parcels, it clearly identifies areas of New Jersey that are considered priorities for state land acquisition. The identification of these areas will establish a basis for decision-making by the Green Acres Program when both reacting to land offerings and targeting lands for preservation. State land acquisition activities covered in this plan include all the methods

employed by the State to preserve land, fee simple acquisition, the purchase of easements and development rights, and the acceptance of donated land. The Green Acres Program works with property owners in the municipalities identified for land acquisition. The Land Preservation Plan is available on the Department's Web site at <u>www.nj.gov/dep/greenacres/pdf/lpp_05_07.pdf</u>.

New Jersey Environmental Infrastructure Financing Program

The New Jersey Environmental Infrastructure Financing Program (NJEIFP) is a partnership between the Department and the New Jersey Environmental Infrastructure Trust (see Section 5.8). Land acquisition financed through the NJEIFP must demonstrate a water quality benefit. Headwaters, stream corridors, wetlands, watershed protection, and aquifer recharge areas are among the types of land that would qualify. Preserving open space protects land from development, safeguards our water supplies and other natural resources. While lands purchased through the NJEIFP cannot be developed, they may be used for passive recreational activities such as hiking, fishing, and horseback riding. Conservation easements placed on funded parcels assure that the water quality benefits are preserved. The NJEIFP works closely with the Green Acres Program to maximize a community's limited funds for land acquisition. Through this partnership, municipalities can receive the resources necessary to purchase larger and/or more expensive parcels before they are lost to development. If only a portion of a parcel is eligible for NJEIFP financing, the remaining portion of the land may be financed through open space acquisition programs such as Green Acres or local programs funded by county and municipal open space taxes. Approximately \$50 million in loans was awarded for 20 land acquisition projects during the 2004-2008 reporting period, contributing to the acquisition of over 3400 acres of land.

Additional information about Clean Water Financing for open space preservation is available on the NJEIT's Web site at http://www.njeit.org/openspace.htm or the Department's Web site at www.state.nj.us/dep/dwq/ots.htm.

5.10 Source Water Assessment

The 1996 Amendments to the Safe Drinking Water Act required all states to establish a Source Water Assessment Program (SWAP). The purpose of SWAP is to provide for the protection and benefit of public water systems and to increase public awareness and involvement in protecting the sources of public drinking water. New Jersey's SWAP Plan incorporates the following four fundamental steps:

- 1. Determine the source water assessment area of each ground and surface water source of public drinking water.
- 2. Inventory the potential contamination sources within the source water assessment area.
- 3. Determine the public water system sources' susceptibility to regulated contaminants.
- 4. Incorporate public education and participation.

The Department, in conjunction with the United States Geological Survey (USGS), performed source water assessments to predict the susceptibility of source water for all community water systems and noncommunity water systems in New Jersey. Based on these assessments, more

than 50 percent of the unconfined wells in New Jersey were rated as highly susceptible to nutrients and VOCs. Confined wells received a high susceptibility rating only for disinfection byproduct precursors (27 percent of confined wells rated highly susceptible). When reviewing the results of the medium susceptibility ratings for confined wells, a high percentage of the wells were moderately susceptible to disinfection byproduct precursors, inorganics, and radionuclides. For surface water, more than 50 percent of the intakes in New Jersey were rated as highly susceptible to inorganics, disinfectant byproduct precursors, and pathogens. Surface waters are subject to various sources of microbial contamination runoff containing fecal matter. For the purpose of the source water assessments, the drinking water derived from all surface water intakes was assumed to be highly susceptible to contamination by pathogens.

The Department has generated individual reports for each of the 606 community water systems and 3,533 noncommunity water systems (number of systems in the 2003 inventory, the year that initial source water assessments had to be completed). These reports provide the susceptibility ratings for each of the water system's sources to each contaminant category. The reports and supporting documents are available to the public and can be obtained by contacting the public water system, or on the Department's Web site at http://www.nj.gov/dep/swap/assessments.htm. Since 2003 (through early 2009), about 525 new or revised community water system delineations and about 750 noncommunity water system wells have been added to the list of assessments to be done. The Department continues to assess new sources and revise source water assessments to reflect new developments.

Source water assessments provide the foundation for source water protection. Source water protection focuses on preserving and protecting the public drinking water source, particularly from the contaminants to which the source is most vulnerable, as identified in the source water assessments. The information developed from the SWAP provides communities with the tools necessary to begin protecting their valuable drinking water source. Currently, the Department does not have specific source water protection regulations, but the Department strongly encourages local municipalities to implement source water protection, including protection plans and well head protection ordinances. Several New Jersey municipalities have taken steps toward protecting their drinking water sources by adopting well head protection ordinances. The Department has assisted many of these townships in developing their ordinances to ensure that their source waters are protected. All well head protection ordinances prohibiting underground storage tanks must be reviewed by the Department to ensure that they are in compliance with State regulations. Additional information about the Source Water Assessment Program is available on the Department's Web site at http://www.nj.gov/dep/swap/index.html.

5.11 Water Education and Outreach

In recognition that some water pollution problems, such as nonpoint source pollution, require approaches other than the traditional regulatory approach (i.e., discharge permits with numeric effluent limitations), the Department administers a cadre of nonregulatory programs and initiatives for water quality restoration, protection, and enhancement; however, some of the Department's water pollution control programs also employ nonregulatory elements, such as education and outreach, either in lieu of, or in tandem with, other permit requirements. Recognizing the need to promote stewardship of our state waterways, the Department has developed many informational programs and materials for stormwater, nonpoint source pollution, water quality, and watershed education and outreach.

The <u>New Jersey Watershed Ambassadors Program</u>, administered by the Department's Bureau of Environmental Analysis and Restoration, is an environmentally-oriented <u>AmeriCorps</u> program that places a trained Watershed Ambassador in each of New Jersey's twenty watershed management areas. These Ambassadors work with local volunteers to monitor local rivers through the Visual Assessment and Biological Assessment protocols employed by the Watershed Watch Network (see description below). They also provide information and education on watershed stewardship through presentations, training, and partnership events at community organizations and schools. The Watershed Ambassadors Program is now administered by the Department's Division of Water Monitoring and Standards.

The Department's Assistant Commissioner for Land Use Management now administers a number of water-focused public education and outreach programs. The *Clean Water Raingers* publications offer educators free teaching materials and other resources for their students as well as background information on watersheds and nonpoint source pollution. "Project WET" (Water Education for Teachers) is an international program that offers teachers a better understanding of the world's water resources through hands-on, multi-disciplinary lessons. Through teacher workshops on multiple curriculum activity guides related to water resources, NJ Project WET teaches about the importance and value of water in our every day life while offering specialized programs about New Jersey's water resources and watersheds.

The <u>Urban Watershed Education Program</u> educates young students living in New Jersey's urban estuaries about the hazards of eating contaminated fish and helps them to enjoy and respect their local water resources by focusing on healthier fishing and shellfishing alternatives in their community. This intensive four-day program gives students the opportunity to experience their local waters first-hand through storm drain marking, water monitoring, aquatic biology, and fishing activities. Originally focused in the Newark Bay Complex, this program now educates students in urban waterfront communities throughout the State, including Trenton and Camden. This program is now administered by the Department's Assistant Commissioner for Land Use Management, in conjunction with the Hackensack Riverkeeper.

The Department's Division of Water Quality has developed a public information campaign known as <u>Clean Water NJ</u>. This program is aimed at reducing nonpoint source pollution carried by stormwater runoff by encouraging New Jersey citizens to change behavior that results in water pollution. The campaign includes television commercials, radio ads, posters, a Web site, and educational brochures. As part of this campaign, the Department also created the <u>Clean Water Car Wash Fundraising Program</u>, which connects organizations with participating car washes to raise money without harming the environment. The Clean Water NJ Web site (<u>www.cleanwaternj.org</u>) provides information to the general public about "stormwater pollution" and what citizens can do to help reduce it in their homes, cars, and communities. The Web site also provides links to educational resources for teachers and for the general public.

The Department's Watershed Outreach and Education Web site (<u>http://www.nj.gov/</u><u>dep/watershedmgt/outreacheducation.htm</u>) provides additional information about many of the

programs summarized above and offers many tools for stormwater, nonpoint source pollution, and watershed education efforts. These include newsletters and brochures for the community at large, as well as teacher workshops, free classroom presentations, and publications for students and teachers. In addition, the Department's Environmental Education Program has developed a nationally acclaimed Web site, the "State Environmental Education Directory" (SEEDS) Web site, which provides educational materials and links to additional educational resources on many environmental topics, including water pollution, conservation, and stewardship. Additional about information SEEDS available Department's is on the Web site at http://www.nj.gov/dep/seeds.

5.12 Regional Water Quality Initiatives

Highlands Region Water Resource Protection Program

The historic Highlands Water Protection and Planning Act (Highlands Act) was signed into law (N.J.S.A. 13:20-1 et seq.) on August 10, 2004. The purpose of the Highlands Act is to preserve an essential source of clean and plentiful drinking water for one-half of the State's population, and to protect the State's great diversity of natural resources. The Highlands Region supplies drinking water to over 5.4 million people or approximately 379 million gallons of drinking water daily. In addition to water resources, the northern New Jersey 800,000-acre Highlands Region contains exceptional natural resources such as contiguous forest lands, wetlands, pristine watersheds, and plant and wildlife habitat. The region contains many sites of historic significance and provides abundant recreational opportunities.

The Highlands Act documents the geographical boundary of the Highlands Region in New Jersey and establishes a Highlands Preservation Area (Preservation Area) and a Highlands Planning Area (Planning Area), each of roughly 400,000 acres. Additionally, the Highlands Act required the Department to establish regulations in the Highlands Preservation Area and created a Highlands Water Protection and Planning Council to develop a regional master plan for the entire Highlands Region.

Additional information about the Highlands Act and its implementation is available on the Department's Web site at <u>http://www.nj.gov/dep/highlands/</u>.

National Estuary Programs

Estuaries are places where rivers meet the sea and where fresh water and salt water mix. Estuaries are vital ecosystems that are critical to early life stages of many species of fish and are critical to the health of coastal environments and to our enjoyment of them. Congress established USEPA's National Estuary Program (NEP) in 1987 to improve the quality of estuaries of national importance. Section 320 of the federal Clean Water Act directs USEPA to develop plans for attaining or maintaining water quality in an estuary. This includes protection of public water supplies; protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife; allows recreational activities in and on water; and requires control of point and nonpoint sources of pollution.

There are 28 National Estuary Programs across the country that are authorized under the federal Clean Water Act to protect, preserve, and restore the nation's estuaries. Each National Estuary Program is a partnership of federal, state, and local government agencies, non-profit groups, academics, and individual citizens that is charged with creating and implementing a Comprehensive Conservation and Management Plan (CCMP) that addresses all aspects of environmental protection for the estuary, including issues such as water quality, habitat, living resources, and land use. The CCMP is based on a scientific characterization of the estuary, and is developed and approved by a broad-based coalition of stakeholders. The CCMP establishes priorities for action, research, and funding, and serves as a blueprint to guide future decisions and activities related to the estuary.

New Jersey participates in three National Estuary Programs: the Barnegat Bay Partnership, the Partnership for the Delaware Estuary, and the New York/New Jersey Harbor Estuary Program.

Barnegat Bay Partnership (BBP):

The Barnegat Bay – Little Egg Harbor Estuary is located along the central New Jersey coastline within the Atlantic Coastal Plain physiographic province. The 75-square-mile, environmentally sensitive estuarine system consists of aquatic vegetation, shellfish beds, finfish habitats, waterfowl nesting grounds and spectacular vistas. Its 660-square-mile watershed encompasses most of the 33 municipalities in Ocean County as well as four municipalities in Monmouth County. Although long recognized for its great aesthetic, economic, and recreational value, this back bay system is now affected by an array of human impacts that potentially threaten its ecological integrity.

The entire watershed has undergone dramatic growth since 1950. During the 1990s, the municipalities surrounding the bay reported population expansions that, on average, exceeded 20 percent. Now home for approximately 500,000 people, the current population more than doubles during the summer season. The development accompanying the increasing population growth has changed land use from principally undeveloped and agricultural to suburban. Boat traffic on the bay, including personal watercraft, has also significantly increased, raising concerns about use conflicts and cumulative impacts on the bay's water quality. An assessment of the estuary indicates that human activities in the watershed and estuary, particularly new development spurred by increased population growth, have led to measurable degradation of water quality, destruction of natural habitats, and reduction of living resources in the aquatic ecosystem.

The Barnegat Bay Partnership (BBP), formerly the Barnegat Bay National Estuary Program, is "a partnership of federal, state, and local interests" overseeing the development and implementation of a management plan for the entire Barnegat Bay watershed. The BBP is made up of subcommittees that oversee the various aspects of the management plan: the Science and Technical Advisory Committee (STAC), the Advisory Committee, and the Policy Committee. Recently, a Sustainable Communities Workgroup was also initiated to address development and related issues affecting water quality. With more than one-third of the Action Items from its 2002 Comprehensive Conservation and Management Plan (CCMP) completed, and in response to USEPA's fall 2006 Implementation Review, the BBP embarked upon a year-long process of strategic planning to identify program priorities and refocus partnership efforts. As a result of its strategic planning process, the BBP committed to addressing five priority areas in the coming three years (2008-2011), including:

- Improving recognition and understanding of the bay's condition, and addressing the causes of water quality degradation within the ecosystem, especially eutrophication in the bay and stormwater and nonpoint source pollution in the watershed;
- Addressing water supply and flow issues that affect the bay and watershed;
- Preventing habitat loss, especially of submerged aquatic vegetation, and supporting habitat restoration; and
- Improving understanding of, and addressing, fisheries declines.

In 2010, the BBP participated in a stakeholder process convened by the Department to gather all interested parties and inventory all work performed to date, to provide the most comprehensive picture of the science of the Bay and the strategies implemented to protect and restore the Bay. BBP, along with the Department, Rutgers University, and Exelon Corporation, made presentations about the topic and scope of scientific research studies conducted to date. The information gathered through the stakeholder process was used by the Department to advise the Governor in crafting a Comprehensive Action Plan for Barnegat Bay. Additional information about this initiative available on the Department's Web site is at http://www.nj.gov/dep/barnegatbay/.

Additional information about the Barnegat Bay Partnership (BBP), including actions, projects, programs, and publications, is available on the BBP Web site at <u>www.bbep.org</u>

The Delaware Estuary Program (Partnership for the Delaware Estuary):

The Delaware Estuary makes up 51 percent of the Delaware River Basin. The Delaware Estuary stretches from Trenton, New Jersey and Morrisville, Pennsylvania south to the mouth of the bay between Cape May, New Jersey and Cape Henlopen, Delaware. In addition to its remarkable natural habitats, the Delaware Estuary maintains the world's largest freshwater port, as well as a strategic military port. The port is home to the second largest refining-petrochemical center in the United States, providing seventy percent of the gasoline and heating oil for the entire East Coast. The Basin also contains six nuclear reactors and one of the world's great concentrations of heavy industry. The entire Delaware River Basin is 13,539 square miles, draining parts of Pennsylvania (50.3%), New Jersey (23.3%), New York (18.5%), and Delaware (7.9%). The Delaware River itself is the longest undammed river east of the Mississippi; it is fed by 216 tributaries and extends 330 miles to the mouth of the Delaware Estuary.

The watershed of the Delaware Estuary continues to undergo shifts in land use. Between 1970 and 1990, developed land within the watershed increased by 20 percent. Developed lands are forecast to substantially increase by another 36 percent, roughly 275,000 acres, between 1990 and 2020. This rapid growth in developed land is predicted to outpace population growth for the Estuary region, which is forecast to undergo only a modest increase of 11 percent from 1990 to 2020. All this suggests that the predicted growth will be associated mainly with urban sprawl. Such changes in land use patterns in the three states within the Estuary present major challenges for environmental managers, as natural lands and farmlands are converted for residential and

commercial use. Changes in land use patterns have customarily been associated with increased stormwater runoff, which carries higher concentrations of nutrients, toxics, and heavy metals to the Estuary. Pollution from land-based activities, loss of habitat, and the disruption of hydrologic functions are attributable to land use alteration in the watersheds of the Delaware Estuary.

As a former center for the Industrial Revolution in the New World, the greater Philadelphia region also contains a pollution legacy lasting more than 300 years; much of the present pollutant runoff can be attributed to past industry. Chlorinated organic compounds, such as polychlorinated biphenyls (PCBs), chlordane, and DDT, have been found in the tissues of fish and shellfish in the Delaware Estuary, which has resulted in fish consumption advisories issued for the entire Estuary. In addition to the human health risks from consuming contaminated fish, PCBs also represent a direct ecological risk to wildlife and aquatic biota in the Estuary. Elevated levels of PCBs, DDT and its metabolites, and chlordane have been detected in Peregrine Falcon eggs from the Estuary.

As a National Estuary Program, the Partnership for the Delaware Estuary is charged with implementing the goals of its 1996 "Comprehensive Conservation and Management Plan" (CCMP). This is a guiding document that includes numerous education, outreach, science, management, and policy goals. In 2004, Delaware Estuary Program (DELEP) and the Partnership merged to form a single organization: the Partnership for the Delaware Estuary (PDE), a National Estuary Program. The reorganized PDE is now charged with addressing the full complement of actions called for in the CCMP. The Department participates on PDE's Steering Committee, the Estuary Implementation Committee, the Science and Technical Advisory Committee, the Toxics Advisory Committee, the Monitoring Advisory Committee, and various technical workgroups.

Additional information about the Partnership for the Delaware Estuary (PDE), including actions, projects, programs, and publications, is available on PDE's Web site at <u>www.DelawareEstuary.org</u>.

New York/New Jersey Harbor Estuary Program (HEP):

The New York/New Jersey Harbor Estuary includes the waters of New York Harbor and the tidally influenced portions of all rivers and streams that empty into the Harbor. The "core area" of the Harbor, which is generally the most degraded, extends from the tidal waters of the Hudson-Raritan Estuary from Piermont Marsh in New York State to an imaginary line (the Sandy Hook-Rockaway Point Transect) connecting Sandy Hook, New Jersey, and Rockaway Point, New York at the mouth of the Harbor. This core area includes the bi-state waters of the Hudson River, Upper and Lower New York Bays, the Arthur Kill, the Kill Van Kull, and Raritan Bay. In New York, the area includes the East and Harlem Rivers and Jamaica Bay, and in New Jersey, it includes the Hackensack, Passaic, Raritan, Shrewsbury, Navesink, and Rahway Rivers, and Newark and Sandy Hook Bays. The New York Bight is the ocean area extending approximately 100 miles offshore from the Sandy Hook-Rockaway Point Transect to the Continental Slope. Almost 240 miles of sandy shoreline, extending from Cape May, New Jersey to Montauk Point, Long Island, form its landward border. There are several back bays that are located behind the barrier beaches outside the core area of the Harbor.

While the primary focus of the New York/New Jersey Harbor Estuary Program (HEP) is on the core area of the Harbor, the Estuary's watershed encompasses about 16,300 square miles, including much of eastern New York, northern New Jersey, and small parts of western Connecticut, Massachusetts, and Vermont. The quality of the Estuary's waters is affected not only by activities occurring directly in the Harbor and Bight but also by industrial, agricultural, land use, and other individual practices throughout this larger watershed. As rainwater moves over the land in the watershed, it carries with it many potential pollutants that eventually end up in the Estuary – including oil dumped down storm drains, pesticides from farms, lawn fertilizers, oil and gasoline from highway runoff, sewage from failed septic tanks, and sediment from construction projects.

HEP was authorized in 1987, under the National Estuary Program, as a partnership (called the Management Conference) of federal, state, and local governments, scientists, civic and environmental advocates, the fishing community, business and labor leaders, and educators. The mission of the Management Conference was to develop a plan to protect and restore the Estuary. In 1987, Congress also required the preparation of a restoration plan for the New York Bight, the ocean area extending approximately 100 miles beyond Harbor waters. Because the Harbor and Bight are inextricably linked within the larger ecosystem, the two plans were joined. The New York/New Jersey Harbor Estuary was designated as an "Estuary of National Significance" in 1988 by USEPA in response to a request by the two state governors.

Since it was completed in 1996, the primary planning document produced by the HEP has been the Comprehensive Conservation and Management Plan (CCMP). This document was signed by the Governors of New York and New Jersey in the fall of 1997. In June 2008, HEP published an <u>Action Plan</u> to help focus implementation of the CCMP. It is organized around five major themes and goals: clean up pollution in the estuary; habitat and ecological health; improve public access; support an economically and ecologically viable estuary and port; and public education and community involvement. This is a working document that will be updated in 2010 to reflect new information, evolving priorities, and progress on recommended priorities. It is meant to be an organizing instrument used to assist with the implementation of the major actions in HEP's CCMP.

Additional information about the New York/New Jersey Harbor Estuary Program (HEP), including actions, projects, programs, and publications, is available on the HEP Web site at <u>http://www.harborestuary.org</u>.

5.13 New Jersey's Wetlands Protection Program

In New Jersey, the chemical, physical, and biological integrity of wetlands is protected under both federal and state laws. Federal protection is provided under sections 303, 401, and 404 of the federal Clean Water Act (the Act). Section 303 provides protection through the antidegradation provisions of the Surface Water Quality Standards. (New Jersey's Surface Water Quality Standards include wetlands in the definition of "surface waters". When USEPA approves the state standards, they become the federal standards for state waters.) Section 401 is designed to allow the state to control any discharges to its waters that may result from the issuance of a federal permit or license, through a certification process. Section 404 addresses and regulates the discharge of dredge and/or fill material into wetlands and other waters of the state. In 1994, New Jersey began implementing its state program in place of the Section 404 program after being granted the authority by USEPA pursuant to Section 404(g) of the Act.

Several New Jersey statutes provide various levels of protection to wetlands, including the Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 et seq.), the New Jersey Water Quality Planning Act (N.J.S.A. 588:11A-1) and the New Jersey Water Pollution Control Act (N.J.S.A. 58:10A-1). New Jersey protects coastal resources (including wetlands) under a variety of laws, including the Waterfront Development Law (N.J.S.A. 12:5-3), the Coastal Area Facility Review Act (N.J.S.A. 13:19), and the Wetlands Act of 1970 (N.J.S.A. 13:9A). The Department applies the New Jersey Coastal Permit Program Rules (N.J.A.C. 7:7), the Coastal Zone Management Rules (N.J.A.C. 7:7E), Water Quality Certification (Section 401), and Federal Consistency Determinations (Section 307 of the Federal Coastal Zone Management Act) to determine permitted uses and development of coastal resources. Specific protection is provided for New Jersey tidal wetlands through the Wetlands Act of 1970.

Since July 1, 1988, the State has protected its "inland" wetlands through the Freshwater Wetlands Protection Act (FWPA) (N.J.S.A. 13:9B-1 et seq.). Prior to enactment of the FWPA, several different state laws afforded various levels of protection to "inland" wetlands. One of the goals of the Act was to consolidate the protection of wetlands into one program. It should be noted; however, that the FWPA does not affect wetlands regulated under the Wetlands Act of 1970. In addition, the FWPA exempts areas under the jurisdiction of the New Jersey Meadowlands Commission. Therefore, activities in the Hackensack Meadowlands area do not require a state freshwater wetlands permit nor are they subject to transition area requirements. However, activities are subject to Water Quality Certification, and to Waterfront Development and Federal Consistency requirements. In areas under the regulation of the Pinelands Commission, freshwater wetland requirements are implemented and applicants must also comply with the Pinelands Comprehensive Management Plan. The most current information regarding the Freshwater Wetlands Protection Act rules is available on the Department's Web site at http://www.nj.gov/dep/rules.

Consistent with the federal government's policy of No Net Loss of Wetlands, New Jersey's Freshwater Wetlands Protection Program combines strict regulation of activities in freshwater wetlands with requirements for compensatory mitigation for all Individual Permits and some General Permits. The FWPA also established the Freshwater Wetland Mitigation Council. The Council has the ability to accept a permittee's mitigation obligation by accepting a monetary contribution into the Wetlands Mitigation Fund. The Council can then use the money in the Wetlands Mitigation Fund to finance and manage wetland creation, restoration, enhancement, or preservation projects throughout New Jersey.

Wetlands Program Development

The Department, in collaboration with Rutgers University, has been undertaking research focusing on quantitative wetland biological assessment methods. A goal of this research is to explore development of a wetlands index of biotic integrity (IBI) for New Jersey. To date,

research has focused on riparian forested wetlands, primarily vegetative species, and macroinvertebrates, including possibly linking to the Department's macroinvertebrate monitoring network for streams (AMNET). Reports will be available on the Department's web site at <u>http://www.state.nj.us/dep/dsr/wetlands</u> once they receive final approval.

The Department completed six wetland research studies funded by USEPA's State Wetlands Development Protection Grants between 1997 and 2007, resulting in the establishment of 312 monitoring plots at 220 sites in 58 rare wetland community types in New Jersey. The Department's current Program Development Grant includes funding to populate a database of wetland monitoring plots (as part of the Natural Heritage Database) and to complete "A Guide to the Wetland Communities of New Jersey." Additional geo-referenced wetland vegetation monitoring plots are being established in rare wetlands statewide as part of this study. All of the monitoring plots occur in reference wetland sites and provide a baseline of vegetation, soils, hydrology, and other environmental data. Additional information about the Natural Heritage Database is available from the Department's Web site at http://www.nj.gov/dep/parksandforests/natural/heritage/index.html.

The Department's Division of Land Use Regulation is currently working on a USEPA Section 104(b)(3) grant project entitled, "Proactive Assessment: Freshwater Wetlands Protection in New Jersey: Demonstration of a Regulatory Environmental Outcome Wetland Program." This project consists of a pilot study that will enhance four aspects of the Department's existing Wetlands Protection Program:

- **Compensatory Mitigation** update the WETMIT database in order to generate reports on the status of compensatory wetland mitigation projects in New Jersey.
- Critical Habitat Retention implement additional protections to critical habitats to ensure that wetlands of significant ecological value and irreplaceable quality are not lost in New Jersey.
- Vernal Pool Protection identify and map vernal pools and associated animal species dependent upon these ephemeral wetlands in order to preserve both the quality and acreage of vernal habitats in the state.
- Classification of Wetland Communities develop of a database of wetland ecological community plot data, create ranking specifications for rare wetland types, and develop "A Guide to the Wetland Communities of New Jersey".

These four program areas cover five of the USEPA grant categories necessary to qualify as a funded pilot project, as illustrated in Table 5.5.

USEPA GRANT CATEGORIES	Compensatory Mitigation	Critical Habitat Retention	Vernal Pool Protection	Classification of Wetland Communities
Restoration	Х			Х
Inventory/Mapping		Х	Х	Х
Monitoring/Assessment	Х	Х	Х	Х
Coordination/Stewardship	Х	Х	X	Х
Regulatory	Х	X	X	Х

 Table 5.5: New Jersey Freshwater Wetlands Protection Program Components

The pilot project is intended to improve the Department's ability to achieve the no net loss/net gain goal for years after this pilot program is completed. During the three-year grant project, the Department hopes to achieve progress in arresting the loss of wetland resources and restoring, enhancing, and preserving existing wetlands.

In June 2010, the Department was awarded a new USEPA Wetlands Program Development Grant entitled, "Developing a Wetland Condition Monitoring Network for New Jersey: Application of New Assessment Methods." Outcomes include a statewide wetland monitoring network that will complement the USEPA National Wetland Condition Assessment efforts planned for 2011, greater watershed protection by providing maps and a classification system for vulnerable springs and associated headwater seepage wetlands, new metrics to assess the success of wetland mitigation projects, improved water allocation permitting decisions based on detailed hydrology and condition data from six National Wetland Inventory-type wetlands across HUC 8 watersheds in New Jersey, and public investment in assessing, monitoring and protecting significant wetland resources statewide. Additional information about this program is available Department's http://www.state.nj.us/dep/wms// the Web site on at NJWetlandConditionMonitoringNetwork.pdf.

Wetlands Mitigation

Compensatory mitigation is required for all Individual Permits as well as for General Permit activities affecting more than 0.1 acres of wetlands, and that involve underground and above ground utility lines, impacts to non-surface water connected wetlands that are also waters of the United States (under the current federal definition), investigation, cleanup, or removal of hazardous materials; minor road crossings, outfall structures, closing of landfills; or redevelopment projects. Mitigation of wetlands can be achieved through wetland creation, restoration, and enhancement. Other forms of mitigation include upland preservation to benefit a freshwater wetland ecosystem; purchase of mitigation credits from a bank that has already been established and is comprised of wetland creation, restoration, and/or enhancement; monetary contribution to the Wetland Mitigation Fund; or donation to the Freshwater Wetland Mitigation Council of land that is a valuable component of a wetland or surface water ecosystem.

Every permit that requires compensatory mitigation includes performance standards that define a successful wetland mitigation project. The Department has established a checklist of standard requirements for submittal of a wetland mitigation proposal as well as standard monitoring

requirements when conducting wetland creation, restoration, and/or enhancement. In order for a mitigation project to be approved it must have a high probability of long-term success and, at a minimum, this requires the following: adequate dedicated financial resources to complete the project; a design that takes advantage of and fits into the watershed; adequate hydrology; adequate soils to support a hydric community; and long term stewardship to maintain the mitigation area.

Wetlands Mitigation Council

The FWPA establishes a Wetlands Mitigation Council (Council). The Council is comprised of seven members: the Commissioner of Environmental Protection or his/her designee (who serves ex officio) and six members of the general public appointed by the Governor (two appointed from persons recommended by recognized building and development organizations, two appointed from persons recommended by recognized environmental and conservation organizations, and two appointed from institutions of higher learning in the State). The Council is responsible for the management and disbursement of dollars from the Wetland Mitigation Fund to finance wetland creation, restoration, enhancement, or preservation projects. The Council has the power to purchase land to provide areas for enhancement or restoration of degraded freshwater wetlands, to engage in the enhancement or restoration of degraded freshwater wetlands on any public lands, including public lands other than those acquired by the Council, and to preserve freshwater wetlands and transition areas determined to be of critical importance in protecting freshwater wetlands. To date, the Council has received over \$7.5 million dollars from 75 applicants as compensation for the loss of almost 60 acres of wetlands, and has awarded over \$7.2 million dollars in wetland mitigation grants from the Wetland Mitigation Fund to preserve over 840 acres of land and restore or enhance almost 200 acres of wetlands.

Additional information about the Department's Wetlands Programs is available on the Department's Web site at <u>http://www.nj.gov/dep/landuse/fww.html</u>.

5.14 Water Compliance and Enforcement

Compliance and enforcement plays a critical role within the Department by deterring violations that would otherwise threaten our environment and the health of New Jersey's citizens. To encourage compliance and environmental stewardship, the Department seeks innovative ways to provide incentives, information, and assistance to the regulated community and the interested public. To ascertain compliance, the Department employs site inspections and detailed reviews of reported information. To ensure compliance, the Department puts violators on notice, takes administrative actions, levies penalties, and where necessary, works cooperatively with criminal prosecutors.

The Department's Division of Water Compliance and Enforcement is responsible for ensuring compliance with the State's water programs. A particular focus is placed on inspections of wastewater discharge and community drinking water supply facilities. Activities include:

- Provide compliance assistance;
- Investigate complaints and notifications of unauthorized activities;
- Conduct inspections;
- Issue enforcement documents, which may include assessed penalties;
- Assist the Attorney General in developing enforcement cases and testify in court;
- Negotiate compliance schedules and penalty settlements; and
- Monitor compliance with all NJPDES permits for surface water, ground water, and indirect discharges to POTWs.

In 1990, the Legislature enacted substantial amendments to the Water Pollution Control Act (WPCA), commonly known as the Clean Water Enforcement Act, P.L. 1990, c. 28 (CWEA). The CWEA requires the Department to inspect permitted facilities and municipal treatment works at least annually. Additional inspections are required when the permittee is identified as a significant noncomplier. The CWEA also requires the assessment of mandatory minimum penalties for violations of the WPCA that are considered serious violations and for violations by permittees designated as significant noncompliers. The CWEA requires the Department to submit a report on the implementation of the CWEA's requirements to the Governor and the Legislature by March 31 of each year. The statute also specifies the items that the Department must include in the report. The Department has organized the required information into several categories, including Permitting, Enforcement, Delegated Local Agencies, Criminal Actions, Fiscal, and Water Quality Assessment. Copies of these CWEA reports are available on the Department's Web site at http://www.nj.gov/dep/enforcement/report-cwea.html.

Additional information about the Water Compliance and Enforcement is also available on the Department's Web site at <u>http://www.nj.gov/dep/enforcement/water.html</u>.

5.15 Water Quality Assurance Program

The Office of Quality Assurance (OQA) administers the Department's Quality Assurance Program, which is required by USEPA to ensure that environmental data used by the Department is generated, compiled, and reviewed using specific quality assurance/quality control (QA/QC) procedures. These procedures help to ensure that data is of documented quality and suitable for its intended use. OQA is responsible for developing and implementing the Department's Quality Management Plan (QMP), which defines the Department's mission and planned quality assurance work outputs for the forthcoming fiscal years. The QMP documents the Department's environmental principles and objectives, organizational responsibilities, and policies and procedures for the generation, compilation, review, and use of data of documented quality. The QMP was written to conform to the requirements outlined in the USEPA document, "EPA Requirements For Quality Management Plans", EPA QA/R-2. March 2001. USEPA requires that states receiving federal grants have a QMP with quality assurance work outputs as promulgated in Title 40 Code of Federal Regulations Parts 31 and 35. The Code of Federal Regulations lists both general and specific requirements for a state's environmental program and acceptable quality assurance (QA) for federally funded programs.

OQA is also responsible for certifying that the laboratories which analyze data used by the Department operate using appropriate quality control measures and analytic methods. OQA

certifies over 800 laboratories granting nearly 125,000 certifications each year. Certification is available in ambient water quality as well as drinking water, wastewater, soils, solid/hazardous waste, and sludge and air for microbiological, toxicity, inorganic, organic, radon, radiochemical, and biological properties. Most Department programs requiring the collection of data require the use of a certified laboratory for data analysis. Certification is offered through both the State Environmental Laboratory Certification Program and the state-run National Environmental Laboratory Accreditation Program.

The Office of Quality Assurance (OQA) offers certification for environmental testing laboratories to ensure that regulatory decisions made by federal, state, and municipal government agencies are based upon accurate and dependable analytical data. The OQA certifies laboratories in 36 states, Canada and overseas, and offers certification in: Drinking Water, Solid and Hazardous Waste, Air, Wastewater, Non-potable Water, and Radon.

Environmental Laboratory Advisory Committee

The Environmental Laboratory Advisory Committee (ELAC) was established by the Office of Quality Assurance to obtain input from a representative cross-section of New Jersey certified laboratories on matters related to environmental monitoring, laboratory certification and practice, and public health. The committee is self-governing and operates independent of the Department. Monthly meetings provide a forum for the discussion of environmental and public health issues related to regulatory environmental monitoring, laboratory accreditation. The ELAC is comprised of individuals who represent the interests of commercial, government, utility and not for profit public/private laboratories. Several members of ELAC are also members of the New Jersey Water Environment Association and/or the Association of Environmental Authorities. Committee membership is open to small, medium, large and bioassay laboratories who are all represented within the ELAC. All individuals with interests in regulatory environmental monitoring and laboratory accreditation are welcome to attend meetings.

For more information on the Department's Water Quality Assurance program, visit the Department's Web site at <u>http://www.nj.gov/dep/oqa</u>.

Chapter 6: Public Health Concerns - Mercury Contamination of Fish

Mercury is a heavy metal that is toxic to humans at relatively low levels. Exposure to mercury comes primarily from eating contaminated fish. Children and pregnant women are especially susceptible to health threats caused by mercury contamination, and exposure to even relatively low levels can cause permanent brain damage to the fetus, infants and young children. A small but significant fraction of the pregnant population already exhibits elevated levels of methylmercury in their system, most likely caused by eating fish contaminated with mercury. A recent study found that 13 percent of pregnant women tested had levels above 1 part per million (ppm) detected in hair, which is considered evidence of exposure to an unsafe level of mercury.¹²

Fish become contaminated with mercury when it is deposited directly or indirectly into the water. Once in an aquatic ecosystem, mercury accumulates in the tissues of organisms (i.e., bioaccumulates) as methylmercury, a toxic and harmful form of mercury. Mercury-contaminated fish have been found in remote areas of the State, such as the Pinelands, as well as in industrialized areas. Studies have shown that reducing mercury emissions can significantly reduce contamination in nearby aquatic ecosystems.^{13, 14}

Since 1982, when research began to show elevated levels of potentially harmful contaminants in certain fish and crabs in some New Jersey waters, fish consumption advisories have been adopted to guide citizens on safe consumption practices. Fish consumption advisories are jointly issued by the Department of Environmental Protection and the Department of Health & Senior Services when concentrations of mercury in the tissues of targeted fish species exceed levels considered safe for human consumption. Fish consumption advisories are developed through a scientific process that includes collecting samples of fish from waters throughout the state and analyzing them for various chemical contaminants, such as mercury. Consumption advisories provide advice to the general population and high-risk individuals (for example, women of childbearing age and children) concerning the number of meals that represent safe levels of consumption of recreational fish from New Jersey waters. Fish consumption advisories for mercury include information on how to limit risk from contaminants by providing guidance on the types and sizes of fish and the number of meals to eat. New Jersey is one of more than 40 states that have issued consumption advisories for certain species of fish known to be contaminated with mercury. The current fish advisories for New Jersey waterways are available at http://www.state.nj.us/dep/dsr/fishadvisories.

The overwhelming source of mercury contamination, both in New Jersey and globally, is air deposition. Waters across the nation, even in otherwise pristine areas, are affected because air is

¹² Stern, Alan, Michael Gochfeld, Clifford Weisel, and Joanna Burger. 2001. Mercury and Methylmercury Exposure in the New Jersey Pregnant Population. *Archives of Environmental Health*, *56*. pp. 4-10.

¹³ Atkeson, Thomas D., Curtis D. Pollman and Donald M. Axelrad. 2005. Recent trends in mercury emissions, deposition, and biota in the Florida Everglades: a monitoring and modeling analysis. In: *Dynamics of Mercury Pollution on Regional and Global Scales: Atmospheric Processes, Human Exposure Around the World*, N. Pirrone and K. Mahaffey (Editors). Springer Publisher. Norwell, MA, USA. Chapter-26, pp. 637-656.

¹⁴ MADEP. 2006. Massachusetts Fish Tissue Mercury Studies: Long-Term Monitoring Results, 1999-2004. Massachusetts Department of Environmental Protection. Office of Research and Standards. Boston, MA.

able to transport mercury across the bounds of land and water. This makes mercury contamination from air deposition uniquely suited to a regional or statewide TMDL that models the relative contribution of mercury from various air sources and identifies the levels of reduction needed to make fish safe to eat. Because of the nature of the air source, adequate control of sources of mercury contamination will depend on regional, national, and international efforts.

Sources of mercury contamination in waterbodies include air pollution that deposits mercury directly to the water (i.e., air deposition), stormwater runoff from land surfaces (which contains mercury from air deposition), and from other direct inputs to surface water such as point source discharges. Mercury falls to the land in precipitation ("wet deposition") and also attached to particles and in a gaseous form that becomes adsorbed to land surfaces and foliage ("dry deposition").

Detailed information on New Jersey's efforts to reduce mercury releases to the environment, including the formation of the Mercury Task Force, their recommendations, and actions implemented to date (most of which was summarized in the 2008 Integrated Report), is available on the Department's Web site at <u>http://www.nj.gov/dep/dsr/mercury</u>. Key actions include:

- Adoption of rules to reduce air emissions of mercury;
- Enactment of Mercury Switch Removal Act of 2005, which became effective March 23, 2005;
- Enactment of a ban on the sale of certain mercury thermometers, under N.J.S.A. 13:1E-99.91-93;
- Launch of the Regional Greenhouse Gas Initiative (RGGI) in December 2005 to reduce CO₂ emissions from power plants;
- Adoption of new rules requiring further reductions in mercury emissions from certain facilities¹⁵ and mandating a reduction of mercury emissions by 75 percent by 2010 from the State's iron and steel plants;
- Submission of a Plan for the Control of Mercury Emissions from Coal-Fired Electric Steam Generating Units to USEPA in 2006, which the Department estimates will accomplish the reduction of over 2000 pounds of mercury in New Jersey by 2018;
- Adoption of the "The Dental Rule" on October 1, 2007 to reduce mercury discharge from dental facilities, which contribute 35 percent or more of the mercury entering publicly owned treatment works (POTWs).

On September 25, 2009, USEPA approved <u>New Jersey's Statewide Mercury TMDL</u>, which was developed based on the New England Interstate Water Pollution Control Commission's (NEIWPCC) <u>Northeast Regional TMDL</u> and New Jersey's Mercury Reduction Action Plan. New Jersey's Statewide Mercury TMDL addresses mercury impairments to 122 non-tidal waterbodies where air deposition is the primary source. The TMDLs showed that, to meet the goal of safe unlimited consumption of fish for the average population and one fish meal per week for the high risk population (pregnant women, nursing mothers, and children), virtually all anthropogenic sources of mercury must be eliminated. The TMDL indicated that the sources are: 12.5 percent

¹⁵ N.J.A.C. Subchapter 27. Control and Prohibition of Mercury Emissions. Available on the Department's Web site at <u>http://www.nj.gov/dep/aqm/Sub27.doc</u>.

New Jersey, 52 percent background deposition (natural and anthropogenic), and the remaining percentage comes from surrounding states, Mexico, and Canada.

The Department has published a Mercury Reduction Progress Report and Action Plan. The various recent actions to reduce mercury emissions at the federal and state level, especially the new rules noted above, have led to dramatic mercury emissions reductions from New Jersey sources. As recently as 2006, reasonably well-characterized New Jersey air emissions sources were estimated to release a total of approximately 2600 pounds of mercury per year to the air. As of 2009, this quantity is estimated to have dropped to the range of 1600 pounds per year.¹⁶ The Mercury Action Plan identifies actions that are planned to monitor the effectiveness of the actions taken to reduce mercury emissions as well as other actions related to mercury. The Mercury Reduction Progress Report and Action Plan are available on the Department's Web site at <u>http://www.nj.gov/dep/dsr/mercury/</u>.

¹⁶ NJDEP. 2008. "Estimated Mercury Emissions to Air; NJ Sources". Mercury Emissions Environmental Trends Report. New Jersey Department of Environmental Protection. Office of Science (formerly the Division of Science, Research & Technology). P. 4. Updated July 2008. Available on the Department's Web site at http://www.nj.gov/dep/dsr/trends2005/pdfs/mercury.pdf.

Chapter 7: Cost/Benefit Analysis

USEPA guidance for assessment, listing, and reporting requirements pursuant to Sections 303(d), 305(b) and 314 of the federal Clean Water Act requires New Jersey to provide, as part of the Integrated Report, "an estimate of the environmental, economic, and social costs and benefits needed to achieve the objectives of the Clean Water Act ..."¹⁷ However, as USEPA acknowledges, this information is difficult to obtain due to the complexities of the economic analysis involved. Therefore, USEPA recommends that, until such time as comparable procedures for evaluation of costs and benefits are in wider use, states should provide a brief narrative explaining the costs associated with water pollution control measures and the associated environmental benefits derived from such expenditures, either directly or indirectly, e.g., extent of streams and lakes improved; increased fishing and swimming use of streams, lakes and beaches.

The value of environmental protection (including water quality management) is hard to quantify. However, water quality conditions impact the dollars expended on water-related activities such as recreational boating, swimming, and fishing; dollars generated by commercial fisheries, including shellfish, and the seafood industry; as well as the economic benefit generated by jobs, housing, retail sales, and tourism associated with these industries. This section summarizes the information that is currently available regarding the economic impact of water pollution on key water-dependant activities vital to the State's economy; the costs associated with administering New Jersey's water quality programs, including expenditures made to restore and protect water resources; and measures (direct and indirect) of environmental benefits derived from pollution control and other measures implemented to restore, enhance, and protect our State's water resources.

Economic Impacts on Tourism, Recreation, and the Seafood Industry

New Jersey tourism expenditures totaled \$28 billion in 2008, excluding expenditures on imported goods sold to tourists. Sixty-two percent or about \$17 billion of those dollars were either spent directly at the Jersey Shore¹⁸ -or represent "indirect" economic activity stimulated by those direct expenditures. Tourism at the Jersey Shore is vital to the overall State economy and clean water is vital to tourism at the Jersey Shore - for swimming, recreational and commercial fishing, clean fish and shellfish for seafood, etc. Along with bad weather and the global

¹⁷ United States Environmental Protection Agency, *Guidance for 2006 Assessment, Listing, and Reporting Requirements Pursuant to Sections 303(d), 305(b), and 314 of the Clean Water Act*, Section II: "Reporting Requirements Under The Clean Water Act Sections 303(D), 305(B), 314 and Corresponding Regulations". Available on USEPA's Web site at <u>http://www.epa.gov/owow/tmdl/2006IRG/report/2006irg-sec2.pdf</u>. Viewed August 9, 2010. Note: USEPA has carried over and supplemented the guidance issued for preparation of the 2006 Integrated Report with additional guidance and information for the 2008 and 2010 Integrated Reports, all of which are available on USEPA's Web site at <u>http://www.epa.gov/owow/tmdl/guidance.html</u>.

¹⁸ McGill, Kenneth. <u>NJ Tourism: Holding Its Own During Difficult Times</u>. 2009. HIS Global Insight, Inc. prepared for New Jersey Division of Travel and Tourism. Pages 9 and 33. Available on the State of New Jersey Web site at: <u>http://www.visitnj.org/sites/visitnj.org/files/tourism-ecom-impact-2008.pdf</u>. As used here, the Jersey Shore includes the Shore Region, the South Shore, and Greater Atlantic City.

economic climate, water pollution is one of the biggest threats to tourism at the Jersey Shore and bacterial contamination (i.e., pathogens) is the predominant cause of pollution in New Jersey's ocean waters (see Chapter 4).

The commercial seafood industry includes the commercial harvest sector, seafood processors and dealers, seafood wholesalers and distributors, and seafood retailers. The economic value of commercial and recreational fisheries (including shellfisheries) in New Jersey between 2004 and 2008 is depicted in Table 7.1. In 2008, the total revenue in New Jersey was the highest in the Mid-Atlantic region with fishermen generating \$169 million in revenues for their New Jersey landings of 162 million pounds. Shellfish landings accounted for most of that revenue (\$149 million) and landings (100 million pounds). Sea scallops contributed the most to New Jersey landings revenue, contributing 54 percent of the \$169 million generated from landings in New Jersey that year.¹⁹

Total Landings (thousands of pounds)							
Year	2004	2005	2006	2007	2008	Total	
Finfish & Other	71,782	74,454	66,317	65,296	62,960	340,809	
Shellfish	115,990	82,522	86,466	88,684	99,510	473,172	
Total Landings	187,772	156,976	152,783	153,979	162,470	813,980	
Tota	Total Landings Revenue (thousands of dollars)						
Finfish & Other	Finfish & Other 21,772 22,938 24,483 24,171 19,961 113,325						
Shellfish	124,061	136,175	111,570	127,281	148,714	647,801	
Total Revenue	145,832	159,113	136,053	151,453	168,676	761,127	

Source: National Oceanic and Atmospheric Administration (NOAA)²⁰

The National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service estimates the economic impacts on fisheries by measuring impacts on business sales, labor income, and employment. Using this analysis, NOAA determined that New Jersey's seafood industry supported over 40,000 jobs in New Jersey, most of which was contributed by seafood retailers, and over \$2.1 billion dollars in sales in 2008 alone (see Table 7.2). New Jersey also led the Mid-Atlantic region in income impacts (almost \$1.2 billion) in 2008.²¹ The recreational fishing industry in New Jersey supported an additional 9,600 jobs and almost \$1.6 billion dollars in sales in 2008.²²

¹⁹ National Marine Fisheries Service. 2010. Fisheries Economics of the United States, 2008. U.S. Dept. Commerce. NOAA Tech. Memo. NMFS-F/SPO-109. p.75. Available at: <u>http://www.st.nmfs.noaa.gov/st5/ publication/index.html</u>.

²⁰ National Marine Fisheries Service, Fisheries Statistics Division, Silver Spring, MD. Available on the National Oceanic and Atmospheric Administration (NOAA) Fisheries: Office of Science and Technology Web site at <u>http://www.st.nmfs.noaa.gov/st1/commercial/landings/gc_runc.html</u>. Viewed on September 22, 2010.

²¹ National Marine Fisheries Service. 2010. p.74.

²² National Marine Fisheries Service. 2010. pp. 5-8.

Impact Category	Sales Impacts	Income Impacts	Job Impacts
Commercial Harvesters	182,432	73,020	2,079
Seafood Processors & Dealers	126,759	62,257	1,380
Seafood Wholesalers & Distributors	503,805	242,285	4,176
Retail Sector	1,357,236	792,118	32,426
Total Impacts	2,170,232	1,169,681	40,061

Table 7.2: 2008 Economic	: Impacts of New	Jersev Seafood	Industry (thousand	ls of dollars)
	impacts of field	oersey searcours	industry (monstand	

Source: National Oceanic and Atmospheric Administration (NOAA)²³

The shellfish industry represents a significant portion of New Jersey's coastal economy with an estimated dockside value of almost \$149,000,000 per year in 2008. New Jersey is the largest molluscan shellfish-producing state in the Nation.²⁴ An example of the cost-effectiveness of investment in water pollution controls to protect shellfish waters is the Delaware Bay Oyster Restoration Initiative, which received approximately \$6 million dollars in federal funding through the Philadelphia District Office of United States Army Corp of Engineers (FY05-08) and over \$3 million dollars in state and local support. In FY05, a total of 280,000 bushels of shell were planted in Delaware Bay waters of New Jersey and Delaware. The FY05 program increased recruitment by about 50 percent and supported the first increase in oyster abundance since 2000. Anticipated 2008-2009 harvest from the 2005 shell plantings is estimated at \$7,379 bushels valued at \$3.49 million ex-vessel (assuming 2006 pricing of \$40/bushel), an economic impact estimated at \$20.9 million, and a return on investment of \$70 for each federal dollar invested. In FY06 and FY07, the anticipated 2010-2011 harvest from the 2007 shell plants of 106,496 bushels is valued at \$9.54 million ex-vessel with an economic impact estimated at \$57.3 million and a minimal return of \$29 dollars for every federal dollar invested.

Costs Associated with Administering New Jersey's Water Quality Programs

New Jersey contains a wide variety of water resources. The State's 7,505 square miles of land area includes 127 linear miles of coastline, 18,126 miles of rivers and streams, and 52,804 acres of lakes and ponds larger than two acres. In addition, there are almost 1 million acres of freshwater and tidal wetlands and 714 square miles of coastal waters (see Chapter 1). New Jersey faces no single greater challenge than providing a clean, safe, and plentiful supply of water for its growing population and its ecosystems.

The Department is responsible for implementing most of New Jersey's water pollution control activities, as described in Chapter 5, including the New Jersey Pollutant Discharge Elimination System (NJPDES) program that regulates the discharge of pollutants to surface and ground waters of the State. The Department's pollution control authority is derived from the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., pursuant to which New Jersey qualifies

 ²³ Internal communication from the National Marine Fisheries Service, Fisheries Statistics Division, Silver Spring, MD. Interactive Fisheries Economic Impacts Tool Interactive Fisheries Economic Impacts Tool. Available on the NOAA Fisheries: Office of Science and Technology Web site at https://www.st.nmfs.noaa.gov/pls/apex32/f?p=160:7:1841880712251891. Viewed on September 22, 2010.
 ²⁴ Internal communication from Debbie Watkins, Bureau of Marine Water Monitoring, New Jersey Department of

²⁴ Internal communication from Debbie Watkins, Bureau of Marine Water Monitoring, New Jersey Department of Environmental Protection. August 3, September 20 and 22, 2010.

for and has primary responsibility under the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.) for the administration of the National Pollutant Discharge Elimination System (NPDES). Table 7.3 shows the total program costs for state fiscal years (SFY) 2004 through 2008 of implementing the Department's NJPDES programs²⁵, as well as the Water Enforcement and Water Monitoring and Standards programs²⁶, to meet the requirements of New Jersey's Water Pollution Control Act, the New Jersey Clean Water Enforcement Act, and the federal Clean Water Act. Revenue from NJPDES permit fees, Clean Water Enforcement Act fines, New Jersey's Corporate Business Tax, and federal funds are used to cover the costs associated with operating these programs.

	2004	2005	2006	2007	2008
Total					
Work					
Years (FTEs)	270	292	283	279	271
Personnel					
Costs	\$21,300,000	\$23,000,000	\$22,800,000	\$25,000,000	\$27,700,000
Operating					
Costs	\$2,300,000	\$2,500,000	\$2,600,000	\$2,400,000	\$3,000,000
Total					
Program					
Costs	\$23,600,000	\$25,500,000	\$25,400,000	\$27,400,000	\$30,700,000

 Table 7.3: Water Pollution Control Act Costs, 2004-2008

Funding to Restore and Protect Water Resources

New Jersey's water programs extend beyond the traditional water pollution control requirements of the federal Clean Water Act, to provide broader protection of water resources authorized under State statutes mandating protection of water quality, water supplies, wetlands, and other aquatic ecosystems through funding and implementation of water quality planning, water supply planning, land use planning, water pollution controls (for point and nonpoint sources), stormwater management, watershed protection and management, flood hazard area controls, and coastal zone management. The costs associated with these other water-related programs are not covered under the Water Pollution Control Act costs shown in Table 7.3.

Water Quality Planning: Each year, the Department receives funds under Section 604(b) of the federal Clean Water Act (Act) to carry out water quality management planning under Sections 205(j) and 303(e) of the Act and to allocate at least 40 percent of these funds to pass-through grants. During the reporting period of 2004-2008, over \$800,000 in 604(b) grant funds were awarded to 14 recipients for water quality management planning and related activities, including wastewater management plans (see Section 5.2).

²⁵ NJDEP. NJPDES Annual Fee Reports. Available on the Department's Web site at <u>http://www.state.nj.us/</u> <u>dep/dwq/njpdesfees.htm.</u> ²⁶ Internal communication from Day Day is in the state of a state of the state

²⁶ Internal communication from Ron Rossi, Water Monitoring and Standards, New Jersey Department of Environmental Protection. 2010.

Infrastructure Improvement: The New Jersey Environmental Infrastructure Trust Program (NJEITP) offers low-cost financing to local government agencies and private water purveyors for the construction of wastewater and drinking water infrastructure, landfill construction and closure, and stormwater management and nonpoint source pollution control projects. Through the NJEITP, the Department has assisted New Jersey municipalities, counties, and sewerage entities with grants or loans for sewage treatment projects funded by the State's Environmental Infrastructure Trust (see Section 5.8). Public investment to improve water quality in New Jersey has been substantial. Since 1987, more than \$6 billion dollars has been spent to upgrade wastewater treatment facilities, reduce infiltration/inflow, control discharges from Combined Sewer Overflows (CSOs), construct sludge handling facilities, improve stormwater runoff, and close landfills. Two billion dollars in Clean Water Loan Awards were issued in 2004 through 2008 for projects that will improve water quality (see Table 5.5).

CSO Control: In addition to these loans, New Jersey Public Law 2005, Chapter 301 appropriated \$30,000,000 for Department-issued grants to local government units for wastewater treatment system projects. This money was passed through to 24 entities to fund up to 20 percent of the cost for development and evaluation of pathogen control alternatives and cost performance analyses for combined sewer systems required by the NJPDES permit program. The legislation also provided \$24,180,000 for financing up to 20 percent of the construction costs for wastewater treatment system projects. The funds were used for a wide variety of wet weather water quality improvement projects, including separate sanitary and stormwater sewer systems, combined sewer systems, and nonpoint source pollution abatement. The legislation also appropriated \$2,820,000 to two local government units to finance up to 20 percent of the project cost for wastewater effluent reuse/recharge projects.

Nonpoint Source Pollution Control: Section 319(h) of the federal Clean Water Act authorizes Congress to annually appropriate monetary grants to states to assist in implementing programs to control NPS pollution (see Section 5.5). The majority of the 319(h) funds received by the Department are passed through to eligible entities to implement NPS pollution control projects. While early projects focused on streambank restoration, projects in this reporting period focused on developing and implementing watershed-based plans (i.e. plans that are regional or area-wide in scope rather than a study of one location). The Department awarded over \$16 million dollars in Section 319(h) grant funds for 57 nonpoint source pollution control-related projects.

Federal funds authorized under the United States Farm Bill are awarded to agricultural agencies for the implementation of conservation programs aimed at controlling nonpoint sources of pollution from agricultural land (see Section 5.5). Since the enactment of the 2002 Farm Bill, New Jersey has received over \$114 million in conservation program funding that has been transferred directly to over 800 New Jersey landowners and managers for conservation measures on almost 70,000 acres of farm land. Over \$60 million in funding was received in New Jersey in 2004-2008 to implement these programs in addition to funding provided for the Conservation Reserve Program, Conservation Reserve Enhancement Program, and Cooperative Conservation Partnership Initiative (see Chapter 5.5).

Local Investment in Water Pollution Control

Wastewater Treatment: In 2009, 640 municipal and industrial facilities were authorized to discharge to surface waters of the State in 2009. Municipal facilities were responsible for treating over 1 billion gallons of wastewater in 2009. Twenty-two publicly-owned treatment works (POTWs) operate as Delegated Local Agencies (DLAs) and issue permits to control discharges from 842 facilities that discharge into their collection system.²⁷ Passaic Valley Sewerage Commissioners (PVSC) operates the largest wastewater treatment facility in the State, which discharged 236 million gallons per day in 2009. This plant provides wastewater treatment for 1.3 million residents. PVSC's total budget in 2009 was about \$156 million.²⁸ Many factors affect the cost of operation and maintenance including: the level of treatment required, the size of the facility, classification of the receiving waters, available funding and complexity of the operation. Therefore, the total cost incurred by municipalities, sewage authorities, and industries on annual basis to operate and maintain wastewater treatment facilities is not easy calculated. Based on PVSC's costs for 2009, these entities collectively spend well over \$1 billion per year to provide clean water - money that is generated through local taxes and user fees.

Stormwater Management: All 566 municipalities within the State are implementing stormwater best management practices (BMPs), as required by NJPDES municipal stormwater permits. The cost of implementing these BMPs also varies based on factors such as: size of municipality, population density, predominant land uses, and number of miles of roads. Although comprehensive cost data are not available, by 2008, stormwater management plans had been adopted in 98 percent of New Jersey's municipalities and stormwater control ordinances were adopted in 99 percent of municipalities. Through implementation of infrastructure maintenance requirements between 2004 and 2008, over one million miles of roads and highways were swept and over 300,000 tons of trash and debris were removed from New Jersey streets and another 300,000 tons of sediment, solids, and trash were removed from catch basins that would have otherwise been discharged via storm sewers to waters of the State (see Section 5.4).

Pathogen and Floatables Controls: Pathogens impact recreational and shellfish harvest for consumption uses. Sources of pathogens impairing these uses include stormwater runoff, combined sewer overflows (CSOs), wildlife, failing septic systems, and broken sewer lines. CSO discharges are located in the New York/New Jersey Harbor Estuary and the Delaware River Estuary around Camden. CSO permittees have invested over \$300 million in infrastructure improvements to control the discharge of solids/floatable materials in CSO discharges and/or eliminate dry weather overflows. As of May 2010, 83 percent of the planned solids and floatables control facilities have been constructed and are operating. It is estimated that New Jersey's CSO Solids/Floatables Control Facilities currently capture, remove, or otherwise prevent the discharge of over 700 tons of solids and floatables materials per year. Additionally, 63 CSO Points have been eliminated since the onset of the program. When all of the required solids/floatable control facilities are in operation, approximately 850 tons of solids/floatable material will have been captured or otherwise prevented from entering the waters of the State (see Section 5.4).

²⁷ 2009 Clean Water Enforcement Report

²⁸ Jan 15, 2009 press release issued by PVSC

Other Expenditures:

<u>Wetlands Mitigation</u>: The New Jersey Wetlands Mitigation Council (see Section 5.13) has the power to purchase land to provide areas for enhancement or restoration of degraded freshwater wetlands, to engage in the enhancement or restoration of degraded freshwater wetlands on any public lands, including public lands other than those acquired by the Council, and to preserve freshwater wetlands and transition areas determined to be of critical importance in protecting freshwater wetlands. To date, the Council has received over \$7.5 million dollars from 75 applicants as compensation for the loss of almost 60 acres of wetlands, and has awarded over \$7.2 million dollars in wetland mitigation grants from the Wetland Mitigation Fund to preserve over 840 acres of land and restore or enhance almost 200 acres of wetlands

<u>Delaware Estuary Grants</u>: The National Fish and Wildlife Foundation (NFWF) Delaware Estuary Watershed Grants Program (DEWGP) has awarded 134 grants since 2004, providing over \$3.8 million of federal and private funds that were leveraged with an additional \$11 million in matching funds raised by grantees. DEWGP encourages innovative, community, or locally-based programs or projects that restore important habitats and living resources, enhance local watershed-based resource management; and promote community-based stewardship and a greater understanding of the Delaware Estuary and its watersheds. Funded projects will achieve significant conservation outcomes, including the restoration of 2,213 acres of wetlands, streams, forests and grasslands for fish and wildlife; the development of 21 watershed management plans to guide and prioritize future local and regional conservation projects; and education, outreach, and training programs offered by local governments and citizen groups that are estimated to reach over 200,000 adults and students.

Delaware Bay Oyster Restoration Initiative: A total of 280,000 bushels of shell were planted in Delaware Bay waters of New Jersey and Delaware in FY '05 supporting the first increase in oyster abundance since 2000. Partners in this program include representatives from the Rutgers University Haskin Shellfish Research Laboratory, Delaware's Department of Natural Resources and Environmental Control, the Department, DRBC, PDE, the Delaware River and Bay Authority, the U.S. Army Corps of Engineers - Philadelphia District, the Delaware and New Jersey Shellfish Industry, and the Cumberland County Empowerment Zone. Approximately \$6 million dollars in federal funding were received through the Philadelphia District Office of United States Army Corp of Engineers (FY05-08) and over \$3 million dollars in state and local support. Subsequently, Flying Fish Brewing Company in Cherry Hill, New Jersey, introduced the "Exit 1 Bayshore Oyster Stout". The oyster stout was brewed using freshly harvested whole oysters (100 per 25-barrel batch of beer). Flying Fish is a supporter of PDE's oyster bed restoration program and introduced this artisan brew "...to call attention to America's once-thriving oyster industry, which has been decimated by overfishing, pollution, and disease."²⁹

<u>Beach Maintenance</u>: The Department's Clean Shores Program (see Section 5.5), which uses inmates from State correctional facilities to remove wood and garbage from tidal shorelines,

²⁹ Kitsock, Greg, "Beer and …Oysters", *The Washington Post*, Wednesday, February 24, 2010. Available from <u>http://www.washingtonpost.com/wp-dyn/content/article/2010/02/23/AR2010022301302.html</u>. Viewed on March 25, 2010.

helps prevent the deleterious effects of marine debris upon recreational ocean bathing beaches and the coastal environment. Since 1989, this program has removed over 125 million pounds of waste material from New Jersey beaches. Since 2004, Adopt-A-Beach (see Section 5.5) volunteers have removed approximately 40,000 pounds of trash that would have otherwise become pollution in our coastal waters.

Benefits of Water Quality

Good water quality provides economic benefits associated with recreation, tourism, and marine industries, as well as the resultant tax revenues. Therefore, protecting, restoring, and maintaining water quality will have a direct and positive impact on the State's economy. Indicators of water quality improvement are summarized below:

- Extent of Water Quality Restoration: The 2010 Integrated Report identifies 355 miles of rivers and streams, and 1,465 acres of lakes, where designated uses are fully supported, including one assessment unit that fully supports all applicable uses including fish consumption and 27 assessment units that fully support all applicable uses except for fish consumption. Water quality was restored in 49 assessment units that were identified as impaired on the 2008 303(d) List. The Department is currently working with USEPA to identify all waters that were placed on the 2002 303(d) List and subsequently delisted because of water quality restoration. This information is being developed as part of an overall effort to track the status (and improvement) of all waters placed on the 303(d) List since 2002. This information should be available for the 2012 Integrated Report.
- Increased Trout Stream Classification: Between 1993 and 2004, the Department upgraded 70 streams from FW2-NT (freshwater non-trout) to FW2-TP (freshwater trout-production) and 27 streams from non-trout to FW2-TM (freshwater trout-maintenance). Between 2004 and 2010, six more non-trout streams were upgraded to trout production, and four more non-trout streams were upgraded to trout production, and four more non-trout streams available for highly desirable trout fishing in the State. Thus, the water pollution control programs that result in improved water quality also generate economic benefits through increased recreational and commercial fishing, tourism, and other monetary and non-monetary benefits.
- Increased Freshwater Fishing Licenses: The number of recreational freshwater fishing licenses issued by the State of New Jersey increased from approximately 260,000 in 2004 to over 270,000 in 2008. Both totals include "All Around Sportsman" licenses, which cover both hunting and fishing, and account for six percent of total fishing license sales every year. ³⁰ Revenues derived from the sale of licenses for fishing (as well as hunting and trapping) support the operations of the Department's Division of Fish and Wildlife. This work includes the operation of two fish hatcheries and associated stocking programs, a pheasant farm, enforcement of fish and wildlife regulations, habitat protection, fish and wildlife research, wildlife management area maintenance and improvement, education and other programs and

³⁰ NJDEP. Division of Fish and Wildlife. Department's Web site at <u>http://www.nj.gov/dep/fgw/license_sales.htm</u>. Viewed on May 13, 2011.

activities. (Additional information about the Division is available on the Department's Web site at <u>http://www.nj.gov/dep/fgw</u>.)

- Increased Marine Fishing: The Department's Bureau of Marine Fisheries Management administers New Jersey's Marine Fisheries Management Programs, which are designed to protect, conserve, and enhance marine fisheries resources and their habitat throughout the 127 miles of Atlantic Coast and 83 miles of bayshore located within New Jersey's borders. Living marine resources support important recreational and commercial fisheries in New Jersey. As noted earlier, they help support a tourism industry worth \$17 billion, and generate recreational & commercial fish revenues of about \$2 billion³¹ (see Economic Impacts on New Jersey's Fisheries, below). (The Department's new Saltwater Recreational Registry Program will provide an additional measure of water quality benefits in future Integrated Reports. See http://www.nj.gov/dep/saltwaterregistry/index.html.)
- Increased Waters Open for Shellfish Harvest: For the past two decades, the general trend in New Jersey has consisted of more upgraded waters than downgraded waters for shellfish harvesting. There was a net increase of 248 acres shellfish waters upgraded to harvestable between 2004 and 2008. Between 2009 and 2010, the Department upgraded approximately 1,400 acres of shellfish waters and downgraded approximately 290 acres, resulting in a net upgrade of approximately 1,110 acres. Currently, approximately 90 percent of the State's shellfish waters are harvestable for consumption. Detailed information on shellfish classifications is available on the Department's Web site at http://www.state.nj.us/dep/wms//bmw/data.htm.
- **Increased Shellfish Harvest:** The surf clam (*Spisula solidissima*) fishery is one of New Jersey's most valuable fisheries. More than 80 percent of the total Mid-Atlantic and New England area catch of surf clams are landed in New Jersey.³² Total landings for shellfish in New Jersey decreased from approximately 116,000,000 pounds in 2004 to approximately 100,000,000 pounds. (See "Economic Impacts on New Jersey Fisheries (including Shellfish)", below.)
- **Increased Beach Days:** Closures at New Jersey's ocean and bay beaches due to exceedances of the water quality standard have been down since the 1990's. However, the overall number of closures is up at ocean beaches primarily due to precautionary closures since 2000 and the criminal medical waste dumping event in 2008. These precautionary closures represent an enhanced level of public health protection that has been implemented by county and local health officials with the support of Department. Even with these additional precautionary closures, New Jersey beaches are open to bathing over 99.8 percent of the time.³³
- Ecosystem Services: In 2007, the Department published a report on the economic value of New Jersey's ecosystems in their undeveloped state.³⁴ Intact ecosystems provide a number of

³¹ Ibid. <u>http://www.nj.gov/dep/fgw/marfhome.htm</u>. Viewed on May 13, 2011.

³² Ibid. <u>http://www.nj.gov/dep/fgw/shelhome.htm#shellinvnt</u>. Viewed on May 13, 2011.

³³ NJDEP. <u>Cooperative Coastal Monitoring Program Summary Report for 2010</u>. December 2010. page 6. Available on the Department's Web site at <u>http://www.nj.gov/dep/wms/bmw/bathingbeach/reports/2010ccmp.pdf</u>.

³⁴ NJDEP. Valuing New Jersey's Natural Capital: An Assessment of the Economic Value of the State's Natural <u>Resources</u> April 2007. Available at <u>www.nj.gov/dep/dsr/naturalcap</u>.

long-term economic benefits to society, including ecosystem "services" such as temporary storage of flood waters by wetlands, water purification from wetlands, and numerous others. The 2007 study presented estimates of the dollar value per acre of the ecosystem services provided by twelve different types of ecosystem. While water of adequate quality and quantity is important to all ecosystems, a number of the ecosystems studied are directly marine or aquatic in nature, and the value of the ecosystem services they provide is summarized below.³⁵

Ecosystem Type	Total Acres as of 2002	Ecosystem Service Value (2009 \$/acre/yr)	Ecosystem Service Value (2009 \$/yr)
Freshwater wetlands	814,479	\$13,141	\$10,703,270,530
Estuaries	455,700	\$13,238	\$6,032,469,106
Saltwater wetlands	190,520	\$6,965	\$1,326,936,744
Coastal shelf	299,835	\$1,476	\$442,455,715
Beaches/dunes	7,837	\$47,879	\$375,227,660
Open fresh water	86,232	\$869	\$74,939,057
Riparian buffers	15,146	\$3,842	\$58,190,205
Total	1,869,749		\$19,013,489,018

Table 7.4: Annual Ecosystem Service Values for Marine And Aquatic Ecosystems in New Jersey

These estimated values make it clear that water of a quality and quantity sufficient to support these ecosystems in a state of healthy functioning is an essential part of a natural environment that provides extremely large economic benefits to New Jersey.

³⁵ Based on data in Table 4 of Part II of the 2007 report. Dollar amounts were converted from 2004 to 2009 dollars using the change in the Consumer Price Index for All Urban Consumers published by the U.S. Department of Labor's Bureau of Labor Statistics at <u>http://www.bls.gov/cpi/</u>.

Chapter 8: Public Participation

Summary of the Public Participation Process for the 2010 Integrated List

The Integrated Report combines the reporting requirements of Sections 305(b) and 303(d) of the federal Clean Water Act. The Integrated List component of the Report, which categorizes the results of use assessments for all the State's assessment units as not supporting, fully supporting or insufficient information, satisfies the reporting requirements of Section 305(b) formerly addressed by the Statewide Water Quality Inventory Report. The 303(d) List component of the Report, which satisfies the reporting requirements of Section 303(d), includes the assessment units identified as not supporting one or more designated uses, the pollutants causing non-support of those assessment units, and their priority ranking for TMDL development. The requirements identified in this section regarding public participation, the USEPA approval, and adoption apply only to the 303(d) List component of the Integrated Report.

The Department is required under 40 CFR 130.7(b)(6) to provide a description of the methodology used to develop the 303(d) List. This Methods Document lays out the framework for assessing data and categorizing assessment units as fully supporting, not supporting or insufficient information for the Integrated List. The Department develops a draft Methods Document that is made available for public review and comment through public notification, as outlined below. After finalizing the Methods Document, the Department assesses the data in accordance with those methods and develops the Integrated Report, which includes the draft Integrated List, draft 303(d) List, and two-year TMDL Schedule. A public notice is published in the New Jersey Register and newspapers of general circulation announcing that the draft Integrated List and draft 303(d) List are available for public review and comment. The Integrated List and 303(d) List are revised, as appropriate, after full consideration of comments received.

The public is afforded the opportunity to participate in three key phases of development of the Integrated List: 1) submission of data, 2) review of and comment on the proposed assessment methods; and 3) review of and comment on the proposed Integrated List and 303(d) List. These phases are summarized below.

Public Submission of Data

Public participation begins with a public request for data submissions. The Department provides several avenues for announcing its intent to seek water quality data from the general public, including publication of a notice in the New Jersey Register, posting on the Department's Web site, and electronic announcement sent to subscribers of the Department's Listservs (see the Department's Web site at http://www.nj.gov/dep/wms/subscribe.htm).

A <u>public notice</u> regarding data submittal requirements for the 2010 303(d) List and Integrated Report was published in the New Jersey Register on November 17, 2008 (see 40 N.J.R. 6657(a)). The public notice (and other notifications) specified that, for the 2010 Integrated Report, the Department was seeking data collected by December 31, 2008 that met all Department data requirements, was collected in compliance with a Department-approved (and signed) Quality Assurance and Quality Control Plan, was available to the public (i.e., not proprietary in nature), and was submitted electronically via the Department's Water Quality Data Exchange (WQDE) System. The deadline for submitting data for consideration in the development of the 2010 Integrated Report was May 17, 2009.

Since the 2010 Integrated Report represented the first time the Department's WQDE system was used as the primary vehicle for data submission, interested parties were encouraged to register their intent to submit data to the Department using the Department's Web-based Intent to Submit Data Form so that the Department could provide the necessary training and assistance (see Section 2.3). In determining which data were appropriate and "readily available" for assessment purposes, the Department considered quality assurance/quality control, monitoring design, age of data, accurate sampling location information, data documentation, and use of electronic data management. Data requirements are discussed in detail in Chapter 3 of the Methods Document (see Appendix F). The Department is working with data-generating organizations to organize their data, provide training in acceptable sampling techniques, and certify laboratories and field measurement protocols.

Public Review of Draft Documents

Once the Department has completed its review of the data submitted by other entities and incorporates the results as appropriate, the Department provides an opportunity for public review of the Integrated Water Quality Monitoring and Assessment Methods Document and the Draft Integrated List. The Department publishes a notice in the New Jersey Register, on the Department Web site, and in newspapers of general circulation throughout the state, announcing the availability of these documents for public review and comment. Adjacent states, federal, and interstate agencies are also notified, as appropriate.

Methods Document:

On May 4, 2009 and December 21, 2009, the Department published public notices (see 41 N.J.R. 2055(a) and 41 N.J.R. 4835(a), respectively) announcing availability for review of the draft 2010 Integrated Water Quality Monitoring and Assessment Methods Document. This document includes a description of the quality assurance requirements as well as the rationale for the placement of waterbodies on the Integrated List. A 30-day public comment period was provided after each notice. After review and consideration of comments received, the Department published the final 2010 Methods Document concurrent with the draft 2010 303(d) List (see 42 N.J.R. 2644(a)). Some additional changes were made to the final 2010 Methods Document in response to comments received on the draft 303(d) List. Those additional changes are identified in the 2010 303(d) List Response to Comments (see Appendix B of this report). The final 2010 Methods Document is located in Appendix F of this report.

303(d) List:

The Department is required to propose the 303(d) List of Water Quality Limited Waters (303(d) List) as an amendment to the Statewide Water Quality Management Plan, provide an opportunity for public comment, and adopt the amendment in accordance with N.J.A.C. 7:15-6.4. A public notice announcing the availability for review of the draft 2010 303(d) List, as part of the draft

2010 Integrated Report, was published in the New Jersey Register on November 1, 2010 (see 42 N.J.R. 2644(a)), in newspapers of general circulation throughout the State, and on the Department's Web site at <u>http://www.state.nj.us/dep/wms/bwqsa/2010_integrated_report.htm</u>, followed by a 30-day public comment period.

The following documents were made available for public review along with the draft 2010 303(d) List:

- Draft 2010 Status of Designated Uses by Subwatershed ("305(b) Report")
- Draft 2010 Two-Year TMDL Schedule
- Draft 2010 Delisting Document
- Final 2010 Methods Document
- Draft 2010 Overview of Water Quality Conditions

These documents are all available on the Department's Web site at <u>http://www.state.nj.us/dep/wms/bwqsa/2010_integrated_report.htm</u>.

The Draft 2010 Status of Designated Uses by Subwatershed report (Status Report) was generated using USEPA's Assessment Database (ADB) assessment unit summary report format. The Status Report presents information compiled for each of New Jersey's 952 assessment units, including assessment unit ID, assessment unit name, waterbody type, and use assessment results, for all designated uses applicable to the assessment unit. Assessment results are shown for each applicable designated use as "fully supporting", "not supporting", or "insufficient information". For uses that are not supported, the Status Report identifies the pollutant causing nonsupport or "cause unknown". Pollutant causes identified for each assessment unit (including "cause unknown") but not shown with a "date completed" are compiled into the draft 2010 303(d) List, along with the priority ranking of each pollutant for TMDL development. The Department published an on-line fact sheet explaining how to read this report in the new format (see http://www.state.nj.us/dep/wms/bwqsa/ 2010 Fact Sheet Draft Status Report.pdf).

A public information session outlining the changes in the methodology used to develop the 2010 303(d) List was held on November 16, 2010. The public comment period closed on December 1, 2010. Agency responses to public comments on the draft 2010 303(d) List follow the final 2010 303(d) List in Appendix B of this report.

Chapter 9: Next Steps - Preparing for 2012 and Beyond

The Department recognizes that monitoring and assessment is an iterative process that will require continuous reevaluation and refinement to identify and fill data gaps, explore new and emerging issues, and improve efficiencies in applying existing methods, especially in light of the resource constraints imposed by the current state, national, and global economy. Despite reductions in staff and funding resources, the Department continues to make significant improvements to New Jersey's water quality monitoring and assessment process. The Departments routinely reports on the status of its monitoring and assessment programs, including any significant refinements, deficiencies, or changes in priority. This section summarized three key vehicles through which the Department will refine and enhance the water quality monitoring and assessment of the State's waters. The Department's has also identified two priorities for enhanced water quality monitoring and assessment: 1) nutrients (statewide); and 2) the Barnegat Bay. Efforts planned and underway to address these new priorities are addressed below.

Long-Term Monitoring and Assessment Strategy

The Department's long term plans for enhancing its water quality monitoring and assessment programs are presented in the *New Jersey Water Monitoring & Assessment Strategy (2005-2014)*, which is available on the Department's Web site at http://www.state.nj.us/dep/wms/longtermstrategyreport.pdf (and is cited in Appendix G). The monitoring program strategy covers all waters of the State and for each waterbody type (streams, rivers, lakes, reservoirs, estuaries, coastal areas, wetlands and ground water), the strategy addresses nine basic elements: 1. Monitoring objectives, 2. Monitoring design, 3. Core & supplemental water quality indicators, 4. Quality assurance, 5. Data management, 6. Data analysis/assessment, 7. Reporting, 8. Programmatic evaluation, and 9. General support and infrastructure planning. Gaps are identified for all current ambient monitoring programs, as well as the resource and technical support needs to fill these gaps.

Nutrient Criteria Enhancement Plan

New Jersey has developed a <u>Nutrient Criteria Enhancement Plan</u> (Nutrient Plan) for enhancing the existing nutrient criteria for freshwaters and developing new nutrient criteria for other (estuarine, marine) waters of the State. Nutrient criteria (including numeric criteria and translators of narrative criteria) will be developed to address and prevent nutrient-related use impairment in New Jersey waters. The Nutrient Plan outlines the following steps to support criteria development:

- Monitoring and data collection on nutrients and response variables;
- Research of causal relationships for nutrients and response variables; selection of appropriate indicators of aquatic life use impairment;
- Development of new assessment methodologies to define thresholds of use impairment based on ecosystem response variables;
- Development of new/enhanced criteria; and

• Promulgation of the new criteria through amendments to the SWQS and implementation of the new assessment methodology through the Integrated Monitoring and Assessment Reporting process.

The Department will soon be publishing a status report on implementation of the Nutrient Plan, as well as an update to the Nutrient Plan itself, on the Department's Web site at http://www.nj.gov/dep/wms/bwqsa/nutrient_criteria.htm.

Barnegat Bay

Current concerns within the Barnegat Bay Estuary are based on observed loss of sea grasses such as eel grass and widgeon grass, collectively referred to as Submerged Aquatic Vegetation (SAV), episodic occurrences of macroalgae and brown tides, decline of hard clams, and increasing numbers of invasive species such as sea nettles. The full suite of stressors and biological/chemical/physical processes responsible for habitat alteration, loss of biological diversity and loss of support of designated uses are not entirely known. Alteration of the shoreline, hydrologic modification, resource harvesting, boating, the effects of the Oyster Creek nuclear generating facility and declining water quality are all suspected causes. On December 9, 2010, Governor Chris Christie announced a comprehensive action plan to address the health of Barnegat Bay.

The Department, in cooperation with Barnegat Bay stakeholders, is initiating a study that will provide water quality data to determine the locations and extent of water quality impairment, identify numeric criteria or loading targets for nutrients, and calibrate and validate modeling tools that can be used to direct water quality restoration of the bay. The Department plans to include the results of this targeted assessment of the Barnegat Bay in the 2012 Integrated Report. Additional information about this effort is available on the Department's Web site at http://www.state.nj.us/dep/barnegatbay/plan-wqstandards.htm.

Enhancements to the Assessment Methodology

In addition to the priorities listed above, the Department plans to refine its water quality assessment methods for the 2012 Integrated Report, as described below.

• Nutrient Impact Assessment: The Department developed a nutrient impact assessment method, to determine if phosphorus is the cause of aquatic life use non-support in freshwater wadeable streams, for the 2010 Integrated Report (see Appendix F, Chapter 4). The Department plans to refine that method for the 2012 Integrated Report to include an assessment of waters threatened by nutrients and situations where the narrative nutrient criteria is met but the numeric phosphorus criteria is exceeded. The Department also intends to develop nutrient impact assessment methods for other designated uses and other waterbody types, as explained in the Department's Nutrient Criteria Enhancement Plan (April 2009). The Department is currently evaluating diatom and other data that will help establish causal relationships between excessive nutrients and aquatic life use attainment in lakes.

- Statewide Statistical Surveys: As explained in Section 3.3, statewide statistical surveys generate spatial quantification of water quality conditions and can be used to characterize the "overall" water quality of an entire region or state, as required under Section 305(b). The Department expects to report on the state-wide statistical assessment of New Jersey Lakes in the 2012 Integrated Report. In addition, the Department has been working with USEPA's Office of Research and Development to develop site selection protocols for wadeable streams that concur with USEPA's Generalized Random Tessellation Stratified (GRTS) Spatially-Balanced Survey Design, the method USEPA prefers states to use. Data collection is scheduled to begin in Summer 2011. The results will be published in future Integrated Reports.
- Arsenic Delisting Method: The 2010 303(d) List identifies 147 assessment units that exceed the applicable arsenic criterion; however, the Department suspects that most if not all of these listings are attributable to natural conditions because there are no anthropogenic sources of the pollutant. The Department is currently working with USGS to determine regional background concentrations. These values will be used to delist waters where arsenic levels are consistent with natural background concentrations. Waters with arsenic levels above natural background concentrations will remain on the 303(d) list and subject to TMDL development.

State:	NJ
~~~~	1 10

# 1/11/2012

Cycle: 2010

AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007000010-01	Rutgers Creek tribs		RIVER	11.55 MILES	HUC14: 02020007000010	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007010010-01	Wallkill R/Lake Mohawk	(above	FRESHWATER LAKE	828.94 ACRES	01367625Wallkill A As of 2010	
	Sparta Sta)		RIVER	19.04 MILES	following monitoring sites and a Classification 01367625 FW2-N	T AN0297 FW2-
					NT NJW04459-093-1 FW2-NT FW2-NT NJW04459-093-0 FW FW2-NT NJW064 OUTLE	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban
Aquatic Life	Fully Supporting	Ν				Runoff/Storm Sewers
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007010020-01	Wallkill R (Ogdensburg t	0	FRESHWATER LAKE	105.93 ACRES	01367625Wallkill A As of 2010	contains the

	SpartaStation)		RIVER	20.66 MILES	following monitoring sites and Classification NJW186 1 FW2- FW2-NT NJW186 3 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Upstream
Aquatic Life	Not Supporting	Ν	Cause Unknown	2007	Medium Priority	Impoundments (e.g., PI-566
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	NRCS Structures)
Fish Consumption	Insufficient Information	Ν				• Urban Runoff/Storm
Industrial Water Supply	Fully Supporting	Ν				Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007010030-01	Franklin Pond Creek		FRESHWATER LAKE	315.67 ACRES	HUC14: 02020007010030 As of the following monitoring sites	
			RIVER	13.65 MILES	the following monitoring sites a SWQS Classification NJW134 NJW134 OUTLET FW2-TP N. NJW192 2 FW2-NT	1 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Aquatic Life - Trout	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007010040-01	Wallkill R(Hamburg SW Ogdensburg)	Bdy to	FRESHWATER LAKE	122.55 ACRES	013677152-WAL-2Wallkill D contains the following monitori	
	Oguensourg)		RIVER	11.03 MILES	associated SWQS Classification	

					NT		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Fully Supporting	Ν					
Aquatic Life	Not Supporting	Ν	Cause Unknown		Pollution		
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority		
Fish Consumption	Insufficient Information	Ν					
Industrial Water Supply	Fully Supporting	Ν					
Primary Contact Recreation	Fully Supporting	Ν					
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Completed		
AU ID	AU Name		Water Type	Size	Location Description		
NJ02020007010050-01	Hardistonville tribs		FRESHWATER LAKE	65.94 ACRES	HUC14: 02020007010050 As o		
			RIVER	11.5 MILES	the following monitoring sites a SWQS Classification NJW167		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Insufficient Information	Ν					
Aquatic Life	Insufficient Information	Ν					
Aquatic Life - Trout	Insufficient Information	Ν					
Fish Consumption	Insufficient Information	Ν					
Industrial Water Supply	Insufficient Information	Ν					
Primary Contact Recreation	Insufficient Information	Ν					
Public Water Supply	Insufficient Information	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02020007010060-01	Beaver Run		RIVER	14.53 MILES	the following monitoring sites a	HUC14: 02020007010060 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0301 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Insufficient Information	Ν				<ul> <li>Agriculture</li> </ul>	

Aquatic Life Fish Consumption	Not Supporting Insufficient Information	N N	Cause Unknown	2006	Medium Priority	• Urban Runoff/Storm Sewers
Industrial Water Supply	Insufficient Information	N				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007010070-01	Wallkill R(Martins Rd to	Hamburg	FRESHWATER LAKE	6.56 ACRES	013677702-WAL-4 As of 2010	
	SW Bdy)		RIVER	19.84 MILES	following monitoring sites and a Classification 01367715 FW2-N FW2-NT 01367735 FW2-NT 2- 2-WAL-3 FW2-NT AN0299	T 01367729
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Supporting	Ν	Total Dissolved Solids	2006	Medium Priority	• Municipal
Aquatic Life	Fully Supporting	Ν				Point Source Discharges
Fish Consumption	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Industrial     Point Source
Public Water Supply	Not Supporting	Ν	Arsenic Total Dissolved Solids	2006 2006	Completed Medium Priority	Discharge
AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007010080-01	Wallkill R(Franklin Pond	l to	FRESHWATER LAKE	55.44 ACRES	013677152-WAL-2Wallkill D A	
	Ogdensburg)		RIVER	5.76 MILES	contains the following monitorin associated SWQS Classification NT 2-WAL- 1 FW2-NT AN029 FIBI049 FW2-TM Wallkill B F	01367700 FW2- 8 FW2-TM
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Temperature, water	1996	Medium Priority	
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	1996	Medium Priority	

Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2010	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2010	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007020010-01	Papakating Ck (above Fra Plains)	ankford	RIVER	13.22 MILES	HUC14: 02020007020010 As of the following monitoring sites an SWQS Classification 01367780 AN0303 FW2-TM	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				• Agriculture
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life - Trout	Fully Supporting	Ν				Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007020020-01	Wykertown tribs (Papaka	ting Creek)	RIVER	17.09 MILES	HUC14: 02020007020020	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Insufficient Information	Ν				<ul> <li>Orban</li> <li>Runoff/Storm</li> <li>Sewers</li> </ul>
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007020030-01	Papakating Ck(Pellettow Plns)	n-Frankford	RIVER	11.65 MILES	HUC14: 02020007020030 As o the following monitoring sites a SWQS Classification 01367800 AN0304 FW2-NT	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007020040-01	Papakating Ck WB(abv 7 side rd)	/4d39m30s	RIVER	17.62 MILES	HUC14: 02020007020040 As o the following monitoring sites a SWQS Classification AN0305 I	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007020050-01	Papakating Ck WB(blw 7 side rd)	74d39m30s	FRESHWATER LAKE RIVER	19.69 ACRES 14.32 MILES	HUC14: 02020007020050 As o the following monitoring sites a SWQS Classification 01367850 AN0306 FW2-NT FIBI040 FW	nd associated FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply Aquatic Life	Fully Supporting Fully Supporting	N N				<ul> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007020060-01	Clove Brook (Papakating	Ck)	FRESHWATER LAKE	5.89 ACRES	HUC14: 02020007020060 As of	
			RIVER	56.25 MILES	the following monitoring sites at SWQS Classification 01367875 01367880 FW2-TM 01367902 F FW2-TM AN0309 FW2-NT AN	FW2-TM W2-NT AN0308
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Package Plant
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	or Other Permitted Small
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	Flows Discharges
Fish Consumption	Insufficient Information	Ν				• Upstream Impoundments
Industrial Water Supply	Fully Supporting	Ν				(e.g., Pl-566 NRCS
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Medium Priority	<ul><li>Structures)</li><li>Agriculture</li></ul>
Public Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007020070-01	Papakating Creek (below	Pellettown)	FRESHWATER LAKE	55.42 ACRES	01367910013679092-PAP-1Wa	
			RIVER	40.95 MILES	contains the following monitorin associated SWQS Classification NT 01367909 FW2-NT 0136791 PAP-1 FW2-NT AN0307 FW2-	1367860 FW2- 0 FW2-NT 2-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li> Agriculture</li><li> Urban</li></ul>

Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				Seweis
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007030010-01	Wallkill R(41d13m30s to Boad)	Martins	FRESHWATER LAKE	72.39 ACRES	013677702-WAL-4 As of 2010 of fullowing manitoring sites and a	
	Road)		RIVER	20.42 MILES	following monitoring sites and a Classification 01367770 FW2-N FW2-NT AN0302 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007030020-01	Quarryville Brook		RIVER	18.14 MILES	HUC14: 02020007030020	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Insufficient Information	Ν				Runoff/Storm
Aquatic Life - Trout	Insufficient Information	Ν				Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	

Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007030030-01	Wallkill River(Owens ga 41d13m30s)	ge to	FRESHWATER LAKE RIVER	38.66 ACRES 9.38 MILES	013680002-WAL-5Wallkill E A the following monitoring sites an SWQS Classification 01368000 WAL-5 FW2-NT NJW04459-24 NJW249 1 FW2-NT NJW249 ce NJW249 OUTLET FW2-NT	nd associated FW2-NT 2- 19-1 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Fully Supporting Not Supporting Insufficient Information Fully Supporting	N N N	рН	2010	Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007030040-01	Wallkill River(stateline to gage)	o Owens	RIVER	15.23 MILES	013680002-WAL-5Wallkill E As of 2010 contains the following monitoring sites and associated SWQS Classification Wallkill E FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed		
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply	Attainment         Fully Supporting         Fully Supporting         Fully Supporting         Insufficient Information         Fully Supporting	N N N N			SWQS Classification Wallkill E TMDL Status	FW2-NT
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption	Attainment Fully Supporting Fully Supporting Fully Supporting Insufficient Information	N N N	Cause Fecal Coliform Arsenic	Cycle First Listed	SWQS Classification Wallkill E	FW2-NT Source • Agriculture • Urban Runoff/Storm

NJ02020007040010-01	Black Ck(above/incl G.G trib)	orge Resort	FRESHWATER LAKE RIVER	61.9 ACRES 12.92 MILES	HUC14: 02020007040010 As of 2010 contains the following monitoring sites and associated SWQS Classification NJW023 1 FW2-NT NJW023 2 FW2-NT NJW023 3 FW2-NT NJW023 Center FW2-NT NJW023 OUTLET FW2-NT NJW04459-097-1 FW1 NJW04459-09 2 FW1 NJW097 1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Upstream
Aquatic Life	Not Supporting	Ν	Temperature, water	2006	Medium Priority	Impoundments (e.g., PI-566
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	NRCS Structures)
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007040020-01	Black Creek (below G. G trib)	orge Resort	FRESHWATER LAKE RIVER	69.92 ACRES 32.24 MILES	01368950Wallkill H As of 2010 following monitoring sites and a Classification 01367620 FW2-N FW2-NT AN0296 FW2-NT Wa Wallkill H FW2-NT	ssociated SWQS T 01368950
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Package Plant
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	or Other Permitted Small
Aquatic Life - Trout	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	Flows Discharges
Fish Consumption	Insufficient Information	Ν				<ul><li> Agriculture</li><li> Urban</li></ul>
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	N				
AU ID	AU Name		Water Type	Size	Location Description	

NJ02020007040030-01	Pochuck Ck/Glenwood Lk & northern trib		FRESHWATER LAKE RIVER	34.66 ACRES 14.06 MILES	HUC14: 02020007040030 As of 2010 contains the following monitoring sites and associated SWQS Classification NJW04459-256-1 FW2-NT NJW256 1 FW2-NT NJW256 center FW2-NT NJW256 OUTLET FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				Agriculture
Aquatic Life	Insufficient Information	Ν				• Urban Runoff/Storm
Aquatic Life - Trout	Insufficient Information	Ν				Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007040040-01	Highland Lake/Wawayan	da Lake	FRESHWATER LAKE RIVER	670.44 ACRES 9.89 MILES	HUC14: 02020007040040 As of 2010 contains the following monitoring sites and associated SWQS Classification DSR 65L FW2-TM NJW022 1 FW2-NT NJW022 Center FW2-NT NJW022 OUTLET FW2-NT NJW271 1 FW2-TM NJW271 2 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics
Aquatic Life - Trout	Insufficient Information	Ν				
Fish Consumption	Not Supporting	Ν	Mercury	2008	Completed	
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	

NJ02020007040050-01	Wawayanda Creek & tribs		FRESHWATER LAKE RIVER	105.58 ACRES 32.22 MILES	HUC14: 02020007040050 As of 2010 contains the following monitoring sites and associated SWQS Classification 01368820 FW1 01368825 FW2-NT 01368900 FW2-TM AN0294 FW2-NT AN0295 FW2-TM NJW269 1 FW2-NT NJW269 OUTLET FW	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status Source	
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Phosphorus (Total) Temperature, water	2006 2006	Completed Medium Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Upstream Impoundments</li> </ul>
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	(e.g., Pl-566 NRCS
Fish Consumption	Insufficient Information	Ν				Structures)
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02020007040060-01	Long House Creek/Upper Lake	Greenwood	FRESHWATER LAKE RIVER	490.87 ACRES 12.16 MILES	HUC14: 02020007040060 As of 2010 contains the following monitoring sites and associated SWQS Classification NJW04459-119-1 FW2-NT NJW04459-119-0 FW2-NT NJW119 1 FW2-NT NJW119 center FW2-NT NJW119 OUTLET FW2-NT NJW282 1 FW2-NT NJW282 2 FW2- NT NJ	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	pH	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	

NJ02030101170010-01	Hudson River (upper)		FRESHWATER LAKE RIVER	5.67 ACRES 10.5 MILES	HUC14: 02030101170010 As of 2010 contains the following monitoring sites and associated SWQS Classification NJ00-0015 SE1 NJ02-0211 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status Source	
Aquatic Life	Not Supporting N		Cause Unknown	2006	Medium Priority	
Fish Consumption	Not Supporting	Ν	Benzo(a)pyrene (PAHs) Chlordane in Fish Tissue DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Hexachlorobenzene Mercury in Fish Tissue PCB in Fish Tissue	2008 2010 2008 2008 2008 2008 2006 2008 2010 2008	Medium Priority Low Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	
Primary Contact Recreation	Fully Supporting	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030101170020-01	Sparkill Brook		FRESHWATER LAKE RIVER	1.7 ACRES 8.33 MILES	HUC14: 02030101170020 As of the following monitoring sites at SWQS Classification 01376223 01376273 FW2-NT	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2008	Medium Priority	Point Source Discharge
Fish Consumption	Insufficient Information	Ν				• Urban Runoff/Storm
Industrial Water Supply	Fully Supporting	Ν				Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030101170030-01	Hudson River (lower)		FRESHWATER LAKE RIVER	39.62 ACRES 13.72 MILES	Hudson River (lower) As of 201 following monitoring sites and a Classification Location B SE2 L SE2 N3B SE2 N3B-E SE2 N3B-	ssociated SWQS ocation C SE2 N3

					0014		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Aquatic Life	Not Supporting	Ν	Cause Unknown	2010	Medium Priority		
Fish Consumption	Not Supporting	Ν	Benzo(a)pyrene (PAHs) Chlordane DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Hexachlorobenzene Mercury in Fish Tissue Polychlorinated biphenyls	2010 2010 2010 2010 2010 2010 2010 2010	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority		
Secondary Contact Recreation	Insufficient Information	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02030103010010-01	Passaic R Upr (above Os	born Mills)	FRESHWATER LAKE RIVER	46.32 ACRES 24.71 MILES	the following monitoring sites an SWQS Classification 01378660 01378670 FW2-TP 01378680 F	HUC14: 02030103010010 As of 2010 contains the following monitoring sites and associated SWQS Classification 01378660 FW2-TP 01378670 FW2-TP 01378680 FW2-TP 01378690 FW2-TP AN0213 FW2-TP AN0214 FW2-TP BA176	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Fully Supporting	Ν				• Industrial	
Aquatic Life	Not Supporting	N	Phosphorus (Total)	2008	Completed	Point Source Discharge	
Aquatic Life - Trout	Not Supporting	N	Phosphorus (Total)	2008	Completed	<ul> <li>Urban Runoff/Storm</li> </ul>	
Fish Consumption	Insufficient Information	N				Sewers	
Industrial Water Supply	Fully Supporting	N					
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2006	Completed		
Public Water Supply	Fully Supporting	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02030103010020-01	Primrose Brook		FRESHWATER LAKE RIVER	13.84 ACRES 12.77 MILES	HUC14: 02030103010020 As of the following monitoring sites at SWQS Classification 01378780	nd associated	

					FW2-TP AN0216 FW2-TP GSW GSWA PB2 FW2-TP GSWA PI GSWA PR2 FW2-	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	pH Phosphorus (Total)	2010 2010	Medium Priority Completed	
Aquatic Life - Trout	Not Supporting	Ν	Oxygen, Dissolved Temperature, water Total Suspended Solids (TSS)	2010 2010 2010	Medium Priority Medium Priority Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2010	Medium Priority	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103010030-01	Great Brook (above Gree	en Village	FRESHWATER LAKE	24.6 ACRES	HUC14: 02030103010030 As of	
	Rd)		RIVER	17.37 MILES	the following monitoring sites an SWQS Classification AN0217 F FW2-NT Bayne Brook #1 FW2- NT GB3 FW2-NT GB	W2-NT AN0218
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
Tublic water Supply					Location Description	
AU ID	AU Name		Water Type	Size	Location Description	

					the following monitoring sites an SWQS Classification 01378860 AN0220 FW2-NT AN0221 FW2 FW2-NT GSWA-LB2 FW2-NT FW2-NT GSWA-LB4 FW2-	FW2-NT 2-NT GSWA-LB1
Use	Attainment Threatened		Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban
Aquatic Life	Not Supporting	Ν	Cause Unknown	2010	Medium Priority	Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Medium Priority	
Public Water Supply	Not Supporting	Ν	Total Dissolved Solids	2008	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103010050-01	Great Brook (below Green Village Rd)		RIVER	18.68 MILES	HUC14: 02030103010050 As of the following monitoring sites an SWQS Classification 01378770 AN0219 FW2-NT GB1 FW2-N' FW2-NT GB2 FW2-NT Great B	nd associated FW2-NT T GB1-AGB
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved Phosphorus (Total)	2010 2010	Medium Priority Completed	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103010060-01	Black Brook (Great Swar	np NWR)	RIVER	27.59 MILES	HUC14: 02030103010060 As of the following monitoring sites an SWQS Classification 01378855 01378895 FW2-NT AN0222 FW	nd associated FW2-NT

					FW2-NT BA138 FW2-NT BA1	39A	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Fully Supporting	Ν					
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved Phosphorus (Total)	2008 2006	Medium Priority Completed		
Fish Consumption	Insufficient Information	Ν					
Industrial Water Supply	Fully Supporting	Ν					
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed		
Public Water Supply	Not Supporting	Ν	Total Dissolved Solids	2008	Medium Priority		
AU ID	AU Name		Water Type	Size	Location Description		
NJ02030103010070-01	Passaic R Upr (Dead R to Mills)	o Osborn	FRESHWATER LAKE RIVER	14.33 ACRES 31.55 MILES	2010 contains the following mor associated SWQS Classification NT 01379010 FW2-NT 0137920	013790006-PAS-1, 6-SITE-201379010 As of 2010 contains the following monitoring sites and associated SWQS Classification 01379000 FW2- NT 01379010 FW2-NT 01379200 FW2-NT 6- PAS-1, 6-SITE-2 FW2-NT AN0224 FW2-NT BA136A	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Cyanide Oxygen, Dissolved Phosphorus (Total)	2006 2010 2010	Low Priority Medium Priority Completed	Source Unknown     Urban Runoff/Storm Sewers     Industrial	
Fish Consumption	Insufficient Information	Ν				Point Source Discharge	
Industrial Water Supply	Fully Supporting	Ν				Disenarge	
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed		
Public Water Supply	Not Supporting	Ν	Arsenic Cyanide	2006 2006	Low Priority Low Priority		
AU ID	AU Name		Water Type	Size	Location Description		
NJ02030103010080-01	Dead River (above Harris	sons Brook)	FRESHWATER LAKE RIVER	13.31 ACRES 21.22 MILES	HUC14: 02030103010080 As of the following monitoring sites a SWQS Classification AN0225 F	nd associated	

					FW2-NT DeadRiver 1 FW2-NT FW2-NT DRB FW2-NT RRTM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	Total Suspended Solids (TSS)	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103010090-01	Harrisons Brook		FRESHWATER LAKE	5.65 ACRES	HUC14: 02030103010090 As of	
			RIVER	15.02 MILES	the following monitoring sites and associated SWQS Classification AN0227A FW2-NT BA140A FW2-NT BA140B FW2-NT RRTMDL	
					HarrB1 FW2-NT SW5 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Urban Runoff/Storm
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2010	Completed	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103010100-01	Dead River (below Harris	sons Brook)	FRESHWATER LAKE	2.51 ACRES	HUC14: 02030103010100 As of	
			RIVER	24.62 MILES	the following monitoring sites and associated SWQS Classification AN0227 FW2-NT BA141A FW2-NT DeadRiver 3 FW2-NT DeadRiver 4 FW2-NT DR1 FW2-NT PRTMDL-DR1 FW	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Fully Supporting Not Supporting Insufficient Information Fully Supporting	N N N	Oxygen, Dissolved Phosphorus (Total) Total Suspended Solids (TSS)	2010 2006 2006	Medium Priority Completed Medium Priority	<ul> <li>Municipal Point Source Discharges</li> <li>Package Plant or Other Permitted Small Flows Discharges</li> <li>Agriculture</li> </ul>
Primary Contact Recreation Public Water Supply	Not Supporting Fully Supporting	N N	Fecal Coliform	2006	Completed	• Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103010110-01	Passaic R Upr (Plainfield R)	Rd to Dead	RIVER	24.44 MILES	01379504013795006-PAS-2, 6-SITE-1 As of 2010 contains the following monitoring sites and associated SWQS Classification 01379300 FW2- NT AN0228 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Insufficient Information Not Supporting Not Supporting Not Supporting	N N N N	Cyanide Oxygen, Dissolved Total Suspended Solids (TSS) Total Suspended Solids (TSS) Fecal Coliform Arsenic Cyanide	2006 2008 2006 2006 2006 2006 2006	Low Priority Medium Priority Medium Priority Medium Priority Completed Low Priority Low Priority	<ul> <li>Source Unknown</li> <li>Municipal Point Source Discharges</li> <li>Package Plant or Other Permitted Small Flows Discharges</li> <li>Urban Runoff/Storm Sewers</li> <li>Agriculture</li> <li>Natural Sources</li> <li>Industrial Point Source Discharge</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103010120-01	Passaic R Upr (Snyder to Rd)	Plainfield	RIVER	20.66 MILES	01379500013795046-PAS-2, 6- 2010 contains the following mor associated SWQS Classification	itoring sites and

					NT PA3 FW2-NT PRTML	DL-PA3 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply Aquatic Life	Fully Supporting	N N	Cyanide	2006	Low Priority	• Source Unknown	
Aquatic Life	Not Supporting	IN	Oxygen, Dissolved Total Suspended Solids (TSS)	2008 2006	Medium Priority Medium Priority	<ul> <li>Municipal Point Source Discharges</li> <li>Package Plant</li> </ul>	
Fish Consumption	Insufficient Information	Ν				or Other Permitted Small	
Industrial Water Supply	Not Supporting	Ν	Total Suspended Solids (TSS)	2006	Medium Priority	Flows Discharges	
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	• Urban	
Public Water Supply	Not Supporting	Ν	Arsenic Cyanide	2006 2006	Low Priority Low Priority	Runoff/Storm Sewers	
			Cyande	2000	Low Monty	<ul><li>Agriculture</li><li>Natural</li><li>Sources</li></ul>	
AU ID	AU Name		Water Type	Size	Location Description	Location Description	
NJ02030103010130-01	Passaic R Upr (40d 45m Ave)	to Snyder	RIVER	27.34 MILES	2010 contains the followin associated SWQS Classific NT 01379504 FW2-NT 6-1	01379504013795006-PAS-2, 6-SITE-1 As of 2010 contains the following monitoring sites and associated SWQS Classification 01379500 FW2- NT 01379504 FW2-NT 6-PAS-2, 6-SITE-1 FW2- NT AN0229 FW2-NT AN0230 FW2-NT BA135	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Fully Supporting	Ν				• Source	
Aquatic Life	Not Supporting	Ν	Cyanide Oxygen, Dissolved	2006 2008	Low Priority Medium Priority	<ul><li>Unknown</li><li>Industrial Point Source</li></ul>	
			Phosphorus (Total) Total Suspended Solids (TSS)	2006 2006	Completed Medium Priority	Discharge <ul> <li>Municipal</li> </ul>	
Fish Consumption	Insufficient Information	N				Point Source Discharges	
Industrial Water Supply	Not Supporting	N	Total Suspended Solids (TSS)	2006	Medium Priority	Package Plant     or Other	
				2007	Completed	Permitted Small	
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Flows Discharges	

						• Natural Sources
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103010140-01	Canoe Brook		FRESHWATER LAKE RIVER	15.42 ACRES 31.09 MILES	0137953001379525 As of 2010 contains the following monitoring sites and associated SWQS Classification 01379525 FW2-NT 01379530 FW2-NT AN0231D FW2-NT AN0231E FW2-N BA150 FW2-NT BA151 FW2-NT BA152	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Urban
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2010	Completed	Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
	ite ituite		VI.		-	
NJ02030103010150-01	Passaic R Upr (Columbia 45m)	Rd to 40d	FRESHWATER LAKE RIVER	9.11 ACRES 18.86 MILES	01379500013795046-PAS-2, 6 2010 contains the following me associated SWQS Classification NT AN0231A FW2-NT	nitoring sites and
NJ02030103010150-01 Use	Passaic R Upr (Columbia	Rd to 40d Threatened	FRESHWATER LAKE		2010 contains the following mo associated SWQS Classification	nitoring sites and
	Passaic R Upr (Columbia 45m)		FRESHWATER LAKE RIVER	18.86 MILES	2010 contains the following mc associated SWQS Classification NT AN0231A FW2-NT	nitoring sites and a 01379550 FW2- Source • Source
Use	Passaic R Upr (Columbia 45m) Attainment	Threatened	FRESHWATER LAKE RIVER	18.86 MILES	2010 contains the following mc associated SWQS Classification NT AN0231A FW2-NT	nitoring sites and 01379550 FW2- Source Unknown • Municipal Point Source Discharges
Use Agricultural Water Supply	Passaic R Upr (Columbia 45m) Attainment Fully Supporting	<b>Threatened</b> N	FRESHWATER LAKE RIVER Cause Cyanide Oxygen, Dissolved	18.86 MILES Cycle First Listed	2010 contains the following mo associated SWQS Classification NT AN0231A FW2-NT TMDL Status Low Priority Medium Priority	nitoring sites and a 01379550 FW2- Source Unknown • Municipal Point Source Discharges • Urban Runoff/Storm
Use Agricultural Water Supply Aquatic Life	Passaic R Upr (Columbia 45m) Attainment Fully Supporting Not Supporting	<b>Threatened</b> N N	FRESHWATER LAKE RIVER Cause Cyanide Oxygen, Dissolved	18.86 MILES Cycle First Listed	2010 contains the following mo associated SWQS Classification NT AN0231A FW2-NT TMDL Status Low Priority Medium Priority	nitoring sites and 01379550 FW2- Source Unknown • Municipal Point Source Discharges • Urban Runoff/Storm Sewers • Agriculture
Use Agricultural Water Supply Aquatic Life Fish Consumption	Passaic R Upr (Columbia 45m) Attainment Fully Supporting Not Supporting Insufficient Information	<b>Threatened</b> N N	FRESHWATER LAKE RIVER Cause Cyanide Oxygen, Dissolved Total Suspended Solids (TSS)	18.86 MILES           Cycle First Listed           2006           2008           2006	2010 contains the following mo associated SWQS Classification NT AN0231A FW2-NT TMDL Status Low Priority Medium Priority Medium Priority	nitoring sites and a 01379550 FW2- Source Unknown • Municipal Point Source Discharges • Urban Runoff/Storm Sewers

AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103010160-01	Passaic R Upr (HanoverRR to ColumbiaRd)		FRESHWATER LAKE RIVER	164.51 ACRES 7.92 MILES	HUC14: 02030103010160 As of the following monitoring sites SWQS Classification 01379570 BA134A FW2-NT PVWC140	and associated ) FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Supporting	Ν	Total Dissolved Solids	2006	Medium Priority	
Aquatic Life	Not Supporting	Ν	Total Suspended Solids (TSS)	2006	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Not Supporting	Ν	Total Dissolved Solids Total Suspended Solids (TSS)	2006 2006	Medium Priority Medium Priority	
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2008	Completed	
Public Water Supply	Not Supporting	N	Total Dissolved Solids	2006	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103010170-01	Passaic R Upr (Rockawa RR)	y to Hanover	RIVER	15.52 MILES	HUC14: 02030103010170 As of the following monitoring sites SWQS Classification 01379580 AN0231 FW2-NT BA133A FW FW2-NT EWQ0231 FW2-NT	and associated 0 FW2-NT V2-NT DSR 13R
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Supporting	Ν	Total Dissolved Solids	2006	Medium Priority	• Industrial
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved Total Suspended Solids (TSS)	2010 2006	Medium Priority Medium Priority	Point Source Discharge • Municipal Point Source
Fish Consumption	Not Supporting	Ν	Chlordane DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006 2006	Low Priority Low Priority Low Priority Low Priority Completed Low Priority	Discharges • Agriculture • Urban Runoff/Storm Sewers • Atmospheric Depositon -
Industrial Water Supply	Not Supporting	Ν	Total Suspended Solids (TSS)	2006	Medium Priority	Toxics • Source
Primary Contact Recreation	Insufficient Information	Ν				• Source Unknown
			Total Dissolved Solids	2006	Medium Priority	

Public Water Supply	Not Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103010180-01	Passaic R Upr (Pine Bk br to Rockaway)		FRESHWATER LAKE	1.12 ACRES	013820006-SITE-3	
			RIVER	18.44 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric Depositon -
Aquatic Life	Fully Supporting	Ν				Toxics • Source
Fish Consumption	Not Supporting	Ν	Chlordane DDD DDE DDT Mercury in Water Column Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006 2006	Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Source Unknown</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Natural Sources</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				Sources
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic Mercury in Water Column	2006 2006	Low Priority Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103010190-01	Slough Brook		FRESHWATER LAKE	1.1 ACRES	HUC14: 02030103010190 As of 2010 contain the following monitoring sites and associated	
			RIVER	4.1 MILES	SWQS Classification AN0231C	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Supporting	Ν	Total Dissolved Solids	2010	Medium Priority	
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2010	Completed	
Public Water Supply	Not Supporting	Ν	Total Dissolved Solids	2010	Medium Priority	

			1		1	
AU ID	AU Name		Water Type Size	Location Description		
NJ02030103020010-01	20010-01 Whippany R (above road at 74d 33m)		FRESHWATER LAKE	3.4 ACRES	HUC14: 02030103020010 As of 2010 conta the following monitoring sites and associate SWQS Classification 01381235 FW2-TP 01381260 FW2-TP AN0232 FW2-TP HAB TP WIB FW2-TP	
			RIVER	12.65 MILES		FW2-TP
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103020020-01	Whippany R (Wash. Valley Rd to 74d 33m)		FRESHWATER LAKE	4.4 ACRES	HUC14: 02030103020020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01378775 FW2-TP 01378778 FW2-TP 01381330 FW2-TP AN0233 FW2-TP EWQ0233 FW2-TP FIBI074 FW2-TP	
			RIVER	16.61 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed		
Use Agricultural Water Supply	Attainment Fully Supporting	<b>Threatened</b> N	Cause	Cycle First Listed	FW2-TP EWQ0233 FW2-TP FI	BI074 FW2-TP
			Cause	Cycle First Listed	FW2-TP EWQ0233 FW2-TP FI	BI074 FW2-TP
Agricultural Water Supply	Fully Supporting	N	Cause	Cycle First Listed	FW2-TP EWQ0233 FW2-TP FI	BI074 FW2-TP
Agricultural Water Supply Aquatic Life	Fully Supporting Fully Supporting	N N	Cause	Cycle First Listed	FW2-TP EWQ0233 FW2-TP FI	BI074 FW2-TP
Agricultural Water Supply Aquatic Life Aquatic Life - Trout	Fully Supporting Fully Supporting Fully Supporting	N N N	Cause	Cycle First Listed	FW2-TP EWQ0233 FW2-TP FI	BI074 FW2-TP
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption	Fully Supporting Fully Supporting Fully Supporting Insufficient Information	N N N	Cause Escherichia coli	Cycle First Listed	FW2-TP EWQ0233 FW2-TP FI	BI074 FW2-TP
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply	Fully Supporting Fully Supporting Fully Supporting Insufficient Information Fully Supporting	N N N N			FW2-TP EWQ0233 FW2-TP FI TMDL Status	BI074 FW2-TP

NJ02030103020030-01	Greystone / Watnong Mt	n tribs	FRESHWATER LAKE	14.19 ACRES	HUC14: 02030103020030 As of	
			RIVER	15.64 MILES	the following monitoring sites an SWQS Classification AN0234A	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103020040-01	Whippany R(Lk Pocahor	tas to Wash	FRESHWATER LAKE	33.68 ACRES	013815006-WHI-1 As of 2010 contains the following monitoring sites and associated SW	
	Val Rd)		RIVER	13.72 MILES	Classification PRTMDL-WI1 FV FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				• Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics
Aquatic Life - Trout	Insufficient Information	Ν				Industrial     Point Source
Fish Consumption	Not Supporting	Ν	Mercury	2008	Completed	Discharge <ul> <li>Municipal</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				Point Source Discharges
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	<ul> <li>Urban Runoff/Storm</li> </ul>
Public Water Supply	Fully Supporting	Ν				Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103020050-01	Whippany R (Malapardis Pocahontas)	to Lk	FRESHWATER LAKE RIVER	16.36 ACRES 10.65 MILES	013815006-WHI-1 As of 2010 c following monitoring sites and a Classification 01381498 FW2-N FW2-NT 01381515 FW2-NT 6- AN0234 FW2-NT AN0235 FW2	ssociated SWQS T 01381500 WHI-1 FW2-NT

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban
Aquatic Life	Not Supporting	Ν	pH Phosphorus (Total)	2010 2006	Medium Priority Completed	Runoff/Storm Sewers
Aquatic Life - Trout	Not Supporting	Ν	pH Phosphorus (Total)	2010 2006	Medium Priority Completed	
Fish Consumption	Insufficient Information	N				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103020060-01	NJ02030103020060-01 Malapardis Brook		FRESHWATER LAKE	2.25 ACRES	HUC14: 02030103020060 As of 2010 contain	
			RIVER	9.27 MILES	the following monitoring sites an SWQS Classification AN0238B	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	N				
Primary Contact Recreation	Insufficient Information	N				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103020070-01	Black Brook (Hanover)		FRESHWATER LAKE	9.34 ACRES	HUC14: 02030103020070	
			RIVER	14.71 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Industrial Point Source

Aquatic Life Fish Consumption	Not Supporting Insufficient Information	N N	Phosphorus (Total)	2010	Completed	Discharge • Urban Runoff/Storm
Industrial Water Supply	Insufficient Information	Ν				Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103020080-01	Troy Brook (above Reyn	olds Ave)	FRESHWATER LAKE	357.82 ACRES	HUC14: 02030103020080 As of	
			RIVER	16.74 MILES	the following monitoring sites and associated SWQS Classification AN0236 FW2-NT NJW10 1 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Mercury	2008	Completed	Industrial     Point Source
Industrial Water Supply	Insufficient Information	Ν				Discharge
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103020090-01	Troy Brook (below Reyn	olds Ave)	FRESHWATER LAKE	22.51 ACRES	HUC14: 02030103020090 As of	
			RIVER	15.83 MILES	the following monitoring sites ar SWQS Classification AN0237 F FW2-NT NJW144 1 FW2-NT N FW2-NT SW1 FW2-NT TBB F	W2-NT FIBI069 JW144 OUTLET
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2010	Completed	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				

Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103020100-01	Whippany R (Rockaway R to Malapardis Bk)		RIVER	15.15 MILES	013818006-WHI-2 As of 2010 contains the following monitoring sites and associated SWQS Classification 01381800 FW2-NT 6-WHI-2 FW2 NT AN0238 FW2-NT PRTMDL-WI3 FW2-NT PVWC210 FW2-NT PVWC250 FW2-NT WI3 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Insufficient Information	N N N	Phosphorus (Total)	2006	Completed	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Industrial Point Source</li> </ul>
Industrial Water Supply	Fully Supporting	N				<ul><li>Discharge</li><li>Municipal</li></ul>
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2006	Completed	Point Source Discharges
Public Water Supply	Not Supporting	Ν	Lead	2007	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103030010-01	Russia Brook (above Mil	ton)	FRESHWATER LAKE RIVER	87.01 ACRES 16.68 MILES	HUC14: 02030103030010 As of 2010 contains the following monitoring sites and associated SWQS Classification NJW139 1 FW2-NT NJW139 OUTLET 1 FW2-NT NJW139 OUTLET 2 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Urban Runoff/Storm
Aquatic Life	Insufficient Information	Ν				Sewers
Aquatic Life - Trout	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
						I

Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103030020-01			FRESHWATER LAKE RIVER	69.16 ACRES 11.66 MILES	HUC14: 02030103030020 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0239 FW2-TM FIBI06 FW2-TM NJW226 1 FW2-NT NJW226 Center FW2-NT NJW226 OUTLET FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Urban
Aquatic Life	Fully Supporting	Ν				Runoff/Storm Sewers
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103030030-01	Rockaway R (above Long outlet)	gwood Lake	FRESHWATER LAKE RIVER	152.45 ACRES 12.15 MILES	0137968001379700 As of 2010 contains the following monitoring sites and associated SWQS Classification NJW04459-083-1 FW2-NT NJW04459-083-O FW2-NT NJW083 1 FW2-NT NJW083 center FW2-NT NJW083 OUTLET FW2-NT NJW258 1 FW2-NT NJW258 2 FW2- NT NJW258	
Use				~		G
	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Attainment Fully Supporting	Threatened N	Cause	Cycle First Listed	IMDL Status	• Atmospheric
			Cause Cause Unknown	2008	Medium Priority	• Atmospheric Depositon - Toxics
Agricultural Water Supply	Fully Supporting	Ν				<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban</li> </ul>
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Cause Unknown	2008	Medium Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> </ul>
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Not Supporting	N N N	Cause Unknown	2008	Medium Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>

AU ID	AU Name		Water Type	Size	Location Description		
NJ02030103030040-01	Rockaway R (Stephens E Longwood Lk)	sk to	FRESHWATER LAKE	2.46 ACRES	0137970001379680 As of 2010 following monitoring sites and a		
			RIVER	21.59 MILES	Classification 01379680 FW2-N FW2-NT AN0240 FW2-NT AN BA147 FW2-NT		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture	
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	• Urban Runoff/Storm	
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2006	Completed	<ul><li>Sewers</li><li>Atmospheric</li></ul>	
Industrial Water Supply	Fully Supporting	Ν				Depositon - Toxics	
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed		
Public Water Supply	Fully Supporting	Ν					
AU ID	AU Name		Water Type	Size	Location Description	Location Description	
NJ02030103030050-01	Green Pond Brook (above Burnt		FRESHWATER LAKE	729.47 ACRES	HUC14: 02030103030050 As of the following monitoring sites a		
	Meadow Bk)		RIVER	8.89 MILES	SWQS Classification NJW0445 NJW04459-109-2 FW2-TM NJ FW2-TM NJW109 1 FW2-TM	the following monitoring sites and associated SWQS Classification NJW04459-109-1 FW2-TM NJW04459-109-2 FW2-TM NJW04459-109-3 FW2-TM NJW109 1 FW2-TM NJW109 2 FW2- TM NJW109 3 FW2-TM NJW109 center FW2- TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Insufficient Information	N				• Urban Runoff/Storm	
Aquatic Life	Insufficient Information	Ν				Sewers	
Aquatic Life - Trout	Insufficient Information	Ν					
Fish Consumption	Insufficient Information	Ν					
Industrial Water Supply	Insufficient Information	Ν					
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed		
Public Water Supply	Insufficient Information	Ν					
AU ID	AU Name		Water Type	Size	Location Description		

NJ02030103030060-01	Green Pond Brook (below Meadow Bk)	v Burnt	FRESHWATER LAKE RIVER	116.37 ACRES 13.07 MILES	HUC14: 02030103030060 As of 2010 contains the following monitoring sites and associated SWQS Classification 01379800 FW2-NT AN0242 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Urban
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103030070-01			FRESHWATER LAKE	23.25 ACRES	0137970001379680 As of 2010 following monitoring sites and a	
	Stephens Bk)		RIVER	20.09 MILES	Classification NJW062 1 FW2-1 OUTLET FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics
Aquatic Life - Trout	Insufficient Information	Ν				Industrial     Point Source
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2006	Completed	Discharge • Agriculture
Industrial Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Sewers
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103030080-01	Mill Brook (Morris Co)		FRESHWATER LAKE RIVER	4.96 ACRES 14.44 MILES	HUC14: 02030103030080 As of 2010 contains the following monitoring sites and associated SWQS Classification 01379870 FW2-TM AN0244 FW2-TM	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban
Aquatic Life	Fully Supporting	Ν				Runoff/Storm Sewers
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103030090-01	Rockaway R (BM 534 br	dg to 74d	FRESHWATER LAKE	12.36 ACRES	HUC14: 02030103030090 As of	
	33m 30s)		RIVER	11.61 MILES	the following monitoring sites at SWQS Classification 01379853 AN0243 FW2-NT FIBI080 FW2 FW2-NT NJW261 OUTLET FW	FW2-NT 2-NT NJW261 1
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2006	Completed	Industrial     Point Source
Industrial Water Supply	Insufficient Information	Ν				Discharge • Urban
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Runoff/Storm Sewers
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103030100-01	Hibernia Brook		FRESHWATER LAKE	40.25 ACRES	HUC14: 02030103030100 As of	
			RIVER	19.51 MILES	the following monitoring sites an SWQS Classification NJW182 1 NJW290 1 FW2-NT NJW290 2	FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Urban Runoff/Storm

Aquatic Life	Fully Supporting	Ν				Sewers
Aquatic Life - Trout	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	N				
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103030110-01	Beaver Brook (Morris County)		FRESHWATER LAKE	385.1 ACRES	0138010001380098 As of 2010	
			RIVER	28.69 MILES	following monitoring sites and a Classification 01380098 FW2-N	T 01380100
					FW2-NT AN0245 FW2-NT AN BA144 FW2-NT FIBI079 FW2- FW2-NT NJW198 1 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				• Agriculture
Aquatic Life	Not Supporting	N	рН	2006	Medium Priority	<ul> <li>Urban Runoff/Storm</li> </ul>
Aquatic Life - Trout	Not Supporting	N	рН	2006	Medium Priority	<ul><li>Sewers</li><li>Atmospheric</li></ul>
Fish Consumption	Not Supporting	N	Mercury in Fish Tissue	2006	Completed	Depositon - Toxics
Industrial Water Supply	Fully Supporting	N				<ul> <li>Industrial Point Source</li> </ul>
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2006	Completed	Discharge
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103030120-01	Den Brook		FRESHWATER LAKE	285.42 ACRES	HUC14: 02030103030120 As of	
			RIVER	15.71 MILES	the following monitoring sites an SWQS Classification 01380125 AN0247 FW2-NT NJW031 1 FW 2 FW2-NT NJW031 3 FW2-NT FW2-NT NJW031 OUTLET FW	FW2-NT W2-NT NJW031 NJW031 Center
					FW2-	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
NJ02030103030140-01	brdg)		FRESHWATER LAKE RIVER	137.25 ACRES 15.42 MILES	01380450013805006-SITE-11 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0248 FW2- NT FIBI083 FW2-NT NJW055 1 FW2-NT NJW055 2 FW2-NT NJW055 OUTLET FW2-NT	
AU ID	AU Name		Water Type	Size	Location Description	
Public Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Industrial Water Supply	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Oxygen, Dissolved	2010	Medium Priority	• Urban Runoff/Storm Sewers
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
	· · · ·		RIVER	31.15 MILES	the following monitoring sites and associated SWQS Classification 01380270 FW2-NT 01380320 FW2-NT AN0249 FW2-NT BA146 FW2-NT NJW160 1 FW2-NT NJW160 2 FW2- NT NJW264 1 FW2-NT NJW264 2 FW2-NT NJW	
NJ02030103030130-01	Stony Brook (Boonton)		FRESHWATER LAKE	207.68 ACRES	Location Description HUC14: 02030103030130 As of 2010 contains	
AU ID	AU Name	1	Water Type	Size	Location Description	
Primary Contact Recreation Public Water Supply	Insufficient Information Fully Supporting	N N				
Industrial Water Supply	Fully Supporting	N				
Fish Consumption	Insufficient Information	Ν				
Aquatic Life - Trout	Not Supporting	N	рН	2008	Medium Priority	
Aquatic Life	Not Supporting	Ν	рН	2008	Medium Priority	
Agricultural Water Supply	Insufficient Information	Ν				

Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Insufficient Information Not Supporting Not Supporting Insufficient Information Insufficient Information Not Supporting	N N N N	Cause Unknown Mercury in Fish Tissue Arsenic Tetrachloroethylene	2006 2006 2006 2006	Medium Priority Completed Low Priority Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Natural Sources</li> </ul>
AU ID	AU Name W		Water Type	Size	Location Description	
NJ02030103030150-01	Brook)		FRESHWATER LAKE RESERVOIR RIVER	11.48 ACRES 790 ACRES 12.78 MILES	01380500013804506-SITE-11 As of 2010 contains the following monitoring sites and associated SWQS Classification 01380450 FW2- NT 01380500 FW2-NT 6-SITE-11 FW2-NT AN0250 FW2-NT DSR 3R FW2-NT DSR 48L FW2-TM PRTMDL-R01 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply	Fully Supporting Fully Supporting Insufficient Information Not Supporting Fully Supporting	N N N	Chlordane DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2008 2008 2008 2008 2008 2006 2008	Low Priority Low Priority Low Priority Low Priority Completed Low Priority	<ul> <li>Source Unknown</li> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Natural Sources</li> </ul>
Primary Contact Recreation	Fully Supporting	N				
Public Water Supply	Not Supporting	Ν	Arsenic Tetrachloroethylene	2006 2006	Low Priority Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103030160-01	Montville tribs.		FRESHWATER LAKE	112.02 ACRES	HUC14: 02030103030160 As of the following monitoring sites an	

			RIVER	20.44 MILES	SWQS Classification 01381050 AN0252 FW2-NT AN0253 FW FW2-NT NJW133 1 FW2-NT N NT NJW133 OUTLET FW2-N FW2-NT	2-NT AN0254 IJW133 2 FW2-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Aquatic Life - Trout	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103030170-01	dam)		FRESHWATER LAKE RIVER	6.9 ACRES 24.38 MILES	013812006-ROC-1, 6-SITE-10 As of 2010 contains the following monitoring sites and associated SWQS Classification 01381200 FW2 NT 6-ROC-1, 6-SITE-10 FW2-NT AN0251 FW NT DROUGHT3 FW2-NT DSR 20R FW2-NT FIBI021 FW2-NT PRTMDL-RO2 FW2-NT PVW	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Fully Supporting Not Supporting Not Supporting Fully Supporting	N N N	Oxygen, Dissolved Mercury in Fish Tissue	2010 2006	Medium Priority Completed	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Municipal Point Source Discharges</li> <li>Agriculture</li> </ul>
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2006	Completed	• Urban Runoff/Storm
Public Water Supply	Not Supporting	N	Tetrachloroethylene	2008	Low Priority	Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103040010-01	Passaic R Upr (Pompton	R to Pine	FRESHWATER LAKE	3.33 ACRES	013820006-SITE-3 As of 2010	contains the

	Bk)		RIVER	48.26 MILES	following monitoring sites and a Classification 01381900 FW2-N FW2-NT 6-SITE-3 FW2-NT AN DSR 22R FW2-NT DSR 4R FW NT PA7 FW2-NT	T 01382000 0274A FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Completed	Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Chlordane DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2006 2006 2006 2006 2006 2006 2008	Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Source</li> <li>Unknown</li> <li>Agriculture</li> <li>Urban</li> <li>Runoff/Storm</li> <li>Sewers</li> <li>Natural</li> <li>Sources</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name			C.	Location Description	
	AU Name		Water Type	Size	Location Description	
NJ02030103050010-01	AU Name Pequannock R (above Stockholm/Vernon Rd)		Water Type FRESHWATER LAKE RIVER	2.24 ACRES 12.62 MILES	Location Description           HUC14: 02030103050010 As of the following monitoring sites an SWQS Classification PQ17 FW	nd associated
	Pequannock R (above	Threatened	FRESHWATER LAKE	2.24 ACRES	HUC14: 02030103050010 As of the following monitoring sites an	nd associated
NJ02030103050010-01	Pequannock R (above Stockholm/Vernon Rd)	<b>Threatened</b> N	FRESHWATER LAKE RIVER	2.24 ACRES 12.62 MILES	HUC14: 02030103050010 As of the following monitoring sites an SWQS Classification PQ17 FW	nd associated I-TP
NJ02030103050010-01 Use	Pequannock R (above Stockholm/Vernon Rd) Attainment		FRESHWATER LAKE RIVER	2.24 ACRES 12.62 MILES	HUC14: 02030103050010 As of the following monitoring sites an SWQS Classification PQ17 FW	nd associated I-TP
NJ02030103050010-01 Use Agricultural Water Supply	Pequannock R (above Stockholm/Vernon Rd) Attainment Insufficient Information	Ν	FRESHWATER LAKE RIVER Cause	2.24 ACRES 12.62 MILES Cycle First Listed	HUC14: 02030103050010 As of the following monitoring sites an SWQS Classification PQ17 FW TMDL Status	nd associated I-TP
NJ02030103050010-01 Use Agricultural Water Supply Aquatic Life	Pequannock R (above Stockholm/Vernon Rd) Attainment Insufficient Information Not Supporting	N N	FRESHWATER LAKE RIVER Cause Cause Unknown	2.24 ACRES 12.62 MILES Cycle First Listed 2008	HUC14: 02030103050010 As of the following monitoring sites an SWQS Classification PQ17 FW TMDL Status Medium Priority	nd associated I-TP
NJ02030103050010-01 Use Agricultural Water Supply Aquatic Life Aquatic Life - Trout	Pequannock R (above Stockholm/Vernon Rd) Attainment Insufficient Information Not Supporting Not Supporting	N N N	FRESHWATER LAKE RIVER Cause Cause Unknown	2.24 ACRES 12.62 MILES Cycle First Listed 2008	HUC14: 02030103050010 As of the following monitoring sites an SWQS Classification PQ17 FW TMDL Status Medium Priority	nd associated I-TP
NJ02030103050010-01 Use Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption	Pequannock R (above Stockholm/Vernon Rd) Attainment Insufficient Information Not Supporting Not Supporting Insufficient Information	N N N	FRESHWATER LAKE RIVER Cause Cause Unknown	2.24 ACRES 12.62 MILES Cycle First Listed 2008	HUC14: 02030103050010 As of the following monitoring sites an SWQS Classification PQ17 FW TMDL Status Medium Priority	nd associated I-TP
NJ02030103050010-01 Use Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply	Pequannock R (above Stockholm/Vernon Rd) Attainment Insufficient Information Not Supporting Not Supporting Insufficient Information Insufficient Information	N N N N	FRESHWATER LAKE RIVER Cause Cause Unknown	2.24 ACRES 12.62 MILES Cycle First Listed 2008	HUC14: 02030103050010 As of the following monitoring sites an SWQS Classification PQ17 FW TMDL Status Medium Priority	nd associated I-TP

NJ02030103050020-01	Pacock Brook		FRESHWATER LAKE	9.7 ACRES	HUC14: 02030103050020 As of 2010 contains	
			RESERVOIR	318 ACRES	the following monitoring sites an SWQS Classification DSR 11L	
			RIVER	12.99 MILES	FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status Source	
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics
Aquatic Life - Trout	Insufficient Information	Ν				
Fish Consumption	Not Supporting	Ν	Mercury	2008	Completed	
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103050030-01	Pequannock R (above Oa	kRidge Res	FRESHWATER LAKE	36.64 ACRES	HUC14: 02030103050030 As of 2010 contains the following monitoring sites and associated	
	outlet)		RESERVOIR	465 ACRES	SWQS Classification 01382170 FW2-TP AN025	
			RIVER	15.79 MILES	FW1-TP AN0259 FW2-TP DSR 60L FW2-TM EWQ0259 FW2-TP FIBI075 FW2-TP NJW021 1 FW2-NT NJW021 2 FW2-NT NJ	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	
Fish Consumption	Not Supporting	Ν	Mercury	2008	Completed	
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	

NJ02030103050040-01	Clinton Reservior/Mossn	nans Brook	FRESHWATER LAKE	315.16 ACRES	HUC14: 02030103050040 As o the following monitoring sites a	
			RESERVOIR	478 ACRES	SWQS Classification 01382280 FW2-TP DSR 12L FW2-TM	FW2-TP AN0260
			RIVER	20.01 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric Depositon -
Aquatic Life	Fully Supporting	Ν				Toxics
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Not Supporting	Ν	Mercury	2008	Completed	
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103050050-01	Pequannock R (Charlotte OakRidge)	burg to	FRESHWATER LAKE	19.96 ACRES	HUC14: 02030103050050 As of 2010 contains the following monitoring sites and associated SWQS Classification 01382310 FW2-TP AN0261 FW2-TP AN0262 FW2-TP FIBI010 FW2-TP Little	
	OakKidge)		RIVER	32.2 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	pH	2010	Medium Priority	
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103050060-01	Pequannock R(Macopin	gage to	FRESHWATER LAKE	14.13 ACRES	013825003-PEQ-1, 3-SITE-8PC	28 As of 2010

	Charl'brg)		RIVER	16.4 MILES	contains the following monitorir associated SWQS Classification TP 01382450 FW2-TP 0138250 PEQ-1, 3-SITE-8 FW2-TP AN	01382410 FW2-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial Point Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	Discharge
Aquatic Life - Trout	Not Supporting	Ν	Oxygen, Dissolved Temperature, water	2006 2006	Medium Priority Medium Priority	Package Plant or Other Permitted Small Flows
Fish Consumption	Not Supporting	Ν	Mercury	2008	Completed	<ul><li>Discharges</li><li>Atmospheric</li></ul>
Industrial Water Supply	Fully Supporting	Ν				Depositon - Toxics
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Urban Runoff/Storm
Public Water Supply	Fully Supporting	Ν				Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103050070-01	Stone House Brook		FRESHWATER LAKE RIVER	149.72 ACRES 13.03 MILES	HUC14: 02030103050070 As of 2010 contains the following monitoring sites and associated SWQS Classification PQ12 FW2-TP PQ26 FW2- TP Pqkakebk FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	N				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103050080-01	Pequannock R (below Ma	acopin gage)	FRESHWATER LAKE	279.69 ACRES	01382800PQ11 As of 2010 cont monitoring sites and associated s	

			RIVER	42.65 MILES	Classification 01382800 FW2-TP AN0265 F TP FIBI077 FW2-TP NJW04459-085-1 FW2 NJW04459-085-0 FW2-TP NJW085 1 FW2 NJW085 center FW2-NT NJW195 1 FW2	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial Point Source
Aquatic Life	Not Supporting	Ν	Temperature, water	2006	Completed	Discharge
Aquatic Life - Trout	Not Supporting	Ν	Oxygen, Dissolved Temperature, water	2008 2006	Medium Priority Completed	Municipal Point Source Discharges
Fish Consumption	Not Supporting	Ν	Chlordane in Fish Tissue DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2008 2006 2006 2006 2006 2006 2008	Low Priority Low Priority Low Priority Low Priority Completed Low Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Source Unknown</li> <li>Atmospheric Depositon - Toxics</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				Package Plant     or Other
Primary Contact Recreation	Fully Supporting	Ν				Permitted Small Flows
Public Water Supply	Fully Supporting	Ν				Discharges • Agriculture
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103070010-01	Belcher Creek (above Pir	necliff Lake)	FRESHWATER LAKE	18.89 ACRES	HUC14: 02030103070010	
			RIVER	15.46 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103070020-01	Belcher Creek (Pinecliff below)	Lake &	FRESHWATER LAKE RIVER	199.97 ACRES 19.28 MILES	HUC14: 02030103070020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01382960 FW2-TP AN0255C FW2-NT AN0255D FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Aquatic Life - Trout	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103070030-01	Wanaque R/Greenwood Lk(aboveMonks gage)		FRESHWATER LAKE RESERVOIR RIVER	878.22 ACRES 522 ACRES 24.81 MILES	HUC14: 02030103070030 As of the following monitoring sites ar SWQS Classification 01383505 AN0255 FW2-TM DSR 13L FW FW2-NT DSR 56L FW2-TM NJ TM NJW049 2 FW2-TM NJW0 NJW	nd associated FW2-TM /2-TM DSR 55L W049 1 FW2-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Not Supporting	Ν	Mercury	2008	Completed	
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				

AU ID	AU Name		Water Type	Size	Location Description		
NJ02030103070040-01	West Brook/Burnt Meade	ow Brook	FRESHWATER LAKE RIVER	116.98 ACRES 34.2 MILES	HUC14: 02030103070040 As the following monitoring sites SWQS Classification 0138600 1 FW2-NT NJW076 OUTLET FW2-TP WB2 FW2-TP WB3 FW2-TP WB5	and associated 00 FW2-TP NJW076 1 FW2-TP WB1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully SupportingFully SupportingNot SupportingInsufficient InformationFully SupportingInsufficient InformationFully SupportingFully Supporting	N N N N N	Oxygen, Dissolved Temperature, water	2008 2006	Medium Priority Medium Priority Medium Priority • Upstream Impoundmen (e.g., PI-566 NRCS Structures)		
AU ID	AU Name		Water Type	Size	Location Description	Location Description	
NJ02030103070050-01	Wanaque Reservior (belo gage)	ow Monks	FRESHWATER LAKE RESERVOIR RIVER	263.29 ACRES 2352 ACRES 17.36 MILES	HUC14: 02030103070050 As the following monitoring sites SWQS Classification DSR 5L 1 FW2-NT NJW137 OUTLET 1 FW2-TM NJW189 2 FW2-T	and associated FW2-TM NJW137 FFW2-TM NJW189	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption	Fully Supporting Not Supporting Not Supporting Not Supporting	N N N	Oxygen, Dissolved Temperature, water Oxygen, Dissolved Temperature, water Mercury	2006 2006 2006 2006 2008	Medium Priority Medium Priority Medium Priority Medium Priority Completed	<ul> <li>Package Plant or Other</li> <li>Permitted Small</li> <li>Flows</li> <li>Discharges</li> <li>Upstream</li> <li>Impoundments</li> <li>(e.g., PI-566</li> <li>NRCS</li> </ul>	
Industrial Water Supply	Fully Supporting	N	Escherichia coli	2006	Medium Priority	<ul><li>Structures)</li><li>Transfer of Water from an</li></ul>	

Primary Contact Recreation Public Water Supply	Not Supporting Fully Supporting	N N				Outside Watershed • Agriculture • Urban Runoff/Storm Sewers • Atmospheric Depositon - Toxics
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103070060-01			FRESHWATER LAKE RIVER	50.93 ACRES 17.11 MILES	HUC14: 02030103070060 As 0f 2010 contains the following monitoring sites and associated SWQS Classification AN0256A FW2-TP FIBI011a FW2-NT NJW265 1 FW2-NT NJW265 2 FW2-NT WQMDBK FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown		Pollution	
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103070070-01	Wanaque R/Posts Bk (below reservior)		FRESHWATER LAKE RIVER	296.78 ACRES 28.12 MILES	0138704101387014 As of 2010 contains the following monitoring sites and associated SWQS Classification 01387000 FW2-TP 01387010 FW2- TP 01387014 FW2-TP 01387041 FW2-TM AN0256 FW2-TP AN0257 FW2-TP DROUGHT1 FW2-TP FIBI096 FW2-TM NJW01	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Cause Unknown	2008	Medium Priority	• Urban Runoff/Storm Sewers

NJ02030103100010-01	Ramapo R (above 74d 11m 00s)		FRESHWATER LAKE RIVER	92.15 ACRES 13.37 MILES	013875003-RAM-1, 3-SITE-9 As of 2010 contains the following monitoring sites and associated SWQS Classification 01387500 FW2- NT 3-RAM-1, 3-SITE-9 FW2-NT AN0266 FW2- NT BA124 FW2-NT BA127 FW2-NT FIBI052 FW2-NT PRTMDL-RA1 FW2-NT	
AU ID	AU Name		Water Type	Size	Location Description	
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Not Supporting Fully Supporting Not Supporting Fully Supporting Fully Supporting	N N N N N	Oxygen, Dissolved Temperature, water Oxygen, Dissolved Temperature, water Mercury Escherichia coli	2010 2010 2010 2008 2010	Medium Priority Medium Priority Medium Priority Completed Medium Priority	<ul> <li>Package Plant or Other</li> <li>Permitted Small</li> <li>Flows</li> <li>Discharges</li> <li>Upstream Impoundments</li> <li>(e.g., Pl-566</li> <li>NRCS</li> <li>Structures)</li> <li>Transfer of</li> <li>Water from an</li> <li>Outside</li> <li>Watershed</li> <li>Agriculture</li> <li>Urban</li> <li>Runoff/Storm</li> <li>Sewers</li> <li>Atmospheric</li> <li>Depositon - Toxics</li> </ul>
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
NJ02030103070080-01	Ringwood Creek		FRESHWATER LAKE RIVER	18.1 ACRES 7.62 MILES	Ringwood Creek As of 2010 cor following monitoring sites and a Classification 01384495 FW2-T	ssociated SWQS
AU ID	AU Name		Water Type	Size	Location Description	
Primary Contact Recreation Public Water Supply	Not Supporting Fully Supporting	N N	Fecal Coliform	2006	Completed	
Fish Consumption Industrial Water Supply	Insufficient Information Fully Supporting	N N				
Aquatic Life - Trout	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial Point Source
Aquatic Life	Not Supporting	N	Oxygen, Dissolved Phosphorus (Total)	2010 2008	Medium Priority Completed	<ul><li>Discharge</li><li>Urban</li><li>Runoff/Storm</li></ul>
Aquatic Life - Trout	Not Supporting	Ν	Oxygen, Dissolved Phosphorus (Total)	2010 2008	Medium Priority Completed	Sewers
Fish Consumption	Insufficient Information	N				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli Fecal Coliform	2006 2006	Completed Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103100020-01	Masonicus Brook		FRESHWATER LAKE	6.57 ACRES	HUC14: 02030103100020 As of 2010 contains the following monitoring sites and associated	
			RIVER	8.81 MILES	SWQS Classification BA126 FW	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Urban Runoff/Storm
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Completed	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103100030-01	Ramapo R (above Fyke E 00s)	3k to 74d 11m	FRESHWATER LAKE	62.75 ACRES	HUC14: 02030103100030 As of the following monitoring sites ar	
	003		RIVER	22.31 MILES	the following monitoring sites and associated SWQS Classification BA128 FW2-NT NJW174 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply	Insufficient Information	Ν				• Urban Runoff/Storm
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Completed	Sewers
Aquatic Life - Trout	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103100040-01 Ramapo R (Bear Swamp Bk thru Fyke		FRESHWATER LAKE	55.51 ACRES	HUC14: 02030103100040 As of		
	Bk)		RIVER	10.11 MILES	the following monitoring sites and associated SWQS Classification Newton D1 FW2-NT NJW240 1 FW2-NT NJW240 DIatom FW2-NT NJW240 OUTLET FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	N				• Urban
Aquatic Life	Not Supporting	Ν	pH Phosphorus (Total)	2010 2006	Medium Priority Completed	Runoff/Storm Sewers
Aquatic Life - Trout	Insufficient Information	N				
Fish Consumption	Insufficient Information	N				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103100050-01	Ramapo R (Crystal Lk br	to	FRESHWATER LAKE	16.75 ACRES	HUC14: 02030103100050 As of	
	BearSwamp Bk)		RIVER	21.42 MILES	the following monitoring sites an SWQS Classification FIBI006 F	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm

				1		
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Completed	Sewers
Aquatic Life - Trout	Not Supporting	Ν	Phosphorus (Total)	2006	Completed	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103100060-01	Crystal Lake/Pond Brook		FRESHWATER LAKE	193.4 ACRES	HUC14: 02030103100060 As of	
			RIVER	20.7 MILES	the following monitoring sites and associated SWQS Classification NJW001 1 FW2-NT NJW001 2 FW2-NT NJW001 Center FW2-NT NJW001 OUTLET FW2-NT NJW159 1 FW2-N	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Industrial
Aquatic Life	Not Supporting	Ν	pH Phosphorus (Total)	2010 2006	Medium Priority Completed	Point Source Discharge • Package Plant or Other
Aquatic Life - Trout	Insufficient Information	Ν				Permitted Small Flows
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Low Priority	Discharges • Urban
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	Atmospheric Depositon -
Public Water Supply	Fully Supporting	Ν				Toxics
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103100070-01	Ramapo R (below Crystal Lake bridge)		FRESHWATER LAKE RIVER	263.29 ACRES 25.71 MILES	0138810001388000 As of 2010 contains the following monitoring sites and associated SWQS Classification 01387811 FW2-NT 01388000 FW2-NT 01388100 FW2-NT AN0267 FW2-NT DROUGHT2 FW2-NT DROUGHT5 FW2-NT DSR 15R FW2-NT DSR 16L FW2-NT NJW159 OUT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply	Fully Supporting Not Supporting Not Supporting Not Supporting Fully Supporting	N N N	Oxygen, Dissolved pH Oxygen, Dissolved pH Chlordane DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2006 2006 2006 2008 2008 2008 2008 2008	Medium Priority Medium Priority Medium Priority Low Priority Low Priority Low Priority Low Priority Medium Priority Low Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Municipal Point Source Discharges</li> <li>Package Plant or Other Permitted Small Flows Discharges</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Source Unknown</li> </ul>
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103110010-01	Lincoln Park tribs (Pompton River)		FRESHWATER LAKE RIVER	24.96 ACRES 28.2 MILES	HUC14: 02030103110010 As of 2010 contains the following monitoring sites and associated SWQS Classification 01388720 FW2-NT AN0269 FW2-NT BA171 FW2-NT BA172 FW2- NT BA173A FW2-NT BA174 FW2-NT BA175 FW2-NT DSR 14R F	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Insufficient Information	N N N	Cause Unknown	2008	Medium Priority	• Urban Runoff/Storm Sewers
Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Fully Supporting	N N	Escherichia coli Fecal Coliform	2006 2006	Completed Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103110020-01	Pompton River		FRESHWATER LAKE	306.01 ACRES	Location Description 01388600013885003-SITE-7 As of 2010 contains	

			RIVER	23.82 MILES	the following monitoring sites a SWQS Classification 01388500 01388600 FW2-NT 01388850 F FW2-NT 3-SITE-7 FW2-NT AI AN0270 FW2-NT PO1	FW2-NT FW2-NT 01388910
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial
Aquatic Life	Not Supporting	Ν	Chromium, hexavalent Phosphorus (Total)	2008 2006	Low Priority Completed	Point Source Discharge • Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	Chlordane in Fish Tissue DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2008 2006 2006 2006 2006 2006 2008	Low Priority Low Priority Low Priority Low Priority Completed Low Priority	Sewers • Source Unknown • Atmospheric Depositon - Toxics • Municipal
Industrial Water Supply	Fully Supporting	Ν				Point Source Discharges
Primary Contact Recreation	Not Supporting	N	Escherichia coli	2008	Medium Priority	Package Plant
Public Water Supply	Not Supporting	Ν	Chromium (total) Lead	2008 2007	Low Priority Low Priority	or Other Permitted Small Flows Discharges • Agriculture
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103120010-01	Peckman River (above C	G Res trib)	FRESHWATER LAKE RIVER	12.72 ACRES 4.58 MILES	HUC14: 02030103120010 As o the following monitoring sites a SWQS Classification AN0275A	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Urban
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Insufficient Information	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103120020-01	Peckman River (below C	G Res trib)	RIVER	10.6 MILES	HUC14: 02030103120020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01389600 FW2-NT AN0275 FW2-NT PK1 FW2-NT PRTMDL-PK FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Industrial
Aquatic Life	Not Supporting	Ν	pH Phosphorus (Total)	2008 2008	Medium Priority Completed	Point Source Discharge • Municipal Point Source
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Discharges  Urban
Industrial Water Supply	Fully Supporting	Ν				Croan     Runoff/Storm     Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	• Atmospheric
Public Water Supply	Insufficient Information	Ν				Depositon - Toxics
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103120030-01	Preakness Brook / Naach	tpunkt Brook	FRESHWATER LAKE RIVER	45.8 ACRES 24.15 MILES	HUC14: 02030103120030 As the following monitoring sites SWQS Classification 0138908 AN0272 FW2-NT AN0273 F FW2-NT SBB FW2-NT	and associated 80 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Municipal
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	Point Source Discharges
Aquatic Life - Trout	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	<ul><li>Agriculture</li><li>Urban</li></ul>
Fish Consumption	Insufficient Information	Ν				Runoff/Storm Sewers
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	

NJ02030103120040-01	Molly Ann Brook		FRESHWATER LAKE RIVER	87.6 ACRES 16.45 MILES	HUC14: 02030103120040 As o the following monitoring sites a SWQS Classification 01389745 01389785 FW2-NT AN0276 FW	nd associated FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Supporting	Ν	Total Dissolved Solids	2008	Medium Priority	• Industrial
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	Point Source Discharge
Fish Consumption	Insufficient Information	Ν				• Urban Runoff/Storm
Industrial Water Supply	Fully Supporting	Ν				Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Not Supporting	Ν	Total Dissolved Solids	2008	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103120050-01	Goffle Brook		FRESHWATER LAKE	8.62 ACRES	HUC14: 02030103120050 As o	
			RIVER	14.1 MILES	the following monitoring sites a SWQS Classification 01389850 AN0277 FW2-NT AN0277A FV	FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Supporting	Ν	Total Dissolved Solids	2006	Medium Priority	Industrial
Aquatic Life	Not Supporting	Ν	Cause Unknown	2010	Medium Priority	Point Source Discharge
Fish Consumption	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Total Dissolved Solids	2006	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103120060-01	Deepavaal Brook		FRESHWATER LAKE	0.94 ACRES	HUC14: 02030103120060 As o	
			RIVER	13.6 MILES	the following monitoring sites a SWQS Classification 01389138 AN0271 FW2-NT FIBI044 FW3	FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply Aquatic Life Fish Consumption	Insufficient Information Not Supporting Insufficient Information	N N N	Cause Unknown	2006	Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103120070-01	Passaic R Lwr (Fair Law Goffle)	n Ave to	RIVER	8.74 MILES	0138989501389880013898704-SITE-5Passaic Passaic-9, Passaic-10 As of 2010 contains the following monitoring sites and associated SW0 Classification 01389860 FW2-NT AN0278 FW NT PVSC3 FW2-NT SW8 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation	Fully Supporting Not Supporting Not Supporting Fully Supporting Not Supporting	N N N N	Ammonia (Un-ionized) Phosphorus (Total) Chlordane DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls Fecal Coliform Arsenic	2008 2006 2006 2006 2006 2006 2006 2006	Medium Priority Completed Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority Completed Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> <li>Urban Runoff/Storm Sewers</li> <li>Combined Sewer Overflows</li> <li>Industrial Point Source Discharge</li> </ul>
Public Water Supply	Not Supporting	Ν	Cyanide	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103120080-01	Passaic R Lwr (Dundee Dam to F.L. Ave)		FRESHWATER LAKE RIVER	63.54 ACRES 4.96 MILES	0138989501389880013898704-SITE-5Passaic-8, Passaic-9, Passaic-10 As of 2010 contains the following monitoring sites and associated SWQS Classification 01389870 FW2-NT 01389880 FW2-NT DSR 10L FW2-NT DSR 21R FW2-NT	

					PA10 FW2-NT PA11	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Combined
Aquatic Life	Not Supporting	Ν	Ammonia (Un-ionized) Phosphorus (Total)	2008 2006	Medium Priority Completed	Sewer Overflows • Industrial
Fish Consumption	Not Supporting	Ν	Chlordane Cyanide DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006 2006	Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority	Point Source Discharge • Urban Runoff/Storm Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103120090-01	Passaic R Lwr (Saddle I Dam)	R to Dundee	FRESHWATER LAKE RIVER	3.04 ACRES 19.29 MILES	01389895013898800138 Passaic-9, Passaic-10 As following monitoring site Classification 01389855 NT AN02920 FW2-NT PRTMDL-PA11 FW2-NT	of 2010 contains the s and associated SWQS FW2-NT 4-SITE-5 FW2- Passaic-8 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Ammonia (Un-ionized) Cyanide Oxygen, Dissolved Phosphorus (Total)	2008 2006 2008 2006	Medium Priority Low Priority Completed Completed	Combined Sewer Overflows     Industrial Point Source Discharge
Fish Consumption	Not Supporting	Ν	Benzo(a)pyrene (PAHs) Chlordane in Fish Tissue DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Mercury in Fish Tissue	2008 2008 2006 2006 2006 2008 2006 2006	Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Source Unknown</li> <li>Agriculture</li> <li>Atmospheric Depositon -</li> </ul>

			PCB in Fish Tissue	2008	Low Priority	Toxics	
Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Not Supporting	N N N	Fecal Coliform Arsenic Benzo(a)pyrene (PAHs) Heptachlor epoxide	2008 2006 2008 2008	Completed Low Priority Low Priority Low Priority		
AU ID	AU Name		Water Type	Size	Location Description		
NJ02030103120100-01	R)		FRESHWATER LAKE RIVER	8.32 ACRES 6.71 MILES	01389630013895004-PAS-3, 4 As of 2010 contains the followi and associated SWQS Classific FW2-NT 01389005 FW2-NT 0 01389130 FW2-NT 01389400 4-SITE-4 FW2-NT PA8	ng monitoring sites ation 01389000 1389110 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Fully Supporting	Ν					
Aquatic Life Fish Consumption	Not Supporting Not Supporting	N	Ammonia (Un-ionized) Chromium (total) Cyanide Oxygen, Dissolved Chlordane in Fish Tissue DDD	2008 2007 2006 2008 2008 2008	Medium Priority Low Priority Low Priority Completed Low Priority Low Priority		
			DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2006 2006 2006 2008	Low Priority Low Priority Low Priority Low Priority		
Industrial Water Supply	Fully Supporting	Ν					
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Completed		
Public Water Supply	Not Supporting	Ν	Arsenic Cyanide Thallium	2006 2006 2006	Low Priority Low Priority Low Priority		
AU ID	AU Name		Water Type	Size	Location Description		
NJ02030103120110-01	Passaic R Lwr (Goeffle I	3k to Pump	FRESHWATER LAKE	34.63 ACRES	01389630013895004-PAS-3, 4	01389630013895004-PAS-3, 4-SITE-6Passaic-11	

	stn)		RIVER	11.82 MILES	As of 2010 contains the following monitoring sites and associated SWQS Classification 01389500 FW2-NT 01389630 FW2-NT 01389800 FW2-NT 1 FW2-NT 4-PAS-3, 4-SITE-6 FW2-NT AN0274 FW2-NT PA	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Ammonia (Un-ionized) Chromium (total) Cyanide Oxygen, Dissolved Phosphorus (Total)	2010 2010 2010 2010 2010 2010	Medium Priority Low Priority Low Priority Completed / Medium Priority Completed	
Fish Consumption	Not Supporting	Ν	Chlordane DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2010 2010 2010 2010 2010 2010 2010	Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority	
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2010	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic Thallium	2010 2010	Low Priority Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103140010-01	Hohokus Bk (above Gody	win Ave)	FRESHWATER LAKE RIVER	62.03 ACRES 12.35 MILES	HUC14: 02030103140010 As of the following monitoring sites a SWQS Classification 01390600 01390610 FW2-NT AN0283 FW NT	nd associated FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Not Supporting Not Supporting Insufficient Information Fully Supporting	N N N	Total Dissolved Solids Phosphorus (Total)	2006 2008	Medium Priority Medium Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Package Plant</li> </ul>

Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	or Other
Public Water Supply	Not Supporting	Ν	Total Dissolved Solids	2006	Medium Priority	Permitted Small Flows
Secondary Contact Recreation	Insufficient Information	Ν				Discharges
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103140020-01	Godwin Ave)		FRESHWATER LAKE RIVER	28.51 ACRES 25 MILES	HUC14: 02030103140020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01390700 FW2-NT 01390800 FW2-NT 01390815 FW2-NT 0139090 FW2-NT AN0284 FW2-NT AN0285 FW2-NT AN0286 FW2-NT AN0286X FW2-NT AN02	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Supporting	Ν	Total Dissolved Solids	2008	Medium Priority	• Industrial Point Source
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Discharge
Fish Consumption	Insufficient Information	Ν				• Urban Runoff/Storm
Industrial Water Supply	Fully Supporting	Ν				Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Total Dissolved Solids	2008	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103140030-01	Hohokus Bk(below Penn	ington Ave)	RIVER	8.89 MILES	HUC14: 02030103140030 As of the following monitoring sites ar SWQS Classification 01390946 01391000 FW2-NT 01391050 F FW2-NT 01391100 FW2-NT 41 FW2-NT AN0288 FW2-NT HB0	nd associated FW2-NT W2-NT 01391070 0024074072000
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Urban Runoff/Storm
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved Phosphorus (Total)	2010 2010	Medium Priority Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				

Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Nitrates	2010	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103140040-01			FRESHWATER LAKE RIVER	18.85 ACRES 36.71 MILES	01390510013905000139051801390470 As of 2010 contains the following monitoring sites and associated SWQS Classification 01390400 FW2- TP 01390445 FW2-TP 01390450 FW2-TP 01390470 FW2-TM 01390500 FW2-NT AN0279 FW2-TP AN0280 FW2-TP AN0281 F	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply AU ID NJ02030103140050-01	<ul> <li>Fully Supporting</li> <li>Not Supporting</li> <li>Not Supporting</li> <li>Insufficient Information</li> <li>Fully Supporting</li> <li>Not Supporting</li> <li>Fully Supporting</li> <li>Saddle River (Rt 4 to Rt</li> </ul>	N N N N N N	Temperature, water Temperature, water Fecal Coliform Water Type FRESHWATER LAKE	2006 2006 2006 <b>Size</b> 0.9 ACRES	Medium Priority Medium Priority Completed Location Description 01390500013905180139051001 2010 contains the following more	itoring sites and
N		Thursday	RIVER	5.76 MILES	associated SWQS Classification 01391110 FW2- NT 01391200 FW2-NT 4-SAD-1, 4-SITE-13, 4- SITE-12 FW2-	
Use Agricultural Water Supply	Attainment Fully Supporting	Threatened N	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Not Supporting Insufficient Information	N N	Phosphorus (Total)	2006	Medium Priority	
Industrial Water Supply Primary Contact Recreation	Not Supporting Not Supporting	N N	Total Suspended Solids (TSS) Escherichia coli	2006 2006	Medium Priority Completed	

Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103140060-01	Saddle River (Lodi gage to Rt 4)		FRESHWATER LAKE RIVER	4.4 ACRES 15.58 MILES	01391500013912000139149001 4-SITE-13, 4-SITE-12Passaic-7 contains the following monitorin associated SWQS Classification NT 01391500 FW2-NT AN0290	As of 2010 ng sites and 01391490 FW2-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Not Supporting Not Supporting	N N	Total Dissolved Solids Ammonia (Un-ionized) Phosphorus (Total) Total Suspended Solids (TSS)	2006 2008 2006 2006	Medium Priority Medium Priority Medium Priority Medium Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Natural Sources</li> <li>Agriculture</li> </ul>
Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Insufficient Information Not Supporting Not Supporting	N N N	Total Suspended Solids (TSS) Escherichia coli Fecal Coliform Arsenic	2006 2006 2006 2006	Medium Priority Completed Completed Low Priority	• Urban Runoff/Storm Sewers
AU ID	AU Name		Nitrates Total Dissolved Solids Water Type	2008 2006 Size	Medium Priority Medium Priority Location Description	
NJ02030103140070-01	Saddle River (below Lod	i gage)	RIVER	5.54 MILES	01391550013915000139149001 4-SITE-13, 4-SITE-12Passaic-7 contains the following monitorin associated SWQS Classification NT 01391550 FW2-NT 4-SITE AN0291 FW2-NT Passaic-7 FW	As of 2010 ng sites and 01391540 FW2- 12 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Not Supporting Not Supporting	N N	Total Dissolved Solids Ammonia (Un-ionized) Phosphorus (Total) Total Suspended Solids (TSS) Dioxin (including 2,3,7,8-TCDD) Polychlorinated biphenyls	2006 2008 2006 2006 2006 2006	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Natural Sources</li> <li>Urban Runoff/Storm Sewers</li> </ul>

Fish Consumption	Not Supporting	Ν	Total Suspended Solids (TSS)	2006	Medium Priority	• Atmospheric Depositon - Toxics
Industrial Water Supply	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Primary Contact Recreation	Not Supporting	Ν	Arsenic Nitrates	2006 2008	Low Priority Medium Priority	
Public Water Supply	Not Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103140080-01	Ϋ́, Ε΄		FRESHWATER LAKE	4.24 ACRES	01390500013905180139051001	
	gage)		RIVER	3.45 MILES	2010 contains the following monitoring sites and associated SWQS Classification 01390510 FW2 NT 01390518 FW2-NT AN0282 FW2-NT FIBI090 FW2-NT SR001 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved Phosphorus (Total)	2010 2010	Medium Priority Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Not Supporting	Ν	Total Suspended Solids (TSS)	2010	Medium Priority	
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2010	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2010	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103150010-01	Third River		FRESHWATER LAKE	7.41 ACRES	HUC14: 02030103150010 As 0	
			RIVER	17.17 MILES	the following monitoring sites an SWQS Classification 01392210	FW2-NT
					013922101 FW2-NT 01392230 SE2 AN0292 FW2-NT AN0292A FW2-NT FIBI043 FW2-NT NJW147 1 FW2-NT NJW147 OUTLET FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2010	Medium Priority	Depositon - Toxics

Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Not Supporting Fully Supporting Insufficient Information Fully Supporting	N N N	Dioxin (including 2,3,7,8-TCDD) Polychlorinated biphenyls	2006 2006	Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Industrial Point Source Discharge</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103150020-01	Second River		FRESHWATER LAKE RIVER	1.31 ACRES 14.46 MILES	HUC14: 02030103150020 As of the following monitoring sites a SWQS Classification 01392518 01392520 SE2 AN0293 SE2 FI Passaic-5 FW2-NT	and associated 3 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Insufficient Information Fully Supporting Not Supporting Fully Supporting	N N N N	Ammonia (Un-ionized) pH Phosphorus (Total) Escherichia coli	2008 2006 2006 2006	Medium Priority Medium Priority Medium Priority Medium Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Urban Runoff/Storm Sewers</li> <li>Combined Sewer Overflows</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103150030-01	Passaic R Lwr (Second R R)	to Saddle	FRESHWATER LAKE RIVER	2.68 ACRES 11.84 MILES	HUC14: 02030103150030 As of the following monitoring sites a SWQS Classification NJ00-001 SE2 Passaic-6 SE2	and associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Insufficient Information Not Supporting Not Supporting	N N N	Ammonia (Un-ionized) Arsenic	2008 2006	Medium Priority Low Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Urban Runoff/Storm</li> </ul>

Industrial Water Supply	Fully Supporting	N	Benzo(a)pyrene (PAHs) Chlordane DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Heptachlor epoxide PCB in Fish Tissue	2008 2006 2006 2006 2008 2008 2008 2008	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	Sewers
Primary Contact Recreation	Not Supporting	Ν	Enterococcus	2008	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103150040-01	```´`´		FRESHWATER LAKE RIVER	25.58 ACRES 5.57 MILES	HUC14: 02030103150040 As of 2010 contains the following monitoring sites and associated SWQS Classification NJ00-0011 SE3 NJ02-0208 SE3 Passaic- 2 SE3 Passaic- 3 SE3	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Insufficient Information Not Supporting Not Supporting	N N N	Ammonia (Un-ionized) Arsenic Benzo(a)pyrene (PAHs) Chlordane DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Heptachlor epoxide Mercury in Fish Tissue PCB in Fish Tissue	2008 2006 2008 2006 2006 2006 2006 2008 2008	Medium Priority Low Priority Medium Priority	<ul> <li>Combined Sewer Overflows</li> <li>Industrial Point Source Discharge</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103150050-01	Passaic R Lwr (Nwk Bay to 4th St brdg)		RIVER	11.68 MILES	HUC14: 02030103150050 As of 2010 contains the following monitoring sites and associated SWQS Classification 13-Kearny SE3 NB205 SE3	

					P305 SE3 Passaic H1L SE3	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Secondary Contact Recreation	Not Supporting Not Supporting Fully Supporting	N N	Ammonia (Un-ionized) Oxygen, Dissolved Arsenic Benzo(a)pyrene (PAHs) Chlordane DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Heptachlor epoxide Mercury in Fish Tissue Polychlorinated biphenyls	2008 2006 2008 2006 2006 2006 2006 2008 2006 2008 2006 2008 2006 2006	Medium Priority Medium Priority Low Priority Medium Priority	<ul> <li>Combined Sewer</li> <li>Overflows</li> <li>Industrial Point Source</li> <li>Discharge</li> <li>Municipal Point Source</li> <li>Discharges</li> <li>Package Plant or Other</li> <li>Permitted Small Flows</li> <li>Discharges</li> <li>Urban Runoff/Storm</li> <li>Sewers</li> <li>Atmospheric</li> <li>Depositon - Toxics</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	• Source Unknown
NJ02030103170010-01	Pascack Brook (above W gage)	estwood	RIVER	20.13 MILES	HUC14: 02030103170010 As o the following monitoring sites a SWQS Classification 01377358	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Supporting	N	Total Dissolved Solids	2006	Medium Priority	• Industrial
Aquatic Life	Not Supporting	Ν	Cause Unknown	2010	Medium Priority	Point Source Discharge
Fish Consumption	Insufficient Information	Ν				<ul><li> Agriculture</li><li> Urban</li></ul>
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Completed	
Public Water Supply	Not Supporting	Ν	Total Dissolved Solids	2006	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	

NJ02030103170020-01	Pascack Brook (below Westwood gage)		FRESHWATER LAKE RIVER	33.67 ACRES 15.73 MILES	013775005-PAS-1 As of 2010 contains the following monitoring sites and associated SWQS Classification 01377499 FW2-NT 01377500 FW2-NT 5-PAS-1 FW2-NT AN0206 FW2-NT AN0207 FW2-NT FIBI059 FW2-NT FIBI060 FW2-NT MB001 FW2-NT M	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Supporting	Ν	Total Dissolved Solids	2006	Medium Priority	• Natural
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved pH Phosphorus (Total)	2010 2010 2006	Medium Priority Medium Priority Medium Priority	Sources • Agriculture • Urban Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103170030-01	gage)		FRESHWATER LAKE RIVER	10.47 ACRES 16.8 MILES	013770005-HAC-3 As of 2010 contains the following monitoring sites and associated SWQS Classification 01376970 FW2-NT 01377000 FW2-NT 5-HAC-2 FW2-NT 5-HAC-3 FW2-NT AN0205 FW2-NT DSR 47L FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Low Priority	<ul><li>Sewers</li><li>Atmospheric</li></ul>
Industrial Water Supply	Fully Supporting	Ν				Depositon - Toxics
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	<ul> <li>Natural Sources</li> </ul>
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103170040-01	Tenakill Brook		FRESHWATER LAKE	7.38 ACRES	013783875-TEN-2 As of 2010 c following monitoring sites and a	

			RIVER	12.97 MILES	Classification 01378350 FW2-N FW2-NT 01378387 FW2-NT 5- 5-TEN-2	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved pH Phosphorus (Total) Total Suspended Solids (TSS)	2010 2010 2010 2010	Medium Priority Medium Priority Completed Medium Priority	Sewers • Industrial Point Source Discharge
Aquatic Life - Trout	Not Supporting	N				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103170050-01	Dwars Kill		FRESHWATER LAKE	2.11 ACRES	HUC14: 02030103170050 As of the following monitoring sites an	
			RIVER	11.69 MILES	SWQS Classification 01378400 01378410 FW2-NT 5-DWA-1 F FW2-NT	FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life	Fully Supporting	Ν				Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Medium Priority	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103170060-01	Hackensack R (Oradell to gage)	k R (Oradell to OldTappan FRESHWATER LAKE 3.96 ACRES		3.96 ACRES	013770005-HAC-3 As of 2010 contains the following monitoring sites and associated SWQS	

			RESERVOIR RIVER	733 ACRES 17.61 MILES	Classification 01378450 FW2-N FW2-NT 5-DOR-1 FW2-NT AN DSR 46L FW2-NT Passaic-1L F 1U FW2-NT	0210 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Oxygen, Dissolved Phosphorus (Total)	2008 2006 2008	Medium Priority Medium Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Urban Runoff/Storm</li> </ul>
Fish Consumption Industrial Water Supply Primary Contact Recreation	Not Supporting Fully Supporting Not Supporting	N N N	Mercury in Fish Tissue Escherichia coli	2008	Low Priority Medium Priority	Sewers • Agriculture • Atmospheric Depositon - Toxics
Public Water Supply	Not Supporting	N	Arsenic	2006	Low Priority	10.1100
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103180010-01	Coles Brook / Van Saun Mill Brook		FRESHWATER LAKE RIVER	7.24 ACRES 13.53 MILES	HUC14: 02030103180010 As of 2010 contains the following monitoring sites and associated SWQS Classification 01378560 FW2-NT AN0211 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Not Supporting Not Supporting Insufficient Information Fully Supporting	N N N	Total Dissolved Solids Phosphorus (Total)	2008 2006	Medium Priority Completed	<ul> <li>Industrial Point Source Discharge</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Total Dissolved Solids	2008	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103180020-01	Hirshfeld Brook		FRESHWATER LAKE RIVER	3.7 ACRES 6.46 MILES	HUC14: 02030103180020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01378520 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

	T CC L L C L	N				
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103180030-01	Hackensack R (Ft Lee Rd to Oradell gage)		RIVER	11.37 MILES	HUC14: 02030103180030 As of 2010 contains the following monitoring sites and associated SWQS Classification 01378500 SE1 01378567 SE1 01-HR SE1 H161 SE1 H304 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation	Not Supporting Not Supporting	N N	Copper Turbidity Benzo(a)pyrene (PAHs) Chlordane DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Heptachlor epoxide Mercury in Fish Tissue PCB in Fish Tissue Enterococcus	2008 2008 2008 2008 2008 2008 2008 2008	Low Priority Medium Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Urban Runoff/Storm Sewers</li> <li>Combined Sewer Overflows</li> <li>Source Unknown</li> <li>Atmospheric Depositon - Toxics</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103180040-01	Overpeck Creek		FRESHWATER LAKE RIVER	241.6 ACRES 27.83 MILES	HUC14: 02030103180040 As of 2010 contains the following monitoring sites and associated SWQS Classification 01378583 FW2-NT 0137859950 FW2-NT 0137859960 FW2-NT 01378600 FW2-NT 0137860050 FW2-NT 01378602 FW2-NT 01378604 FW2-NT 01378600 FW2-NT 0	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply Aquatic Life	Not Supporting Not Supporting	N N	Total Dissolved Solids Ammonia (Un-ionized) pH	2006 2007 2006	Medium Priority Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Fish Consumption	Not Supporting	N	Chlordane DDD DDE DDT Dioxin (including 2,3,7,8-TCDD) Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	Combined Sewer Overflows
Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Not Supporting	N N N	Escherichia coli Cadmium Chloride Lead Total Dissolved Solids	2006 2007 2007 2007 2006	Medium Priority Low Priority Low Priority Low Priority Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103180050-01	Hackensack R (Bellmans Ck to Ft Lee Rd)		FRESHWATER LAKE RIVER	9.05 ACRES 25.5 MILES	HUC14: 02030103180050 As of the following monitoring sites a SWQS Classification 02-HR SI	and associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Insufficient Information Not Supporting	N N	Ammonia (Un-ionized) Oxygen, Dissolved Turbidity	2007 2006 2006	Medium Priority Medium Priority Medium Priority	<ul> <li>Combined Sewer</li> <li>Overflows</li> <li>Industrial Point Source Discharge</li> </ul>
Fish Consumption	Not Supporting Fully Supporting	Ν	Benzo(a)pyrene (PAHs) Chlordane DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Mercury in Fish Tissue Polychlorinated biphenyls	2007 2007 2007 2007 2007 2008 2006 2007 2006	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	<ul> <li>Municipal Point Source Discharges</li> <li>Urban Runoff/Storm Sewers</li> <li>Source Unknown</li> <li>Atmospheric Depositon - Toxics</li> </ul>
Industrial Water Supply		Ν				

Primary Contact Recreation	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103180060-01	Berrys Creek (above Pate	erson Ave)	RIVER	11.46 MILES	HUC14: 02030103180060	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Insufficient Information Not Supporting Not Supporting	N N	Ammonia (Un-ionized) Copper Lead Oxygen, Dissolved Turbidity Arsenic	2007 2006 2006 2008 2006 2006	Medium Priority Low Priority Low Priority Medium Priority Medium Priority Low Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Urban Runoff/Storm Sewers</li> <li>Source Unknown</li> <li>Atmospheric</li> </ul>
	Torouppoining		Benzo(a)pyrene (PAHs) Cadmium Chlordane DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Mercury in Fish Tissue PCB in Fish Tissue	2007 2008 2007 2007 2007 2007 2007 2006 2006 2006	Medium Priority Low Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	Depositon - Toxics
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103180070-01	Berrys Creek (below Pate	erson Ave)	RIVER	27.2 MILES	HUC14: 02030103180070 As o the following monitoring sites a SWQS Classification 08-BC SE	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Insufficient Information Not Supporting	N N	Ammonia (Un-ionized) Arsenic Cadmium Chromium, hexavalent Copper Lead	2007 2006 2007 2008 2006 2006	Medium Priority Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Urban Runoff/Storm Sewers</li> <li>Source Unknown</li> </ul>

Fish Consumption	Not Supporting	Ν	Oxygen, Dissolved Turbidity Benzo(a)pyrene (PAHs) Chlordane DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Mercury in Fish Tissue PCB in Fish Tissue	2008 2006 2007 2007 2007 2007 2007 2007 2007	Medium Priority Medium Priority	• Atmospheric Depositon - Toxics
Industrial Water Supply	Insufficient Information	Ν				
Secondary Contact Recreation	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030103180080-01	Hackensack R (Rt 3 to Bellmans Ck)		RIVER	35.24 MILES	HUC14: 02030103180080 As of 2010 contains the following monitoring sites and associated SWQS Classification 03-HR SE2 09-MC SE2 10- CKC SE2 11-CKC SE2 H303 SE2	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Insufficient Information Not Supporting Not Supporting	N N N	Ammonia (Un-ionized) Cadmium Oxygen, Dissolved Turbidity Benzo(a)pyrene (PAHs) Chlordane DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Heptachlor epoxide Mercury in Fish Tissue PCB in Fish Tissue	2007 2008 2006 2006 2007 2007 2007 2007 2007 2007	Medium Priority Low Priority Medium Priority	<ul> <li>Combined Sewer Overflows</li> <li>Industrial Point Source Discharge</li> <li>Municipal Point Source Discharges</li> <li>Package Plant or Other Permitted Small Flows Discharges</li> <li>Urban Runoff/Storm Sewers</li> <li>Source</li> </ul>
Industrial Water Supply Secondary Contact Recreation	Fully Supporting Insufficient Information	N N				<ul> <li>Source Unknown</li> <li>Atmospheric Depositon - Toxics</li> </ul>

AU ID	AU Name		Water Type	Size	Location Description		
NJ02030103180090-01	Hackensack R (Amtrak b 3)	ridge to Rt	FRESHWATER LAKE RIVER	58.66 ACRES 27.76 MILES	HUC14: 02030103180090 As o the following monitoring sites a SWQS Classification 04-HR SE 14-Kearny SE2 Location A SE2	nd associated E2 07-SMC SE2	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply Aquatic Life	Insufficient Information Not Supporting	N N	Ammonia (Un-ionized) Cadmium Oxygen, Dissolved	2007 2008 2006	Medium Priority Low Priority Medium Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Package Plant or Other Permitted Small</li> </ul>	
Fish Consumption	Not Supporting	Ν	Benzo(a)pyrene (PAHs) Chlordane DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Heptachlor epoxide PCB in Fish Tissue	2007 2007 2007 2007 2007 2007 2006 2007 2008	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	Fernited Sman Flows Discharges • Combined Sewer Overflows • Urban Runoff/Storm Sewers • Source Unknown	
Industrial Water Supply	Fully Supporting	Ν				Atmospheric Depositon -	
Secondary Contact Recreation	Fully Supporting	Ν				Toxics	
AU ID	AU Name		Water Type	Size	Location Description		
NJ02030103180100-01	Hackensack R (below Ar	ntrak bridge)	FRESHWATER LAKE RIVER	8.43 ACRES 18.64 MILES	the following monitoring sites a SWQS Classification 05-HR SE	HUC14: 02030103180100 As of 2010 contains the following monitoring sites and associated SWQS Classification 05-HR SE2 06-PHC SE2 H1 SE3 H2 SE2 NB225 SE3 NJ03-0209 SE3 Passaic B2L SE2 Passaic H1U SE3 Passa	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Insufficient Information	Ν				• Combined	
Aquatic Life	Not Supporting	Ν	Ammonia (Un-ionized) Cadmium Oxygen, Dissolved pH Turbidity	2007 2008 2006 2006 2006	Medium Priority Low Priority Medium Priority Medium Priority Medium Priority	Sewer Overflows • Industrial Point Source Discharge • Package Plant	
Fish Consumption	Not Supporting	Ν	Benzo(a)pyrene (PAHs)	2007	Medium Priority	or Other Permitted Small	

Industrial Water Supply Secondary Contact Recreation	Fully Supporting	N	Cadmium Chlordane DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Heptachlor epoxide Mercury in Fish Tissue PCB in Fish Tissue	2008 2007 2007 2007 2007 2007 2006 2007 2006 2008	Low Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	Flows Discharges • Urban Runoff/Storm Sewers • Source Unknown • Atmospheric Depositon - Toxics
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104010010-01	Newark Airport Peripheral Ditch		FRESHWATER LAKE	69.37 ACRES	HUC14: 02030104010010	
			RIVER	6.82 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Insufficient Information Not Supporting Not Supporting	N N N	Phosphorus (Total) Benzo(a)pyrene (PAHs) Chlordane DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Mercury in Fish Tissue Polychlorinated biphenyls	2008 2007 2007 2007 2007 2007 2007 2006 2007 2006	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	<ul> <li>Combined Sewer</li> <li>Overflows</li> <li>Industrial Point Source</li> <li>Discharge</li> <li>Urban</li> <li>Runoff/Storm</li> <li>Sewers</li> <li>Source</li> <li>Unknown</li> <li>Atmospheric</li> <li>Depositon - Toxics</li> </ul>
Industrial Water Supply	Insufficient Information	Ν				<ul> <li>Municipal</li> </ul>
Primary Contact Recreation	Insufficient Information	Ν				Point Source Discharges
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104010020-01	Kill Van Kull West		ESTUARY RIVER	0.65 SQUARE MILES 1.8 MILES	HUC14: 02030104010020 As of 2010 contains the following monitoring sites and associated SWQS Classification NB1 SE3 NB2 SE3 NB201 SE3 NB202 SE3 NB206 SE3 NB212 SE3 NB216 SE3 NB217 SE3 NB222	

## Appendix A

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Secondary Contact Recreation	Not Supporting Not Supporting Insufficient Information	N N N	Cause Unknown Benzo(a)pyrene (PAHs) Chlordane DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Heptachlor epoxide Hexachlorobenzene Mercury in Water Column PCB in Fish Tissue	2007 2007 2006 2007 2007 2007 2007 2006 2007 2008 2006 2007	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Completed Medium Priority	Municipal Point Source Discharges     Source Unknown     Atmospheric Depositon - Toxics     Combined Sewer Overflows     Industrial Point Source Discharge     Urban Runoff/Storm
						Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104010030-01	Upper NY Bay / Kill Van Kull (74d07m30s)		ESTUARY RIVER	6.47 SQUARE MILES 9.98 MILES	HUC14: 02030104010030 As of 2010 contains the following monitoring sites and associated SWQS Classification Location E SE2 NB207 SE3 NB218 SE3 NJ01-0010 SE2 NJ03-0207 SE2 UH019 SE2 UH022 SE2 UH208 SE2 UH219 SE2	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Secondary Contact Recreation	Not Supporting Not Supporting Insufficient Information	N N	Cause Unknown Benzo(a)pyrene (PAHs) Chlordane DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Heptachlor epoxide Hexachlorobenzene Mercury in Fish Tissue PCB in Fish Tissue	2007 2007 2007 2007 2007 2007 2007 2007	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Completed Medium Priority	<ul> <li>Municipal Point Source Discharges</li> <li>Package Plant or Other Permitted Small Flows Discharges</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Secondary Contact Recreation	insufficient information	11				
AU ID	AU Name		Water Type	Size	Location Description	

NJ02030104020010-01	Elizabeth River (above I-78)		RIVER	1.8 MILES	HUC14: 02030104020010 As o the following monitoring sites a SWQS Classification AN0203 H	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Urban
Aquatic Life	Insufficient Information	Ν				Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2007	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104020020-01	Elizabeth R (Elizabeth C I-78)		RIVER	13.5 MILES	013934507-ELI-2 As of 2010 contains the following monitoring sites and associated SWQS Classification 01393300 FW2-NT 01393345 FW2-NT 01393350 FW2-NT 01393440 FW2-NT 01393450 FW2-NT 7-ELI-1 FW2-NT 7-WBE-1 FW2-NT AN0202 FW2-NT AN0202X	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Not Supporting Not Supporting	N N	Total Dissolved Solids Copper Oxygen, Dissolved Phosphorus (Total)	2006 2007 2010 2006	Medium Priority Low Priority Medium Priority Medium Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Agriculture</li> <li>Urban</li> </ul>
Fish Consumption	Insufficient Information	N				Runoff/Storm Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Lead Total Dissolved Solids	2007 2006	Low Priority Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104020030-01	Elizabeth R (below Eliza BDY)	beth CORP	ESTUARY	0.04 SQUARE MILES	HUC14: 02030104020030 As o the following monitoring sites a	

			RIVER	5.98 MILES	SWQS Classification 7-ELI-2 F	W2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Supporting	N	Total Dissolved Solids	2010	Medium Priority	• Source
Aquatic Life	Not Supporting	Ν	Copper Oxygen, Dissolved Phosphorus (Total)	2010 2010 2010	Low Priority Medium Priority Medium Priority	Unknown • Atmospheric Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Benzo(a)pyrene (PAHs) Chlordane DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Heptachlor epoxide Hexachlorobenzene Mercury in Fish Tissue PCB in Fish Tissue	2008 2006 2008 2008 2008 2008 2008 2008	Medium Priority Medium Priority	<ul> <li>Combined Sewer</li> <li>Overflows</li> <li>Municipal Point Source</li> <li>Discharges</li> <li>Industrial</li> <li>Point Source</li> <li>Discharge</li> <li>Urban</li> <li>Runoff/Storm</li> <li>Sewers</li> </ul>
Industrial Water Supply	Insufficient Information	N				
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2010	Completed	
Public Water Supply	Not Supporting	N	Benzo(a)pyrene (PAHs) Lead Total Dissolved Solids	2008 2010 2010	Medium Priority Low Priority Medium Priority	
Secondary Contact Recreation	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104030010-01	Morses Creek / Piles Cree	ek	ESTUARY	0.3 SQUARE MILES	013936907-MOR-1 As of 2010	
			FRESHWATER LAKE	135.67 ACRES	following monitoring sites and a Classification 01393690 FW2-N	T 7-MOR-1
			RIVER	22.11 MILES	FW2-NT RAH 1 SE3	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Supporting	Ν	Total Dissolved Solids	2008	Medium Priority	• Industrial
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2010	Medium Priority	Point Source Discharge
Fish Consumption	Not Supporting	Ν	Benzo(a)pyrene (PAHs) Chlordane	2008 2006	Medium Priority Medium Priority	• Urban Runoff/Storm Sewers

Industrial Water Supply Public Water Supply Secondary Contact Recreation	Fully Supporting Not Supporting Not Supporting	N N	DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Heptachlor epoxide Hexachlorobenzene Mercury in Fish Tissue Polychlorinated biphenyls Heptachlor epoxide Hexachlorobenzene Polychlorinated biphenyls Total Dissolved Solids Fecal Coliform	2008 2008 2008 2008 2006 2008 2008 2008	Medium Priority Medium Priority	<ul> <li>Source Unknown</li> <li>Atmospheric Depositon - Toxics</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104050010-01	Rahway River WB		FRESHWATER LAKE RIVER	96.57 ACRES 12.11 MILES	HUC14: 02030104050010 As of 2010 contains the following monitoring sites and associated SWQS Classification 01393960 FW2-NT AN0192 FW2-NT NJW052 1 FW2-NT NJW052 OUTLET FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Not Supporting Not Supporting	N N	Chloride Total Dissolved Solids Phosphorus (Total)	2010 2006 2006	Low Priority Medium Priority Medium Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Source</li> </ul>
Fish Consumption	Insufficient Information	N				Unknown
Industrial Water Supply	Fully Supporting	N				
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Sulfates Total Dissolved Solids	2006 2006	Low Priority Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104050020-01	Rahway River EB		RIVER	8.66 MILES	HUC14: 02030104050020	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply Aquatic Life Fish Consumption	Not Supporting Insufficient Information Insufficient Information	N N N	Total Dissolved Solids	2008	Medium Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Total Dissolved Solids	2008	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104050030-01	Baltusrol trib (above Springfield Sta)		FRESHWATER LAKE	4.17 ACRES	HUC14: 02030104050030	
			RIVER	6.99 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Urban
Aquatic Life	Insufficient Information	Ν				Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104050040-01	Rahway R (Kenilworth E WB)	lvd to EB /	RIVER	12.28 MILES	HUC14: 02030104050040 As of 2010 contains the following monitoring sites and associated SWQS Classification 01394200 FW2-NT 01394500 FW2-NT AN0193 FW2-NT AN0194 FW2-NT FIBI020 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Supporting	Ν	Total Dissolved Solids	2008	Medium Priority	Industrial
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	Point Source Discharge
Fish Consumption	Insufficient Information	Ν				• Urban Runoff/Storm
Industrial Water Supply	Fully Supporting	Ν				<ul><li>Sewers</li><li>Agriculture</li></ul>

	T	1				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
			Total Dissolved Solids	2008	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104050050-01	Nomahegan Brook		FRESHWATER LAKE	21.98 ACRES	HUC14: 02030104050050 As o	
			RIVER	12.59 MILES	the following monitoring sites a SWQS Classification DSR 54L	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Urban
Aquatic Life	Insufficient Information	Ν				Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104050060-01	Rahway R(Robinsons Br	to	FRESHWATER LAKE	42.1 ACRES	013950007-RAH-1 As of 2010	
	KenilworthBlvd)		RIVER	18.34 MILES	following monitoring sites and a Classification 01394630 FW2-N	Т 01395000
					FW2-NT 7-RAH-1 FW2-NT AN FIBI019 FW2-NT NJW044 1 F	
					FW2-NT NJW044 OUTLET FV	V2-NT NJ
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Combined Sewer
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2010	Medium Priority	Overflows
			Phosphorus (Total) Total Suspended Solids (TSS)	2006 2006	Medium Priority Medium Priority	<ul> <li>Industrial Point Source</li> </ul>
Fish Consumption	Not Supporting	N	Mercury in Fish Tissue	2008	Medium Priority	Discharge • Agriculture
-			Total Suspended Solids (TSS)	2006	Medium Priority	• Urban Runoff/Storm
Industrial Water Supply	Not Supporting Not Supporting	N	Fecal Coliform	2006	Completed	Sewers
Primary Contact Recreation		Ν	Hacal Colitorm			• Atmospheric

Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	Depositon - Toxics • Natural Sources
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104050070-01	Robinsons Br Rahway R Ave)	(above Lake	RIVER	40.06 MILES	HUC14: 02030104050070 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0196 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2008	Medium Priority	Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104050080-01	Robinsons Br Rahway R (below Lake Ave)		FRESHWATER LAKE	86.84 ACRES	013960037-ROB-1 As of 2010 contains the following monitoring sites and associated SWQS Classification 01395200 FW2-NT 01395500 FW2-NT 01395700 FW2-NT 01396003 FW2-NT 7-ROB-1 FW2-NT AN0197 FW2-NT AN0198 FW2-NT AN0199 FW2-NT FIBI084	
			RIVER	13.03 MILES	FW2-NT 01395700 FW2-NT 01 7-ROB-1 FW2-NT AN0197 FW	396003 FW2-NT 2-NT AN0198
Use	Attainment	Threatened	RIVER Cause	13.03 MILES Cycle First Listed	FW2-NT 01395700 FW2-NT 01 7-ROB-1 FW2-NT AN0197 FW	396003 FW2-NT 2-NT AN0198
Use Agricultural Water Supply		<b>Threatened</b> N			FW2-NT 01395700 FW2-NT 01 7-ROB-1 FW2-NT AN0197 FW FW2-NT AN0199 FW2-NT FIB	396003 FW2-NT 2-NT AN0198 1084 Source • Combined
	Attainment				FW2-NT 01395700 FW2-NT 01 7-ROB-1 FW2-NT AN0197 FW FW2-NT AN0199 FW2-NT FIB	396003 FW2-NT 2-NT AN0198 1084 Source • Combined Sewer Overflows
Agricultural Water Supply	Attainment Fully Supporting	Ν	Cause	Cycle First Listed	FW2-NT 01395700 FW2-NT 01 7-ROB-1 FW2-NT AN0197 FW FW2-NT AN0199 FW2-NT FIB TMDL Status	396003 FW2-NT 2-NT AN0198 I084 Source • Combined Sewer Overflows • Agriculture • Urban
Agricultural Water Supply Aquatic Life	Attainment Fully Supporting Not Supporting	N N	Cause	Cycle First Listed	FW2-NT 01395700 FW2-NT 01 7-ROB-1 FW2-NT AN0197 FW FW2-NT AN0199 FW2-NT FIB TMDL Status	396003 FW2-NT 2-NT AN0198 I084 Source • Combined Sewer Overflows • Agriculture • Urban Runoff/Storm Sewers
Agricultural Water Supply Aquatic Life Fish Consumption	Attainment       Fully Supporting       Not Supporting       Insufficient Information	N N N	Cause	Cycle First Listed	FW2-NT 01395700 FW2-NT 01 7-ROB-1 FW2-NT AN0197 FW FW2-NT AN0199 FW2-NT FIB TMDL Status	396003 FW2-NT 2-NT AN0198 I084 Source • Combined Sewer Overflows • Agriculture • Urban Runoff/Storm
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Attainment         Fully Supporting         Not Supporting         Insufficient Information         Fully Supporting	N N N	<b>Cause</b> Phosphorus (Total)	Cycle First Listed	FW2-NT 01395700 FW2-NT 01 7-ROB-1 FW2-NT AN0197 FW FW2-NT AN0199 FW2-NT FIB TMDL Status Medium Priority	396003 FW2-NT 2-NT AN0198 I084 • Combined Sewer Overflows • Agriculture • Urban Runoff/Storm Sewers • Natural

NJ02030104050090-01	Rahway River SB		FRESHWATER LAKE RIVER	8.58 ACRES 20.35 MILES	013960307-SBR-1 As of 2010 of following monitoring sites and a Classification 01396030 FW2-N NT AN0200 FW2-NT AN0201 FW2-NT BA183 FW2-NT BA18 BA185 FW2-N	associated SWQS NT 7-SBR-1 FW2- FW2-NT BA182
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status Source	
Agricultural Water Supply	Not Supporting	Ν	Total Dissolved Solids	2006	Medium Priority	• Industrial
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	Point Source Discharge
Fish Consumption	Not Supporting	Ν	Dioxin (including 2,3,7,8-TCDD) Polychlorinated biphenyls	2006 2006	Medium Priority Medium Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Combined</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				Sewer Overflows
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Atmospheric Depositon -
Public Water Supply	Not Supporting	Ν	Total Dissolved Solids	2006	Medium Priority	Toxics
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104050100-01	Rahway River (below Ro Branch)	binsons	ESTUARY RIVER	0 SQUARE MILES 19.86 MILES	HUC14: 02030104050100 As of 2010 contains the following monitoring sites and associated SWQS Classification Passaic-19 SE3 Passaic-20L SE3 Passaic-20U SE3 RAH 2 SE3	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Source
Aquatic Life	Fully Supporting	Ν				<ul><li>Unknown</li><li>Atmospheric</li></ul>
Fish Consumption	Not Supporting	Ν	Benzo(a)pyrene (PAHs) Chlordane DDD DDE	2008 2008 2008 2008 2008	Medium Priority Medium Priority Medium Priority Medium Priority	Depositon - Toxics • Combined Sewer Overflows
			DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Mercury in Fish Tissue Polychlorinated biphenyls	2008 2008 2006 2010 2006	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	<ul> <li>Municipal Point Source Discharges</li> <li>Urban Runoff/Storm</li> </ul>
Industrial Water Supply	Insufficient Information	N	Dieldrin Dioxin (including 2,3,7,8-TCDD) Mercury in Fish Tissue	2008 2006 2010	Medium Priority Medium Priority Medium Priority	<ul> <li>Municipal Point Source Discharges</li> <li>Urban</li> </ul>

AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104050110-01	Woodbridge Creek		RIVER	26.46 MILES	HUC14: 02030104050110	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation	Insufficient Information Not Supporting Insufficient Information	N N N	Dioxin (including 2,3,7,8-TCDD) Polychlorinated biphenyls	2006 2006	Medium Priority Medium Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Industrial Point Source</li> </ul>
	4 Y Y N		NV / 70	c:		Discharge
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104050120-01	Arthur Kill waterfront (be Grasselli)	elow	ESTUARY RIVER	1.83 SQUARE MILES 4.53 MILES	HUC14: 02030104050120 As o the following monitoring sites a SWQS Classification CCMPM2 SE3 NB209 SE3 NB219 SE3 N 21 SE3	nd associated K0004 SE2 NB208
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Secondary Contact Recreation	Not Supporting Not Supporting Insufficient Information	N N N	Cause Unknown Benzo(a)pyrene (PAHs) Chlordane DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Heptachlor epoxide Hexachlorobenzene Mercury in Water Column PCB in Fish Tissue	2007 2008 2008 2008 2008 2008 2008 2008	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Completed Medium Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Municipal Point Source Discharges</li> <li>Urban Runoff/Storm Sewers</li> <li>Source Unknown</li> <li>Atmospheric Depositon - Toxics</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104060010-01	Cheesequake Creek / Wh	ale Creek	FRESHWATER LAKE RIVER	17.12 ACRES 42.16 MILES	HUC14: 02030104060010 As o the following monitoring sites a SWQS Classification R61 SE1	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply Aquatic Life Fish Consumption	Insufficient Information Fully Supporting Not Supporting	N N N	Chlordane DDD DDE DDT Mercury in Fish Tissue	2006 2006 2006 2006 2006	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Package Plant or Other</li> <li>Permitted Small Flows</li> <li>Discharges</li> </ul>	
Industrial Water Supply Primary Contact Recreation Shellfish Harvesting	Insufficient Information Insufficient Information Fully Supporting	N N N	Polychlorinated biphenyls	2006	Medium Priority	<ul> <li>Source Unknown</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Industrial Point Source Discharge</li> </ul>	
AU ID	AU Name		Water Type	Size	Location Description		
NJ02030104060020-01	Matawan Creek (above F	avine Drive)	FRESHWATER LAKE RIVER	76.82 ACRES 16.52 MILES	the following monitoring site SWQS Classification 66 FW2 NT MCHD-66 FW2-NT NJT	HUC14: 02030104060020 As of 2010 contains the following monitoring sites and associated SWQS Classification 66 FW2-NT AN0456 FW2- NT MCHD-66 FW2-NT NJT07 LEFBS1 FW2- NT NJW080 1 FW2-NT NJW080 2 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply Aquatic Life Fish Consumption	Insufficient Information Not Supporting Not Supporting	N N N	Copper Lead PCB in Fish Tissue Mercury in Fish Tissue PCB in Fish Tissue	2006 2006 2010 2010 2010	Low Priority Low Priority Low Priority / Pollution Completed Low Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Agriculture</li> <li>Atmospheric Depositon - Toxics</li> </ul>	
Industrial Water Supply Primary Contact Recreation	Fully Supporting Fully Supporting Not Supporting	N N	Arsenic Lead	2006 2006	Low Priority Low Priority		

AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104060030-01	Matawan Creek (below F	Ravine Drive)	FRESHWATER LAKE RIVER	18.11 ACRES 28.54 MILES	8R62 As of 2010 contains the f monitoring sites and associated Classification 01407012 FW2- FW2-NT 20 FW2-NT 51 SE1 ( AN0457 FW2-NT AN0458 FW	SWQS NT 01407026 55 FW2-NT 8 SE1
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Package Plant
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	or Other Permitted Small
Fish Consumption	Not Supporting	Ν	Chlordane DDD DDE DDT Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	Flows Discharges • Agriculture • Urban Runoff/Storm Sewers
Industrial Water Supply	Fully Supporting	Ν				• Atmospheric Depositon -
Primary Contact Recreation	Not Supporting	Ν	Enterococcus	2008	Medium Priority	Toxics <ul> <li>Source</li> </ul>
Public Water Supply	Fully Supporting	Ν				Unknown <ul> <li>Combined</li> </ul>
Shellfish Harvesting	Fully Supporting	Ν				Sewer Overflows • Industrial Point Source Discharge
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104060040-01	Chingarora Creek to Tho	rns Creek	FRESHWATER LAKE	57.33 ACRES	36R64 As of 2010 contains the	
			RIVER	25 MILES	monitoring sites and associated Classification 36 SE1 AN0459	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Chlordane DDD DDE DDT	2006 2006 2006 2006 2006	Medium Priority Medium Priority Medium Priority Medium Priority	<ul> <li>Municipal Point Source Discharges</li> <li>Source Unknown</li> </ul>

Industrial Water Supply Primary Contact Recreation Public Water Supply Shellfish Harvesting	Insufficient Information Not Supporting Insufficient Information Fully Supporting	N N N	Mercury in Fish Tissue Polychlorinated biphenyls Enterococcus	2006 2006 2008	Medium Priority Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Industrial Point Source Discharge</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104060050-01	Waackaack Creek		RIVER	21.73 MILES	35R65 As of 2010 contains the f monitoring sites and associated S Classification 01407065 FW2-N AN0460 FW2-NT CCMPMC000 EWQ0460 FW2-NT MB-PARK SE1	SWQS T 35 SE1 03 SE1
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Not Supporting	N N N	Oxygen, Dissolved Chlordane DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2006 2006 2006 2006 2006 2006 2006 2008	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban</li> <li>Runoff/Storm</li> <li>Sewers</li> <li>Atmospheric</li> <li>Depositon -</li> <li>Toxics</li> <li>Source</li> <li>Unknown</li> <li>Industrial</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				Point Source Discharge
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
Secondary Contact Recreation	Not Supporting	Ν	Enterococcus	2008	Completed / Medium Priority	
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104060060-01	Pews Creek to Shrewsbur	ry River	FRESHWATER LAKE RIVER	1.94 ACRES 29.01 MILES	HUC14: 02030104060060 As of the following monitoring sites ar SWQS Classification 01407090	d associated

					AN0461 FW2-NT BA3 FW2-NT BA4 FW	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved Phosphorus (Total)	2006 2010	Medium Priority Medium Priority	Depositon - Toxics • Source Unknown
Fish Consumption	Not Supporting	Ν	Chlordane DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Industrial Water Supply	Fully Supporting	N				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104070010-01	Hop Brook		FRESHWATER LAKE RIVER	4.55 ACRES 20.33 MILES	0140721053 As of 2010 contains the following monitoring sites and associated SWQS Classification 01407210 FW2-TM 53 FW2-TM AN0465 FW2-TM AN0466 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial
Aquatic Life	Not Supporting	Ν	Phosphorus (Total) Total Suspended Solids (TSS)	2006 2006	Medium Priority Medium Priority	Point Source Discharge • Package Plant or Other
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	Permitted Small Flows
Fish Consumption	Insufficient Information	Ν				Discharges
Industrial Water Supply	Not Supporting	Ν	Total Suspended Solids (TSS)	2006	Medium Priority	<ul> <li>Agriculture</li> <li>Urban</li> </ul>
Primary Contact Recreation	Not Supporting	N	Escherichia coli	2006	Completed	Runoff/Storm Sewers
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	• Upstream Impoundments (e.g., Pl-566

						NRCS Structures)
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104070020-01	Willow Brook		RIVER	28.62 MILES	HUC14: 02030104070020 As of the following monitoring sites at SWQS Classification 01407253 FW2-NT AN0467 FW2-NT AN	nd associated FW2-NT 52
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	рН	2008	Medium Priority	• Package Plant or Other Permitted Small
			Phosphorus (Total) Total Suspended Solids (TSS)	2006 2006	Medium Priority Medium Priority	Flows Discharges • Transfer of
Fish Consumption	Insufficient Information	N	Total Suspended Solids (TSS)	2006	Medium Priority	Water from an Outside Watershed
Industrial Water Supply	Not Supporting	Ν	Fecal Coliform	2008	Completed	• Agriculture
Primary Contact Recreation	Not Supporting	Ν		2008	Completed	<ul> <li>Urban Runoff/Storm</li> </ul>
Public Water Supply	Fully Supporting	Ν				Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104070030-01	Big Brook		RIVER	28.66 MILES	0140732021, 57 As of 2010 con following monitoring sites and a Classification 01407280 FW2-N FW2-NT 21 FW2-NT 57 FW2-1 NT AN0470 FW2-NT EWQ047	ssociated SWQS T 01407320 NT AN0469 FW2-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Package Plant or Other
Aquatic Life	Not Supporting	Ν	pH Phosphorus (Total)	2010 2006	Medium Priority Medium Priority	Permitted Small Flows Discharges
Fish Consumption	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	50 W015
Public Water Supply	Fully Supporting	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104070040-01	Yellow Brook (above Bucks Mill)		FRESHWATER LAKE RIVER	19.49 ACRES 16.36 MILES	0140736012-YEL-1 As of 2010 contains the following monitoring sites and associated SWQS Classification 01407360 FW2-NT 12-YEL-1 FW2-NT AN0471 FW2-NT BA6 FW2-NT BA7 FW2-NT BA8 FW2-NT Westons Mill Pond FW2 NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Fully Supporting Not Supporting Insufficient Information Fully Supporting	N N N	Cause Unknown	2008	Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104070050-01	Mine Brook (Monmouth	Co)	RIVER	12.69 MILES	HUC14: 02030104070050 As of 2010 contains the following monitoring sites and associated SWQS Classification 01407450 FW2-NT 58 FW2-NT AN0473 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104070060-01	Yellow Brook (below Bu	cks Mill)	RIVER	9.48 MILES	HUC14: 02030104070060 As of 2010 contains the following monitoring sites and associated SWQS Classification 72 FW2-NT AN0472 FW2-	

					NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Transfer of
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	Water from an Outside
Fish Consumption	Insufficient Information	Ν				Watershed <ul> <li>Agriculture</li> </ul>
Industrial Water Supply	Insufficient Information	Ν				• Urban Runoff/Storm
Primary Contact Recreation	Insufficient Information	Ν				Sewers
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104070070-01	5		FRESHWATER LAKE	20.81 ACRES	HUC14: 02030104070070 As of the following monitoring sites as	
	Bk		RIVER	11.62 MILES	the following monitoring sites and associated SWQS Classification 01407460 FW2-NT 01467460 FW2-NT 54 FW2-NT 55 FW2-NT 56 FW2-NT BA213 FW2-NT BA214 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total) Total Suspended Solids (TSS)	2006 2006	Medium Priority Medium Priority	• Urban Runoff/Storm Sewers
Fish Consumption	Not Supporting	Ν	Chlordane in Fish Tissue DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2010 2010 2010 2010 2010 2010	Low Priority Low Priority Low Priority Completed Low Priority	
Industrial Water Supply	Fully Supporting	N				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104070080-01	Pine Brook / Hockhockso	on Brook	FRESHWATER LAKE	0.63 ACRES	HUC14: 02030104070080 As of the following monitoring sites at	

			RIVER	25.86 MILES	SWQS Classification 01407520 FW2-TM 75 FW2-TM AN0475 AN0476 FW2-TM MB-34 FW2	FW2-TM
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				Agriculture
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	• Urban Runoff/Storm
Aquatic Life - Trout	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104070090-01	Nut Swamp Brook		FRESHWATER LAKE	90.9 ACRES	HUC14: 02030104070090 As of 2010 contains the following monitoring sites and associated	
			RIVER	14.45 MILES	SWQS Classification AN0464 F FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric Depositon -
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	• Agriculture
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Completed	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
Industrial Water Supply	Insufficient Information	Ν				Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104070100-01	Poricy Bk/Swimming R( SwimmingR Rd)	below	ESTUARY	0.16 SQUARE MILES	HUC14: 02030104070100 As of the following monitoring sites as	
	Swinning( (G)		FRESHWATER LAKE	24.42 ACRES	SWQS Classification 01407500	FW2-NT
			RIVER	10.98 MILES	100080061E SE1 1000E SE1 41 SE1 74 SE1 AN0463 FW2-NT AN0474 FW2-NT NJ00-005 SE1 R	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Urban
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	Runoff/Storm Sewers
Fish Consumption	Not Supporting	Ν	DDD DDE DDT Polychlorinated biphenyls	2006 2006 2006 2006	Low Priority Low Priority Low Priority Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> </ul>
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104070110-01	Navesink R (below Rt		ESTUARY	3.33 SQUARE MILES	HUC14: 02030104070110 As of	
	35)/LowerShrewsbury		FRESHWATER LAKE	39.1 ACRES	the following monitoring sites and associated SWQS Classification 01407538 FW2-NT 100080026B SE1 100080041B SE1 100640002	
			RIVER	26.97 MILES	100080026B SEI 100080041B S SEI 1006B SEI 1012B SEI 101 SEI 37	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved Turbidity	2006 2006	Medium Priority Medium Priority	Runoff/Storm Sewers
Fish Consumption	Not Supporting	Ν	DDD DDE DDT Polychlorinated biphenyls	2006 2006 2006 2006	Low Priority Low Priority Low Priority Low Priority	
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104070120-01	Navesink R mouth		ESTUARY	0.47 SQUARE MILES	river mouth As of 2010 contains the following monitoring sites and associated SWQS	

			RIVER	0.05 MILES	Classification 1000000160 SE1 1020 SE1 10 SE1 CCMPMC0050 SE1 CCMPMC0051 SE NJ01-0060 SE1 NJ03-0247 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved Turbidity	2006 2010	Medium Priority Medium Priority	Runoff/Storm Sewers • Atmospheric Depositon -
Fish Consumption	Not Supporting	Ν	DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2010 2010 2010 2010 2010 2006	Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Depositor - Toxics</li> <li>Source Unknown</li> <li>Agriculture</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Shellfish Harvesting	Not Supporting	Ν	Fecal Coliform Total Coliform	2006 2006	Completed Completed	
AU ID	AU Name		XX ( T	c.	<b>x</b> <i>i</i> , <b>b</b> , <i>i</i> ,	
AUID	AU Name		Water Type	Size	Location Description	
NJ02030104080010-01	Little Silver Creek / Tow Creek	n Neck	ESTUARY FRESHWATER LAKE	0.25 SQUARE MILES 2.6 ACRES	HUC14: 02030104080010 As of the following monitoring sites an SWQS Classification 1118A SE	nd associated
-	Little Silver Creek / Tow	n Neck	ESTUARY	0.25 SQUARE MILES	HUC14: 02030104080010 As of the following monitoring sites an	nd associated
-	Little Silver Creek / Tow	n Neck Threatened	ESTUARY FRESHWATER LAKE	0.25 SQUARE MILES 2.6 ACRES	HUC14: 02030104080010 As of the following monitoring sites an	nd associated
NJ02030104080010-01	Little Silver Creek / Tow Creek		ESTUARY FRESHWATER LAKE RIVER	0.25 SQUARE MILES 2.6 ACRES 7.4 MILES	HUC14: 02030104080010 As of the following monitoring sites an SWQS Classification 1118A SE	nd associated 1 Source • Atmospheric
NJ02030104080010-01 Use	Little Silver Creek / Tow Creek Attainment	Threatened	ESTUARY FRESHWATER LAKE RIVER	0.25 SQUARE MILES 2.6 ACRES 7.4 MILES	HUC14: 02030104080010 As of the following monitoring sites an SWQS Classification 1118A SE	Massociated Source • Atmospheric Depositon - Toxics
NJ02030104080010-01 Use Agricultural Water Supply	Little Silver Creek / Tow Creek Attainment Insufficient Information	<b>Threatened</b> N	ESTUARY FRESHWATER LAKE RIVER	0.25 SQUARE MILES 2.6 ACRES 7.4 MILES	HUC14: 02030104080010 As of the following monitoring sites an SWQS Classification 1118A SE	Ad associated Source • Atmospheric Depositon -
NJ02030104080010-01 Use Agricultural Water Supply Aquatic Life	Little Silver Creek / Tow Creek Attainment Insufficient Information Insufficient Information	<b>Threatened</b> N N	ESTUARY FRESHWATER LAKE RIVER Cause DDD DDE DDT Mercury in Fish Tissue	0.25 SQUARE MILES 2.6 ACRES 7.4 MILES Cycle First Listed 2006 2006 2006 2006	HUC14: 02030104080010 As of the following monitoring sites an SWQS Classification 1118A SE TMDL Status Low Priority Low Priority Low Priority Low Priority Low Priority	Ad associated Source • Atmospheric Depositon - Toxics • Source Unknown • Agriculture • Urban Runoff/Storm

Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104080020-01	Parkers Creek / Oceanpo	rt Creek	ESTUARY FRESHWATER LAKE RIVER	0.23 SQUARE MILES 15.63 ACRES 13.07 MILES	40R04 As of 2010 contains the following monitoring sites and associated SWQS Classification 32 FW2-NT 33 FW2-NT 40 SE1 MB-33 FW2-NT NJW222 1 FW2-NT NJW222 2 FW2-NT NJW222 Center FW2-NT NJW222 OUTLET FW2	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Not Supporting	N N N	Oxygen, Dissolved pH Phosphorus (Total) DDD DDE	2006 2006 2006 2006 2006	Medium Priority Medium Priority Medium Priority Low Priority Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
Industrial Water Supply Primary Contact Recreation	Fully Supporting Not Supporting	N N	DDT Mercury in Fish Tissue Polychlorinated biphenyls Escherichia coli	2006 2006 2006 2006	Low Priority Low Priority Low Priority Completed	Sewers • Industrial Point Source Discharge
Public Water Supply Shellfish Harvesting	Fully Supporting Not Supporting	N N	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104080030-01	Branchport Creek		ESTUARY FRESHWATER LAKE RIVER	0.35 SQUARE MILES 24.82 ACRES 6.9 MILES	45R05 As of 2010 contains the following monitoring sites and associated SWQS Classification 1135B SE1 45 SE1 46 SE1 47 SE1 48 SE1 62 SE1 R05 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Insufficient Information Not Supporting	N N	Oxygen, Dissolved	2006	Medium Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Urban</li> </ul>
Fish Consumption	Not Supporting	Ν	DDD	2006	Low Priority	Runoff/Storm

Industrial Water Supply Primary Contact Recreation Shellfish Harvesting	Insufficient Information Not Supporting Not Supporting	N N	DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls Enterococcus Escherichia coli Total Coliform	2006 2006 2006 2006 2008 2008 2008 2006	Low Priority Low Priority Low Priority Low Priority Completed Completed Completed	Sewers • Atmospheric Depositon - Toxics • Source Unknown • Agriculture
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104080040-01	River)		ESTUARY FRESHWATER LAKE RIVER	<ul><li>2.86 SQUARE MILES</li><li>3.04 ACRES</li><li>4.59 MILES</li></ul>	HUC14: 02030104080040 As of 2010 contains the following monitoring sites and associated SWQS Classification 100000032A SE1 100000043B SE1 10000050B SE1 100000068A SE1 1100A SE1 1104B SE1 1110A SE1 1111B SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Not Supporting Not Supporting	N N	Oxygen, Dissolved pH DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006 2006	Medium Priority Medium Priority Low Priority Low Priority Low Priority Low Priority Low Priority	Urban Runoff/Storm Sewers     Atmospheric Depositon - Toxics     Source Unknown     Agriculture
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	• Agriculture
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104080050-01	Long Branch direct Atlar	ntic drainage	FRESHWATER LAKE	1.16 ACRES	Long Branch	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Insufficient Information Not Supporting Not Supporting	N N N	Oxygen, Dissolved DDD DDE	2006 2010 2010	Medium Priority Low Priority Low Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Urban Runoff/Storm Sewers</li> </ul>

Industrial Water Supply Primary Contact Recreation	Insufficient Information Not Supporting	N N	DDT Mercury in Fish Tissue Polychlorinated biphenyls Enterococcus Escherichia coli Total Coliform	2010 2010 2010 2008 2008 2008	Low Priority Low Priority Low Priority Completed Completed Completed	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> <li>Agriculture</li> </ul>
Shellfish Harvesting	Not Supporting	N		~		
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104090010-01	Whale Pond Brook		FRESHWATER LAKE RIVER	26.43 ACRES 5.67 MILES	0140761731 As of 2010 contains the followi monitoring sites and associated SWQS Classification 01407617 FW2-NT 31 FW2-N SE1 AN0477 FW2-NT MB-31 FW2-NT NJ 1 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104090020-01	Poplar Brook		RIVER	5.47 MILES	0140763059 As of 2010 contain monitoring sites and associated S Classification 01407630 FW2-N AN0478 FW2-NT	SWQS
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers

Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104090030-01	)1 Deal Lake		FRESHWATER LAKE	159.26 ACRES	HUC14: 02030104090030 As of the following monitoring sites at	
			RIVER	9.21 MILES	the following monitoring sites and associated SWQS Classification 10 FW2-NT BA1 FW2-NT BA2 FW2-NT CCMPMC1022 SC MB-10 FW2 NT NJT07 DEABS1 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	Chlordane in Fish Tissue DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2010 2010 2010 2010 2010 2010 2010	Low Priority Low Priority Low Priority Low Priority Completed Low Priority	Sewers
Industrial Water Supply	Not Supporting	Ν	pH	2006	Medium Priority	
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104090040-01	Shark River (above Rem gage)	en Mill	RIVER	26.11 MILES	0140775001407705 As of 2010 following monitoring sites and a Classification 01407670 FW2-N FW2-TM AN0481 FW2-NT B F TM D FW2	ssociated SWQS T 30 FW2-NT 70
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout	Fully Supporting Not Supporting Not Supporting	N N N	Phosphorus (Total)	2008	Medium Priority	• Package Plant or Other Permitted Small Flows Discharges

Fish Consumption	Not Supporting	Ν	Chlordane DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2006 2006 2006 2006 2006 2008	Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Source Unknown</li> <li>Atmospheric</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				Depositon - Toxics
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104090050-01	Jumping Brook (Ocean Co)		RIVER	14.14 MILES	HUC14: 02030104090050 As of the following monitoring sites at SWQS Classification 01407720 01407760 FW2-NT 71 FW2-NT NT AN0480 FW2-NT	nd associated FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104090060-01	Shark River (below Rem gage)	sen Mill	ESTUARY FRESHWATER LAKE RIVER	<ol> <li>1.23 SQUARE MILES</li> <li>4.13 ACRES</li> <li>9.76 MILES</li> </ol>	0140775001407705 As of 2010 contains the following monitoring sites and associated SWQS Classification 01407705 SE1 01407750 SE1 11 SE1 12 SE1 1201A SE1 1203A SE1 1204C SE1 1205B SE1 1206C	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Insufficient Information Not Supporting	N N	Oxygen, Dissolved	2006	Medium Priority	• Urban Runoff/Storm Sewers

Fish Consumption	Not Supporting	Ν	Chlordane DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006 2006	Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> <li>Agriculture</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Enterococcus	2008	Completed / Medium Priority	
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104090070-01	Wreck Pond Brook (above Rt 35)		FRESHWATER LAKE RIVER	52.37 ACRES 11.75 MILES	HUC14: 02030104090070 As of 2010 contains the following monitoring sites and associated SWQS Classification 14 FW2-NT MB-14 FW2- NT MB-151 FW2-NT NJW04459-117-1 FW2-NT NJW04459-117-0 FW2-NT NJW117 1 FW2-NT NJW117 center FW2-	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply	Fully Supporting Not Supporting Not Supporting Insufficient Information Fully Supporting	N N N N	pH Phosphorus (Total) pH	2006 2010 2006	Medium Priority Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104090080-01	Wreck Pond Brook (belo	w Rt 35)	FRESHWATER LAKE RIVER	164.45 ACRES 8.89 MILES	01407806EWQ0484 As of 2010 following monitoring sites and a Classification 01407806 FW2-N NT AN0484 FW2-NT BA210 F FW2-NT BA212 FW2-NT DSR EWQ0484 FW2-NT	ssociated SWQS T AN0483 FW2- W2-NT BA211A

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Phosphorus (Total)	2008	Medium Priority	• Urban Runoff/Storm Sewers
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Completed	<ul> <li>Atmospheric Depositon -</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				Toxics <ul> <li>Agriculture</li> </ul>
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104090090-01	Atl drainage ( Shark R - I	Deal Lk)	FRESHWATER LAKE	55.9 ACRES	Shark R -Deal Lk As of 2010 co	
			RIVER	1.35 MILES	following monitoring sites and associated SWC Classification 76 SE1 77 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Insufficient Information Not Supporting Not Supporting	N N N	Oxygen, Dissolved Chlordane DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2010 2010 2010 2010 2010 2010	Medium Priority Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> <li>Agriculture</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104100010-01	Manasquan R (above 74c road)	117m50s	FRESHWATER LAKE RIVER	24.9 ACRES 22.45 MILES	HUC14: 02030104100010 As of 2010 contain the following monitoring sites and associated SWQS Classification AN0485 FW2-NT NJW 1 FW2-NT NJW291 2 FW2-NT NJW291 3 F NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply Aquatic Life	Insufficient Information Not Supporting	N N	Phosphorus (Total)	2006	Completed	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
	Insufficient Information	N	Thosphorus (Total)	2000	Completeu	Sewers
Fish Consumption						
Industrial Water Supply	Insufficient Information	N				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Completed	
Public Water Supply	Insufficient Information	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104100020-01	Manasquan R (Rt 9 to 74	d17m50s	FRESHWATER LAKE	1.27 ACRES	0140786825 As of 2010 contains	
	road)		RIVER	36.82 MILES	monitoring sites and associated SWQS Classification 01407862 FW2-NT 01407868 FW2-NT 25 FW2-NT AN0486 FW2-NT AN0487	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total) Total Suspended Solids (TSS)	2006 2006	Completed Medium Priority	• Urban Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104100030-01	Manasquan R (West Farr 9)	ns Rd to Rt	RIVER	21.25 MILES	0140800012-MA-1, 12-MA-2, 12-MA-301407871 As of 2010 contains the following monitoring sites and associated SWQS Classification 01407871 FW2-NT 12-MA-1, 12-MA-2, 12-MA-3 FW2-TM 15 FW2-TM 73	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν	Phosphorus (Total) Total Suspended Solids (TSS)	2006 2006	Medium Priority Medium Priority	• Industrial Point Source Discharge

Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Not Supporting Not Supporting Insufficient Information Fully Supporting Not Supporting Fully Supporting	N N N N	Temperature, water Escherichia coli	2006 2006	Medium Priority Completed	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Upstream Impoundments (e.g., PI-566 NRCS Structures)</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104100040-01	Marsh Bog Brook		RIVER	11.29 MILES	0140799724 As of 2010 contains monitoring sites and associated S Classification 01407988 FW2-N FW2-NT 24 FW2-NT 40102507 NT AN0491 FW2-NT AN0492 I FW2-NT BA12 F	SWQS T 01407997 4094301 FW2-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Cause Unknown	2008	Medium Priority	• Urban Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104100050-01	Manasquan R (gage to West Farms Rd)		RESERVOIR RIVER	752 ACRES 7.92 MILES	0140800012-MA-1, 12-MA-2, 12-MA-301407871 As of 2010 contains the following monitoring sites and associated SWQS Classification 01407900 FW2-TM 01408000 FW2-TM AN0490 FW2-TM AN0493 FW2-TM BA16 FW2-TM BA17 FW2- NT BA18	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture

Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Not Supporting Not Supporting Not Supporting Fully Supporting Not Supporting Fully Supporting	N N N N N	Phosphorus (Total) Total Suspended Solids (TSS) Temperature, water Mercury in Fish Tissue Fecal Coliform	2006 2008 2008 2008 2006	Completed Medium Priority Medium Priority Completed Completed	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Upstream Impoundments (e.g., PI-566 NRCS Structures)</li> <li>Atmospheric Depositon - Toxics</li> </ul>
AU ID	AU Name V		Water Type	Size	Location Description	
NJ02030104100060-01	Mingamahone Brook (above Asbury Rd)		RIVER	15.91 MILES	0140800923 As of 2010 contain monitoring sites and associated s Classification 01408009 FW2-T TM BA20 FW2-TM BA21 FW2	SWQS M AN0494 FW2-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Total Suspended Solids (TSS) Turbidity	2006 2006	Medium Priority Medium Priority	• Urban Runoff/Storm Sewers
Aquatic Life - Trout	Not Supporting	Ν	Total Suspended Solids (TSS) Turbidity	2006 2006	Medium Priority Medium Priority	
Fish Consumption	Insufficient Information	N				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104100070-01	-01 Mingamahone Brook (below Asbury Rd)		RIVER	12.91 MILES	HUC14: 02030104100070 As of the following monitoring sites an SWQS Classification 23 FW2-T TM MB-23 FW2-TM R60 FW2-	nd associated M AN0495 FW2-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				

Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104100080-01	Manasquan R (74d07m3	0s to	FRESHWATER LAKE	9.04 ACRES	HUC14: 02030104100080 As of	
	Squankum gage)		RIVER	18.92 MILES	the following monitoring sites and associated SWQS Classification 0140802850 FW2-TM 01408029 FW2-TM 16 FW2-NT AN0496 FW2- NT AN0497 FW2-NT MB-16 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Package Plant
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2008	Completed	or Other Permitted Small
Aquatic Life - Trout	Not Supporting	Ν	Phosphorus (Total)	2008	Completed	Flows Discharges
Fish Consumption	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	<ul> <li>Natural Sources</li> </ul>
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104100090-01	Manasquan R (Rt 70 br to 74d07m30s)	0	ESTUARY	0.67 SQUARE MILES	HUC14: 02030104100090 As of the following monitoring sites an	
	74d07iii30s)		FRESHWATER LAKE	3.81 ACRES	SWQS Classification 1314A SE SE1 78 FW2-TM 79 SE1 80 SE	1 551120057A
			RIVER	17.15 MILES	FW2-TM R07	1 01 SET AINU498
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
			l			

Aquatic Life - Trout	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	N				
Primary Contact Recreation	Fully Supporting	N				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104100100-01	bridge)		ESTUARY FRESHWATER LAKE RIVER	<ol> <li>1.31 SQUARE MILES</li> <li>5.72 ACRES</li> <li>7.31 MILES</li> </ol>	HUC14: 02030104100100 As of 2010 contains the following monitoring sites and associated SWQS Classification 1300A SE1 1303 SE1 1306A SE1 1308A SE1 1308C SE1 1309A SE1 551120003A SE1 5511200165 SE1 55112003	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	<ul><li>Agriculture</li><li>Urban</li></ul>
Fish Consumption	Insufficient Information	Ν				Runoff/Storm
Primary Contact Recreation	Not Supporting	Ν	Enterococcus	2008	Completed / Medium Priority	Sewers
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
AU ID NJ02030104910010-01	AU Name Raritan Bay (west of Tho	rns Ck)	Water Type ESTUARY RIVER	Size 12.92 SQUARE MILES 0.36 MILES	Location Description HUC14: 02030104910010 As of the following monitoring sites an SWQS Classification 24A SE1 2 CCMPMC0001 SE1 CCMPMC0 CCMPMX0001 SE1 CCMPMX0 1M SE1 DSR	nd associated 26A SE1 63B SE1 0002 SE1
		rns Ck) Threatened	ESTUARY	12.92 SQUARE MILES	HUC14: 02030104910010 As of the following monitoring sites an SWQS Classification 24A SE1 2 CCMPMC0001 SE1 CCMPMC0 CCMPMX0001 SE1 CCMPMX	nd associated 26A SE1 63B SE1 0002 SE1
NJ02030104910010-01	Raritan Bay (west of Tho		ESTUARY RIVER	12.92 SQUARE MILES 0.36 MILES	HUC14: 02030104910010 As of the following monitoring sites an SWQS Classification 24A SE1 2 CCMPMC0001 SE1 CCMPMC0 CCMPMX0001 SE1 CCMPMX0 1M SE1 DSR	nd associated 26A SE1 63B SE1 2002 SE1 2002 SE1 DSR

AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104910020-01	Sandy Hook Bay (east of Thorns Ck)		ESTUARY	16.18 SQUARE MILES	HUC14: 02030104910020 As o the following monitoring sites a SWQS Classification 88A SE1 SE1 916A SE1 97B SE1 CCMP CCMPMC0007 SE1 CCMPMC	nd associated 906A SE1 914 MC0005 SE1
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	• Industrial
Fish Consumption	Not Supporting	Ν	Benzo(a)pyrene (PAHs) Chlordane DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) PCB in Fish Tissue	2008 2006 2006 2006 2006 2008 2008 2008	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	Point Source Discharge
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2008	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104910030-01	Raritan Bay ( deep water	)	BAY(S) & HARBOR	26.92 SQUARE MILES	( deep water) As of 2010 contain monitoring sites and associated Classification 29A SE1 908C SI 14M SE1 L6992337027 SE1 L7 NJ00-0007 SE1 NJ01-0002 SE1 RB	SWQS E1 918 SE1 DSR 012537152 SE1
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Not Supporting Not Supporting	N N	Oxygen, Dissolved Benzo(a)pyrene (PAHs) Chlordane DDD DDE DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Mercury in Fish Tissue PCB in Fish Tissue	2006 2008 2006 2006 2006 2006 2008 2008	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Source Unknown</li> <li>Atmospheric Depositon - Toxics</li> </ul>

Primary Contact Recreation	Fully Supporting	Ν	Total Coliform	2008	Medium Priority	
Shellfish Harvesting	Not Supporting	Ν				
AU ID	AU Name W		Water Type	Size	Location Description	
NJ02030104920010-01			FRESHWATER LAKE OCEAN	4.01 ACRES 37.39 SQUARE MILES	HUC14: 02030104920010 As of 2010 contains the following monitoring sites and associated SWQS Classification A7A SC CCMPMC0009 SC CCMPMC1004 SC CCMPMC1006 SC CCMPMC1010 SC CCMPMC1066 SC JC01A SC JC03 SC JC05 SC	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation	Not Supporting Not Supporting Fully Supporting	N N N	Oxygen, Dissolved DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006	Medium Priority Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> <li>Urban Runoff/Storm Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104920020-01	AtlCoast(Navesink R to WhalePond)		OCEAN	71.73 SQUARE MILES	HUC14: 02030104920020 As of the following monitoring sites an SWQS Classification A11A SC	nd associated
					CCMPMC1013 SC CCMPMC1 CCMPMC1016 SC CCMPMC1 CCMPMC1019 SC CCMPMC1 CCMPMC1021 SC CCMP	018 SC
Use	Attainment	Threatened	Cause	Cycle First Listed	CCMPMC1016 SC CCMPMC1 CCMPMC1019 SC CCMPMC1	018 SC
Use Aquatic Life Fish Consumption	Attainment       Not Supporting       Not Supporting	<b>Threatened</b> N N	Cause Oxygen, Dissolved DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	Cycle First Listed           2006           2006           2006           2006           2006           2006           2006           2006           2006	CCMPMC1016 SC CCMPMC1 CCMPMC1019 SC CCMPMC1 CCMPMC1021 SC CCMP	018 SC 020 SC

						<ul> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030104930010-01	Atl Coast(Whale Pond to Shark R)		OCEAN	22.17 SQUARE MILES	HUC14: 02030104930010 As of 2010 contains the following monitoring sites and associated SWQS Classification A17A2 SC A18A2 SC A19A SC A20B SC CCMPMC1024 SC CCMPMC1027 SC CCMPMC1041 SC CCMPMC1043 SC CCMPMC1047 SC C	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation	Not Supporting Not Supporting Fully Supporting	N N N	Oxygen, Dissolved DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006	Medium Priority Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Municipal Point Source Discharges</li> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> </ul>
Shellfish Harvesting	Fully Supporting	N				
AU ID NJ02030104930020-01	AU Name Atl Coast (Shark R to Ma	unasquan)	Water Type OCEAN RIVER	Size 20.78 SQUARE MILES 0.05 MILES	Location Description HUC14: 02030104930020 As of 2010 contains the following monitoring sites and associated SWQS Classification A21A SC A22B SC A24A SC CCMPMC1028 SC CCMPMC1036 SC CCMPMC1055 SC CCMPMC1056 SC CCMPMC1057 SC CCMPMC1058 SC	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Not Supporting Not Supporting	N N	Oxygen, Dissolved DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006	Medium Priority Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> </ul>

Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105010010-01	Drakes Brook (above Eyl	and Ave)	FRESHWATER LAKE	24.74 ACRES	HUC14: 02030105010010 As of the following monitoring sites as	
			RIVER	19.5 MILES	SWQS Classification AN0311 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105010020-01	Drakes Brook (below Ey	and Ave)	FRESHWATER LAKE	9.7 ACRES	HUC14: 02030105010020 As of the following monitoring sites as	
			RIVER	21.03 MILES	SWQS Classification 01396180 AN0312 FW2-NT DkB1 FW2-1 TP SBW	FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Package Plant or Other
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	Permitted Small Flows
Aquatic Life - Trout	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	Discharges
Fish Consumption	Insufficient Information	Ν				<ul> <li>Agriculture</li> <li>Urban</li> </ul>
Industrial Water Supply	Insufficient Information	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105010030-01	Raritan River SB(above Rt 46)		FRESHWATER LAKE RIVER	389.41 ACRES 8.41 MILES	HUC14: 02030105010030 As of 2010 contains the following monitoring sites and associated SWQS Classification 01396085 FW2-NT DSR 17L FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Fully Supporting	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105010040-01	Raritan River SB(74d 44 46)	n 15s to Rt	RIVER	17.56 MILES	HUC14: 02030105010040 As of the following monitoring sites ar SWQS Classification 01396090 01396106 FW2-TP AN0310 FW FW2-TP Site 1 Tur	d associated FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Completed	
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	

NJ02030105010050-01	Raritan R SB(LongValley br to 74d44m15s)		FRESHWATER LAKE RIVER	12.19 ACRES 42.86 MILES	013962808-SB-101396350 As of 2010 contains the following monitoring sites and associated SWQS Classification 01396121 FW2-TP 01396190 FW2-TP 01396219 FW2-TP AN0313 FW2-TP AN0314	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Upstream
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Impoundments (e.g., Pl-566
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	NRCS Structures)
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Completed	<ul><li>Agriculture</li><li>Urban</li></ul>
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105010060-01	Raritan R SB(Califon br Valley)	to Long	RIVER	35.76 MILES	013962808-SB-101396350 As of the following monitoring sites a SWQS Classification 01396280 01396283 FW2-TP 01396286 F FW2-TP DSR 18R FW2-TP SB SBWA03 FW2-TP Site 3 Vertex	nd associated FW2-TP W2-TP 8-SB-1 R4 FW2-TP
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life - Trout	Not Supporting	Ν	Oxygen, Dissolved Temperature, water	2010 2006	Medium Priority Medium Priority	Sewers
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Completed	
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	

NJ02030105010070-01	Raritan R SB(StoneMill gage to Califon)		RIVER	18.65 MILES	013962808-SB-101396350 As of 2010 contains the following monitoring sites and associated SWQS Classification 01396350 FW2-TM AN0316 FW2-TM AN0317 FW2-TM EWQ0316 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105010080-01	Raritan R SB(Spruce Run gage)	n-StoneMill	FRESHWATER LAKE RIVER	19.69 ACRES 12.91 MILES	013965358-SB-2 As of 2010 co following monitoring sites and a Classification 01396500 FW2-T FW2-TM 8-SB-2 FW2-TM FIB FIBI088 FW2-TM SBRR4 SL F	ssociated SWQS M 01396535 I086 FW2-TM
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Fully Supporting	N N				• Upstream Impoundments (e.g., Pl-566
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	NRCS Structures)
Fish Consumption	Insufficient Information	Ν				<ul> <li>Urban Runoff/Storm</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105020010-01	Spruce Run (above Glen	Gardner)	FRESHWATER LAKE	6.25 ACRES	HUC14: 02030105020010 As or	f 2010 contains

			RIVER	29.37 MILES	the following monitoring sites a SWQS Classification 01396550 FW2-TP BA113 FW2-TP FIBI0	FW2-TP AN0318
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105020020-01	Spruce Run (Reservior to Gardner)	Glen	RIVER	8.28 MILES	013965888-SP-2 As of 2010 con following monitoring sites and a Classification 01396588 FW2-T AN0319 FW2-TP BA114 FW2- TP Rocky01 FW2-TP Rocky03 FW2-TP	ssociated SWQS P 8-SP-2 FW2-TP TP BA115 FW2-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2008	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105020030-01	Mulhockaway Creek		FRESHWATER LAKE	1.1 ACRES	013966608-MU-1 As of 2010 co following monitoring sites and a	

			RIVER	39.85 MILES	Classification 01396660 FW2-TP 8-MU-11 TP AN0321 FW2-TP BA109 FW2-TP BA1 FW2-TP BA111 FW2-TP BA112 FW2-TP FIBI053 FW2	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Fully Supporting	Ν				Runoff/Storm
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105020040-01	Spruce Run Reservior / V Brook	Villoughby	FRESHWATER LAKE RESERVOIR RIVER	22.18 ACRES 13 ACRES 15.46 MILES	013968008-SP-1 As of 2010 contains the following monitoring sites and associated SWQS Classification 01396800 FW2-TM 8-SP-1 FW2- TM AN0320 FW2-TP DSR 7L FW2-TM NJW04459-113-1 FW2-TM NJW04459-113-O FW2-TM NJW113 1 FW2-TM NJW113 cente	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				• Upstream
Aquatic Life	Not Supporting	Ν	pH Phosphorus (Total)	2006 2006	Medium Priority Medium Priority	Impoundments (e.g., Pl-566 NRCS Structures)
Aquatic Life - Trout	Not Supporting	Ν	pH Phosphorus (Total) Temperature, water	2006 2006 2006	Medium Priority Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Completed	Sewers • Atmospheric Depositon -
Industrial Water Supply	Fully Supporting	Ν				Toxics
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				

AU ID	AU Name		Water Type	Size	Location Description		
NJ02030105020050-01	Beaver Brook (Clinton)		RIVER	20.59 MILES	HUC14: 02030105020050 As of 2010 contains the following monitoring sites and associated SWQS Classification 01396812 FW2-TP AN03 FW2-TP AN0324 FW2-TM BvB1 FW2-TM		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	pH Phosphorus (Total)	2010 2006	High Priority High Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Municipal Point Source</li> </ul>	
Aquatic Life - Trout	Not Supporting	Ν	Phosphorus (Total) Temperature, water	2006 2010	High Priority Medium Priority	<ul><li>Point Source</li><li>Discharges</li><li>Package Plant</li><li>or Other</li></ul>	
Fish Consumption	Insufficient Information	Ν				Permitted Small Flows	
Industrial Water Supply	Fully Supporting	Ν				Discharges <ul> <li>Agriculture</li> </ul>	
Primary Contact Recreation	Insufficient Information	Ν				• Urban Runoff/Storm	
Public Water Supply	Fully Supporting	Ν				Sewers	
AU ID	AU Name		Water Type	Size	Location Description		
NJ02030105020060-01	Cakepoulin Creek		RIVER	36.54 MILES	HUC14: 02030105020060 As of the following monitoring sites an SWQS Classification 01396900	nd associated	
					FW2-TP AN0325B FW2-TP CC		
Use	Attainment	Threatened	Cause	Cycle First Listed			
Use Agricultural Water Supply	Attainment Fully Supporting	<b>Threatened</b> N	Cause	Cycle First Listed	FW2-TP AN0325B FW2-TP CC	C1 FW2-TP	
			Cause	Cycle First Listed	FW2-TP AN0325B FW2-TP CC	C1 FW2-TP	
Agricultural Water Supply	Fully Supporting	Ν	Cause Temperature, water	Cycle First Listed	FW2-TP AN0325B FW2-TP CC	C1 FW2-TP	
Agricultural Water Supply Aquatic Life	Fully Supporting Fully Supporting	N N			FW2-TP AN0325B FW2-TP CC	C1 FW2-TP	
Agricultural Water Supply Aquatic Life Aquatic Life - Trout	Fully Supporting Fully Supporting Not Supporting	N N N	Temperature, water DDD DDE	2010 2006 2006	FW2-TP AN0325B FW2-TP CC TMDL Status Medium Priority Low Priority Low Priority	C1 FW2-TP	

Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105020070-01	Raritan R SB(River Rd to Run)	) Spruce	FRESHWATER LAKE RIVER	1.24 ACRES 27.1 MILES	HUC14: 02030105020070 As of 2010 contains the following monitoring sites and associated SWQS Classification 01396868 FW2-NT AN0322 FW2-TM AN0324A	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life Aquatic Life - Trout	Not Supporting Not Supporting	N N	pH Phosphorus (Total) Total Suspended Solids (TSS) pH Phosphorus (Total) Temperature, water Total Suspended Solids (TSS)	2010 2010 2010 2010 2010 2010 2010	High Priority High Priority High Priority High Priority High Priority Medium Priority High Priority	
Fish Consumption	Insufficient Information	N				
Industrial Water Supply	Fully Supporting	N				
Primary Contact Recreation	Insufficient Information	N				
Public Water Supply	Fully Supporting	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105020080-01	Raritan R SB(Prescott Bl Rd)	to River	RIVER	24.13 MILES	013970008-SB-3 As of 2010 con following monitoring sites and a Classification 01397000 FW2-T TM AN0326 FW2-TM FIBI018	ssociated SWQS M 8-SB-3 FW2-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Package Plant
Aquatic Life Aquatic Life - Trout	Not Supporting Not Supporting	N N	Temperature, water Total Suspended Solids (TSS) Temperature, water	2006 2010 2006	Medium Priority High Priority Medium Priority	or Other Permitted Small Flows Discharges • Upstream Impoundments
Fish Consumption	Insufficient Information	Ν				(e.g., Pl-566 NRCS

Industrial Water Supply Primary Contact Recreation Public Water Supply	Not Supporting Not Supporting Not Supporting	N N N	Total Suspended Solids (TSS) Escherichia coli Arsenic	2010 2006 2006	High Priority Completed Low Priority	Structures) • Transfer of Water from an Outside Watershed • Agriculture • Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105020090-01	Prescott Brook / Round Valley Reservior		FRESHWATER LAKE RESERVOIR RIVER	31.02 ACRES 2266 ACRES 19.27 MILES	HUC14: 02030105020090 As of 2010 contains the following monitoring sites and associated SWQS Classification 01397160 FW2-TM AN0327 FW2-TM DSR 8L FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Insufficient Information Not Supporting Not Supporting Insufficient Information Insufficient Information Fully Supporting	N N N N N	Phosphorus (Total) Phosphorus (Total) Mercury in Fish Tissue	2008 2008 2008	Completed Completed Completed	• Atmospheric Depositon - Toxics
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105020100-01	Raritan R SB(Three Brid Bk)	ges-Prescott	FRESHWATER LAKE RIVER	1.63 ACRES 67.52 MILES	013974008-SB-4 As of 2010 con following monitoring sites and a Classification 01397400 FW2-N NT AN0328 FW2-NT AN0329	ssociated SWQS T 8-SB-4 FW2-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Phosphorus (Total) Total Suspended Solids (TSS) Phosphorus (Total)	2010 2010 2010	High Priority High Priority High Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Industrial Point Source</li> </ul>

Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Not Supporting Not Supporting Not Supporting Not Supporting Not Supporting	N N N N	Temperature, water Total Suspended Solids (TSS) Mercury in Fish Tissue Total Suspended Solids (TSS) Escherichia coli Arsenic	2006 2010 2010 2010 2006 2006	Medium Priority High Priority Completed High Priority Completed Low Priority	Discharge • Municipal Point Source Discharges
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105030010-01	First Neshanic River		RIVER	16.2 MILES	HUC14: 02030105030010 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0330 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Urban Runoff/Storm
Aquatic Life - Trout	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105030020-01	Second Neshanic River		RIVER	19.13 MILES	HUC14: 02030105030020 As of the following monitoring sites ar SWQS Classification 01397430 AN0331 FW2-NT	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				Seweis

Industrial Water Supply	Insufficient Information	Ν				
				2000		
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105030030-01	Headquarters trib (Third River)	Neshanic	RIVER	17.12 MILES	HUC14: 02030105030030	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	High Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	N				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	N				
AU ID	AU Name		Water Type	Size	Location Description	
AU ID NJ02030105030040-01	AU Name Third Neshanic River		Water Type RIVER	Size	Location Description HUC14: 02030105030040 As o the following monitoring sites a SWQS Classification 01397810 01397950 FW2-NT AN0332 FW	nd associated FW2-NT
		Threatened			HUC14: 02030105030040 As o the following monitoring sites a SWQS Classification 01397810	nd associated FW2-NT
NJ02030105030040-01	Third Neshanic River	<b>Threatened</b> N	RIVER	15.4 MILES	HUC14: 02030105030040 As o the following monitoring sites a SWQS Classification 01397810 01397950 FW2-NT AN0332 FW	nd associated FW2-NT V2-NT <b>Source</b> • Transfer of
NJ02030105030040-01 Use	Third Neshanic River Attainment		RIVER	15.4 MILES	HUC14: 02030105030040 As o the following monitoring sites a SWQS Classification 01397810 01397950 FW2-NT AN0332 FW	nd associated FW2-NT W2-NT Source
NJ02030105030040-01 Use Agricultural Water Supply	Third Neshanic River       Attainment       Fully Supporting	N	RIVER Cause	15.4 MILES Cycle First Listed	HUC14: 02030105030040 As o the following monitoring sites a SWQS Classification 01397810 01397950 FW2-NT AN0332 FW TMDL Status	nd associated FW2-NT V2-NT Source • Transfer of Water from an Outside Watershed
NJ02030105030040-01 Use Agricultural Water Supply Aquatic Life	Third Neshanic River         Attainment         Fully Supporting         Not Supporting	N N	RIVER Cause	15.4 MILES Cycle First Listed	HUC14: 02030105030040 As o the following monitoring sites a SWQS Classification 01397810 01397950 FW2-NT AN0332 FW TMDL Status	nd associated FW2-NT V2-NT Source • Transfer of Water from an Outside Watershed • Agriculture • Urban
NJ02030105030040-01 Use Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Third Neshanic River         Attainment         Fully Supporting         Not Supporting         Insufficient Information         Fully Supporting	N N N	RIVER Cause	15.4 MILES Cycle First Listed	HUC14: 02030105030040 As o the following monitoring sites a SWQS Classification 01397810 01397950 FW2-NT AN0332 FW TMDL Status	nd associated FW2-NT V2-NT Source • Transfer of Water from an Outside Watershed • Agriculture
NJ02030105030040-01 Use Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation	Third Neshanic River         Attainment         Fully Supporting         Not Supporting         Insufficient Information         Fully Supporting         Not Supporting         Not Supporting         Not Supporting	N N N N	RIVER Cause Oxygen, Dissolved	15.4 MILES Cycle First Listed 2006	HUC14: 02030105030040 As o the following monitoring sites a SWQS Classification 01397810 01397950 FW2-NT AN0332 FV TMDL Status High Priority	nd associated FW2-NT V2-NT • Transfer of Water from an Outside Watershed • Agriculture • Urban Runoff/Storm
NJ02030105030040-01 Use Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Third Neshanic River         Attainment         Fully Supporting         Not Supporting         Insufficient Information         Fully Supporting         Not Supporting         Fully Supporting         Fully Supporting         Fully Supporting         Fully Supporting         Fully Supporting	N N N N	RIVER Cause Oxygen, Dissolved Fecal Coliform	15.4 MILES Cycle First Listed 2006 2006	HUC14: 02030105030040 As o the following monitoring sites a SWQS Classification 01397810 01397950 FW2-NT AN0332 FW TMDL Status High Priority Completed	nd associated FW2-NT V2-NT • Transfer of Water from an Outside Watershed • Agriculture • Urban Runoff/Storm
NJ02030105030040-01 Use Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation	Third Neshanic River         Attainment         Fully Supporting         Not Supporting         Insufficient Information         Fully Supporting         Not Supporting         Not Supporting         Not Supporting	N N N N	RIVER Cause Oxygen, Dissolved	15.4 MILES Cycle First Listed 2006	HUC14: 02030105030040 As o the following monitoring sites a SWQS Classification 01397810 01397950 FW2-NT AN0332 FV TMDL Status High Priority	nd associated FW2-NT V2-NT • Transfer of Water from an Outside Watershed • Agriculture • Urban Runoff/Storm Sewers

			RIVER	31.12 MILES	the following monitoring sites a SWQS Classification AN0334 FW2-NT SBWA18 FW	nd associated FW2-NT AN0335
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105030060-01	Neshanic River (below F confl)	NR / SNR	FRESHWATER LAKE RIVER	13.39 ACRES 22.53 MILES	013980008-NE-1 As of 2010 cc following monitoring sites and Classification 01398000 FW2-1 NT AN0333 FW2-NT FIBI023 FW2-NT	associated SWQS NT 8-NE-1 FW2-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved pH Phosphorus (Total)	2010 2008 2006	High Priority High Priority High Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Not Supporting	Ν	pH	2008	High Priority	
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli Fecal Coliform	2010 2006	Completed Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105030070-01	Neshanic River (below B	lack Brk)	FRESHWATER LAKE RIVER	16.44 ACRES 26.7 MILES	013980008-NE-1 As of 2010 cd following monitoring sites and Classification 01398060 FW2-1	associated SWQS

					FW2-NT AN0336 FW2-NT AN EWQ0337	0337 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				
Aquatic Life	Not Supporting	Ν	pH Phosphorus (Total)	2010 2010	High Priority High Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Not Supporting	Ν	рН	2010	High Priority	
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2010	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2010	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105040010-01	Raritan R SB(Pleasant Run-Three Bridges)		FRESHWATER LAKE RIVER	0.91 ACRES 40.94 MILES	01398102013980708-SB-6 As of 2010 contains the following monitoring sites and associated SWQS Classification 01397415 FW2-NT 01398070 FW2-NT AN0338 FW2-NT DSR 17F FW2-NT SBWA07	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Not Supporting	N N N	Phosphorus (Total) Mercury in Fish Tissue	2006 2010	High Priority Completed	<ul> <li>Industrial Point Source Discharge</li> <li>Package Plant or Other Permitted Small</li> </ul>
Industrial Water Supply Primary Contact Recreation	Fully Supporting Not Supporting	N N	Fecal Coliform	2006	Completed	Flows Discharges • Agriculture • Urban
Public Water Supply	Not Supporting	N	Arsenic	2006	Low Priority	Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105040020-01	Pleasant Run		FRESHWATER LAKE RIVER	3.98 ACRES 36.63 MILES	HUC14: 02030105040020 As of the following monitoring sites at SWQS Classification 01398090 AN0339 FW2-NT AN0340	nd associated

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Cause Unknown	2006	Medium Priority	<ul><li>Agriculture</li><li>Urban</li><li>Runoff/Storm</li></ul>
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Medium Priority	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105040030-01	Holland Brook		FRESHWATER LAKE	1.07 ACRES	HUC14: 02030105040030 As of	
			RIVER	37.28 MILES	the following monitoring sites and associated SWQS Classification 01398107 FW2-NT 01398110 FW2-NT AN0342 FW2-NT AN0343 FW2-NT EWQ0343	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Package Plant
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	or Other Permitted Small
Fish Consumption	Insufficient Information	Ν				Flows Discharges
Industrial Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Primary Contact Recreation	Insufficient Information	Ν				Runoff/Storm Sewers
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105040040-01	Raritan R SB(NB to Plea	sant Run)	FRESHWATER LAKE	7.95 ACRES	01398070013981028-SB-6 As o	
			RIVER	18.3 MILES	the following monitoring sites an SWQS Classification 01398102 FW2-NT AN0341 FW2-NT SBI	FW2-NT 8-SB-6
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	pH Phosphorus (Total)	2010 2006	High Priority High Priority	• Urban Runoff/Storm Sewers

			Total Suspended Solids (TSS)	2010	High Priority	
			Mercury in Fish Tissue	2010	Completed	
Fish Consumption	Not Supporting	Ν	Total Suspended Solids (TSS)	2010	High Priority	
Industrial Water Supply	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Primary Contact Recreation	Not Supporting	Ν	Arsenic	2006	Low Priority	
Public Water Supply	Not Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105050010-01	Lamington R (above Rt 1	0)	FRESHWATER LAKE	226.83 ACRES	HUC14: 02030105050010 As of	
			RIVER	9.69 MILES	the following monitoring sites ar SWQS Classification NJW04459	9-106-1 FW2-NT
					NJW051 1 FW2-NT NJW106 1 NJW106 center FW2-NT	FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	N				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105050020-01	Lamington R (Hillside Re	d to Rt 10)	FRESHWATER LAKE	20.03 ACRES	HUC14: 02030105050020 As of	
			RIVER	38.58 MILES	the following monitoring sites ar SWQS Classification 01399200 AN0356 FW2-NT LR1 FW2-NT	FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2010	High Priority	Sewers
Aquatic Life - Trout	Not Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				

		1				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105050030-01	Lamington R (Furnace Rd to Hillside Rd)		FRESHWATER LAKE RIVER	7.43 ACRES 17.59 MILES	HUC14: 02030105050030 As of 2010 contains the following monitoring sites and associated SWQS Classification 01399295 FW2-NT AN0357 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Upstream
Aquatic Life	Fully Supporting	Ν				Impoundments (e.g., Pl-566 NRCS
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2007	Medium Priority	Structures)
Fish Consumption	Insufficient Information	Ν				<ul> <li>Agriculture</li> <li>Urban</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105050040-01	Lamington R(Pottersville FurnaceRd)	e gage-	FRESHWATER LAKE	9.11 ACRES	HUC14: 02030105050040 As of	
	Fundcerku)		RIVER	30.2 MILES	the following monitoring sites and associated SWQS Classification 01399320 FW2-TM 01399500 FW2-TP AN0358 FW2-TM AN0359 FW2-TP EWQ0358 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Orban Runoff/Storm Sewers
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2008	Medium Priority	Seweis
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				

Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105050050-01	Pottersville trib (Lamington River)		RIVER	17.14 MILES	HUC14: 02030105050050 As of the following monitoring sites an SWQS Classification 01399520 FW2-TP	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Agriculture
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105050060-01	Cold Brook		RIVER	16.04 MILES	HUC14: 02030105050060 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0362 FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Fully Supporting	Ν				Runoff/Storm
Aquatic Life - Trout	Fully Supporting	Ν				Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105050070-01	Lamington R(HallsBrRd-HerzogBrk)		FRESHWATER LAKE RIVER	24.65 ACRES 26.56 MILES	HUC14: 02030105050070 As of 2010 contains the following monitoring sites and associated SWQS Classification 01399545 FW2-NT 01399780 FW2-NT AN0363 FW2-NT AN037/ FW2-NT EWQ0363 FW2-NT FIBI032 FW2-T FIBI054 FW2-TM FIBI078 FW2-N	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	pH Phosphorus (Total) Total Suspended Solids (TSS)	2010 2006 2010	High Priority High Priority Medium Priority	
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Not Supporting	Ν	pH Total Suspended Solids (TSS)	2010 2010	High Priority Medium Priority	
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105050080-01	Rockaway Ck (above Mc	Crea Mills)	RIVER	51.88 MILES	HUC14: 02030105050080 As of the following monitoring sites an SWQS Classification 01399565 FW2-TP AN0365 FW2-TP RC0 FW2-TP RC03 FW2-TP RC04 H	nd associated FW2-TP AN0364 1 FW2-TP RC02
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				

Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105050090-01	Rockaway Ck (below Mo	Crea Mills)	FRESHWATER LAKE RIVER	14.36 ACRES 17.08 MILES	HUC14: 02030105050090 As of the following monitoring sites at SWQS Classification 01399570 01399700 FW2-NT 01399720 F FW2-NT AN0366 FW2-TP AN EWQ0369 FW2-NT NBRC1 FW	nd associated FW2-TP W2-NT 8-RO-1 0369 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	pH Phosphorus (Total)	2010 2010	Medium Priority High Priority	
Aquatic Life - Trout	Not Supporting	Ν	Phosphorus (Total)	2010	High Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105050100-01	Rockaway Ck SB		FRESHWATER LAKE RIVER	27.88 ACRES 36.6 MILES	HUC14: 02030105050100 As of 2010 contains the following monitoring sites and associated SWQS Classification 01399650 FW2-TM AN0367 FW2-TP AN0368 FW2-TM FIBI073 FW2-TP RC11 FW2-TP RC12s FW2-TP RC13 FW2-TP RC14	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout	Fully Supporting Not Supporting Not Supporting	N N N	Phosphorus (Total) Total Suspended Solids (TSS) Phosphorus (Total)	2006 2010 2006	High Priority High Priority High Priority	<ul> <li>Package Plant or Other</li> <li>Permitted Small</li> <li>Flows</li> <li>Discharges</li> <li>Agriculture</li> <li>Urban</li> </ul>

Appendix A

Fish Consumption	Insufficient Information	Ν	Total Symponian Solida (TSS)	2010	High Drigaity	Runoff/Storm Sewers
Industrial Water Supply	Not Supporting	Ν	Total Suspended Solids (TSS)	2010	High Priority	Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105050130-01	Pottersville gage)		FRESHWATER LAKE	7.22 ACRES	HUC14: 02030105050130 As of 2010 contain the following monitoring sites and associated SWQS Classification AN0360 FW2-TP LR3 FW2-TP	
			RIVER	9.8 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2010	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105060010-01	Raritan R NB (above/incl	l India Bk)	FRESHWATER LAKE	6.48 ACRES	HUC14: 02030105060010 As of the following monitoring sites an	
			RIVER	18.61 MILES	SWQS Classification AN0344 F AN0344A FW2-TP AN0345 FW FW2-TP BA104 FW2-TP	W2-TP
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life	Fully Supporting	Ν				Sewers
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				

Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105060020-01	Burnett Brook (above Ole	d Mill Rd)	FRESHWATER LAKE	2.54 ACRES	HUC14: 02030105060020 As of 2010 conta	
	R		RIVER	18.7 MILES	the following monitoring sites and associated SWQS Classification 01398300 FW2-TP AN0347 FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105060030-01	Raritan R NB(incl McVie Bk)	ckers to India	FRESHWATER LAKE	23.74 ACRES	HUC14: 02030105060030 As of	
	BKy		RIVER	25.46 MILES	the following monitoring sites and associated SWQS Classification 01398260 FW2-TP AN0346 FW2-TP AN0348 FW2-TP NB01 FW2-TP NB02 FW2-TP NBRR1 FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Fully Supporting	Ν				Runoff/Storm
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2010	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				

Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105060040-01	Raritan R NB(Peapack Bk to McVickers Bk)		FRESHWATER LAKE RIVER	46.06 ACRES 26.39 MILES	HUC14: 02030105060040 As of 2010 contains the following monitoring sites and associated SWQS Classification FIBI093 FW2-TP NB06 FW2-TM NBRR3 RL FW2-TM NJW135 1 FW2 NT NJW135 2 FW2-NT NJW135 OUTLET FW2 TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Total Suspended Solids (TSS)	2010	Medium Priority	
Aquatic Life - Trout	Not Supporting	Ν	Oxygen, Dissolved Temperature, water	2010 2010	Medium Priority Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105060050-01	Peapack Brook (above/in Bk)	cl Gladstone	FRESHWATER LAKE RIVER	4.41 ACRES 18.6 MILES	HUC14: 02030105060050 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0349 FW2-TP NB03 FW2-TP PB01 FW2-TP PB02 FW2-TP PB03 FW2-TP PB04 FW2-TP PB05 FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				

Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105060060-01	Peapack Brook (below Gladstone Brook)		RIVER	15.95 MILES	HUC14: 02030105060060 As of the following monitoring sites at SWQS Classification AN0350 F FW2-TP PB07 FW2-TP PB08 F	nd associated W2-TP PB06
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105060070-01	Raritan R NB(incl Mine	Bk to	FRESHWATER LAKE	35.45 ACRES	HUC14: 02030105060070 As of	
	Peapack Bk)		RIVER	25.39 MILES	the following monitoring sites and associated SWQS Classification 01398900 FW2-NT AN0351 FW2-NT AN0352 FW2-NT AN0355 FW2-NT EWQ0351 FW2-NT NB10 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Aquatic Life - Trout	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				

Public Water Supply	Fully Supporting	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105060080-01	Middle Brook (NB Raritan River)		RIVER	24.28 MILES	HUC14: 02030105060080 As of the following monitoring sites at SWQS Classification 01399100 AN0354 FW2-NT AN0355 FW2 FW2-NT	nd associated FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Medium Priority	
Public Water Supply	Fully Supporting	Ν				
	AU Name					
AU ID	AU Name		Water Type	Size	Location Description	
AU ID NJ02030105060090-01	AU Name Raritan R NB (Lamingto Bk)	n R to Mine	Water Type FRESHWATER LAKE RIVER	Size 2.99 ACRES 31.91 MILES	Location Description 013991208-NB-2 As of 2010 co following monitoring sites and a Classification 01399120 FW2-N NT NB14 FW2-NT NBRR5 FW FW2-NT	ssociated SWQS T 8-NB-2 FW2-
	Raritan R NB (Lamington	n R to Mine Threatened	FRESHWATER LAKE	2.99 ACRES	013991208-NB-2 As of 2010 co following monitoring sites and a Classification 01399120 FW2-N NT NB14 FW2-NT NBRR5 FW	ssociated SWQS T 8-NB-2 FW2-
NJ02030105060090-01	Raritan R NB (Lamingto Bk)	1	FRESHWATER LAKE RIVER	2.99 ACRES 31.91 MILES	013991208-NB-2 As of 2010 co following monitoring sites and a Classification 01399120 FW2-N NT NB14 FW2-NT NBRR5 FW FW2-NT	ssociated SWQS T 8-NB-2 FW2- 2-NT NBRR6 Source • Agriculture
NJ02030105060090-01 Use	Raritan R NB (Lamingto Bk) Attainment	Threatened	FRESHWATER LAKE RIVER	2.99 ACRES 31.91 MILES	013991208-NB-2 As of 2010 co following monitoring sites and a Classification 01399120 FW2-N NT NB14 FW2-NT NBRR5 FW FW2-NT	ssociated SWQS T 8-NB-2 FW2- 2-NT NBRR6 Source • Agriculture • Urban Runoff/Storm
NJ02030105060090-01 Use Agricultural Water Supply	Raritan R NB (Lamingto Bk) Attainment Fully Supporting	<b>Threatened</b> N	FRESHWATER LAKE RIVER	2.99 ACRES 31.91 MILES	013991208-NB-2 As of 2010 co following monitoring sites and a Classification 01399120 FW2-N NT NB14 FW2-NT NBRR5 FW FW2-NT	ssociated SWQS T 8-NB-2 FW2- '2-NT NBRR6 Source • Agriculture • Urban
NJ02030105060090-01 Use Agricultural Water Supply Aquatic Life	Raritan R NB (Lamingto Bk) Attainment Fully Supporting Fully Supporting	<b>Threatened</b> N N	FRESHWATER LAKE RIVER	2.99 ACRES 31.91 MILES	013991208-NB-2 As of 2010 co following monitoring sites and a Classification 01399120 FW2-N NT NB14 FW2-NT NBRR5 FW FW2-NT	ssociated SWQS T 8-NB-2 FW2- 2-NT NBRR6 Source • Agriculture • Urban Runoff/Storm
NJ02030105060090-01 Use Agricultural Water Supply Aquatic Life Fish Consumption	Raritan R NB (Lamington Bk) Attainment Fully Supporting Fully Supporting Insufficient Information	Threatened N N N	FRESHWATER LAKE RIVER	2.99 ACRES 31.91 MILES	013991208-NB-2 As of 2010 co following monitoring sites and a Classification 01399120 FW2-N NT NB14 FW2-NT NBRR5 FW FW2-NT	ssociated SWQS T 8-NB-2 FW2- 2-NT NBRR6 Source • Agriculture • Urban Runoff/Storm
NJ02030105060090-01 Use Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Raritan R NB (Lamington Bk) Attainment Fully Supporting Fully Supporting Insufficient Information Fully Supporting	Threatened N N N N	FRESHWATER LAKE RIVER Cause	2.99 ACRES 31.91 MILES Cycle First Listed	013991208-NB-2 As of 2010 co following monitoring sites and a Classification 01399120 FW2-N NT NB14 FW2-NT NBRR5 FW FW2-NT TMDL Status	ssociated SWQS T 8-NB-2 FW2- 2-NT NBRR6 Source • Agriculture • Urban Runoff/Storm

NJ02030105070010-01	Raritan R NB (Rt 28 to Lamington R)		FRESHWATER LAKE RIVER	18.46 ACRES 33.3 MILES	HUC14: 02030105070010 As of 2010 contains the following monitoring sites and associated SWQS Classification 01399820 FW2-NT AN0371 FW2-NT FIBI031 FW2-NT NJW040 1 FW2-NT NJW040 2 FW2-NT NJW040 Center FW2-NT NJW040 OUTLET FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status Source	
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105070020-01	Chambers Brook		FRESHWATER LAKE RIVER	3.67 ACRES 23.21 MILES	HUC14: 02030105070020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01399900 FW2-NT AN0372 FW2-NT AN0373 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Package Plant
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	or Other Permitted Small
Fish Consumption	Insufficient Information	Ν				Flows Discharges
Industrial Water Supply	Fully Supporting	Ν				<ul><li> Agriculture</li><li> Urban</li></ul>
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Runoff/Storm Sewers
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105070030-01	Raritan R NB (below Rt	28)	FRESHWATER LAKE RIVER	6.57 ACRES 18.71 MILES	HUC14: 02030105070030 As of 2010 contains the following monitoring sites and associated SWQS Classification 01400000 FW2-NT AN0374 FW2-NT NBRR7 FW2-NT	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life	Not Supporting	Ν	Phosphorus (Total) Total Suspended Solids (TSS)	2006 2010	High Priority High Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Not Supporting	Ν	Total Suspended Solids (TSS)	2010	High Priority	
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105080010-01	Peters Brook		FRESHWATER LAKE	8.58 ACRES	HUC14: 02030105080010 As o	
			RIVER	24.38 MILES	the following monitoring sites and associated SWQS Classification 01400395 FW2-NT AN0376 FW2-NT FIBI025 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105080020-01	Raritan R Lwr (Rt 206 to	NB / SB)	FRESHWATER LAKE	52.94 ACRES	HUC14: 02030105080020 As o	
			RIVER	25.99 MILES	the following monitoring sites a SWQS Classification NJW0445 NJW105 1 FW2-NT NJW105 c NJW242 1 FW2-NT NJW242 2 NJW242 OUTLET FW2-NT	9-105-1 FW2-NT enter FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li> Agriculture</li><li> Urban</li></ul>

Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2010	High Priority	Runoff/Storm Sewers
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Completed	Seweis
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105080030-01	Raritan R Lwr (Millstone	e to Rt 206)	FRESHWATER LAKE	15.49 ACRES	HUC14: 02030105080030 As of	
	R		RIVER	24.35 MILES	the following monitoring sites and associated SWQS Classification 01400500 FW2-NT AN0375 FW2-NT AN0377 FW2-NT DSR 16R FW2-NT R1 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	pH Total Suspended Solids (TSS)	2010 2010	Medium Priority High Priority	• Urban Runoff/Storm Sewers
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Completed	
Industrial Water Supply	Not Supporting	Ν	pH Total Suspended Solids (TSS)	2010 2010	Medium Priority High Priority	
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105090010-01	Stony Bk (above 74d 49r	n 15s)	FRESHWATER LAKE	10.12 ACRES	HUC14: 02030105090010 As of	
			RIVER	13.32 MILES	the following monitoring sites an SWQS Classification NJW184 1	FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				

Industrial Water Supply	Insufficient Information	Ν					
Primary Contact Recreation	Insufficient Information	N					
Public Water Supply	Fully Supporting	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02030105090020-01	15s)		FRESHWATER LAKE RIVER	4.84 ACRES 35.56 MILES	HUC14: 02030105090020 As of the following monitoring sites ar SWQS Classification 01400860 01400870 FW2-NT AN0390 FW	nd associated FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Fully Supporting	Ν					
Aquatic Life	Fully Supporting	Ν					
Fish Consumption	Insufficient Information	Ν					
Industrial Water Supply	Fully Supporting	Ν					
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Medium Priority		
Public Water Supply	Fully Supporting	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02030105090030-01	Stony Bk (Baldwins Ck t 10s)	o 74d 48m	FRESHWATER LAKE RIVER	10.48 ACRES 20.6 MILES	0140088310-STO-3 As of 2010 contains the following monitoring sites and associated SWQS Classification 01400883 FW2-NT 10-STO-3 FW2-NT AN0391 FW2-NT FIBI030 FW2-NT		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Insufficient Information	Ν					
Aquatic Life	Fully Supporting	Ν					
Fish Consumption	Insufficient Information	Ν					
Industrial Water Supply	Insufficient Information	Ν					
Primary Contact Recreation	Insufficient Information	Ν					
Public Water Supply	Fully Supporting	Ν					
III J					Location Description		

Appendix A

NJ02030105090040-01	Stony Bk(74d46m dam to	o/incl	FRESHWATER LAKE	29.85 ACRES	HUC14: 02030105090040	
	Baldwins Ck)		RIVER	15.07 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105090050-01	Stony Bk(Province Line Rd to 74d46m dam)		FRESHWATER LAKE RIVER	55.76 ACRES 29.8 MILES	0140100010-STO-1, 10-STO-4 contains the following monitorin associated SWQS Classification NT	ng sites and
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	High Priority	Point Source Discharge
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Completed	• Package Plant or Other
Industrial Water Supply	Fully Supporting	Ν				Permitted Small Flows
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Discharges <ul> <li>Agriculture</li> </ul>
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	• Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105090060-01	Stony Bk (Rt 206 to Province Line Rd)		FRESHWATER LAKE RIVER	7.03 ACRES 26.07 MILES	0140100010-STO-1, 10-STO-4 As of 2010 contains the following monitoring sites and associated SWQS Classification 01401000 FW2- NT 10-STO-1, 10-STO-4 FW2-NT AN0393 FW2-NT	

Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Fully Supporting Not Supporting Insufficient Information Fully Supporting	N N N	Phosphorus (Total)	2006	High Priority	<ul> <li>Package Plant or Other</li> <li>Permitted Small</li> <li>Flows</li> <li>Discharges</li> <li>Agriculture</li> <li>Urban</li> <li>Runoff/Storm</li> </ul>
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Sewers
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105090070-01	Stony Bk (Harrison St to	Rt 206)	FRESHWATER LAKE RIVER	10.17 ACRES 6.32 MILES	0140100010-STO-1, 10-STO-4 contains the following monitorin associated SWQS Classification NT	g sites and
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	High Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105090080-01	Duck Pond Run		RIVER	18.08 MILES	HUC14: 02030105090080 As of 2010 contains the following monitoring sites and associated SWQS Classification 01401200 FW2-NT AN0394 FW2-NT BA118A FW2-NT DPR 1 FW2-NT DPR 2 FW2-NT DPR 3 FW2-NT DPR 4 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Orban Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				3CWC18

Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105090090-01	Stony Bk- Princeton drain	nage	FRESHWATER LAKE	77.42 ACRES	0140100010-STO-1, 10-STO-4	
			RIVER	0.15 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2010	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2010	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105100010-01	Millstone River (above R	t 33)	RIVER	25.49 MILES	014005400140053010-MIL-15 As of 2010 contains the following monitoring sites and associated SWQS Classification 01400530 FW2- NT 01400540 FW2-NT 10-MIL-1 FW2-NT 5 FW2-NT AN0378 FW2-NT AN0379 FW2-NT MB-72 FW2-NT MB-73	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	High Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers <ul> <li>Natural</li> </ul>
Industrial Water Supply	Not Supporting	Ν	Total Suspended Solids (TSS)	2006	High Priority	Sources
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	

AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105100020-01	Millstone R (Applegarth road to Rt 33)		RIVER	27.63 MILES	014005300140054010-MIL-15 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0382D FW2 NT BA116 FW2-NT MB-BB2 FW2-NT MB-B FW2-NT MB-CA FW2-NT MB-CB FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	High Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers <ul> <li>Natural</li> </ul>
Industrial Water Supply	Not Supporting	Ν	Total Suspended Solids (TSS)	2006	High Priority	Sources
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105100030-01	Millstone R (RockyBk to road)	Applegarth	RIVER	16.61 MILES	HUC14: 02030105100030 As o the following monitoring sites a SWQS Classification 01400560 FW2-NT	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved Phosphorus (Total)	2010 2008	Medium Priority High Priority	Point Source Discharge • Municipal Point Source
Fish Consumption	Insufficient Information	Ν				<ul><li>Discharges</li><li>Agriculture</li></ul>
Industrial Water Supply	Fully Supporting	Ν				<ul> <li>Urban</li> <li>Runoff/Storm</li> </ul>
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	Sewers
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105100040-01	Rocky Brook (above Mor line)	nmouth Co	FRESHWATER LAKE	15.33 ACRES	HUC14: 02030105100040 As of 2010 contains the following monitoring sites and associated	

			RIVER	21.73 MILES	SWQS Classification 01400585 AN0380 FW2-NT MB-70 FW2 FW2-NT MB-RB FW2-NT M-	-NT MB-RA
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial Point Source
Aquatic Life	Fully Supporting	Ν				<ul><li>Discharge</li><li>Agriculture</li></ul>
Fish Consumption	Insufficient Information	Ν				Urban Runoff/Storm
Industrial Water Supply	Fully Supporting	Ν				Sewers
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105100050-01	Rocky Brook (below Mo line)	nmouth Co	FRESHWATER LAKE RIVER	42.64 ACRES 15.76 MILES	0140059910-ROC-2 As of 2010 following monitoring sites and a Classification 01400598 FW2-N FW2-NT 10-ROC-1 FW2-NT 1 NT AN0381 FW2-NT NJW024 NJW024 2 FW2-NT NJW024 C NJW0	associated SWQS VT 01400599 0-ROC-2 FW2- 1 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Insufficient Information Not Supporting Insufficient Information Fully Supporting	N N N	Oxygen, Dissolved Phosphorus (Total)	2010 2006	Medium Priority High Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Municipal Point Source Discharges</li> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	Sewers
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AUID	AU Name		Water Type	Size	Location Description	
NJ02030105100060-01	Millstone R (Cranbury B Bk)	k to Rocky	RIVER	14.43 MILES	0140065001400640 As of 2010 contains the following monitoring sites and associated SWQS Classification 01400640 FW2-NT 01400650 FW2-NT AN0382 FW2-NT AN0382B FW2-NT	

					BA117A FW2-NT UMR2 FW2	2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	High Priority	Point Source Discharge
Fish Consumption	Insufficient Information	Ν				Municipal     Point Source
Industrial Water Supply	Fully Supporting	Ν				Discharges <ul> <li>Agriculture</li> </ul>
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	• Urban Runoff/Storm
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105100070-01	Cranbury Brook (above N	J Turnpike)	FRESHWATER LAKE	9.96 ACRES	HUC14: 02030105100070 As of the following monitoring sites	
			RIVER	29.54 MILES	the following monitoring sites a SWQS Classification 01400690 AN0385 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105100080-01	Cedar Brook (Cranbury H	Brook)	RIVER	12.46 MILES	HUC14: 02030105100080	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				

Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	N				
Public Water Supply	Insufficient Information	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105100090-01			FRESHWATER LAKE RIVER	56.56 ACRES 10.39 MILES	HUC14: 02030105100090 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0386 FW2-NT CB2-PP FW2-NT NJW033 1 FW2-NT NJW033 2 FW2- NT NJW033 Center FW2-NT NJW033 OUTLET FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105100100-01	Shallow Brook (Devils B	rook)	FRESHWATER LAKE	2.87 ACRES	HUC14: 02030105100100 As of	
			RIVER	20.89 MILES	the following monitoring sites ar SWQS Classification AN0388 F	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				

Appendix A

AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105100110-01	Devils Brook		FRESHWATER LAKE	4.8 ACRES	HUC14: 02030105100110 As of the following monitoring sites an	2010 contains
			RIVER	25.69 MILES	SWQS Classification 01400823 AN0387 FW2-NT AN0389 FW2	FW2-NT
					FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2010	Medium Priority	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105100120-01	Bear Brook (above Trent	on Road)	RIVER	11.69 MILES	HUC14: 02030105100120	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers <ul> <li>Industrial</li> </ul>
Industrial Water Supply	Fully Supporting	N				Point Source Discharge
Primary Contact Recreation	Not Supporting	N	Escherichia coli	2008	Medium Priority	
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105100130-01	Bear Brook (below Trent	on Road)	FRESHWATER LAKE	28.73 ACRES	HUC14: 02030105100130 As of the following monitoring sites an	
			RIVER	9.72 MILES	the following monitoring sites and associated SWQS Classification 01400775 FW2-NT 01400808 FW2-NT AN0383 FW2-NT AN0384 FW2-NT BBB2-GMP FW2-NT DSR 57L FW2- NT	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2010	Medium Priority	Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Mercury	2008	Completed	Industrial     Point Source
Industrial Water Supply	Fully Supporting	Ν				Discharge • Urban
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Medium Priority	Runoff/Storm Sewers
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105100140-01	Millstone R (Rt 1 to Crar	ibury Bk)	FRESHWATER LAKE	36.64 ACRES	HUC14: 02030105100140 As of	
			RIVER	12.39 MILES	the following monitoring sites an SWQS Classification 01400834 MIL-7 FW2-NT M1 FW2-NT U	FW2-NT 10-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Industrial
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved Phosphorus (Total)	2010 2010	Medium Priority Medium Priority	Point Source Discharge • Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105110010-01	Heathcote Brook		FRESHWATER LAKE	2.94 ACRES	HUC14: 02030105110010 As or	
			RIVER	27.21 MILES	the following monitoring sites a SWQS Classification 01401400 AN0395 FW2-NT AN0396 FW FW2-NT FIBI013 FW2-NT HC HCB2 FW2-NT HCB3	FW2-NT 2-NT BA119
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm

Aquatic Life	Not Supporting	Ν	pH Total Suspended Solids (TSS)	2008 2008	Medium Priority High Priority	Sewers <ul> <li>Agriculture</li> </ul>
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105110020-01			FRESHWATER LAKE	180.52 ACRES	HUC14: 02030105110020 As of	
	St)		RIVER	10.22 MILES	the following monitoring sites and associated SWQS Classification DSR 20L FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric
Aquatic Life	Insufficient Information	Ν				Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Mercury	2008	Completed	Industrial     Point Source
Industrial Water Supply	Insufficient Information	Ν				Discharge
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105110030-01	Millstone R (Beden Bk to	Heathcote	FRESHWATER LAKE	0.89 ACRES	014014400140130110-MIL-2 A	
	Bk)		RIVER	26.17 MILES	the following monitoring sites an SWQS Classification 01401301 01401440 FW2-NT 10-MIL-2 F FW2-NT BA120A FW2-NT M2 FW2-NT M4	FW2-NT W2-NT AN0397
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Insufficient Information Not Supporting	N N	Oxygen, Dissolved pH Phosphorus (Total) Temperature, water	2010 2006 2006 2006	Medium Priority Medium Priority Medium Priority Medium Priority	<ul> <li>Municipal Point Source Discharges</li> <li>Package Plant or Other Permitted Small</li> </ul>

Fish Consumption	Insufficient Information	Ν				Discharges <ul> <li>Agriculture</li> </ul>
Agricultural Water Supply Aquatic Life	Insufficient Information Not Supporting	N N	Cause Unknown	2006	Medium Priority	• Package Plant or Other Permitted Small Flows
NJ02030105110040-01 Use	Rd)		RIVER	20 MILES Cycle First Listed	HUC14: 02030105110040 As of 2010 contains the following monitoring sites and associated SWQS Classification 01401520 FW2-NT 10- BED-1 FW2-NT AN0398 FW2-NTTMDL StatusSource	
Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply AU ID	Insufficient Information Insufficient Information Not Supporting Not Supporting	N N N	Escherichia coli Arsenic Water Type	2006 2006 Size	Medium Priority Low Priority <b>Location Description</b>	Flows Discharges • Upstream Impoundments (e.g., PI-566 NRCS Structures) • Transfer of Water from an Outside Watershed • Agriculture • Urban Runoff/Storm Sewers • Industrial Point Source Discharge

Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Insufficient Information Fully Supporting Not Supporting Not Supporting	N N N N	Phosphorus (Total) Fecal Coliform Arsenic	2006 2006 2006	Medium Priority Completed Low Priority	<ul> <li>Package Plant or Other</li> <li>Permitted Small</li> <li>Flows</li> <li>Discharges</li> <li>Transfer of</li> <li>Water from an</li> <li>Outside</li> <li>Watershed</li> <li>Agriculture</li> <li>Urban</li> <li>Runoff/Storm</li> <li>Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105110060-01	Rock Brook (above Camp Meeting Ave)		RIVER	21.57 MILES	HUC14: 02030105110060 As of the following monitoring sites an SWQS Classification 01401560 AN0399 FW2-NT BA192 FW2- NT	nd associated FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Fully Supporting Fully Supporting Insufficient Information Fully Supporting	N N N				Agriculture     Urban     Runoff/Storm     Sewers
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105110070-01	Rock Brook (below Cam Ave)	p Meeting	FRESHWATER LAKE RIVER	12.47 ACRES 10.5 MILES	HUC14: 02030105110070 As of the following monitoring sites at SWQS Classification 01401595 1 FW2-NT AN0400 FW2-NT B	nd associated FW2-NT 10-RO-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Insufficient Information Fully Supporting	N N				<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>

Fish Consumption	Insufficient Information	N				
Industrial Water Supply	Insufficient Information	N				
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105110080-01	Pike Run (above Cruser Brook)		RIVER	12.82 MILES	HUC14: 02030105110080 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0402 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105110090-01	Cruser Brook / Roaring E	rook	FRESHWATER LAKE	0.3 ACRES	HUC14: 02030105110090 As of	
			RIVER	14.54 MILES	the following monitoring sites an SWQS Classification AN0403 F	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				

NJ02030105110100-01	Pike Run (below Cruser I	3rook)	FRESHWATER LAKE RIVER	2.8 ACRES 31.68 MILES	HUC14: 02030105110100 As of the following monitoring sites at SWQS Classification 01401700 AN0404 FW2-NT AN0405 FW2 FW2-NT	nd associated FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2008	High Priority	Point Source Discharge
Fish Consumption	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105110110-01	Millstone R (BlackwellsMills to BedenBk)		RIVER	45.79 MILES	0140200010-MIL-5, 10-MIL-6 As of 2010 contains the following monitoring sites and associated SWQS Classification 01460530 FW2- NT AN0406 FW2-NT AN0407 FW2-NT BA122A FW2-NT M5 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	High Priority	Point Source Discharge
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Completed	Package Plant     or Other
Industrial Water Supply	Fully Supporting	Ν				Permitted Small Flows
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Discharges <ul> <li>Agriculture</li> </ul>
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	• Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105110120-01	Sixmile Run (above Mide	llebush Rd)	FRESHWATER LAKE RIVER	2.3 ACRES 22.46 MILES	HUC14: 02030105110120 As of the following monitoring sites at SWQS Classification AN0408 F FW2-NT	nd associated

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Insufficient Information	N N N	Phosphorus (Total)	2006	High Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105110130-01	Sixmile Run (below Middlebush Rd)		RIVER	10.47 MILES	HUC14: 02030105110130 As of the following monitoring sites a SWQS Classification SMR1 FW	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2010	High Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105110140-01	Millstone R(AmwellRd t BlackwellsMills)	0	RIVER	20.18 MILES	0140200010-MIL-5, 10-MIL-6 As of 2010 contains the following monitoring sites and associated SWQS Classification 01401900 FW2- NT 01402000 FW2-NT 10-MIL-5, 10-MIL-6 FW2-NT AN0409 FW2-NT AN0410 FW2-NT DSR 1R FW2-NT EWQ0409 FW2-NT M6	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Phosphorus (Total)	2006	High Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>

Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Completed	
-	11 0		Neterly in Fish Fissue	2010	Completed	
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105110150-01	Royce Brook (above Bran	nch Royce	FRESHWATER LAKE	4.03 ACRES	HUC14: 02030105110150 As of	
	Brook)		RIVER	20.62 MILES	the following monitoring sites and associated SWQS Classification AN0411 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105110160-01	Royce Brook (below/incl Royce Bk)	Branch	RIVER	14.9 MILES	HUC14: 02030105110160 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0412 FW2-NT AN0413 FW2-NT FIBI014 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				Package Plant
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	or Other Permitted Small
Fish Consumption	Insufficient Information	Ν				Flows Discharges
Industrial Water Supply	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Primary Contact Recreation	Insufficient Information	Ν				Runoff/Storm Sewers
Public Water Supply	Insufficient Information	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105110170-01	Millstone River (below A	amwell Rd)	FRESHWATER LAKE RIVER	22.33 ACRES 21.79 MILES	0140200010-MIL-5, 10-MIL- contains the following monitor associated SWQS Classificati NT 10-MIL-3 FW2-NT AN04 BA123A FW2-NT M7 FW2- 1 FW2-NT NJW257 1 FW2-N	oring sites and ion 01402540 FW2- 414 FW2-NT NT NJW04459-257-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	pH Phosphorus (Total) Mercury in Fish Tissue	2006 2006 2010	Medium Priority High Priority Completed	<ul> <li>Transfer of Water from an Outside Watershed</li> <li>Agriculture</li> </ul>
Fish Consumption Industrial Water Supply Primary Contact Recreation	Not Supporting Fully Supporting Not Supporting	N N N	Fecal Coliform	2006	Completed	• Urban Runoff/Storm Sewers
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105120010-01	Green Bk (above/incl Blu	ie Brook)	FRESHWATER LAKE RIVER	28.19 ACRES 11.46 MILES	HUC14: 02030105120010	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption	Fully Supporting Fully Supporting Insufficient Information	N N N				• Urban Runoff/Storm Sewers
Industrial Water Supply Primary Contact Recreation Public Water Supply	Insufficient Information Fully Supporting Not Supporting Fully Supporting	N N N	Fecal Coliform	2006	Completed	

NJ02030105120020-01	Green Bk (N Plainfield g Bk)	age to Blue	RIVER	6.75 MILES	HUC14: 02030105120020 As of the following monitoring sites an SWQS Classification 01403465 01403470 FW2-NT AN0421 FW	nd associated FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Supporting	Ν	Chloride	2010	Low Priority	• Urban
Aquatic Life	Not Supporting	Ν	pH	2010	Medium Priority	Runoff/Storm Sewers
Aquatic Life - Trout	Not Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Total Dissolved Solids	2010	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105120030-01	Stony Brook (North Plainfield)		FRESHWATER LAKE RIVER	18.42 ACRES 14.76 MILES	HUC14: 02030105120030 As of 2010 contains the following monitoring sites and associated SWQS Classification 01403575 FW2-NT AN0422 FW2-NT NJW245 1 FW2-NT NJW245 OUTLET FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Supporting	Ν	Total Dissolved Solids	2008	Medium Priority	• Urban
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Not Supporting	Ν	Total Dissolved Solids	2008	Medium Priority	
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Not Supporting	Ν	Total Dissolved Solids	2008	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105120040-01	Green Bk (Bound Bk to M gage)	N Plainfield	RIVER	14.18 MILES	HUC14: 02030105120040 As of the following monitoring sites an SWQS Classification AN0423 F FW2-NT	nd associated

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Cause Unknown	2006	Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105120050-01	J02030105120050-01 Middle Brook EB		FRESHWATER LAKE	4.87 ACRES	HUC14: 02030105120050 As of	
			RIVER	26.26 MILES	the following monitoring sites and associated SWQS Classification 01403075 FW2-TM AN0418 FW2-TM AN0419 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Supporting	Ν	Chloride Total Dissolved Solids	2010 2008	Low Priority Medium Priority	• Urban Runoff/Storm
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	Sewers
Aquatic Life - Trout	Not Supporting	N	Cause Unknown	2006	Medium Priority	
Fish Consumption	Insufficient Information	N				
Industrial Water Supply	Insufficient Information	N				
Primary Contact Recreation	Insufficient Information	N				
Public Water Supply	Not Supporting	Ν	Total Dissolved Solids	2008	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105120060-01	Middle Brook WB		FRESHWATER LAKE RESERVOIR RIVER	24.88 ACRES 21 ACRES 14.83 MILES	HUC14: 02030105120060 As of 2010 contains the following monitoring sites and associated SWQS Classification 01403171 FW2-NT AN0416 FW2-NT AN0417 FW2-NT BA187 FW2-NT BA188 FW2-NT BA189 FW2-NT BA190 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Cause Unknown	2008	Medium Priority	<ul> <li>Agriculture</li> <li>Urban</li> <li>Runoff/Storm</li> <li>Sewers</li> </ul>
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105120070-01	Cuckels Brook		FRESHWATER LAKE	25.04 ACRES	HUC14: 02030105120070 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0415 FW2-NT	
			RIVER	7.36 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Urban Runoff/Storm
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name	•	Water Type	Size	Location Description	
NJ02030105120080-01	South Fork of Bound Bro	ook	RIVER	20.33 MILES	HUC14: 02030105120080 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0424B FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	Point Source Discharge
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue Polychlorinated biphenyls	2010 2006	Completed Medium Priority	<ul> <li>Agriculture</li> <li>Urban</li> <li>Runoff/Storm</li> <li>Sewers</li> </ul>
Industrial Water Supply	Fully Supporting	N				• Atmospheric Depositon -

Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Toxics
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105120090-01	Spring Lake Fork of Bo	und Brook	FRESHWATER LAKE	10.83 ACRES	HUC14: 02030105120090	
			RIVER	3.61 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	Sewers
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Medium Priority	<ul> <li>Atmospheric</li> <li>Depositon -</li> <li>Toxics</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				TOXICS
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105120100-01	Bound Brook (below for 15s)	rk at 74d 25m	FRESHWATER LAKE RIVER	16.69 ACRES 17.32 MILES	HUC14: 02030105120100 the following monitoring si SWQS Classification 0140 AN0424 FW2-NT	tes and associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial Point Source
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	<ul><li>Point Source</li><li>Discharge</li><li>Agriculture</li></ul>
Fish Consumption	Not Supporting	Ν	Dioxin (including 2,3,7,8-TCDD) Mercury in Fish Tissue Polychlorinated biphenyls	2008 2010 2006	Medium Priority Completed Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				Depositon - Toxics
		Ν	Fecal Coliform	2006	Completed	I UNICO
Primary Contact Recreation	Not Supporting	1				
Primary Contact Recreation Public Water Supply	Not Supporting Fully Supporting	N				

Appendix A

NJ02030105120110-01	Ambrose Brook (above/in	ncl Lake	FRESHWATER LAKE	21.86 ACRES	HUC14: 02030105120110		
	Nelson)		RIVER	5.88 MILES			
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Insufficient Information	Ν					
Aquatic Life	Insufficient Information	Ν					
Fish Consumption	Insufficient Information	Ν					
Industrial Water Supply	Insufficient Information	Ν					
Primary Contact Recreation	Insufficient Information	N					
Public Water Supply	Insufficient Information	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02030105120120-01	Ambrose Brook (below L	ake Nelson)	FRESHWATER LAKE	HWATER LAKE 5.62 ACRES HUC14: 020301051202			
			RIVER	22.24 MILES	the following monitoring sites an SWQS Classification AN0425 F AN0425A FW2-NT FIBI071 FV Lake FW2-NT	W2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Insufficient Information	Ν				• Agriculture	
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	• Urban Runoff/Storm	
Fish Consumption	Insufficient Information	Ν				Sewers	
Industrial Water Supply	Insufficient Information	Ν					
Primary Contact Recreation	Insufficient Information	Ν					
Public Water Supply	Insufficient Information	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02030105120130-01	Green Brook (below Bou	nd Brook)	FRESHWATER LAKE	0.66 ACRES	HUC14: 02030105120130 As of		
			RIVER	7.5 MILES	the following monitoring sites an SWQS Classification 01403900 AN0426 FW2-NT FIBI091 FW2 FW2-NT Passaic-22U FW2-NT	FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	

Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply AU ID	Fully Supporting Not Supporting Not Supporting Not Supporting Not Supporting Not Supporting AU Name	N N N N	Phosphorus (Total) Polychlorinated biphenyls Total Suspended Solids (TSS) Fecal Coliform Sulfates Water Type	2006 2006 2006 2006 2008 <b>Size</b>	Medium Priority Medium Priority Medium Priority Completed Low Priority Location Description	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> </ul>
NJ02030105120140-01	Raritan R Lwr(I-287 Piscatway- Millstone)		DITCH OR CANAL RIVER	12.31 MILES 15.37 MILES	HUC14: 02030105120140 As of 2010 contains the following monitoring sites and associated SWQS Classification 01403300 FW2-NT AN0427 FW2-NT AN0428 FW2-NT R2 FW2-NT R3 FW2-NT R4 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2006	Completed	
Industrial Water Supply	Not Supporting	Ν	Total Suspended Solids (TSS)	2006	Medium Priority	
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic Benzene	2006 2006	Low Priority Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105120150-01	Mile Run		RIVER	6.96 MILES	HUC14: 02030105120150 As of the following monitoring sites an SWQS Classification AN0429 F FW2-NT	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	Orban Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				568618

Industrial Water Supply	Insufficient Information	N				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105120160-01 Raritan R Lwr (MileRun to I-287		FRESHWATER LAKE	5.76 ACRES	HUC14: 02030105120160 As of the following monitoring sites of		
	Pisctwy)		RIVER	27.41 MILES	the following monitoring sites and associated SWQS Classification 01404100 FW2-NT 01404170 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Not Supporting	Ν	Phosphorus (Total) Total Suspended Solids (TSS)	2006 2006	Medium Priority Medium Priority	Runoff/Storm Sewers
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Medium Priority	<ul> <li>Atmospheric Depositon - Toxics</li> </ul>
Industrial Water Supply	Not Supporting	Ν	Total Suspended Solids (TSS)	2006	Medium Priority	Natural
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Sources <ul> <li>Source</li> </ul>
Public Water Supply	Not Supporting	Ν	Arsenic Benzene	2006 2006	Low Priority Low Priority	Unknown
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105120170-01	Raritan R Lwr (Lawrence Run)	e Bk to Mile	FRESHWATER LAKE	5.18 ACRES	HUC14: 02030105120170 As of	
	Kun)		RIVER	21.36 MILES	the following monitoring sites and associated SWQS Classification 01460600 FW2-NT DSR 23R SE1 NJ02-0203 SE1 Passaic-23L SE1 Passaic-23U SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial Point Source
Aquatic Life	Not Supporting	Ν	Cadmium Phosphorus (Total) Total Suspended Solids (TSS) Zinc	2002 2006 2006 2002	Low Priority Medium Priority Medium Priority Low Priority	<ul> <li>Point Source</li> <li>Discharge</li> <li>Urban</li> <li>Runoff/Storm</li> <li>Sewers</li> <li>Source</li> </ul>
Fish Consumption	Not Supporting	Ν	Benzo(a)pyrene (PAHs)	2008	Medium Priority	Unknown

AU Name Great Ditch / Pigeon Swa Attainment	mp Threatened N	Benzene Water Type FRESHWATER LAKE RIVER Cause	2010 Size 172.57 ACRES 11.22 MILES Cycle First Listed	Low Priority Location Description HUC14: 02030105130010 TMDL Status	Source
	mp	Water Type FRESHWATER LAKE	Size 172.57 ACRES	Location Description	
	mp	Water Type	Size	Location Description	
AU Name					
		Benzene	2010	Low Priority	
Not Supporting	Ν	Arsenic	2010	Low Priority	
Not Supporting	Ν	Escherichia coli	2010	Completed	
Not Supporting	Ν	Total Suspended Solids (TSS)	2010	Medium Priority	
Not Supporting	N	Mercury in Fish Tissue	2010	Completed	
Not Supporting	Ν	Phosphorus (Total)	2010	Medium Priority	
Fully Supporting	N				
Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Middle Brook		RIVER	2.42 MILES	HUC14: 02030105120180 As of 2010 contains the following monitoring sites and associated SWQS Classification 01403190 FW2-NT AN0420 FW2-NT FIBI072 FW2-NT	
AU Name		Water Type	Size	Location Description	
Not Supporting	N	Arsenic Benzo(a)pyrene (PAHs) Heptachlor epoxide	2002 2008 2008	Low Priority Medium Priority Medium Priority	
Fully Suggesting	N	DDD DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Mercury in Fish Tissue Polychlorinated biphenyls	2008 2008 2008 2008 2008 2010 2008	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	Depositon - Toxics
	AU Name Middle Brook Attainment Fully Supporting Not Supporting Not Supporting Not Supporting Not Supporting Not Supporting	Insufficient Information N Not Supporting N AU Name AU Name Middle Brook Attainment Threatened Fully Supporting N Not Supporting N Not Supporting N Not Supporting N	DDT Dieldrin Dioxin (including 2,3,7,8-TCDD) Mercury in Fish Tissue Polychlorinated biphenylsFully SupportingNInsufficient InformationNNot SupportingNArsenic Benzo(a)pyrene (PAHs) Heptachlor epoxideAU NameWater TypeMiddle BrookRIVERAttainmentThreatenedFully SupportingNNot SupportingN	DDD DDE DDF Doxin (including 2,3,7,8-TCDD)2008 2008 2008 2008 2008 2010 2008Fully SupportingN-Insufficient InformationN-Not SupportingN-Mot SupportingN-Middle BrookWater TypeSizeMiddle BrookCycle First ListedFully SupportingN-Not SupportingN-Middle BrookThreatenedCauseCycle First Listed-SupportingN-SupportingN-MidsupportingN-MidsupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-SupportingN-	Justic SupportingDDD DDE DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF DDF 

Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105130020-01	dam)		FRESHWATER LAKE	5.05 ACRES	HUC14: 02030105130020 As of	
			RIVER	11.24 MILES	the following monitoring sites and associated SWQS Classification AN0430 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Urban Runoff/Storm
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105130030-01	Oakeys Brook		RIVER	13.71 MILES	HUC14: 02030105130030 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0432 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				

Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105130040-01	Ireland Brook		FRESHWATER LAKE RIVER	25.9 ACRES 11.93 MILES	HUC14: 02030105130040 As o the following monitoring sites a SWQS Classification 01404470	nd associated FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	AN0433 FW2-NT FIBI051 FW2-NT TMDL Status Source	
Agricultural Water Supply	Fully Supporting	N				Agriculture
Aquatic Life	Not Supporting	N	pH	2006	Medium Priority	<ul> <li>Urban Runoff/Storm</li> </ul>
Fish Consumption	Insufficient Information	N				Sewers
Industrial Water Supply	Fully Supporting	N				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105130050-01	Lawrence Bk (Church Lane to Deans Pond)		FRESHWATER LAKE RIVER	36.97 ACRES 13.12 MILES	014043029-LAW-1 As of 2010 contains the following monitoring sites and associated SWQS Classification 01404400 FW2-NT 9-LAW-1 FW2-NT AN0431 FW2-NT IreB1 FW2-NT LawB1 FLi FW2-NT LawB1-FLi FW2-NT NJW060 1 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Completed	Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Medium Priority	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105130060-01	Lawrence Bk (Milltown	o Church	FRESHWATER LAKE	10.5 ACRES	HUC14: 02030105130060 As o	f 2010 contains

	Lane)		RIVER 12.14 MILE		the following monitoring sites and associated SWQS Classification 01405003 FW2-NT AN0434 FW2-NT EWQ0434 FW2-NT LawB2 FL FW2-NT LawB2-FL FW2-NT LawB3 FL0 FW2-NT LawB3 FL0_R FW2-NT LawB3-FL0 FW2-NT La	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Natural
Aquatic Life	Not Supporting	Ν	рН	2010	Medium Priority	Sources
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Completed	
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Medium Priority	
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105130070-01	Lawrence Bk (below Milltown/Herberts br)		FRESHWATER LAKE RIVER	99.51 ACRES 12.52 MILES	HUC14: 02030105130070 A the following monitoring site SWQS Classification AN043 WMPi FW2-NT LawB4-WM WMP FW2-NT LawB5 WM LawB5-WMP FW2-NT Law NT LawB6 WMPo	s and associated 5 FW2-NT LawB4 IPi FW2-NT LawB5 P_C FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Dioxin (including 2,3,7,8-TCDD) Polychlorinated biphenyls	2006 2006	Low Priority Low Priority	Package Plant or Other Permitted Small Flows
Industrial Water Supply	Insufficient Information	Ν				Discharges
Primary Contact Recreation	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban Runoff/Storm</li></ul>
Public Water Supply	Insufficient Information	Ν				Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105140010-01	Manalapan Brook (above	e 40d 16m	FRESHWATER LAKE	25.73 ACRES	014053409-MAN-1 As of 20	10 contains the

	15s)		RIVER	49.29 MILES	following monitoring sites and associated SWQS Classification 01405303 FW2-NT AN0437 FW2- NT AN0438 FW2-NT EWQ0437 FW2-NT NJW074 1 FW2-NT NJW074 2 FW2-NT NJW074 OUTLET FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Transfer of
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Completed	Water from an Outside
Fish Consumption	Insufficient Information	Ν				Watershed <ul> <li>Agriculture</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Sewers
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105140020-01	Manalapan Bk(incl LkManlpn to 40d16m15s)		FRESHWATER LAKE RIVER	48.34 ACRES 44.64 MILES	014053409-MAN-1 As of 2010 following monitoring sites and Classification 01405340 FW2-N FW2-NT AN0439 FW2-NT	associated SWQS
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Completed	• Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Completed	Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105140030-01	Manalapan Brook (below Lake Manalapan)		FRESHWATER LAKE RIVER	76.68 ACRES 37.38 MILES	014054409-MAN-201405390 As of 2010 contai the following monitoring sites and associated SWQS Classification 01405390 FW2-NT 01405440 FW2-NT 9-MAN-2 FW2-NT AN044 FW2-NT DSR 52L FW2-NT EWQ0440 FW2-N	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Mercury	2008	Completed	<ul><li> Agriculture</li><li> Urban</li></ul>
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Natural Sources
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105150010-01	Weamaconk Creek		FRESHWATER LAKE	3.87 ACRES	0140518568 As of 2010 contain	
			RIVER	22.02 MILES	monitoring sites and associated Classification 01405185 FW2-N	NT 68 FW2-NT 69
					FW2-NT 9 FW2-NT AN0441 F FW2-NT AN0443 FW2-NT MI	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Transfer of Water from an
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved Phosphorus (Total)	2010 2006	Medium Priority High Priority	Outside Watershed
			Total Suspended Solids (TSS) Turbidity	2006 2010	Medium Priority Medium Priority	<ul><li>Agriculture</li><li>Urban</li></ul>
Fish Consumption	Insufficient Information	N				Runoff/Storm Sewers
Industrial Water Supply	Fully Supporting	N				beweis
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	N				
		IN	<b>W</b> ( ) = <b>m</b>			
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105150020-01	McGellairds Brook (abov Mills)	e Taylors	FRESHWATER LAKE	21.95 ACRES	HUC14: 02030105150020 As of the following monitoring sites a	nd associated
			RIVER	22.75 MILES	SWQS Classification 61 FW2-1 NT AN0445 FW2-NT MB-97 F	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture

Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Completed	• Urban Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105150030-01	McGellairds Brook (below Taylors Mills)		RIVER	15.09 MILES	HUC14: 02030105150030 As of 2010 contains the following monitoring sites and associated SWQS Classification 01405180 FW2-NT 22 FW2-NT AN0446 FW2-NT AN0447 FW2-NT MB-92 FW2-NT MGB1 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105150040-01	Matchaponix Brook (abo Bk)	ve/incl Pine	RIVER	13.3 MILES	HUC14: 02030105150040 As of 2010 contains the following monitoring sites and associated SWQS Classification 01405195 FW2-NT AN0448 FW2-NT AN0449 FW2-NT MB-87 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers

Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν			L	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105150050-01	NJ02030105150050-01 Barclay Brook		FRESHWATER LAKE	8.72 ACRES	HUC14: 02030105150050 As of	
			RIVER	26.27 MILES	the following monitoring sites and associated SWQS Classification 01405285 FW2-NT AN0450 FW2-NT BaB1 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	рН	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2010	Medium Priority	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105150060-01	Matchaponix Brook (belo Brook)	ow Pine	RIVER	44.23 MILES	0140530201405290 As of 2010 contains the following monitoring sites and associated SWQS Classification 01405290 FW2-NT 01405302 FW2-NT AN0451 FW2-NT EWQ0451 FW2-NT MB1 FW2-NT MB2 FW2-NT MtB1 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Municipal
Aquatic Life		<b>N</b> 7	Oxygen, Dissolved	2010	Medium Priority	Point Source Discharges
· ·	Not Supporting	Ν	Phosphorus (Total)	2006	High Priority	Package Plant
Fish Consumption	Not Supporting Insufficient Information	N N				• Package Plant or Other Permitted Small
						Package Plant or Other Permitted Small Flows Discharges
Fish Consumption	Insufficient Information	Ν				Package Plant or Other Permitted Small Flows

AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105160010-01	Deep Run (above Monmouth Co line)		RIVER	24.44 MILES	HUC14: 02030105160010 As of 2010 contains the following monitoring sites and associated SWQS Classification MB-90 FW2-NT New Market Pond FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				• Industrial Point Source
Aquatic Life	Not Supporting	N	Oxygen, Dissolved	2008	Medium Priority	Discharge <ul> <li>Package Plant</li> </ul>
Fish Consumption	Insufficient Information	Ν				or Other Permitted Small
Industrial Water Supply	Fully Supporting	N				Flows Discharges
Primary Contact Recreation	Insufficient Information	Ν				• Urban Runoff/Storm
Public Water Supply	Fully Supporting	Ν				Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105160020-01	Deep Run (Rt 9 to Monm line)	outh Co	RIVER	17.56 MILES	HUC14: 02030105160020 As o the following monitoring sites a SWQS Classification AN0453 F	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				• Urban
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2008	Medium Priority	Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	N				
Primary Contact Recreation	Insufficient Information	N				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105160030-01	Duhernal Lake / Iresick E	Brook	FRESHWATER LAKE	115.69 ACRES	HUC14: 02030105160030 As o	
			RIVER	20.57 MILES	the following monitoring sites a SWQS Classification 01405470 AN0452 FW2-NT MnB2-DL F	FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	N	Oxygen, Dissolved	2010	Medium Priority	
Fish Consumption	Not Supporting	N	Mercury in Fish Tissue	2010	Completed	
Industrial Water Supply	Insufficient Information	N				
Primary Contact Recreation	Insufficient Information	N				
Public Water Supply	Fully Supporting	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105160040-01	Deep Run (below Rt 9)		RIVER	15.81 MILES	HUC14: 02030105160040 As of 2010 contains the following monitoring sites and associated SWQS Classification 01406040 FW2-NT AN0454 FW2-NT EWQ0454 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2008	Medium Priority	Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105160050-01	Tennent Brook (above 74	ld 19m 05s)	FRESHWATER LAKE	6.58 ACRES	HUC14: 02030105160050	
			RIVER	14.71 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				

Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105160060-01	``````````````````````````````````````		FRESHWATER LAKE RIVER	43.68 ACRES 11.15 MILES	HUC14: 02030105160060 As the following monitoring sites SWQS Classification AN045:	and associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105160070-01	South River (below Duhe	ernal Lake)	FRESHWATER LAKE RIVER	2.06 ACRES 33.56 MILES	HUC14: 02030105160070 As the following monitoring sites SWQS Classification 0140570	and associated
		1			01406580 SE1 DSR 24R FW2	2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Insufficient Information Not Supporting Not Supporting	N N	Cadmium Copper Lead Dioxin (including 2,3,7,8-TCDD)	2006 2006 2006 2006	Low Priority Low Priority Low Priority Medium Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric</li> </ul>
Industrial Water Supply	Insufficient Information	N	Mercury in Water Column Polychlorinated biphenyls	2008 2006	Medium Priority Medium Priority	Depositon - Toxics • Agriculture
Primary Contact Recreation	Insufficient Information	Ν		2005		
Public Water Supply	Not Supporting	Ν	Arsenic Cadmium	2006 2006	Low Priority Low Priority	

			Chromium (total) Lead Mercury in Water Column	2006 2006 2008	Low Priority Low Priority Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105160080-01	Mill Brook / Martins Creek		RIVER	13.91 MILES	HUC14: 02030105160080 As the following monitoring sites SWQS Classification AN0436	and associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
	AU Name				Location Description	
AU ID	AU Name		Water Type	Size	Location Description	
AU ID NJ02030105160090-01	AU Name Red Root Creek / Crows	Mill Creek	Water Type RIVER	Size 34.13 MILES	Location Description           HUC14: 02030105160090	
		Mill Creek Threatened				Source
NJ02030105160090-01	Red Root Creek / Crows		RIVER	34.13 MILES	HUC14: 02030105160090	Source
NJ02030105160090-01 Use	Red Root Creek / Crows Attainment	Threatened	RIVER	34.13 MILES	HUC14: 02030105160090	<ul> <li>Source Unknown</li> <li>Atmospheric</li> </ul>
NJ02030105160090-01 Use Agricultural Water Supply	Red Root Creek / Crows Attainment Insufficient Information	<b>Threatened</b> N	RIVER	34.13 MILES	HUC14: 02030105160090	• Source Unknown

Primary Contact Recreation	Insufficient Information	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02030105160100-01	Raritan R Lwr (below La	wrence Bk)	FRESHWATER LAKE RIVER	22.72 ACRES 53.91 MILES	HUC14: 02030105160100 As of 2010 contain the following monitoring sites and associated SWQS Classification CCMPMX0005 SE1 NJ 0001 SE1 NJ00-0005 SE1 Passaic-24 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation	Not Supporting Not Supporting Insufficient Information	N N	Cadmium Oxygen, Dissolved Benzo(a)pyrene (PAHs) Chlordane DDD DDE DDT Dieldrin Diosin (including 2,3,7,8-TCDD) Heptachlor epoxide Mercury in Fish Tissue Polychlorinated biphenyls	2006 2008 2008 2008 2008 2008 2008 2008	Low Priority Medium Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Package Plant or Other Permitted Small Flows Discharges</li> <li>Urban Runoff/Storm Sewers</li> <li>Combined Sewer Overflows</li> <li>Municipal Point Source Discharges</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040104090010-01	Mashipacong Island UDF	V tribs	RIVER	7.33 MILES	HUC14: 02040104090010	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Insufficient Information Insufficient Information	N N				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	

NJ02040104090020-01	Clove Brook (Delaware R)		FRESHWATER LAKE RIVER	65.07 ACRES 25.6 MILES	HUC14: 02040104090020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01438090 FW2-TP AN0001 FW2-TP AN0002 FW2-TP DSR 62L FW1 EWQ0002 FW2-TP FIBI046 FW2-TP NJW04459-090-1 FW2-TM NJW04459-090-0 F	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Not Supporting	Ν	Mercury	2008	Completed	
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040104090030-01	Shimers Brook		FRESHWATER LAKE RIVER	146.27 ACRES 17.62 MILES	01438399DRBC/NPS47 As of 2010 contains the following monitoring sites and associated SWQS Classification 01438399 FW2-TP 01438400 FW2- TP AN0003 FW2-TP DRBC/NPS47 FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Upstream
Aquatic Life	Not Supporting	Ν	Temperature, water	2008	Medium Priority	Impoundments (e.g., PI-566
Aquatic Life - Trout	Not Supporting	Ν	Oxygen, Dissolved Temperature, water	2010 2008	Medium Priority Medium Priority	NRCS Structures) • Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Medium Priority	
Public Water Supply	Fully Supporting	Ν				

Appendix A

NJ02040104110010-01	UDRV tribs (Dingmans H bridg)	Ferry to 206	RIVER	7.26 MILES	HUC14: 02040104110010	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Aquatic Life - Trout	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040104110020-01	UDRV tribs (Flat Bk to I Ferry)	Dingmans	FRESHWATER LAKE	11.34 ACRES	HUC14: 02040104110020 As of 2010 contains	
	reny)		RIVER	8.21 MILES	the following monitoring sites an SWQS Classification NJW054 1 NJW054 OUTLET FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040104130010-01	Little Flat Brook (Beersk above)	ill and	FRESHWATER LAKE RIVER	41.89 ACRES 16.07 MILES	01439920DRBC/NPS2251 As o the following monitoring sites ar SWQS Classification AN0004 F FW2-TP DSR 58L FW2-NT NJ FW2-NT NJW04459-116-O FW FW2-NT NJW116 center FW2-1	nd associated W2-TP AN0005 W04459-116-1 '2-TP NJW116 1

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Fully Supporting	N N				• Upstream Impoundments (e.g., Pl-566
Aquatic Life - Trout	Not Supporting	N	Temperature, water	2006	Medium Priority	NRCS Structures)
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Completed	<ul><li>Agriculture</li><li>Urban</li></ul>
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	N				
AU ID	AU Name		Water Type 5	Size	Location Description	
NJ02040104130020-01	Little Flat Brook (Layton	to Beerskill)	RIVER	14.6 MILES	01439920DRBC/NPS2251 As of 2010 contains the following monitoring sites and associated SWQS Classification FIBI065 FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Fully Supporting	N N				• Upstream Impoundments (e.g., PI-566
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	NRCS Structures)
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040104130030-01	Little Flat Brook (Conflu Layton)	ence to	RIVER	13.63 MILES	01439920DRBC/NPS2251 As of 2010 contains the following monitoring sites and associated SWQS Classification 01439920 FW2-TP AN0005A FW2-TP DRBC/NPS2251 FW2-TP EWQ0005A FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Upstream

Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Insufficient Information Fully Supporting Fully Supporting Fully Supporting	N N N N	Temperature, water	2006	Medium Priority	Impoundments (e.g., Pl-566 NRCS Structures)
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040104140010-01	Big Flat Brook (above Forked Brook)		FRESHWATER LAKE	20.23 ACRES	HUC14: 02040104140010 As of the following monitoring sites at	
			RIVER	23.56 MILES	SWQS Classification DSR 9L F	W2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Fully Supporting	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040104140020-01	Forked Brook/Parker Bro	ok	FRESHWATER LAKE	47.57 ACRES	HUC14: 02040104140020	
			RIVER	15.35 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				

Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	N				
Public Water Supply	Fully Supporting	N				
AUID	AU Name		Water Type	Size	Location Description	
NJ02040104140030-01	Big Flat Brook (Kittle Rd to Forked Bk)		FRESHWATER LAKE RIVER	22.65 ACRES 13.66 MILES	HUC14: 02040104140030 As of 2010 contains the following monitoring sites and associated SWQS Classification NJW036 1 FW2-NT NJW036 2 FW2-NT NJW036 3 FW2-NT NJW036 Center FW2-NT NJW036 OUTLET FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040104140040-01	Big Flat Brook (Confluence to Kittle Rd)		FRESHWATER LAKE RIVER	175.77 ACRES 33.07 MILES	HUC14: 02040104140040 As of 2010 contains the following monitoring sites and associated SWQS Classification 01439830 FW2-TP AN000 FW2-TP FIBI066 FW2-TP NJW013 1 FW2-NT NJW013 2 FW2-NT NJW013 Center FW2-NT NJW013 OUTLET FW2-TP NJW063 1 F	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	pH	2010	Medium Priority	
Aquatic Life - Trout	Not Supporting	Ν	pH	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				

Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040104150010-01	Flat Brook (Tillman Broo	ok to	FRESHWATER LAKE	8.31 ACRES	01440000DRBC/NPS32	
	Confluence)		RIVER	18.61 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Upstream Impoundments
Aquatic Life	Not Supporting	Ν	Temperature, water	2006	Medium Priority	(e.g., Pl-566 NRCS
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	Structures)
Fish Consumption	Insufficient Information	Ν				Agriculture
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Medium Priority	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040104150020-01	Flat Brook (below Tillma	an Brook)	FRESHWATER LAKE	16.59 ACRES	01440000DRBC/NPS32 As of 2	
			RIVER	19.62 MILES	following monitoring sites and a Classification 01440000 FW2-T TM AN0008 FW2-TM DRBC/N	M AN0007 FW2-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Upstream
Aquatic Life	Fully Supporting	Ν				Impoundments (e.g., Pl-566 NRCS
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	NRCS Structures)
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				

Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040104240010-01	r i r i r i r i r i r i r i r i r i r i		FRESHWATER LAKE RIVER	67.6 ACRES 15.85 MILES	HUC14: 02040104240010 As of 2010 contains the following monitoring sites and associated SWQS Classification 01440097 FW2-TP 01440100 FW2-TP AN0009 FW2-TP AN0010 FW2-TP AN0011 FW2-TP DRBC/NPS31 FW2- TP FIBI039 FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	pH	2008	Medium Priority	
Aquatic Life - Trout	Not Supporting	Ν	pH	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040104240020-01	Dunnfield Creek (incl UI	DRV)	FRESHWATER LAKE RIVER	37.3 ACRES 15.51 MILES	HUC14: 02040104240020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01442760 FW2-TP AN0012 FW2-TP NJW142 1 FW1 NJW142 2 FW1 NJW142 OUTLET FW1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				

Public Water Supply	Fully Supporting	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105030010-01	)1 Swartswood trib(41-06-06 thru Lk Owassa)		FRESHWATER LAKE RIVER	451.32 ACRES 21.21 MILES	HUC14: 02040105030010 As of 2010 contains the following monitoring sites and associated SWQS Classification 01443462 FW2-TM NJW059 1 FW2-NT NJW059 OUTLET FW2-TN	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Insufficient Information Not Supporting	N N	pH Phosphorus (Total) Temperature, water	2010 2008 2008	Medium Priority Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Upstream Impoundments</li> </ul>
Aquatic Life - Trout Fish Consumption	Not Supporting Insufficient Information	N N	Temperature, water	2008	Medium Priority	(e.g., Pl-566 NRCS Structures)
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105030020-01	Swartswood Lake and tri	bs	FRESHWATER LAKE RIVER	637.81 ACRES 15.88 MILES	HUC14: 02040105030020 As of the following monitoring sites at SWQS Classification 01443464 01443466 FW2-TM 01443468 F 01443470 FW2-NT AN0023 FW FW2-TM DSR 18L FW2-TM F	nd associated FW2-TM W2-TM V2-NT AN0023A
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout	Insufficient Information Not Supporting Not Supporting	N N N	Temperature, water Temperature, water	2008 2008	Medium Priority Medium Priority	• Upstream Impoundments (e.g., PI-566 NRCS Structures)
Fish Consumption Industrial Water Supply	Not Supporting Fully Supporting	N N	Mercury in Fish Tissue	2008	Completed	• Atmospheric Depositon - Toxics

Primary Contact Recreation Public Water Supply	Not Supporting Fully Supporting	N N	Fecal Coliform	2006	Completed	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105030030-01	Trout Brook		FRESHWATER LAKE RIVER	66.76 ACRES 15.47 MILES	HUC14: 02040105030030 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0024 FW2-TP DSR 51L FW1-TM FIB1081 FW2-NT NJW04459-081-O FW2-TP NJW081 1 FW2-NT NJW081 center FW2-NT NJW081 OUTLET FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply AU ID NJ02040105040010-01	Insufficient InformationFully SupportingFully SupportingNot SupportingInsufficient InformationNot SupportingInsufficient InformationAU NameCulvers Creek	N N N N N	Mercury Fecal Coliform Water Type FRESHWATER LAKE RIVER	2008 2006 Size 562.48 ACRES 13.71 MILES	Completed Completed <b>Location Description</b> HUC14: 02040105040010 As of the following monitoring sites at SWQS Classification AN0017 F FW2-TM FIB1100 FW2-TM NJ	nd associated W2-TM AN0018
					NJW172 2 FW2-TM NJW172 3	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Aquatic Life - Trout	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				

	1			1	1	1
Primary Contact Recreation	Insufficient Information	N				
Public Water Supply	Insufficient Information	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105040020-01	5		FRESHWATER LAKE RIVER	13.19 ACRES 16.85 MILES	0144337001443409 As of 2010 contains the following monitoring sites and associated SWQS Classification 01443370 FW2-NT 01443409 FW2-NT AN0019 FW2-NT AN0020 FW2-NT EWQ0020 FW2-NT PK-7 FW2-NT PK-8 FW2- NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Insufficient Information	N N N	Cause Unknown	2008	Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Industrial Water Supply	Fully Supporting	N				
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105040030-01	Lake Kemah tribs		FRESHWATER LAKE RIVER	115.78 ACRES 11.34 MILES	HUC14: 02040105040030 As of the following monitoring sites an SWQS Classification PK-9 FW2	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Agriculture
Aquatic Life	Insufficient Information	Ν				• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	

NJ02040105040040-01	Lafayette Swamp tribs		RIVER	10.1 MILES	HUC14: 02040105040040 As o the following monitoring sites a SWQS Classification AN0016 I	nd associated	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Insufficient Information	Ν				• Agriculture	
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	• Urban Runoff/Storm	
Aquatic Life - Trout	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Sewers	
Fish Consumption	Insufficient Information	Ν					
Industrial Water Supply	Insufficient Information	Ν					
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed		
Public Water Supply	Insufficient Information	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040105040050-01	Sparta Junction tribs		FRESHWATER LAKE	112.6 ACRES		JC14: 02040105040050 As of 2010 contains following monitoring sites and associated	
			RIVER	19.59 MILES	SWQS Classification AN0014 I FW2-NT PK-2 FW2-TP		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>	
Aquatic Life	Fully Supporting	Ν				• Orban Runoff/Storm Sewers	
Aquatic Life - Trout	Insufficient Information	Ν				Sewers	
Fish Consumption	Insufficient Information	Ν					
Industrial Water Supply	Insufficient Information	Ν					
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed		
Public Water Supply	Insufficient Information	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040105040060-01	Paulins Kill (above Rt 15	)	FRESHWATER LAKE	32.4 ACRES	HUC14: 02040105040060 As o the following monitoring sites a		
			RIVER	24.63 MILES	SWQS Classification 01443250 AN0015 FW2-NT BA163 FW2	FW2-NT	

					NT BA54 FW2-TM Newton I D3 FW2-TM Newton U1 F	D2 FW2-NT Newton
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial Point Source
Aquatic Life	Not Supporting	N	Oxygen, Dissolved Phosphorus (Total)	2006 2006	Medium Priority Medium Priority	Discharge • Municipal Point Source
Aquatic Life - Trout	Not Supporting	N	Oxygen, Dissolved Phosphorus (Total)	2006 2006	Medium Priority Medium Priority	<ul><li>Discharges</li><li>Package Plant or Other</li></ul>
Fish Consumption	Insufficient Information	Ν				Permitted Small Flows
Industrial Water Supply	Fully Supporting	Ν				Discharges <ul> <li>Transfer of</li> </ul>
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Water from an Outside
Public Water Supply	Fully Supporting	Ν				Watershed <ul> <li>Agriculture</li> </ul>
						• Urban Runoff/Storm
						Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105040070-01	Paulins Kill (Dry Brook t	to Rt 15)	FRESHWATER LAKE	2.1 ACRES	HUC14: 02040105040070 As of 2010 contains the following monitoring sites and associated	
		I	RIVER	11.83 MILES	SWQS Classification BA55A	
			RIVER	THUS MILLS	FW2-TM PK-6 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	FW2-TM PK-6 FW2-NT TMDL Status	Source
Use Agricultural Water Supply	Attainment Fully Supporting	<b>Threatened</b> N				Source • Agriculture
						Source • Agriculture • Urban Runoff/Storm
Agricultural Water Supply	Fully Supporting	N				Source <ul> <li>Agriculture</li> <li>Urban</li> </ul>
Agricultural Water Supply Aquatic Life	Fully Supporting Fully Supporting	N N				Source • Agriculture • Urban Runoff/Storm
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Fully Supporting Insufficient Information	N N N				Source • Agriculture • Urban Runoff/Storm
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Fully Supporting Fully Supporting Insufficient Information Fully Supporting	N N N	Cause	Cycle First Listed	TMDL Status	Source • Agriculture • Urban Runoff/Storm
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation	Fully Supporting Fully Supporting Insufficient Information Fully Supporting Not Supporting	N N N N	Cause	Cycle First Listed	TMDL Status	Source • Agriculture • Urban Runoff/Storm

	Brook)		RIVER	9.29 MILES	following monitoring sites and a Classification 01443440 FW2-N FW2-NT 1-PAU-1 FW2-NT AN AN0021D FW2-NT BA56 FW2 FW2-NT EWQ0021 FW2-NT N	T 01443441 10021 FW2-NT -NT BA57A
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life - Trout	Insufficient Information	Ν				Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105040090-01	Paulins Kill (Stillwater V Lake)	il to PK	FRESHWATER LAKE RIVER	9.74 ACRES 19.53 MILES	HUC14: 02040105040090 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0022 FW2-TM AN0022A FW2-TM FIBI082 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Upstream Impoundments
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	(e.g., Pl-566 NRCS
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	Structures) • Agriculture
Fish Consumption	Insufficient Information	Ν				Vrban Runoff/Storm
Industrial Water Supply	Fully Supporting	Ν				Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105050010-01	Paulins Kill (Blairstown t	o Stillwater)	FRESHWATER LAKE	120.04 ACRES	HUC14: 02040105050010 As of the following monitoring sites an	

			RIVER	33.92 MILES	SWQS Classification FIBI001 1 FW2-TM NJW154 2 FW2-T OUTLET FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Upstream
Aquatic Life	Not Supporting	Ν	Temperature, water	2006	Medium Priority	Impoundments (e.g., PI-566
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	NRCS Structures)
Fish Consumption	Insufficient Information	Ν				<ul> <li>Agriculture</li> <li>Urban</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105050020-01	Blair Creek		FRESHWATER LAKE RIVER	171.58 ACRES 23.14 MILES	HUC14: 02040105050020 As the following monitoring sites SWQS Classification 014435( AN0025 FW2-TM AN0025A FW2-NT AN0027 FW2-TM N NJW010 2 FW2-NT NJW010	and associated 00 FW2-TM FW2-NT AN0026 JJW010 1 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Agriculture
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life - Trout	Fully Supporting	Ν				Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105050030-01	Jacksonburg Creek		FRESHWATER LAKE	32.2 ACRES	HUC14: 02040105050030 As the following monitoring sites	

			RIVER	16.3 MILES	SWQS Classification 01443550 01443600 FW2-TM AN0028 FW FW2-TM		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Fully Supporting	Ν				Agriculture	
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm	
Aquatic Life - Trout	Fully Supporting	Ν				Sewers	
Fish Consumption	Insufficient Information	Ν					
Industrial Water Supply	Fully Supporting	Ν					
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed		
Public Water Supply	Fully Supporting	Ν					
AU ID	AU Name		Water Type	Size	Location Description	tion Description	
NJ02040105050040-01	Yards Creek		FRESHWATER LAKE	497.87 ACRES	HUC14: 02040105050040 As of the following monitoring sites an		
			RIVER	15.13 MILES	SWQS Classification 01443890 FW2-TP AN0031 FW2-TP DSR	FW2-TP AN0030	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>	
Aquatic Life	Fully Supporting	Ν				<ul> <li>Orban</li> <li>Runoff/Storm</li> <li>Sewers</li> </ul>	
Aquatic Life - Trout	Not Supporting	Ν	Oxygen, Dissolved	2010	Medium Priority	Sewers	
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Completed		
Industrial Water Supply	Insufficient Information	Ν					
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed		
Public Water Supply	Insufficient Information	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040105050050-01	Paulins Kill (below Blair	stown gage)	FRESHWATER LAKE	132.98 ACRES	HUC14: 02040105050050 As of the following monitoring sites an		
			RIVER	35.18 MILES	SWQS Classification AN0032 F AN0032A FW2-TM AN0032B	W2-TM	

					AN0032C FW2-TM DRBCNJ0036 FW2-TN FIBI055 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Package Plant     or Other
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Permitted Small Flows
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	Discharges
Fish Consumption	Insufficient Information	Ν				• Upstream Impoundments
Industrial Water Supply	Fully Supporting	Ν				(e.g., Pl-566 NRCS
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Structures) <ul> <li>Agriculture</li> </ul>
Public Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105060010-01	Stony Brook (incl UDRV	)	FRESHWATER LAKE	1.69 ACRES	HUC14: 02040105060010 As o	
			RIVER	15.52 MILES	the following monitoring sites a SWQS Classification 01443000 FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				Agriculture
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life - Trout	Fully Supporting	Ν				Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105060020-01	Delawanna Creek (incl U	DRV)	FRESHWATER LAKE	37.39 ACRES	HUC14: 02040105060020 As o	
			RIVER	19.28 MILES	the following monitoring sites and associated SWQS Classification 01444520 FW2-TP AN FW2-TP AN0034 FW2-TP NJW04459-087-	

					FW2-NT NJW04459-087-O FW FW2-NT NJW087 center FW2-	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	pH	2010	Medium Priority	
Aquatic Life - Trout	Not Supporting	Ν	pH	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105070010-01	Lake Lenape trib		FRESHWATER LAKE	135.39 ACRES	HUC14: 02040105070010	
			RIVER	12.3 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Aquatic Life - Trout	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105070020-01	New Wawayanda Lake/A trib	Andover Pond	FRESHWATER LAKE RIVER	363.15 ACRES 16.94 MILES	HUC14: 02040105070020 As of 2010 contains the following monitoring sites and associated SWQS Classification NJW075 1 FW2-TM NJW075 OUTLET FW2-NT NJW267 1 FW2-TI NJW267 2 FW2-TM NJW267 OUTLET FW2-N NJW289 1 FW2-TM NJW289 2 FW2-TP	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Aquatic Life - Trout	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105070030-01	Pequest River (above Bri	ghton)	FRESHWATER LAKE	86.32 ACRES	HUC14: 02040105070030 As of	
	R		RIVER	19.94 MILES	the following monitoring sites and associated SWQS Classification 01444970 FW2-TM AN0035 FW2-TM BA45 FW2-TM BA45A FW TM BA46 FW2-TM BA47 FW2-TM NJW0445 081-1 FW2-TM NJ	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2010	Medium Priority	• Urban Runoff/Storm
Aquatic Life - Trout	Not Supporting	Ν	Oxygen, Dissolved	2010	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105070040-01	Brighton)		FRESHWATER LAKE RIVER	19.01 ACRES 17.17 MILES	HUC14: 02040105070040 As of 2010 contains the following monitoring sites and associated SWQS Classification 01444990 FW2-NT 01445000 FW2-TM AN0036 FW2-NT AN0037 FW2-TM FIBI063 FW2-TM FIBI064 FW2-NT NJW263 1 FW2-TM Pequest 1 FW2-TM	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	• Urban Runoff/Storm
Aquatic Life - Trout	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Medium Priority	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105070050-01	Trout Brook/Lake Tranqu	uility	FRESHWATER LAKE	133.38 ACRES	HUC14: 02040105070050 As of	
			RIVER	20.94 MILES	the following monitoring sites and associated SWQS Classification AN0038 FW2-TP NJW04459-255-1 FW2-NT NJW04459-255-2 FW2-NT NJW04459-255-0 FW2-TP NJW165 FW2-NT NJW165 2 FW2-NT NJW255 1 FW2- NT NJW25	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105070060-01	Pequest R (below Bear S Trout Bk)	wamp to	FRESHWATER LAKE RIVER	6.82 ACRES 12.02 MILES	HUC14: 02040105070060 As of the following monitoring sites an SWQS Classification 01445100 AN0039 FW2-NT NJW193 1 FW FW2-NT Pequest 3 FW2-NT	nd associated FW2-NT

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				• Industrial
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2008	Completed	Point Source Discharge
Aquatic Life - Trout	Not Supporting	Ν	Phosphorus (Total)	2008	Completed	• Package Plant or Other
Fish Consumption	Insufficient Information	Ν				Permitted Small Flows
Industrial Water Supply	Fully Supporting	Ν				Discharges <ul> <li>Agriculture</li> </ul>
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	• Urban Runoff/Storm
Public Water Supply	Fully Supporting	Ν				Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105080010-01	Bear Brook (Sussex/War	ren Co)	FRESHWATER LAKE	74.11 ACRES	HUC14: 02040105080010 As of	
			RIVER	13.79 MILES	the following monitoring sites and associated SWQS Classification 01445160 FW2-TP AN0040A FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	• Urban Runoff/Storm
Aquatic Life - Trout	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105080020-01	Bear Creek		FRESHWATER LAKE	35.37 ACRES	HUC14: 02040105080020 As of	
			RIVER	19.11 MILES	the following monitoring sites and associated SWQS Classification 01445210 FW2-TM AN0040 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				

Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105090010-01 Pequest R (Drag Stripbe Swamp)	elow Bear	FRESHWATER LAKE	18.34 ACRES	HUC14: 02040105090010		
Swamp)			RIVER	8.73 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2008	Completed	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105090020-01	Pequest R (Cemetary Roa Strip)	ad to Drag	RIVER	12.15 MILES	HUC14: 02040105090020 As of the following monitoring sites an SWQS Classification Pequest 4	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Completed	• Urban Runoff/Storm
Aquatic Life - Trout	Fully Supporting	Ν				Sewers
Fish Consumption	Insufficient Information	Ν				

Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Fully Supporting	N		2000	compreted	
AU ID	AU Name	IN	Water Type	Size	Location Description	
NJ02040105090030-01	Pequest R (Furnace Bk to Cemetary Road)		FRESHWATER LAKE RIVER	0.67 ACRES 12.07 MILES	014455001-PEQ-2 As of 2010 contains the following monitoring sites and associated SWQS Classification 01445430 FW2-NT AN0041 FW2- NT BA41 FW2-NT BA42 FW2-TM BA43 FW2- TM FIBI003 FW2-TM Pequest 5 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Insufficient Information Not Supporting Not Supporting Insufficient Information Insufficient Information Not Supporting Insufficient Information	N N N N N	Phosphorus (Total) Total Suspended Solids (TSS) Phosphorus (Total) Fecal Coliform	2006 2006 2006 2006	Completed Medium Priority Completed Completed	<ul> <li>Package Plant or Other Permitted Small Flows Discharges</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Industrial Point Source Discharge</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105090040-01	Mountain Lake Brook		FRESHWATER LAKE RIVER	131.96 ACRES 8.97 MILES	HUC14: 02040105090040 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0044 FW2-NT BA40B FW2-NT DSR 14L FW2-TM NJW246 1 FW2- TM NJW246 OUTLET FW2-TM NJW262 1 FW2-TM NJW262 2 FW2-TM NJW262 OUTLET F	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout	Insufficient Information Insufficient Information Insufficient Information	N N N				<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban</li> </ul>

Fish Consumption	Not Supporting	Ν	Mercury	2008	Completed	Runoff/Storm Sewers
Industrial Water Supply	Insufficient Information	Ν				Seners
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105090050-01	Furnace Brook		FRESHWATER LAKE	56.49 ACRES	HUC14: 02040105090050 As of	
			RIVER	11.37 MILES	the following monitoring sites and associated SWQS Classification 01445495 FW2-NT AN0042 FW2-NT FIBI002 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	• Urban Runoff/Storm Sewers
Aquatic Life - Trout	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105090060-01	Pequest R (below Furnac	e Brook)	RIVER	14.91 MILES	014464001-PEQ-3DRBCNJ0033 As of 2010 contains the following monitoring sites and associated SWQS Classification 01445500 FW2- TM 01446400 FW2-TM 1-PEQ-2 FW2-TM 1- PEQ-3 FW2-TM AN0043 FW2-TM AN0048 FW2-TM BA40 FW2-TM BA40A	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	pH Phosphorus (Total) Temperature, water Total Suspended Solids (TSS)	2006 2006 2006 2006	Medium Priority Medium Priority Medium Priority Medium Priority	<ul> <li>Upstream Impoundments (e.g., PI-566 NRCS Structures)</li> <li>Transfer of Water from an</li> </ul>

Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation	Not Supporting Insufficient Information Not Supporting	N N N	pH Phosphorus (Total) Temperature, water Total Suspended Solids (TSS) pH Total Suspended Solids (TSS) Fecal Coliform Arsenic	2006 2006 2006 2006 2006 2006 2006 2006	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Completed Low Priority	Outside Watershed • Agriculture • Urban Runoff/Storm Sewers • Natural Sources
Public Water Supply	Not Supporting AU Name	N	Water Type	Size	Location Description	
NJ02040105100010-01	Union Church trib		FRESHWATER LAKE RIVER	20.01 ACRES 11.9 MILES	HUC14: 02040105100010 As of 2010 contains the following monitoring sites and associated SWQS Classification NJW175 1 FW2-NT NJW175 2 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout	Insufficient Information Insufficient Information Insufficient Information	N N N				
Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Insufficient Information Insufficient Information Insufficient Information Insufficient Information	N N N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105100020-01	Honey Run		FRESHWATER LAKE RIVER	54.01 ACRES 22.49 MILES	HUC14: 02040105100020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01445900 FW2-TM AN0046 FW2-TM BA153 FW2-TM BA154 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Upstream

Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Not Supporting Not Supporting Insufficient Information Fully Supporting Not Supporting Fully Supporting	N N N N N	Oxygen, Dissolved Oxygen, Dissolved Fecal Coliform	2006 2006 2006	Medium Priority Medium Priority Completed	Impoundments (e.g., PI-566 NRCS Structures) • Agriculture • Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105100030-01	Beaver Brook (above Hoj	pe Village)	FRESHWATER LAKE	87.83 ACRES	HUC14: 02040105100030 As of the following monitoring sites an	
			RIVER	11.66 MILES	SWQS Classification AN0045 F	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105100040-01	Beaver Brook (below Ho	pe Village)	FRESHWATER LAKE	0.44 ACRES	HUC14: 02040105100040 As of	
			RIVER	19.97 MILES	the following monitoring sites an SWQS Classification 01446000 AN0047 FW2-NT BA155 FW2- FW2 NT FUPLOAT FW2 NT	FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	FW2-NT FIBI047 FW2-NT TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N			L. IDI Status	Source
Aquatic Life	Fully Supporting	N				
	, supporting					

Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105110010-01	Pophandusing Brook		RIVER	8.84 MILES	HUC14: 02040105110010 As of the following monitoring sites ar SWQS Classification AN0049 F	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105110020-01	Buckhorn Creek (incl UE	DRV)	RIVER	18.81 MILES	HUC14: 02040105110020 As of the following monitoring sites ar SWQS Classification 01446568 FW2-TP EWQ0050 FW2-TP FII	nd associated FW2-TP AN0050
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				

Primary Contact Recreation	Insufficient Information	N				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105110030-01	UDRV tribs (Rt 22 to Bu	ckhorn Ck)	EPHEMERAL STREAM	3.9 MILES	HUC14: 02040105110030	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Assessed	Ν				
Aquatic Life	Not Assessed	Ν				
Fish Consumption	Not Assessed	Ν				
Industrial Water Supply	Not Assessed	Ν				
Primary Contact Recreation	Not Assessed	Ν				
Public Water Supply	Not Assessed	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105120010-01	Lopatcong Creek (above Rt 57)		FRESHWATER LAKE RIVER	0.79 ACRES 10.74 MILES	HUC14: 02040105120010 As of 2010 contains the following monitoring sites and associated SWQS Classification 01455080 FW2-TP AN0051 FW2-TP AN0052 FW2-TP EWQ0052 FW2-TP Lopat 1 FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2010	Medium Priority	Runoff/Storm Sewers
Aquatic Life - Trout	Not Supporting	Ν	Phosphorus (Total)	2010	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105120020-01	Lopatcong Creek (below	Rt 57) incl	FRESHWATER LAKE	20.1 ACRES	HUC14: 02040105120020 As of	2010 contains

	UDRV		RIVER	12.94 MILES	the following monitoring sites and associated SWQS Classification AN0053 FW2-TP BA156 FW2-TP BA157 FW2-TP BA158 FW2-TP BA159 FW2-TP DRBCNJ0028 FW2-TP FIBI004 FW2-TP Lopat	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2010	Medium Priority	• Urban Runoff/Storm
Aquatic Life - Trout	Not Supporting	Ν				Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	Pohatcong Creek (above Rt 31) F		Water Type	Size	Location Description HUC14: 02040105140010 As of 2010 contains the following monitoring sites and associated SWQS Classification 01455120 FW2-TP 01455135 FW2-TM AN0054 FW2-TP AN0055 FW2-TM EWQ0055 FW2-TM FIBI033 FW2-TM	
NJ02040105140010-01			FRESHWATER LAKE RIVER	11.17 ACRES 17.98 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Upstream
Aquatic Life	Fully Supporting	Ν				Impoundments (e.g., Pl-566 NRCS
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	Structures)
Fish Consumption	Insufficient Information	Ν				<ul> <li>Agriculture</li> <li>Urban</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	

NJ02040105140020-01	Pohatcong Ck (Brass Cas 31)	tle Ck to Rt	FRESHWATER LAKE RIVER	7.23 ACRES 24.87 MILES	HUC14: 02040105140020 As of 2010 contain the following monitoring sites and associated SWQS Classification 01455138 FW2-TP AN( FW2-TP BA165 FW2-TM P1 FW2-TM P	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Transfer of
Aquatic Life Aquatic Life - Trout	Not Supporting Not Supporting	N	Oxygen, Dissolved pH Phosphorus (Total) Temperature, water Total Suspended Solids (TSS) Oxygen, Dissolved pH Phosphorus (Total) Temperature, water	2008 2008 2006 2006 2008 2008 2008 2008	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	Water from an Outside Watershed • Agriculture • Urban Runoff/Storm Sewers • Package Plant or Other Permitted Small Flows
Fish Consumption	Insufficient Information	Ν	Total Suspended Solids (TSS)	2008	Medium Priority	Discharges • Upstream Impoundments (e.g., Pl-566
Industrial Water Supply	Fully Supporting	Ν				NRCS Structures)
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Structures)
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105140030-01	Pohatcong Ck (Edison R Castle Ck)	d-Brass	RIVER	23.6 MILES	HUC14: 02040105140030 As of the following monitoring sites an SWQS Classification 01455200 AN0057 FW2-TM AN0058 FW FW2-TM BA168 FW2-TM FIB	nd associated FW2-TM 2-TM BA166
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	pH Phosphorus (Total) Temperature, water Total Suspended Solids (TSS)	2008 2006 2006 2008	Medium Priority Medium Priority Medium Priority Medium Priority	<ul> <li>Package Plant or Other</li> <li>Permitted Small</li> <li>Flows</li> <li>Discharges</li> <li>Agriculture</li> </ul>
Aquatic Life - Trout	Not Supporting	Ν	pH Phosphorus (Total) Temperature, water	2008 2006 2006	Medium Priority Medium Priority Medium Priority	• Urban Runoff/Storm Sewers

Fish Consumption Industrial Water Supply	Insufficient Information Fully Supporting	N N	Total Suspended Solids (TSS) Fecal Coliform	2008	Medium Priority Completed	• Upstream Impoundments (e.g., PI-566 NRCS Structures)
Primary Contact Recreation Public Water Supply	Not Supporting Fully Supporting	N N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105140040-01	Merrill Creek		FRESHWATER LAKE RESERVOIR RIVER	649.09 ACRES 649 ACRES 7.87 MILES	HUC14: 02040105140040 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0059 FW2-TP AN006 FW2-TP DSR 2R FW2-TP DSR 6L FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Insufficient Information Not Supporting Not Supporting Fully Supporting Insufficient Information Not Supporting Insufficient Information	N N N N N	Cause Unknown Fecal Coliform	2010 2008	Medium Priority Completed	• Agriculture • Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105140050-01	Pohatcong Ck (Merrill C Rd)	k to Edison	RIVER	13.98 MILES	HUC14: 02040105140050 As of the following monitoring sites at SWQS Classification FIBI067 F TM	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	pH Phosphorus (Total) Temperature, water	2008 2006 2006	Medium Priority Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>

Aquatic Life - Trout	Not Supporting	N	Total Suspended Solids (TSS) pH Phosphorus (Total) Temperature, water Total Suspended Solids (TSS)	2008 2008 2006 2006 2008	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	• Upstream Impoundments (e.g., PI-566 NRCS Structures)
Fish Consumption	Insufficient Information	N				
Industrial Water Supply	Fully Supporting	Ν	Escherichia coli	2006	Completed	
Primary Contact Recreation	Not Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105140060-01	Pohatcong Ck (Springtown to Merrill Ck)		RIVER	9.78 MILES	HUC14: 02040105140060 As of 2010 contains the following monitoring sites and associated SWQS Classification 01455240 FW2-TP BA167 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Not Supporting Not Supporting Fully Supporting Fully Supporting Fully Supporting	N N N N N	Phosphorus (Total) Phosphorus (Total) Mercury in Fish Tissue Fecal Coliform	2006 2006 2010 2006	Medium Priority Medium Priority Completed Completed	• Agriculture • Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105140070-01	Pohatcong Ck(below Springtown) incl UDRV		FRESHWATER LAKE RIVER	26.64 ACRES 3.82 MILES	HUC14: 02040105140070 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0061 FW2-TP BA169 FW2-TP BA170 FW2-TP DRBCNJ0027 FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Not Supporting Insufficient Information Fully Supporting Not Supporting Fully Supporting	N N N N N	Phosphorus (Total) Phosphorus (Total) Fecal Coliform	2006 2006 2006	Medium Priority Medium Priority Completed	Agriculture     Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105150010-01	Weldon Brook/Beaver B	rook	FRESHWATER LAKE	12.82 ACRES	HUC14: 02040105150010	
			RIVER	17.41 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Aquatic Life - Trout	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105150020-01	Lake Hopatcong		FRESHWATER LAKE	2556.46 ACRES	HUC14: 02040105150020 As of	
			RIVER	18.3 MILES	the following monitoring sites and associated SWQS Classification DSR 3L FW2-TM Hop 1 FW2-TM Hop 10 FW2-TM Hop 11 FW2-TM Hop 2 FW2-TM Hop 3 FW2-TM Hop 4 FW2-TM Hop 5 FW2-TM Hop 6 FW2-TM Hop 7 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric

Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Not Supporting Not Supporting Not Supporting Fully Supporting Insufficient Information Fully Supporting	N N N N	pH pH Mercury	2008 2008 2008	Medium Priority Medium Priority Completed	Depositon - Toxics
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105150030-01	Musconetcong R (Wills Bk to LkHopatcong)		FRESHWATER LAKE RIVER	313.7 ACRES 14.73 MILES	HUC14: 02040105150030 As of 2010 contains the following monitoring sites and associated SWQS Classification 01455500 FW2-TM AN0062 FW2-TM AN0063 FW2-TM BA161 FW2-TM MSA1 FW2-TM MSA2 FW2-TM MSA3 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout	Fully Supporting Not Supporting Not Supporting	N N N	pH Temperature, water pH Temperature, water	2006 2006 2006 2006	Medium Priority Medium Priority Medium Priority Medium Priority	Municipal Point Source Discharges     Upstream Impoundments (e.g., PI-566 NRCS Structures)
Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Insufficient Information Fully Supporting Not Supporting Not Supporting	N N N	Fecal Coliform	2006	Completed	<ul> <li>Transfer of Water from an Outside</li> <li>Watershed</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105150040-01	Lubbers Run (above/incl Dallis Pond)		FRESHWATER LAKE RIVER	109.24 ACRES 15.32 MILES	HUC14: 02040105150040 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0065 FW2-TM FIBI050 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

	La constante de	N				
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105150050-01	Lubbers Run (below Dall	is Pond)	FRESHWATER LAKE	260.23 ACRES	HUC14: 02040105150050 As of	
			RIVER	21.66 MILES	the following monitoring sites an SWQS Classification 01455780	FW2-TM
					AN0064 FW2-TM AN0066 FW2-TM BA162 FW2-TM EWQ0066 FW2-TM MSA4 FW2-TM MSA5 FW2-TM NJW177 1 FW2-N	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Upstream
Aquatic Life	Not Supporting	Ν	pH Temperature, water	2008 2008	Medium Priority Medium Priority	Impoundments (e.g., Pl-566 NRCS
Aquatic Life - Trout	Not Supporting	Ν	pH Temperature, water	2008 2008	Medium Priority Medium Priority	Structures)
Fish Consumption	Insufficient Information	N				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105150060-01	Cranberry Lake / Jefferso	on Lake &	FRESHWATER LAKE	270.78 ACRES	HUC14: 02040105150060 As of	2010 contains
	tribs		RIVER	12.31 MILES	the following monitoring sites and associated SWQS Classification DSR 15L FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Insufficient Information Fully Supporting Insufficient Information Not Supporting Insufficient Information Insufficient Information Insufficient Information	N N N N N	Mercury	2008	Completed	• Atmospheric Depositon - Toxics
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105150070-01	WillsBk)		FRESHWATER LAKE RIVER	32.85 ACRES 8.04 MILES	HUC14: 02040105150070 As of 2010 contains the following monitoring sites and associated SWQS Classification 01455700 FW2-TM FIBI057 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	pH Temperature, water	2008 2006	Medium Priority Medium Priority	
Aquatic Life - Trout	Not Supporting	Ν	pH Temperature, water	2008 2006	Medium Priority Medium Priority	
Fish Consumption	Insufficient Information	N				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105150080-01	Musconetcong R (SaxtonFalls to Waterloo)		FRESHWATER LAKE RIVER	158.42 ACRES 21.17 MILES	HUC14: 02040105150080 As of 2010 contains the following monitoring sites and associated SWQS Classification BA160 FW2-TM NJW009 1 FW2-NT NJW009 2 FW2-NT NJW009 Center FW2-NT NJW009 OUTLET FW2-NT NJW233 1 FW2-NT NJW233 2 FW2-NT NJW233 3 FW	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Urban Runoff/Storm
Aquatic Life	Fully Supporting	Ν				Sewers <ul> <li>Industrial</li> </ul>
Aquatic Life - Trout	Fully Supporting	Ν				Point Source Discharge
Fish Consumption	Insufficient Information	Ν				Discharge
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105150090-01	Mine Brook (Morris Co)		FRESHWATER LAKE	7.59 ACRES	HUC14: 02040105150090 As of	
			RIVER	11.24 MILES	the following monitoring sites and associated SWQS Classification 01456074 FW2-TM 01456077 FW2-TM AN0067 FW2-TM	FW2-TM
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Agriculture
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life - Trout	Fully Supporting	Ν				Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105150100-01	Musconetcong R (Trout I	Bk to	FRESHWATER LAKE	13.07 ACRES	HUC14: 02040105150100 As of	
	SaxtonFalls)		RIVER	17.24 MILES	the following monitoring sites and associated SWQS Classification AN0068 FW2-TM FIBI058 FW2-TM MR4 FW2-TM MR5 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Agriculture

Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation	Not Supporting Not Supporting Insufficient Information Insufficient Information Not Supporting	N N N N	Cause Unknown Cause Unknown Fecal Coliform	2008 2008 2008	Medium Priority Medium Priority Completed	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Natural Sources</li> </ul>
Public Water Supply	Not Supporting	N	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105150110-01			FRESHWATER LAKE RIVER	40.76 ACRES 2.99 MILES	HUC14: 02040105150110 As of 2010 contains the following monitoring sites and associated SWQS Classification 01455801 FW2-TM MSA6 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	pH Temperature, water	2010 2010	Medium Priority Medium Priority	
Aquatic Life - Trout	Not Supporting	Ν	pH Temperature, water	2010 2010	Medium Priority Medium Priority	
Fish Consumption	Insufficient Information	N				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2010	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105160010-01	Musconetcong R (Hances Bk thru Trout Bk)		RIVER	30.61 MILES	014562001-MUS-3 As of 2010 contains the following monitoring sites and associated SWQS Classification 01456200 FW2-TM 1-MUS-3 FW2-TM AN0069 FW2-TM AN0070 FW2-TP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Upstream

Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Not Supporting Not Supporting Insufficient Information Fully Supporting Not Supporting Not Supporting	N N N N	Temperature, water Temperature, water Fecal Coliform Arsenic	2006 2006 2006 2006	Medium Priority Medium Priority Completed Low Priority	Impoundments (e.g., PI-566 NRCS Structures) • Agriculture • Urban Runoff/Storm Sewers • Industrial Point Source Discharge • Municipal Point Source Discharges
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105160020-01	Musconetcong R (Changewater to HancesBk)		RIVER	42.51 MILES	014562001-MUS-3 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0071 FW2-TP FIBI062 FW2- TM MR6 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply	Fully Supporting Not Supporting Not Supporting Insufficient Information Fully Supporting	N N N N	Temperature, water Temperature, water	2006 2006	Medium Priority Medium Priority	<ul> <li>Upstream Impoundments (e.g., PI-566 NRCS Structures)</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Industrial</li> </ul>
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Point Source
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	Discharge
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105160030-01	Musconetcong R (Rt 31 to Changewater)		RIVER	6.49 MILES	014570001-MUS-401456590 As of 2010 contains the following monitoring sites and associated SWQS Classification 01456590 FW2-TM AN0072 FW2-TM EWQ0072 FW2-TM FIBI005 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture

Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Not Supporting Not Supporting Insufficient Information Fully Supporting Not Supporting Fully Supporting	N N N N N	Temperature, water Temperature, water Fecal Coliform	2008 2008 2006	Medium Priority Medium Priority Completed	• Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105160040-01	Musconetcong R (75d 00	m to Rt 31)	FRESHWATER LAKE	0.9 ACRES	014570001-MUS-401456590	
			RIVER	4.88 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Not Supporting	Ν	Temperature, water	2008	Medium Priority	Runoff/Storm
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2008	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105160050-01	Musconetcong R (I-78 to	75d 00m)	RIVER	29.34 MILES	014570001-MUS-401456590 As the following monitoring sites an SWQS Classification FIBI061 F	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2008	Medium Priority	Sewers

Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	N				
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105160060-01	Musconetcong R (Warren Glen to I- 78)		RIVER	9.21 MILES	014570001-MUS-401456590 As of 2010 contains the following monitoring sites and associated SWQS Classification 01457000 FW2-TM 01457120 FW2-TM 1-MUS-4 FW2-TM AN0073 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2008	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105160070-01	Musconetcong R (below Glen)	Warren	RIVER	14.17 MILES	014574001-MUS-5DBRCNJ0025 As of 2010 contains the following monitoring sites and associated SWQS Classification 01457400 FW2- TM 1-MUS-5 FW2-TM AN0074 FW2-TM DRBCNJ0025 FW2-TM MR1 FW2-TM MR2 FW2-TM MR3 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Upstream Impoundments
Aquatic Life	Not Supporting	Ν	Total Suspended Solids (TSS)	2010	Medium Priority	(e.g., Pl-566 NRCS
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	Structures) • Agriculture

Fish Consumption	Insufficient Information	Ν				• Urban Runoff/Storm
Industrial Water Supply	Fully Supporting	Ν				Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105160080-01	Riegelsville (direct Del. R. drainage)		RIVER	4.54 MILES	direct Del. R. drainage As of 201 following monitoring sites and a Classification 01457500 DRBC	0 contains the ssociated SWQS
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Assessed	Ν				
Aquatic Life	Not Assessed	Ν				
Aquatic Life - Trout	Not Assessed	Ν				
Fish Consumption	Not Assessed	Ν				
Industrial Water Supply	Not Assessed	Ν				
Primary Contact Recreation	Not Assessed	Ν				
Public Water Supply	Not Assessed	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105170010-01	Holland Twp (Hakihokak Musconetcong)	te to	RIVER	15.27 MILES	HUC14: 02040105170010	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Aquatic Life - Trout	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				

Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105170020-01	Hakihokake Creek		FRESHWATER LAKE RIVER	9.95 ACRES 51.32 MILES	01458100DRBCNJ0023 As of 2 following monitoring sites and a Classification 01458100 FW2-T TP AN0076 FW2-TP AN0077 I FW2-TP BA195 FW2-TP BA19 BA197 FW2	ssociated SWQS P AN0075 FW2- FW2-TP BA194
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply AU ID	Fully Supporting Not Supporting Not Supporting Insufficient Information Fully Supporting Not Supporting Fully Supporting AU Name	N N N N N	Phosphorus (Total) Phosphorus (Total) Fecal Coliform <b>Water Type</b>	2008 2008 2008 Size	Medium Priority       • Agricultu         Medium Priority       • Urban         Medium Priority       Sewers         Completed       • Urban         Location Description       • Urban	
NJ02040105170030-01	Harihokake Creek (and to Ck)	) Hakihokake	RIVER	42.69 MILES	HUC14: 02040105170030 As of 2010 contains the following monitoring sites and associated SWQS Classification 01458300 FW2-NT 01458400 FW2-TM AN0078 FW2-NT AN0079 FW2-TM FIBI034 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation	Fully Supporting Not Supporting Not Supporting Insufficient Information Fully Supporting Not Supporting	N N N N N	Phosphorus (Total) Phosphorus (Total) Escherichia coli	2006 2006 2008	Medium Priority Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>

Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105170040-01	Nishisakawick Creek (ab 33m)	ove 40d	FRESHWATER LAKE	7.71 ACRES	01458570DRBCNJ0020 As of 2010 contains the following monitoring sites and associated SWC Classification AN0080 FW2-NT	
	5511)		RIVER	19.29 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Not Supporting	Ν	pH	2008	Medium Priority	Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105170050-01	Nishisakawick Creek (below 40d 33m)		RIVER	27.76 MILES	01458570DRBCNJ0020 As of 2 following monitoring sites and a Classification 01458570 FW2-N NT AN0082 FW2-NT AN0083 DRBCNJ0020 FW2-NT FIBI02	ssociated SWQS T AN0081 FW2- FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				Agriculture
Aquatic Life	Not Supporting	Ν	pH	2008	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105170060-01	Kingwood Twp(Warford Nishisakawk)	Little	RIVER	20.65 MILES	HUC14: 02040105170060 As of 2010 contains the following monitoring sites and associated SWQS Classification 01458710 FW2-NT	

					AN0084 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Package Plant
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	or Other Permitted Small
Fish Consumption	Insufficient Information	Ν				Flows Discharges
Industrial Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Runoff/Storm Sewers
Public Water Supply	Fully Supporting	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105170070-01	Kingwood Twp (Rt 519 to Warford Ck)		RIVER	10.63 MILES	HUC14: 02040105170070 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0085 FW2-TP DSR 31R DRBC	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105200010-01	Lockatong Ck (above Rt 12)		RIVER	20.01 MILES	HUC14: 02040105200010 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0086 FW2-NT L8 FW2- NT L8a FW2-NT L9 FW2-NT L9a FW2-NT L9b FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	pH Phosphorus (Total)	2008 2006	Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Fish Consumption	Insufficient Information	Ν		2000		
Industrial Water Supply	Not Supporting	Ν	рН	2008	Medium Priority	
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Medium Priority	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105200020-01	Lockatong Ck (Milltown to Rt 12) R		RIVER	26.1 MILES	01460900DRBCNJ0013 As of 2 following monitoring sites and a Classification 01460860 FW2-N FW2-NT AN0087 FW2-NT AN FIBI027 FW2-NT L3a FW2-NT	ssociated SWQS T 01460870 0088 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout	Fully Supporting Not Supporting Not Supporting	N N N	pH Phosphorus (Total) Temperature, water Turbidity pH Phosphorus (Total) Temperature, water Turbidity	2008 2006 2008 2008 2008 2008 2006 2008 2008	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Not Supporting	Ν	pH Turbidity	2008 2008	Medium Priority Medium Priority	
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Medium Priority	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105200030-01	Lockatong Ck (below Mi UDRV	lltown) incl	FRESHWATER LAKE	5 ACRES	01460900DRBCNJ0013 As of 2010 contains the following monitoring sites and associated SWQS	

			RIVER	8.65 MILES	Classification 01460880 FW2-TM 01460900 FW2-TM AN0089 FW2-TM DRBCNJ0013 TM L1 FW2-TM L2 FW2-TM L3 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Not Supporting	Ν	pH Phosphorus (Total) Temperature, water Turbidity	2008 2006 2008 2008	Medium Priority Completed Medium Priority Medium Priority	Runoff/Storm Sewers
Aquatic Life - Trout	Not Supporting	N	Temperature, water	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Medium Priority	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105200040-01	Wickecheoke Creek (above Locktown)		RIVER	28.39 MILES	HUC14: 02040105200040 As of 2010 contains the following monitoring sites and associated SWQS Classification 01461220 FW2-NT 01461250 FW2-NT AN0090 FW2-NT AN0091 FW2-NT BA206 FW2-NT BA207 FW2-NT BA208 FW2-NT BA209A FW2	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial Point Source
Aquatic Life	Not Supporting	Ν	pH Phosphorus (Total) Total Suspended Solids (TSS)	2010 2006 2010	Medium Priority Completed Medium Priority	<ul> <li>Discharge</li> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Completed	
	Fully Supporting	Ν		1		1

Appendix A

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105200050-01	Plum Creek F		RIVER	17.26 MILES	HUC14: 02040105200050 As of 2010 contains the following monitoring sites and associated SWQS Classification 01461262 FW2-TM AN0092 FW2-TM AN0093 FW2-TM BA61 FW2-TM BA62 FW2-TM BA63 FW2-TM FIBI035 FW2-TM W4	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Completed	• Urban Runoff/Storm
Aquatic Life - Trout	Not Supporting	Ν	Phosphorus (Total)	2006	Completed	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105200060-01	Wickecheoke Creek (belo Locktown)	DW.	RIVER	30.01 MILES	01461300DRBCNJ0012 As of 2010 contains the following monitoring sites and associated SWQS Classification 01461282 FW2-TM 01461300 FW2-TM AN0094 FW2-TM AN0095 FW2-TM BA202 FW2-TM BA203 FW2-TM BA204 FW2- TM BA205 FW2-	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Package Plant
Aquatic Life	Not Supporting	Ν	pH Phosphorus (Total)	2010 2006	Medium Priority Completed	or Other Permitted Small Flows Discharges
Aquatic Life - Trout	Not Supporting	Ν	pH Temperature, water	2010 2006	Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
Fish Consumption	Insufficient Information	Ν				Sewers • Upstream
Industrial Water Supply	Fully Supporting	Ν	Escherichia coli	2006	Completed	Impoundments (e.g., Pl-566 NRCS

Primary Contact Recreation	Not Supporting	Ν				Structures)
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105200070-01			FRESHWATER LAKE STREAM	9.56 ACRES 23.9 MILES	newly created HUC running along Del River As of 2010 contains the following monitoring sites and associated SWQS Classification 01461000 DRBC	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Assessed	Ν				
Aquatic Life	Not Assessed	Ν				
Aquatic Life - Trout	Not Assessed	Ν				
Fish Consumption	Not Assessed	Ν				
Industrial Water Supply	Not Assessed	Ν				
Primary Contact Recreation	Not Assessed	Ν				
Public Water Supply	Not Assessed	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105210010-01	Alexauken Ck (above 74	d 55m)	FRESHWATER LAKE	42.27 ACRES	HUC14: 02040105210010 As of	
			RIVER	21.08 MILES	the following monitoring sites an SWQS Classification AN0096 F	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Upstream Impoundments
Aquatic Life	Fully Supporting	Ν				(e.g., Pl-566 NRCS
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	Structures)
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105210020-01	11BA06)		FRESHWATER LAKE RIVER	3.32 ACRES 16.6 MILES	HUC14: 02040105210020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01461840 FW2-TM 01461900 FW2-TM AN0097 FW2-TM AN009 FW2-TM FIBI029 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Upstream
Aquatic Life	Fully Supporting	Ν				Impoundments (e.g., PI-566
Aquatic Life - Trout	Not Supporting	Ν	Temperature, water	2006	Medium Priority	NRCS Structures)
Fish Consumption	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105210030-01	Swan Creek (Moore Ck t Ck)	o Alexauken	RIVER	21.71 MILES	HUC14: 02040105210030 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0099 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Aquatic Life - Trout	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105210040-01	Moore Creek		RIVER	32.92 MILES	HUC14: 02040105210040 As of 2010 contains	

					the following monitoring sites at SWQS Classification AN0100 F FW2-TM FIBI028 FW2-TM	nd associated W2-TM AN0101
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status Source	
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Aquatic Life - Trout	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105210050-01	Fiddlers Creek (Jacobs C Ck)	k to Moore	RIVER	19.11 MILES	HUC14: 02040105210050	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	N				
Aquatic Life	Insufficient Information	Ν				
Aquatic Life - Trout	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105210060-01	Jacobs Creek (above Woo	olsey Brook)	RIVER	16.63 MILES	HUC14: 02040105210060 As of 2010 contains the following monitoring sites and associated SWQS Classification 01462730 FW2-NT 01462739 FW2-NT AN0102 FW2-NT AN0105 FW2-NT	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Oxygen, Dissolved Phosphorus (Total) Total Suspended Solids (TSS)	2010 2008 2010	Medium Priority Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric</li> </ul>
Fish Consumption	Not Supporting	Ν	Mercury in Water Column	2008	Low Priority	Depositon - Toxics
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic Mercury in Water Column	2008 2008	Low Priority Low Priority	
AU ID	AU Name V		Water Type	Size	Location Description	
NJ02040105210070-01	Jacobs Creek (below/incl Woolsey Brook)		RIVER	26.74 MILES	HUC14: 02040105210070 As of 2010 contains the following monitoring sites and associated SWQS Classification 01462800 FW2-NT AN0103 FW2-NT AN0104 FW2-NT AN0106 FW2-NT BA201 FW2-NT DRBCNJ0003 FW2- NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105210080-01	Mercer (Calhoun St to Jacobs Creek)		FRESHWATER LAKE RIVER	6.91 ACRES 20.43 MILES	HUC14: 02040105210080 As of 2010 contains the following monitoring sites and associated SWQS Classification 01460390 FW2-NT AN0107 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	N	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	N				
Industrial Water Supply	Insufficient Information	N				
Primary Contact Recreation	Insufficient Information	N				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105230010-01	Assunpink Ck (above As	sunpink	FRESHWATER LAKE	93.43 ACRES	HUC14: 02040105230010 As of	
	Lake)		RIVER	19.46 MILES	the following monitoring sites and associated SWQS Classification 01463520 FW2-NT AN0108 FW2-NT MB-115 FW2-NT MB-116 FW2-NT NJW128 1 FW2-NT NJW128 2 FW2- NT NJW128 OUTLET FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105230020-01	Assunpink Ck (NewShare	onBr to/incl	FRESHWATER LAKE	278.59 ACRES	HUC14: 02040105230020 As of	
	Lake)		RIVER	20.53 MILES	the following monitoring sites an SWQS Classification 01463568 AN0109A FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Insufficient Information Not Supporting	N N	Phosphorus (Total) Total Suspended Solids (TSS)	2010 2010	Medium Priority Medium Priority	• Atmospheric Depositon - Toxics

Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Low Priority	
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105230030-01	New Sharon Branch (Ass Creek)	unpink	RIVER	26.41 MILES	HUC14: 02040105230030 As of 2010 contains the following monitoring sites and associated SWQS Classification 4 FW2-NT AN0109B FW2- NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2006	Low Priority	<ul><li>Sewers</li><li>Atmospheric</li></ul>
Industrial Water Supply	Fully Supporting	Ν				Depositon - Toxics
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105230040-01	Assunpink Ck (TrentonR NewSharonBr)	d to	RIVER	17.78 MILES	0146361011-AS-4 As of 2010 cd following monitoring sites and a Classification 11-AS-4 FW2-NT	ssociated SWQS
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	Runoff/Storm
Fish Consumption	Not Supporting	Ν	Cause Unknown Mercury in Fish Tissue	2006 2006	Medium Priority Low Priority	Sewers • Atmospheric Depositon - Toxics
Industrial Water Supply	Fully Supporting	Ν				1 OAIOS
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Medium Priority	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105230050-01	Rd)		FRESHWATER LAKE RIVER	284.58 ACRES 22.57 MILES	0146361011-AS-4 As of 2010 contains the following monitoring sites and associated SWQ Classification 01463610 FW2-NT 01463620 FW2-NT 11-AS-2 FW2-NT AN0109 FW2-NT DSR 34L FW2-NT DSR 5R FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2006	Low Priority	<ul><li>Sewers</li><li>Atmospheric</li></ul>
Industrial Water Supply	Fully Supporting	Ν				Depositon - Toxics
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AUID	AU Name		Water Type	Size	Location Description	
NJ02040105230060-01	1		FRESHWATER LAKE RIVER	21.1 ACRES 31.32 MILES	HUC14: 02040105230060 As of 2010 contains the following monitoring sites and associated SWQS Classification 01463661 FW2-NT AN0110 FW2-NT AN0111 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Fully Supporting Not Supporting Insufficient Information Fully Supporting	N N N	Oxygen, Dissolved	2010	Medium Priority	Agriculture     Urban     Runoff/Storm     Sewers
Primary Contact Recreation	Not Supporting	N	Escherichia coli	2008	Medium Priority	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	·
NJ02040105240010-01	Shabakunk Creek		FRESHWATER LAKE RIVER	37.79 ACRES 18.53 MILES	HUC14: 02040105240010 As of 2010 contains the following monitoring sites and associated SWQS Classification 01463810 FW2-NT AN0113 FW2-NT AN0114 FW2-NT FIBI041	

					FW2-NT NJW04459-102-1 FW2-NT NJW 102-O FW2-NT NJW102 1 FW2-NT NJW	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2010	Medium Priority	Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2006	Low Priority	<ul><li>Agriculture</li><li>Urban</li></ul>
Industrial Water Supply	Insufficient Information	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105240020-01	Shabakunk Creek WB		RIVER	8.05 MILES	HUC14: 02040105240020	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Urban
Aquatic Life	Insufficient Information	Ν				Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105240030-01	Miry Run (Assunpink Cr	)	FRESHWATER LAKE	53.75 ACRES	HUC14: 02040105240030 As o	
			RIVER	28.8 MILES	the following monitoring sites a SWQS Classification 01463850 AN0115 FW2-NT AN0115A F	FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Oxygen, Dissolved Phosphorus (Total)	2006 2006	Medium Priority Completed	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Industrial</li> </ul>

Fish Consumption	Insufficient Information	Ν				Point Source
Industrial Water Supply	Fully Supporting	Ν				Discharge
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105240040-01	Pond Run Fl		FRESHWATER LAKE	16.61 ACRES	HUC14: 02040105240040 As of the following monitoring sites an	
			RIVER	17.16 MILES	SWQS Classification 01463920 FW2-NT AN0117 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Total Suspended Solids (TSS) Turbidity	2006 2010	Medium Priority Medium Priority	• Urban Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105240050-01	Little Shabakunk Creek		FRESHWATER LAKE	14.03 ACRES	014640200146400011-AS-3DRI	
			RIVER	6.62 MILES	2010 contains the following mor associated SWQS Classification NT AN0112X FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved Phosphorus (Total)	2008 2006	Medium Priority Medium Priority	
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2006	Low Priority	
Industrial Water Supply	Fully Supporting	Ν				
			Escherichia coli	2006	Completed	

Primary Contact Recreation Public Water Supply	Not Supporting Not Supporting	N N	Arsenic Lead	2006 2007	Low Priority Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040105240060-01	Ck)		FRESHWATER LAKE RIVER	6.65 ACRES 11.83 MILES	014640200146400011-AS-3DRBCNJ1338 As of 2010 contains the following monitoring sites and associated SWQS Classification 01463500 FW2- NT 01463700 FW2-NT 01463881 FW2-NT 01463882 FW2-NT 01464000 FW2-NT 01464020 FW2-NT 11-AS-3 FW2-NT AN0116	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved pH Phosphorus (Total)	2010 2010 2010	Medium Priority Medium Priority Medium Priority	
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Low Priority	
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2010	Completed	
Public Water Supply	Not Supporting	N	Arsenic Lead	2010 2010	Low Priority Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201030010-01	Duck Creek and UDRV t Ck	to Assunpink	FRESHWATER LAKE RIVER	640 ACRES 11.41 MILES	HUC14: 02040201030010 As of 2010 contains the following monitoring sites and associated SWQS Classification Crosswicks FW2-NT NJ 8 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric Depositon -
Aquatic Life Fish Consumption	Insufficient Information Not Supporting	N N	Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006	Low Priority Low Priority	Toxics • Industrial Point Source Discharge • Municipal
Industrial Water Supply	Insufficient Information	Ν				Point Source

Primary Contact Recreation Public Water Supply	Insufficient Information Insufficient Information	N N				Discharges • Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201040010-01	Brook)		FRESHWATER LAKE RIVER	41.56 ACRES 25.18 MILES	HUC14: 02040201040010	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201040020-01			FRESHWATER LAKE RIVER	29.45 ACRES 6.5 MILES	HUC14: 02040201040020 As of 2010 contains the following monitoring sites and associated SWQS Classification NJW04459-253-1 PL NJW04459-253-O PL NJW253 1 PL NJW253 center PL NJW253 OUTLET PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	pH	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201040030-01			RIVER	20.73 MILES	HUC14: 02040201040030 As of 2010 contains the following monitoring sites and associated SWQS Classification 01464280 PL AN0119A PL	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Insufficient Information Not Supporting Fully Supporting	N N N N	pH Escherichia coli	2006 2006	Medium Priority Medium Priority	Municipal Point Source Discharges Agriculture Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201040040-01	Jumping Brook (Monmo	uth Co)	FRESHWATER LAKE RIVER	10.18 ACRES 16.96 MILES	HUC14: 02040201040040 As of 2010 contains the following monitoring sites and associated SWQS Classification 01464290 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Primary Contact Recreation Public Water Supply	Insufficient Information Insufficient Information Not Supporting Insufficient Information Insufficient Information	N N N N	Mercury in Fish Tissue	2006	Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Industrial Point Source Discharge</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201040050-01	South Run (North Run to Brook)	Jumping	RIVER	23.64 MILES	HUC14: 02040201040050 As of the following monitoring sites at SWQS Classification 01464300 01464330 FW2-NT AN0119 FW	nd associated FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation	Fully Supporting Not Supporting Not Supporting Fully Supporting Insufficient Information	N N N N	Phosphorus (Total) Mercury in Fish Tissue	2006 2006	Medium Priority Low Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> </ul>

Public Water Supply	Fully Supporting	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201040060-01	North Run (above Wrigh bypass)	tstown	RIVER	13.64 MILES	HUC14: 02040201040060	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Package Plant     or Other
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	Permitted Small Flows
Fish Consumption	Insufficient Information	Ν				Discharges
Industrial Water Supply	Not Supporting	Ν	Total Suspended Solids (TSS)	2006	Medium Priority	• Transfer of Water from an
Primary Contact Recreation	Fully Supporting	Ν				Outside Watershed
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	<ul><li> Agriculture</li><li> Urban</li></ul>
						Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201040070-01	Crosswicks Ck(NewEgy NorthRun)	pt to/incl	FRESHWATER LAKE RIVER	37.53 ACRES 15.7 MILES	HUC14: 02040201040070 As o the following monitoring sites a SWQS Classification 01464377 01464380 FW2-NT 01464400 F FW2-NT BA221 FW2-NT BA2 PL NJW04459-115-1 FW2-NT	nd associated FW2-NT FW2-NT AN0120
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Package Plant
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	or Other Permitted Small
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2006	Low Priority	Flows Discharges
Industrial Water Supply	Not Supporting	Ν	Total Suspended Solids (TSS)	2006	Medium Priority	• Transfer of Water from an
Primary Contact Recreation	Fully Supporting	Ν				Outside Watershed
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>

						• Atmospheric Depositon - Toxics
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201050010-01			FRESHWATER LAKE RIVER	157.26 ACRES 32.37 MILES	HUC14: 02040201050010 As of 2010 contains the following monitoring sites and associated SWQS Classification 01464440 FW2-NT AN0122 FW2-NT AN0123 FW2-NT Colonial Lake FW2-NT MB-FA FW2-NT MB-FB FW2- NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Cause Unknown	2006	Medium Priority	<ul><li>Agriculture</li><li>Urban Runoff/Storm</li></ul>
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201050020-01	Lahaway Ck(Allentwn/N Prospertown)	E Road-	FRESHWATER LAKE RIVER	14.38 ACRES 34.41 MILES	HUC14: 02040201050020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01464450 FW2-NT AN0124 FW2-NT MB-117 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Transfer of Water from an
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	Outside Watershed
Fish Consumption	Insufficient Information	Ν				• Agriculture
Industrial Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm
Primary Contact Recreation	Fully Supporting	Ν				Sewers
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	

NJ02040201050030-01	Crosswicks Ck(Lahaway Ck to New Egypt)		RIVER	36.69 MILES	HUC14: 02040201050030 As of 2010 contain the following monitoring sites and associated SWQS Classification 01464420 FW2-NT 01464430 FW2-NT AN0121 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Not Supporting Fully Supporting Fully Supporting Fully Supporting	N N N N	Phosphorus (Total) Mercury in Fish Tissue	2006 2006	Medium Priority Low Priority	<ul> <li>Package Plant or Other</li> <li>Permitted Small</li> <li>Flows</li> <li>Discharges</li> <li>Transfer of</li> <li>Water from an</li> <li>Outside</li> <li>Watershed</li> <li>Agriculture</li> <li>Urban</li> <li>Runoff/Storm</li> <li>Sewers</li> <li>Atmospheric</li> <li>Depositon - Toxics</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201050040-01	Crosswicks Ck(Walnford Ck)	l to Lahaway	RIVER	27.51 MILES	0146450020-CRO-1 As of 2010 contains the following monitoring sites and associated SWQS Classification 01464460 FW2-NT 01464480 FW2-NT 2 FW2-NT AN0125B FW2-NT MB-14 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Fully Supporting Not Supporting Not Supporting Fully Supporting	N N N	Phosphorus (Total) Mercury in Fish Tissue	2006 2006	Medium Priority Low Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> </ul>
Primary Contact Recreation Public Water Supply	Not Supporting Not Supporting	N N	Escherichia coli Arsenic	2006 2006	Completed Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	• •
NJ02040201050050-01	Crosswicks Ck(Ellisdale	trib -	FRESHWATER LAKE	2.07 ACRES	0146450020-CRO-1 As of 2010 contains the	

	Walnford)		RIVER	22.65 MILES	following monitoring sites and associated SWQS Classification 01464485 FW2-NT 01464500 FW2-NT 01464502 FW2-NT 20-CRO-1 FW2-NT AN0125 FW2-NT AN0126B FW2-NT MB-119 FW2-NT MB-120 FW2-NT MB-143		
Use	Attainment Threatened		Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Fully Supporting	Ν				Agriculture	
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	• Urban Runoff/Storm	
Fish Consumption	Not Supporting	Ν	Mercury in Water Column	2008	Low Priority	<ul><li>Sewers</li><li>Natural</li></ul>	
Industrial Water Supply	Fully Supporting	Ν				<ul><li>Sources</li><li>Atmospheric</li></ul>	
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Completed	Depositon - Toxics	
Public Water Supply	Not Supporting	Ν	Arsenic Mercury in Water Column	2006 2008	Low Priority Low Priority		
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040201050060-01	Ellisdale trib (Crosswicks Creek)		RIVER	23.52 MILES	HUC14: 02040201050060 A the following monitoring sitt SWQS Classification 01464: AN0126A FW2-NT	es and associated	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Insufficient Information	N				Agriculture	
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	• Urban Runoff/Storm	
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2006	Low Priority	<ul><li>Sewers</li><li>Atmospheric</li></ul>	
Industrial Water Supply	Insufficient Information	Ν				Depositon - Toxics	
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Completed		
Public Water Supply	Insufficient Information	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040201050070-01			RIVER	19.07 MILES	following monitoring sites at Classification 0146450250 F	0146450020-CRO-1 As of 2010 contains the following monitoring sites and associated SWQS Classification 0146450250 FW2-NT 01464504 FW2-NT 20-CRO-2 FW2-NT AN0126 FW2-NT DSR 7R FW2-NT	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Phosphorus (Total) Total Suspended Solids (TSS) Turbidity	2006 2006 2006	Medium Priority Medium Priority Medium Priority	Package Plant or Other Permitted Small Flows Discharges
Fish Consumption	Not Supporting	Ν	Mercury in Water Column Polychlorinated biphenyls	2010 2006	Medium Priority Low Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Industrial Water Supply	Not Supporting	Ν	Total Suspended Solids (TSS)	2006	Medium Priority	<ul> <li>Atmospheric</li> <li>Depositon -</li> </ul>
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Completed	Toxics • Natural
Public Water Supply	Not Supporting	Ν	Arsenic Mercury in Water Column	2006 2010	Low Priority Medium Priority	Sources
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201060010-01	Doctors Creek (above 74	d28m40s)	FRESHWATER LAKE	13.93 ACRES	HUC14: 02040201060010 As of 2010 contains the following monitoring sites and associated	
			RIVER	13.85 MILES	SWQS Classification 01464512 AN0127 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201060020-01	Doctors Creek (Allentow 74d28m40s)	n to	FRESHWATER LAKE RIVER	49.64 ACRES 50.87 MILES	HUC14: 02040201060020 As or the following monitoring sites at SWQS Classification 3 FW2-NT NT MB-122 FW2-NT MB-PAR NJW231 1 FW2-NT NJW231 C NJW231 0UTLET FW2-NT	nd associated F AN0128 FW2- K1 FW2-NT

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Phosphorus (Total)	2006	Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201060030-01	Doctors Creek (below Al	lentown)	FRESHWATER LAKE	0.29 ACRES	HUC14: 02040201060030 As of	
			RIVER	25.44 MILES	the following monitoring sites and associated SWQS Classification 01464515 FW2-NT 01464522 FW2-NT AN0129 FW2-NT AN0130 FW2-NT MB-123 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Insufficient Information Fully Supporting Not Supporting Fully Supporting	N N N N	Phosphorus (Total) Fecal Coliform	2006 2006	Completed	<ul> <li>Industrial Point Source Discharge</li> <li>Package Plant or Other Permitted Small Flows Discharges</li> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	Sewers
NJ02040201070010-01	Back Creek (above Yardy Road)	ville-H Sq	RIVER	15.25 MILES	HUC14: 02040201070010	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Phosphorus (Total)	2006	Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
Fish Consumption	Insufficient Information	Ν				Sewers

Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201070020-01	Crosswicks Ck(below Doctors Creek)		FRESHWATER LAKE	29.74 ACRES	HUC14: 02040201070020 As of the following monitoring sites at	
	R		RIVER	39.13 MILES	the following monitoring sites and associated SWQS Classification 01464523 FW2-NT 0146452360 FW2-NT AN0131 FW2-NT AN0131A FW2-NT DSR 39R FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial Point Source
Aquatic Life	Not Supporting	Ν	Phosphorus (Total) Total Suspended Solids (TSS)	2006 2006	Medium Priority Medium Priority	<ul><li>Discharge</li><li>Municipal</li></ul>
			Turbidity	2010	Medium Priority	Point Source Discharges
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	<ul> <li>Agriculture</li> <li>Urban</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Insufficient Information	Ν				Atmospheric Depositon -
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	Toxics
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201070030-01	Shady Brook/Spring Lak Lake	e/Rowan	FRESHWATER LAKE	24.37 ACRES	HUC14: 02040201070030	
	Lake		RIVER	12.74 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric Depositon -
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2008	Completed	Toxics • Urban
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006	Low Priority Low Priority	Runoff/Storm Sewers
Industrial Water Supply	Insufficient Information	Ν				

Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201080010-01	Blacks Creek (above 40d06m10s)		RIVER	25.53 MILES	HUC14: 02040201080010 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0132A FW2-NT AN0132B FW2-NT AN0132D FW2-NT AN0132E FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Insufficient Information	N N N	Phosphorus (Total)	2006	Completed	<ul> <li>Package Plant or Other</li> <li>Permitted Small</li> <li>Flows</li> <li>Discharges</li> <li>Agriculture</li> </ul>
Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Fully Supporting	N N N	Fecal Coliform	2006	Completed	• Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201080020-01	Blacks Creek (Bacons Ru 40d06m10s)	in to	FRESHWATER LAKE RIVER	1.47 ACRES 35.26 MILES	HUC14: 02040201080020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01464527 FW2-NT 01464529 FW2-NT AN0132 FW2-NT AN0133 FW2-NT AN0133A FW2-NT AN0133B FW2-NT AN0134B FW2-NT AN0134D FW2-NT BA100	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Insufficient Information	N N N	Phosphorus (Total)	2006	Completed	Package Plant or Other Permitted Small Flows Discharges
Industrial Water Supply Primary Contact Recreation	Fully Supporting Not Supporting	N N	Escherichia coli	2006	Completed	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201080030-01			FRESHWATER LAKE RIVER	2.63 ACRES 14.75 MILES	HUC14: 02040201080030 As of the following monitoring sites a SWQS Classification 01464532 AN0134 FW2-NT AN0134A F	nd associated FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Phosphorus (Total) Total Suspended Solids (TSS)	2006 2006	Medium Priority Medium Priority	<ul> <li>Municipal Point Source Discharges</li> <li>Transfer of Water from an</li> </ul>
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Outside Watershed
Industrial Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Medium Priority	Runoff/Storm Sewers
Public Water Supply	Fully Supporting	Ν				Atmospheric Depositon - Toxics
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201090010-01	Crafts Creek (above Rt 2	06)	RIVER	15.54 MILES	HUC14: 02040201090010 As of the following monitoring sites a SWQS Classification 01464537 AN0135 FW2-NT AN0136 FW FW2-NT AN0136B FW2-NT A AN0137D FW2-NT CRA-03IR	nd associated FW2-NT 2-NT AN0136A .N0136C FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
						1
Primary Contact Recreation	Insufficient Information	Ν				
Primary Contact Recreation Public Water Supply	Insufficient Information Fully Supporting	N N				

NJ02040201090020-01	Crafts Creek (below Rt 206)		RIVER	19.81 MILES	HUC14: 02040201090020 A the following monitoring site SWQS Classification 014645 AN0137 FW2-NT AN0137A FW2-NT AN0137C FW2-NT NT CRA-02JR FW2-NT	s and associated 40 FW2-NT FW2-NT AN0137B
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Not Supporting	N N N	Oxygen, Dissolved Polychlorinated biphenyls	2010 2006	Medium Priority Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
Industrial Water Supply	Fully Supporting	N				Sewers
Primary Contact Recreation Public Water Supply	Insufficient Information Not Supporting	N N	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201090030-01	LDRV tribs (Assiscunk C Ck)	Ck to Blacks	FRESHWATER LAKE RIVER	41.28 ACRES 18.04 MILES	HUC14: 02040201090030 A the following monitoring site SWQS Classification 332064 FW2-NT NJ01-0074 DRBC SHB-01AF FW2-NT SHB-02 03NB FW2-NT	s and associated FW2-NT DSR 32L NJ03-0074 DRBC
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	N				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue PCB in Fish Tissue	2008 2010	Completed Low Priority	
Industrial Water Supply	Insufficient Information	N				
Primary Contact Recreation	Insufficient Information	N				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201090040-01	LDRV tribs (Bustleton C	reek area)	FRESHWATER LAKE	96.89 ACRES	HUC14: 02040201090040 A the following monitoring site	

			RIVER	8.97 MILES	SWQS Classification 01464576	FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue PCB in Fish Tissue	2010 2010	Low Priority Low Priority	
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201100010-01	Assiscunk Creek (above Rt 206)		RIVER	26.7 MILES	HUC14: 02040201100010 As of 2010 contains the following monitoring sites and associated SWQS Classification 01464577 FW2-NT 01464578 FW2-NT AN0138 FW2-NT AN0139 FW2-NT AN0139A FW2-NT AN0139B FW2-NT AN0141B FW2-NT AN0141C FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				• Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total) Total Suspended Solids (TSS)	2006 2010	Completed Medium Priority	• Urban Runoff/Storm Sewers
Fish Consumption	Insufficient Information	N				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201100020-01	Barkers Brook (above 40	d02m30s)	FRESHWATER LAKE	0.92 ACRES	HUC14: 02040201100020 As of the following monitoring sites an	
			RIVER	34.78 MILES	the following monitoring sites and SWQS Classification 01464583 AN0140 FW2-NT AN0141H FW FW2-NT AN0141K FW2-NT A	FW2-NT W2-NT AN0141I

					AN01410 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Package Plant
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Completed	or Other Permitted Small
Fish Consumption	Insufficient Information	Ν				Flows Discharges
Industrial Water Supply	Fully Supporting	Ν				<ul><li> Agriculture</li><li> Urban</li></ul>
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Runoff/Storm Sewers
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201100030-01	Jacksonville trib (above l Brook)	Barkers	RIVER	9.7 MILES	HUC14: 02040201100030 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0141E FW2-NT AN0141F FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201100040-01	Assiscunk Ck (Jacksonvi 206)	lle rd to Rt	RIVER	15.89 MILES	0146458820-AS-1 As of 2010 following monitoring sites and Classification AN0141A FW2-	associated SWQS
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Cause Unknown	2008	Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>

Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201100050-01	Assiscunk Ck(Neck Rd to Jacksonville rd)		RIVER	15.34 MILES	0146458820-AS-1 As of 2010 cd following monitoring sites and a Classification 01464587 FW2-N FW2-NT 01464592 FW2-NT 20 AN0141 FW2-NT AN0142 FW2 FW2-NT AN0142E FW2-NT	ssociated SWQS T 01464588 -AS-1 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Atmospheric
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Package Plant     or Other
Industrial Water Supply	Fully Supporting	Ν				Permitted Small Flows
Primary Contact Recreation	Insufficient Information	Ν				Discharges <ul> <li>Agriculture</li> </ul>
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	• Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201100060-01	Assiscunk Creek (below	Neck Rd)	RIVER	15.36 MILES	HUC14: 02040201100060 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0142A FW2-NT AN0142B FW2-NT AN0142C FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Package Plant     or Other
Industrial Water Supply	Fully Supporting	Ν				Permitted Small Flows Discharges

Primary Contact Recreation Public Water Supply	Insufficient Information Fully Supporting	N N				<ul> <li>Agriculture</li> <li>Urban</li> <li>Runoff/Storm</li> <li>Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040201110010-01	LDRV tribs (Beverly to Assiscunk Ck)		FRESHWATER LAKE RIVER	23.88 ACRES 11 MILES	HUC14: 02040201110010 A the following monitoring site SWQS Classification NJ00-0 0073 DRBC NJW181 1 FW2 FW2-NT NJW181 3 FW2-N	s and associated 073 DRBC NJ02- -NT NJW181 2
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water SupplyAquatic LifeFish ConsumptionIndustrial Water SupplyPrimary Contact RecreationPublic Water SupplyAU IDNJ0204020200010-01	Insufficient Information Not Supporting Not Supporting Insufficient Information Insufficient Information Insufficient Information Stream	N N N N N me Mill	Phosphorus (Total) Polychlorinated biphenyls Water Type FRESHWATER LAKE RIVER	2008 2006 <b>Size</b> 9.95 ACRES 30.29 MILES	Completed Low Priority Low Priority Understand State S	d associated SWQS 0-1 PL NJW04459-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	N				• Urban
Aquatic Life	Not Supporting	Ν	Copper Lead	2006 2006	Low Priority Low Priority	Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				

Public Water Supply	Not Supporting	Ν	Lead	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202020020-01	6		FRESHWATER LAKE RIVER	77.99 ACRES 23.62 MILES	HUC14: 0204020202020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01465965 PL AN0149A F AN0149B PL EWQ0149A PL NJABPHAN PL NJARANGE PL NJW04459-094-1 PL NJW04459-094-0 PL NJW094 1 PL NJW094 center	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Insufficient Information	N N N	рН	2006	Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202020030-01	Rancocas Ck NB (incl Mirror Lk- GauntsBk)		FRESHWATER LAKE RIVER	211.19 ACRES 23.84 MILES	0146595019-RA-1N As of 2010 contains the following monitoring sites and associated SWQS Classification 01465950 PL 19-RA-1N PL AN0143 PL DSR 28L PL NNOHANOV PL NNOMILIT PL	
			KI V LK			OHANOV PL
Use	Attainment	Threatened	Cause	Cycle First Listed		Source
Use Agricultural Water Supply Aquatic Life	Attainment Insufficient Information Not Supporting	Threatened N N		2007 2006 2006 2006 2006	NNOMILIT PL	Source <ul> <li>Urban</li> <li>Runoff/Storm</li> <li>Sewers</li> <li>Agriculture</li> <li>Atmospheric</li> <li>Depositon -</li> </ul>
Agricultural Water Supply	Insufficient Information	N	Cause Copper Lead pH	2007 2006 2006	NNOMILIT PL         TMDL Status         Low Priority         Low Priority         Medium Priority	Source <ul> <li>Urban</li> <li>Runoff/Storm</li> <li>Sewers</li> <li>Agriculture</li> <li>Atmospheric</li> </ul>
Agricultural Water Supply Aquatic Life	Insufficient Information Not Supporting	N N	Cause Copper Lead pH Phosphorus (Total)	2007 2006 2006 2006	NNOMILIT PL         TMDL Status         Low Priority         Low Priority         Medium Priority         Medium Priority	Source <ul> <li>Urban</li> <li>Runoff/Storm</li> <li>Sewers</li> <li>Agriculture</li> <li>Atmospheric</li> <li>Depositon -</li> </ul>

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202020040-01	Rancocas Ck NB (NL dam to Mirror Lk)		RIVER	16.28 MILES	HUC14: 02040202020040 As the following monitoring sites SWQS Classification 014659 PL	s and associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Insufficient Information Not Supporting	N N	pH Phosphorus (Total)	2006 2006	Medium Priority Medium Priority	Agriculture     Urban     Runoff/Storm     Sewers
Fish Consumption	Not Supporting	N	Mercury in Water Column	2008	Low Priority	• Atmospheric Depositon -
Primary Contact Recreation	Not Supporting	N	Escherichia coli	2006	Medium Priority	Toxics
Public Water Supply	Not Supporting	Ν	Mercury in Water Column	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202030010-01	Pole Bridge Branch (above County line)		RIVER	14.74 MILES	HUC14: 02040202030010	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202030020-01	Mount Misery Bk NB (al 74d27m30s dam)	oove	FRESHWATER LAKE	8.39 ACRES	HUC14: 02040202030020	
	74d27m30s dam)		RIVER	14.94 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				

					1	
Fish Consumption	Insufficient Information	N				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202030030-01	Mount Misery Bk MB/NB (below 74d27m30s)		RIVER	8.54 MILES	HUC14: 02040202030030 As of 2010 contains the following monitoring sites and associated SWQS Classification GMIMOUNT PL GNOSANDR PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202030040-01	Mount Misery Brook SB		RIVER	16.32 MILES	HUC14: 02040202030040	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202030050-01	Bucks Cove Run / Cranberry Branch		FRESHWATER LAKE RIVER	33.78 ACRES 15.73 MILES	HUC14: 02040202030050 As of 2010 contains the following monitoring sites and associated SWQS Classification DSR 66L PL	
Research and the second s						

Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric Depositon -
Aquatic Life	Fully Supporting	Ν				Toxics
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Completed	
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202030060-01	Pole Bridge Br (CountryLk dam - Co line)		FRESHWATER LAKE RIVER	144.57 ACRES 11.02 MILES	HUC14: 02040202030060 As of 2010 contains the following monitoring sites and associated SWQS Classification GPORT70D PL GPOWHITE PL NJW020 1 PL NJW020 2 PL NJW020 3 PL NJW020 Center PL NJW020 OUTLET PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202030070-01	McDonalds Branch		RIVER	9.5 MILES	HUC14: 02040202030070 As of the following monitoring sites an SWQS Classification 01466500 FW1 GMCBUTTE FW1	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202030080-01	Bisphams Mill Creek (below McDonalds Br)		FRESHWATER LAKE RIVER	134.63 ACRES 19.02 MILES	HUC14: 02040202030080 the following monitoring s SWQS Classification AN0 GBITURKE PL GCOPAK NJW155 1 PL NJW155 0	ites and associated 147 PL GBIPRESU PL IM PL GCOPAKIS PL
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202030090-01	Greenwood Br(below CountryLk & MM confl)		FRESHWATER LAKE RIVER	7.75 ACRES 31.24 MILES	HUC14: 02040202030090 the following monitoring s SWQS Classification 0146 01466900 PL AN0144 PL PL GGRIMPNT PL GGRN GMORTE70 PL GMOUC. P	ites and associated 6100 PL 01466200 PL AN0145 PL AN0148 //EADO PL
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Source
Aquatic Life	Not Supporting	Ν	Cause Unknown	2010	Medium Priority	Unknown • Urban
Fish Consumption	Not Supporting	Ν	DDD DDE DDT PCB in Fish Tissue	2008 2008 2010 2008	Low Priority Low Priority Low Priority Low Priority	Runoff/Storm Sewers
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202040010-01	Rancocas Ck NB (Pemberton br to NL		FRESHWATER LAKE	45.68 ACRES	0146700019-RA-3N As of 2010 contains the	

	dam)		RIVER	24.14 MILES	following monitoring sites and Classification 01467000 FW2-1 FW2-NT AN0149 FW2-NT NN NT NNOTRMGU PL RCW-NI	NT 19-RA-3N NORT616 FW2-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Copper Lead pH	2006 2006 2006	Low Priority Low Priority Medium Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Agriculture</li> </ul>
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Not Supporting	Ν	Arsenic Lead	2008 2006	Low Priority Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202040020-01	Pemberton / Ft Dix trib (NB Rancocas Ck)		FRESHWATER LAKE RIVER	2.23 ACRES 14.5 MILES	HUC14: 02040202040020 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0150 FW2-NT NBURT616 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	N				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Not Supporting	N	Cause Unknown	2006	Medium Priority	Runoff/Storm Sewers
Fish Consumption	Insufficient Information	N				
Industrial Water Supply	Insufficient Information	N				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202040030-01	Rancocas Ck NB (Rt 206 Pemberton br)	to	RIVER	29.22 MILES	01467006014670050146700319-RA-4N As of 2010 contains the following monitoring sites and associated SWQS Classification 0146700260 FW2-NT AN0151A FW2-NT BA94 FW2-NT BA95 FW2-NT EWQ0151A FW2-NT RCTMDL	

					IR1 FW2-NT RCW-NBRanc2	FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Copper Lead Phosphorus (Total)	2006 2006 2006	Low Priority Low Priority Medium Priority	Municipal Point Source Discharges     Package Plant or Other Permitted Small
Fish Consumption	Insufficient Information	N				Flows Discharges • Urban
Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Not Supporting	N N N	Fecal Coliform Arsenic Lead	2006 2006 2006	Completed Low Priority Low Priority	<ul> <li>Orban</li> <li>Runoff/Storm</li> <li>Sewers</li> <li>Industrial</li> <li>Point Source</li> <li>Discharge</li> <li>Agriculture</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202040040-01	Rancocas Creek NB (Sm 206)	ithville to Rt	FRESHWATER LAKE RIVER	23.11 ACRES 14.13 MILES	014670060146700501467003 2010 contains the following m associated SWQS Classification NT 0146700350 FW2-NT RC	onitoring sites and on 01467003 FW2-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation	Fully Supporting Not Supporting Insufficient Information Fully Supporting Not Supporting	N N N N	Phosphorus (Total) Fecal Coliform	2006	Medium Priority Completed	<ul> <li>Package Plant or Other Permitted Small Flows Discharges</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202040050-01	Rancocas Creek NB (belo Smithville)	w	FRESHWATER LAKE RIVER	5.1 ACRES 29.57 MILES	01467003014670060146700519-RA-4N As of 2010 contains the following monitoring sites and associated SWQS Classification 01467005 FW2- NT 01467006 FW2-NT 19-RA-4N FW2-NT AN0151 FW2-NT AN0176R FW2-NT BA96A FW2-NT BA96B FW2-NT BA97	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	Point Source Discharge
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Municipal     Point Source
Industrial Water Supply	Fully Supporting	Ν				<ul><li>Discharges</li><li>Agriculture</li></ul>
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	• Urban Runoff/Storm
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	<ul><li>Sewers</li><li>Atmospheric</li></ul>
						Depositon - Toxics
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202050010-01	Burrs Mill Bk (above 39d51m30s road)		FRESHWATER LAKE	39 ACRES	HUC14: 02040202050010 As of	
			RIVER	13.38 MILES	the following monitoring sites and associated SWQS Classification SSBSOOYL PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers <ul> <li>Natural</li> </ul>
Primary Contact Recreation	Fully Supporting	Ν				Sources
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202050020-01	Burrs Mill Bk (Burnt Br ) rd)	Br- 39-51-30	RIVER	12.19 MILES	HUC14: 02040202050020 As of the following monitoring sites at SWQS Classification 01465808 SSBSOOYS PL	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers <ul> <li>Natural</li> </ul>

Primary Contact Recreation	Fully Supporting	Ν				Sources
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202050030-01	Burrs Mill Bk (BurrsMill Br)	to Burnt Br	FRESHWATER LAKE	80.3 ACRES	HUC14: 02040202050030	
	D1)		RIVER	15.89 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Package Plant     or Other
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	Permitted Small Flows
Fish Consumption	Insufficient Information	Ν				<ul><li>Discharges</li><li>Agriculture</li></ul>
Primary Contact Recreation	Fully Supporting	Ν				• Agriculture
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202050040-01	Friendship Creek (above Bk)	Burrs Mill	FRESHWATER LAKE	39.88 ACRES	HUC14: 02040202050040 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0152 PL SBRCAMPI PL SBRNEWRD PL SFRCAMPI PL SFRIRICK PL SFRPOWEL PL	
	BK)		RIVER	15.98 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202050050-01	Friendship Ck (below/inc Bk)	el Burrs Mill	FRESHWATER LAKE	67.36 ACRES	HUC14: 02040202050050 As of the following monitoring sites a	
			RIVER	15.76 MILES	SWQS Classification AN0154 F NJW270 1 PL NJW270 2 PL NJ NJW270 OUTLET PL SBUSOO	L AN0155 PL W270 3 PL

					SFRHAMPT PL SFRRETRE	PL
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	N	pH Phosphorus (Total)	2006 2006	Medium Priority Medium Priority	• Urban Runoff/Storm Sewers
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Completed	Natural Sources
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Medium Priority	
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202050060-01	Rancocas Creek SB(abov	e Friendship	FRESHWATER LAKE	640 ACRES	HUC14: 02040202050060 As	
	Ck)		RIVER	24.79 MILES	the following monitoring sites SWQS Classification SCEBU SSOBURRS PL SSOTRBUR	RRS PL
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Insufficient Information Not Supporting	N N	pH Phosphorus (Total)	2008 2008	Medium Priority Medium Priority	• Agriculture • Atmospheric Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue Polychlorinated biphenyls	2010 2006	Completed Low Priority	• Urban Runoff/Storm Sewers
Primary Contact Recreation	Not Supporting	N	Escherichia coli	2008	Medium Priority	
Public Water Supply	Not Supporting	N	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202050070-01	Jade Run		RIVER	25.26 MILES	HUC14: 02040202050070 As the following monitoring sites SWQS Classification 014658 01465848 FW2-NT AN0157 RCTMDL-JR1 PL SJART610	s and associated 47 FW2-NT PL AN0157A PL
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture

Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved pH Phosphorus (Total)	2006 2006 2006	Medium Priority Medium Priority Medium Priority	• Urban Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202050080-01	Rancocas Ck SB (Vincer FriendshipCk)	ntown-	FRESHWATER LAKE RIVER	24.75 ACRES 18.63 MILES	HUC14: 02040202050080 As of the following monitoring sites an SWQS Classification 01465835 AN0156 PL DSR 43R PL EWQ 1 FW2-NT NJW015 2 FW2-NT FW2-NT NJW015 OUTLET FW	nd associated PL 19-RA-3S PL 0156 PL NJW015 NJW015 Center
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Not Supporting Not Supporting Not Supporting	N N N N	Oxygen, Dissolved pH Phosphorus (Total) Mercury in Fish Tissue Polychlorinated biphenyls Escherichia coli Arsenic	2008 2008 2006 2010 2006 2008 2008	Medium Priority Medium Priority Medium Priority Completed Low Priority Medium Priority Low Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202050090-01	Rancocas Ck SB (Bobby Vincentown)	sRun to	RIVER	13.95 MILES	0146591519-RA-1S As of 2010 contains the following monitoring sites and associated SWQS Classification 01465850 FW2-NT 01465854 FW2-NT AN0161 FW2-NT RCW-SBRanc1 FW2-NT RCW-SBRanc2 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν	рН	2006	Medium Priority	• Industrial Point Source Discharge

Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Not Supporting Not Supporting Insufficient Information Fully Supporting Not Supporting	N N N N	Phosphorus (Total) Mercury in Fish Tissue Polychlorinated biphenyls Arsenic	2006 2010 2006 2006	Medium Priority Completed Low Priority Low Priority	<ul> <li>Package Plant or Other</li> <li>Permitted Small</li> <li>Flows</li> <li>Discharges</li> <li>Agriculture</li> <li>Urban</li> <li>Runoff/Storm</li> <li>Sewers</li> <li>Atmospheric</li> <li>Depositon - Toxics</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202060010-01	Kettle Run (above Center	nnial Lake)	FRESHWATER LAKE RIVER	94.28 ACRES 9.32 MILES	HUC14: 02040202060010 As of the following monitoring sites an SWQS Classification AN0167 P NJW071 1 PL NJW071 OUTLE PL NJW230 2 PL NJW230 3 PL PL NJW230 OUTLET PL WCE	nd associated L DSR 45L PL T PL NJW230 1 NJW230 Center
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Primary Contact Recreation Public Water Supply	Insufficient Information Not Supporting Insufficient Information Insufficient Information Fully Supporting	N N N N	рН	2008	Medium Priority	• Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202060020-01	Lake Pine / Centennial L	ake & tribs	FRESHWATER LAKE RIVER	195.9 ACRES 14.87 MILES	HUC14: 02040202060020 As of 2010 contains the following monitoring sites and associated SWQS Classification NJW050 1 PL NJW050 2 PL NJW050 3 PL NJW050 HOT SPOT PL NJW050 OUTLET PL NJW149 1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	pH	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				

Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202060030-01	Haynes Creek (below La	ke Pine)	FRESHWATER LAKE RIVER	235.41 ACRES 14.48 MILES	HUC14: 02040202060030 As of the following monitoring sites an SWQS Classification AN0168 P 086-1 PL NJW04459-086-O PL PL NJW04459-098-2 PL NJW04 NJW04459-098-O PL NJW086	nd associated L NJW04459- NJW04459-098-1 4459-098-3 PL
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	рН	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202060040-01	Barton Run (above Kettle	Run Road)	FRESHWATER LAKE RIVER	94.32 ACRES 7.56 MILES	HUC14: 02040202060040 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0163 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved pH	2008 2006	Medium Priority Medium Priority	Runoff/Storm Sewers • Agriculture
Fish Consumption	Insufficient Information	Ν				Natural Sources
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AUID	AU Name		Water Type	Size	Location Description	

NJ02040202060050-01	Barton Run (below Kettle	Run Road)	FRESHWATER LAKE RIVER	45.09 ACRES 22.21 MILES	HUC14: 02040202060050 As of 2010 contains the following monitoring sites and associated SWQS Classification 01465865 PL AN0164 PL AN0165 PL AN0166 PL EWQ0166 PL NJW04459-251-1 PL NJW04459-251-2 PL NJW04459-251-0 PL NJW251 1 PL NJW251	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Oxygen, Dissolved	2008	Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
*			pH Phosphorus (Total)	2006 2010	Medium Priority Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202060060-01	Bear Swamp River		RIVER	12.85 MILES	HUC14: 02040202060060 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0159 PL WBERTE70 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202060070-01	Little Creek (above Bear	Swamp	FRESHWATER LAKE	0.59 ACRES	HUC14: 02040202060070 As of	
	River)		RIVER	13.13 MILES	the following monitoring sites an SWQS Classification 01465893 AN0158 FW2-NT WLIHAWKI FW2-NT	FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	N				
Fish Consumption	Insufficient Information	N				
Primary Contact Recreation	Not Supporting	N	Escherichia coli	2006	Medium Priority	
Public Water Supply	Fully Supporting	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202060080-01	Rancocas Ck SW Branch Medford br)	(above	RIVER	18.03 MILES	HUC14: 02040202060080 As of the following monitoring sites an SWQS Classification 01465857 AN0162 FW2-NT SBR0 FW2-N NT SBR2 PL SBR3 PL WSOHA WSOMEDPK PL WSORT541 F	nd associated FW2-NT IT SBR1 FW2- ARTF PL
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	pH Phosphorus (Total) Total Suspended Solids (TSS)	2008 2006 2008	Medium Priority Medium Priority Medium Priority	<ul> <li>Municipal Point Source Discharges</li> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic Nitrates	2008 2008	Low Priority Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202060090-01	Little Creek (below Bear River)	Swamp	RIVER	12.58 MILES	HUC14: 02040202060090 As of the following monitoring sites ar SWQS Classification AN0160 F	d associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				

## Appendix A

Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	N				
Primary Contact Recreation	Insufficient Information	N				
Public Water Supply	Insufficient Information	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202060100-01	Rancocas Ck SW Branch Medford br)	(below	FRESHWATER LAKE RIVER	5.01 ACRES 20.44 MILES	0146588219-RA-2S As of 2010 following monitoring sites and a Classification 01465882 PL 014 01465900 FW2-NT 19-RA-2S F FW2-NT AN0170 FW2-NT EW RCW-SR1 FW2-NT RCW-SRB	ssociated SWQS 65884 FW2-NT W2-NT AN0169 Q0169 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Not Supporting	N N N	Oxygen, Dissolved pH Phosphorus (Total) Polychlorinated biphenyls	2008 2008 2006 2006	Medium Priority Medium Priority Medium Priority Low Priority	<ul> <li>Municipal Point Source Discharges</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric</li> </ul>
Industrial Water Supply Primary Contact Recreation	Fully Supporting Not Supporting	N N	Fecal Coliform	2006	Completed	Depositon - Toxics
Public Water Supply	Not Supporting	N	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202070010-01	Bobbys Run		RIVER	8.35 MILES	HUC14: 02040202070010 As of the following monitoring sites at SWQS Classification AN0171 F AN0171A FW2-NT	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Insufficient Information Not Supporting Not Supporting	N N N	Cause Unknown Polychlorinated biphenyls	2008 2006	Medium Priority Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
Industrial Water Supply	Insufficient Information	Ν				- unon, otomi

Primary Contact Recreation	Insufficient Information	N				Sewers
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202070020-01	Rancocas Creek SB (Rt 38 to Bobbys Run)		RIVER	16.66 MILES	0146591519-RA-1S As of 2010 following monitoring sites and a Classification 01465915 FW2-N FW2-NT AN0176S FW2-NT EV NT Rancocas FW2-NT	ssociated SWQS T 19-RA-1S
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	Runoff/Storm Sewers
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	• Atmospheric
Industrial Water Supply	Fully Supporting	Ν				Depositon - Toxics
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Medium Priority	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202070030-01	Rancocas Creek SB (belo	ow Rt 38)	RIVER	30.64 MILES	0146591519-RA-1S As of 2010 following monitoring sites and a Classification AN0172 FW2-NT NT	ssociated SWQS
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Transfer of Water from an
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	Outside Watershed
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	<ul> <li>Agriculture</li> <li>Urban</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Medium Priority	<ul><li>Sewers</li><li>Atmospheric</li></ul>
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	Depositon - Toxics

AU ID	AU Name		Water Type	Size	Location Description		
NJ02040202080010-01	Parkers Creek (above Ma Highway)	rne	RIVER	18.48 MILES	HUC14: 02040202080010		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Fully Supporting	Ν				• Transfer of	
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	Water from an Outside	
Fish Consumption	Insufficient Information	Ν				Watershed <ul> <li>Agriculture</li> </ul>	
Industrial Water Supply	Fully Supporting	Ν				<ul> <li>Urban Runoff/Storm</li> </ul>	
Primary Contact Recreation	Insufficient Information	Ν				Sewers	
Public Water Supply	Fully Supporting	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040202080020-01	Rancocas Creek (Martins NB/SB)	Beach to	RIVER	13.26 MILES	the following monitoring sites a SWQS Classification 01467011	HUC14: 02040202080020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01467011 FW2-NT AN0174 FW2-NT EWQ0174 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Fully Supporting	Ν				• Municipal	
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	Point Source Discharges	
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	<ul><li>Agriculture</li><li>Urban</li></ul>	
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers	
Primary Contact Recreation	Insufficient Information	Ν				• Atmospheric Depositon -	
Public Water Supply	Fully Supporting	Ν				Toxics	
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040202080030-01	Mill Creek (Willingboro)		FRESHWATER LAKE	17.24 ACRES	HUC14: 02040202080030 As of the following monitoring sites a		
			RIVER	21.69 MILES	the following monitoring sites a SWQS Classification 01467021 AN0175 FW2-NT EWQ0175 F	FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	

Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	pH Phosphorus (Total) Total Suspended Solids (TSS)	2010 2006 2010	Medium Priority Medium Priority Medium Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban</li> </ul>
Fish Consumption	Not Supporting	N	Polychlorinated biphenyls	2006	Low Priority	Runoff/Storm Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202080040-01	Rancocas Creek (Rt 130 Beach)	to Martins	FRESHWATER LAKE	47.69 ACRES	HUC14: 02040202080040	
	Beach)		RIVER	17.66 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Insufficient Information Insufficient Information Not Supporting Insufficient Information Insufficient Information	N N N N	Polychlorinated biphenyls	2006	Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Municipal Point Source Discharges</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202080050-01	Rancocas Creek (below F	Rt 130)	FRESHWATER LAKE RIVER	16.64 ACRES 8.2 MILES	HUC14: 02040202080050 As of the following monitoring sites an SWQS Classification NJ 7 FW2-	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Not Supporting	Ν	PCB in Fish Tissue	2010	Low Priority	
Industrial Water Supply	Insufficient Information	Ν				

Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202080060-01	LRDV trib- Delanco/Edg	ewater	FRESHWATER LAKE	12.42 ACRES	HUC14: 02040202080060	
			RIVER	3.89 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Not Supporting	Ν	PCB in Fish Tissue	2010	Low Priority	
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
AU ID NJ02040202090010-01	AU Name Swede Run		Water Type FRESHWATER LAKE	Size 28.3 ACRES	HUC14: 02040202090010 As of	
					HUC14: 02040202090010 As of the following monitoring sites an SWQS Classification 01467027	nd associated FW2-NT
			FRESHWATER LAKE	28.3 ACRES	HUC14: 02040202090010 As of the following monitoring sites an	nd associated FW2-NT
		Threatened	FRESHWATER LAKE	28.3 ACRES	HUC14: 02040202090010 As of the following monitoring sites an SWQS Classification 01467027 AN0176 FW2-NT EWQ0176 FW	nd associated FW2-NT
NJ02040202090010-01	Swede Run	<b>Threatened</b> N	FRESHWATER LAKE RIVER	28.3 ACRES 11.95 MILES	HUC14: 02040202090010 As of the following monitoring sites an SWQS Classification 01467027 AN0176 FW2-NT EWQ0176 FW 0076 DRBC NJ03-0076 DRBC	nd associated FW2-NT W2-NT NJ01- Source • Agriculture
NJ02040202090010-01	Swede Run Attainment		FRESHWATER LAKE RIVER	28.3 ACRES 11.95 MILES	HUC14: 02040202090010 As of the following monitoring sites an SWQS Classification 01467027 AN0176 FW2-NT EWQ0176 FW 0076 DRBC NJ03-0076 DRBC	nd associated FW2-NT W2-NT NJ01- Source • Agriculture • Urban Runoff/Storm
NJ02040202090010-01 Use Agricultural Water Supply	Swede Run Attainment Fully Supporting	Ν	FRESHWATER LAKE RIVER Cause	28.3 ACRES 11.95 MILES Cycle First Listed	HUC14: 02040202090010 As of the following monitoring sites an SWQS Classification 01467027 AN0176 FW2-NT EWQ0176 FW 0076 DRBC NJ03-0076 DRBC TMDL Status	nd associated FW2-NT W2-NT NJ01- Source • Agriculture • Urban Runoff/Storm Sewers • Atmospheric
NJ02040202090010-01 Use Agricultural Water Supply Aquatic Life	Swede Run Attainment Fully Supporting Not Supporting	N N	FRESHWATER LAKE RIVER Cause Oxygen, Dissolved	28.3 ACRES 11.95 MILES Cycle First Listed 2008	HUC14: 02040202090010 As of the following monitoring sites an SWQS Classification 01467027 AN0176 FW2-NT EWQ0176 FV 0076 DRBC NJ03-0076 DRBC TMDL Status Medium Priority	nd associated FW2-NT W2-NT NJ01- Source • Agriculture • Urban Runoff/Storm Sewers
NJ02040202090010-01 Use Agricultural Water Supply Aquatic Life Fish Consumption	Swede Run Attainment Fully Supporting Not Supporting Not Supporting	N N N	FRESHWATER LAKE RIVER Cause Oxygen, Dissolved	28.3 ACRES 11.95 MILES Cycle First Listed 2008	HUC14: 02040202090010 As of the following monitoring sites an SWQS Classification 01467027 AN0176 FW2-NT EWQ0176 FV 0076 DRBC NJ03-0076 DRBC TMDL Status Medium Priority	nd associated FW2-NT W2-NT NJ01- Source • Agriculture • Urban Runoff/Storm Sewers • Atmospheric Depositon -
NJ02040202090010-01 Use Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Swede Run Attainment Fully Supporting Not Supporting Fully Supporting Fully Supporting	N N N	FRESHWATER LAKE RIVER Cause Oxygen, Dissolved	28.3 ACRES 11.95 MILES Cycle First Listed 2008	HUC14: 02040202090010 As of the following monitoring sites an SWQS Classification 01467027 AN0176 FW2-NT EWQ0176 FV 0076 DRBC NJ03-0076 DRBC TMDL Status Medium Priority	nd associated FW2-NT W2-NT NJ01- Source • Agriculture • Urban Runoff/Storm Sewers • Atmospheric Depositon -

NJ02040202090020-01			FRESHWATER LAKE RIVER	2.49 ACRES 7.93 MILES	HUC14: 02040202090020 As of 2010 contains the following monitoring sites and associated SWQS Classification PM 002 FW2-NT PM 003 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status Source	
Agricultural Water Supply Aquatic Life	Insufficient Information Not Supporting	N N	Oxygen, Dissolved pH Phosphorus (Total)	2010 2010 2008	Medium Priority Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Medium Priority	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202090030-01	Pompeston Ck (below Rt 40d)	130/Swede to	RIVER	4.63 MILES	HUC14: 02040202090030 As of the following monitoring sites at SWQS Classification AN0177 F FW2-NT DSR 38R FW2-NT	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Municipal Point Source
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	Discharges
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	• Package Plant or Other Permitted Small
Industrial Water Supply	Insufficient Information	Ν				Flows Discharges
Primary Contact Recreation	Insufficient Information	Ν				• Agriculture
Public Water Supply	Insufficient Information	Ν				<ul> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	

NJ02040202100010-01	Pennsauken Ck NB (above NJTPK)		RIVER	14.86 MILES	HUC14: 02040202100010 As the following monitoring sites SWQS Classification 0146706 AN0178 FW2-NT AN0179 FW	and associated 5 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				Agriculture
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202100020-01	Pennsauken Ck NB (incl NJTPK)	StrwbrdgLk-	FRESHWATER LAKE RIVER	32.43 ACRES 10.89 MILES	0146706918-PE-1, 18-PE-2 As of 2010 contains the following monitoring sites and associated SWQS Classification 01467069 FW2-NT 18-PE- 1, 18-PE-2 FW2-NT DSR 68L FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Fully Supporting Not Supporting Not Supporting Fully Supporting	N N N	Phosphorus (Total) Chlordane DDD DDE DDT Mercury PCB in Fish Tissue	2006 2008 2008 2008 2008 2008 2008 2008	Completed Low Priority Low Priority Low Priority Low Priority Completed Low Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Source Unknown</li> <li>Atmospheric Depositon - Toxics</li> </ul>
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	N	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202100030-01	Pennsauken Ck NB (belo Strawbridge Lk)	w	RIVER	8.23 MILES	0146706918-PE-1, 18-PE-2 As of 2010 contains the following monitoring sites and associated	

					SWQS Classification 01467072 AN0180 FW2-NT AN0181 FW	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Cause Unknown	2008	Medium Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Industrial</li> </ul>
Fish Consumption Industrial Water Supply	Insufficient Information Fully Supporting	N N				<ul> <li>Industrial Point Source</li> <li>Discharge</li> <li>Municipal</li> <li>Point Source</li> </ul>
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Discharges
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	• Agriculture
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202100040-01	Pennsauken Ck SB (above Rt 41)		RIVER	14.58 MILES	014670810146707518-PE-3 As of 2010 contains the following monitoring sites and associated SWQS Classification 01467075 FW2-NT 18-PE-3 FW2-NT AN0182 FW2-NT Penn-SBPC2 FW2- NT Penn-SBPC3 FW2-NT Penn-SBPCB FW2- NT TMDL 1805 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Oxygen, Dissolved Phosphorus (Total)	2008 2006	Medium Priority Medium Priority	Municipal Point Source Discharges     Urban Runoff/Storm Sewers
Fish Consumption	Insufficient Information	N	Total Suspended Solids (TSS)	2006	Medium Priority	Agriculture
Industrial Water Supply	Not Supporting	Ν	Fecal Coliform	2006	Completed	Natural Sources
Primary Contact Recreation	Not Supporting	Ν			1	
Public Water Supply	Not Supporting	N	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202100050-01	Pennsauken Ck SB (below	w Rt 41)	RIVER	12.41 MILES	014670810146707518-PE-3 As the following monitoring sites a SWQS Classification 01467080 01467081 FW2-NT 014670813 AN0183 FW2-NT AN0184 FW FW2-NT Penn-SBPC4 FW2-NT	nd associated FW2-NT 0 FW2-NT 2-NT AN0185

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Insufficient Information	N N N	Phosphorus (Total)	2006	Medium Priority	<ul> <li>Municipal Point Source Discharges</li> <li>Agriculture</li> <li>Urban</li> </ul>
Industrial Water Supply	Not Supporting	N	Total Suspended Solids (TSS)	2006	Medium Priority	Runoff/Storm
Primary Contact Recreation		N	Fecal Coliform	2006	Completed	<ul><li>Sewers</li><li>Natural</li></ul>
Public Water Supply	Not Supporting Not Supporting	N	Arsenic	2006	Low Priority	Sources
AU ID		IN		Size	·	
NJ02040202100060-01			Water Type RIVER	7.03 MILES	Location Description HUC14: 02040202100060 As of the following monitoring sites at SWQS Classification 01467082 25R FW2-NT NJ 6 FW2-NT Per NT	nd associated FW2-NT DSR
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Not Supporting	N N N	Chromium (total) Copper Lead Oxygen, Dissolved Phosphorus (Total) Chlordane DDD DDE DDT Mercury in Water Column Polychlorinated biphenyls	2006 2006 2008 2008 2006 2006 2006 2006	Low Priority Low Priority Low Priority Medium Priority Medium Priority Low Priority Low Priority Low Priority Pollution Low Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Agriculture</li> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Not Supporting	Ν	Arsenic Cadmium Lead	2006 2006 2006	Low Priority Low Priority Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	

NJ02040202110010-01	Cooper River NB(above Springdale Road)		RIVER	10.3 MILES	0146715518-CO-2 As of 2010 contains the following monitoring sites and associated SWQS Classification 01467155 FW2-NT 18-CO-2 FW2 NT AN0186 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Municipal     Point Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2008	Medium Priority	Discharges  Urban
Fish Consumption	Not Supporting	Ν	DDD DDE DDT Polychlorinated biphenyls	2006 2006 2006 2006 2006	Low Priority Low Priority Low Priority Low Priority	<ul> <li>Orban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				Source Unknown
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Agriculture
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202110020-01	Cooper River NB(below Road)	Springdale	RIVER	11.03 MILES	0146715518-CO-2 As of 2010 c following monitoring sites and a Classification 01467181 FW2-N NT AN0188 FW2-NT	ssociated SWQS
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Municipal
Aquatic Life	Not Supporting	N	Oxygen, Dissolved Phosphorus (Total)	2008 2008	Medium Priority Completed / Medium Priority	Point Source Discharges • Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	DDD DDE DDT Polychlorinated biphenyls	2006 2006 2006 2006 2006	Low Priority Low Priority Low Priority Low Priority	Sewers • Atmospheric Depositon - Toxics • Source
Industrial Water Supply	Fully Supporting	Ν				Unknown <ul> <li>Agriculture</li> </ul>
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Natural     Sources
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	Sources
AU ID	AU Name		Water Type	Size	Location Description	

NJ02040202110030-01	Cooper River (above Evesham Road)		FRESHWATER LAKE RIVER	57.91 ACRES 13.77 MILES	014671500146714018-CO-4 As of 2010 contains the following monitoring sites and associated SWQS Classification 01467120 FW2-NT AN0189 FW2-NT NJW002 1 FW2-NT NJW002 2 FW2-NT NJW002 Center FW2-NT NJW002 OUTLET FW2-NT NJW234 1 FW2-NT NJW234 Cent	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Not Supporting Not Supporting	N N	Total Dissolved Solids Lead Phosphorus (Total) Turbidity	2008 2007 2006 2006	Medium Priority Low Priority Completed Medium Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> </ul>
Fish Consumption	Not Supporting	Ν	DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2006 2006 2006 2008 2008	Low Priority Low Priority Low Priority Completed Low Priority	<ul> <li>Source</li> <li>Unknown</li> <li>Agriculture</li> <li>Natural</li> <li>Sources</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic Lead Sulfates Tetrachloroethylene Total Dissolved Solids Trichloroethylene	2006 2007 2008 2008 2008 2008 2008	Low Priority Low Priority Low Priority Low Priority Medium Priority Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202110040-01	Cooper R (Wallworth ga Evesham Rd)	ge to	FRESHWATER LAKE RIVER	17.89 ACRES 17.05 MILES	014671500146714018-CO-4 As of 2010 contains the following monitoring sites and associated SWQS Classification 01467140 FW2-NT AN0190 FW2-NT DSR 26R FW2-NT DSR 43L FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Not Supporting Not Supporting	N N	Total Dissolved Solids Phosphorus (Total) Turbidity	2008 2006 2006	Medium Priority Completed Medium Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Urban Runoff/Storm</li> </ul>

Fish Consumption	Not Supporting	Ν	Chlordane DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2008 2006 2006 2006 2010 2006	Low Priority Low Priority Low Priority Low Priority Completed Low Priority	Sewers • Source Unknown • Atmospheric Depositon - Toxics • Agriculture
Industrial Water Supply	Fully Supporting	N	5 10 10	<b>2</b> 00 <i>5</i>		
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic Lead Sulfates Tetrachloroethylene Total Dissolved Solids Trichloroethylene	2006 2007 2008 2006 2008 2008	Low Priority Low Priority Low Priority Low Priority Medium Priority Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202110050-01	Cooper River (Rt 130 to gage)	Wallworth	FRESHWATER LAKE RIVER	175.3 ACRES 6.22 MILES	0146719018-CO-1 As of 2010 contains the following monitoring sites and associated SWQS Classification 01467150 FW2-NT 01467190 FW2-NT 01467191 FW2-NT 18-CO-1 FW2-NT 18-CO-4 FW2-NT AN0191 FW2-NT Cooper FW2-NT DSR 27R FW2-NT DSR	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Supporting	Ν	Total Dissolved Solids	2008	Medium Priority	• Urban
Aquatic Life	Not Supporting	Ν	pH Phosphorus (Total) Turbidity	2008 2006 2006	Medium Priority Completed Medium Priority	Runoff/Storm Sewers • Source Unknown • Atmospheric
Fish Consumption	Not Supporting	Ν	Chlordane DDD DDE DDT Polychlorinated biphenyls	2008 2006 2006 2006 2006 2006	Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Annospierc</li> <li>Depositon -</li> <li>Toxics</li> <li>Natural</li> <li>Sources</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli Fecal Coliform	2010 2006	Completed Completed	
Public Water Supply	Not Supporting	Ν	Arsenic Lead	2008 2007	Low Priority Low Priority	

			Sulfates Tetrachloroethylene Total Dissolved Solids Trichloroethylene	2008 2008 2008 2008 2008	Low Priority Low Priority Medium Priority Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202110060-01	Cooper River (below Rt	130)	RIVER	4.3 MILES	0146719018-CO-1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Combined
Aquatic Life	Not Supporting	Ν	pH Phosphorus (Total)	2008 2006	Medium Priority Completed	Sewer Overflows • Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	DDD DDE DDT Polychlorinated biphenyls	2006 2006 2006 2006 2006	Low Priority Low Priority Low Priority Low Priority	Sewers • Industrial Point Source Discharge • Atmospheric
Industrial Water Supply	Fully Supporting	Ν				Depositon - Toxics
Primary Contact Recreation	Insufficient Information	Ν				• Source Unknown
Public Water Supply	Not Supporting	Ν	Arsenic Tetrachloroethylene Trichloroethylene	2006 2006 2008	Low Priority Low Priority Low Priority	Natural Sources
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202110070-01	LDRV tribs (Pennsauken St)	Ck to 28th	RIVER	3.74 MILES	HUC14: 02040202110070 As o the following monitoring sites a SWQS Classification NJ00-007 0075 DRBC	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				

Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202120010-01	Rd)		FRESHWATER LAKE RIVER	60.58 ACRES 10.27 MILES	HUC14: 02040202120010 A the following monitoring site SWQS Classification AN066 FW2-NT NJW007 1 FW2-NT FW2-NT NJW007 OUTLET FW2-NT NJW161 2 FW2-NT	s and associated 1 FW2-NT DSR 42L 1 NJW007 Center FW2-NT NJW161 1
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Fully Supporting Not Supporting Fully Supporting	N N N N N	Phosphorus (Total) Mercury in Fish Tissue Fecal Coliform	2006 2006 2006	Medium Priority Completed Completed	<ul> <li>Municipal Point Source Discharges</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
	Big Timber Creek NB (below Laurel Rd)				HUC14: 02040202120020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01467359 FW2-NT AN0662 FW2-NT AN0663 FW2-NT	
NJ02040202120020-01		elow Laurel	FRESHWATER LAKE RIVER	2.18 ACRES 22.17 MILES	the following monitoring site SWQS Classification 014673	s and associated 59 FW2-NT
NJ02040202120020-01		elow Laurel Threatened			the following monitoring site SWQS Classification 014673	s and associated 59 FW2-NT
	Rd)		RIVER	22.17 MILES	the following monitoring site SWQS Classification 014673 AN0662 FW2-NT AN0663 F	s and associated 59 FW2-NT W2-NT

NJ02040202120030-01	Rd)		FRESHWATER LAKE RIVER	151.36 ACRES 24.17 MILES	HUC14: 02040202120030 As of 2010 contains the following monitoring sites and associated SWQS Classification 01467325 FW2-NT 01467327 FW2-NT AN0655 FW2-NT AN0656 FW2-NT AN0657 FW2-NT AN0658 FW2-NT NJW078 1 FW2-NT NJW078 2 FW2-NT NJW	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status Source	
Agricultural Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2008	Medium Priority	Sewers <ul> <li>Atmospheric</li> </ul>
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2006	Completed	Depositon - Toxics
Industrial Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li></ul>
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202120040-01	Big T Ck SB(incl Bull Ru LakelandRd)	ın to	FRESHWATER LAKE RIVER	6.18 ACRES 13.57 MILES	0146732918-BIG-1 As of 2010 contains the following monitoring sites and associated SWQS Classification 01467329 FW2-NT 18-BIG-1 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Completed	• Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2006	Completed	Sewers <ul> <li>Atmospheric</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				Depositon - Toxics
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202120050-01			RIVER	10 MILES	HUC14: 02040202120050 As of 2010 contains the following monitoring sites and associated SWQS Classification 01467331 FW2-NT AN0659 FW2-NT AN0660 FW2-NT EWQ0659 FW2-NT	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Fully Supporting Not Supporting Not Supporting Fully Supporting	N N N	Phosphorus (Total) Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006	Medium Priority Completed Low Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> </ul>
Primary Contact Recreation	Insufficient Information	N				
Public Water Supply	Fully Supporting	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202120060-01	Almonesson Creek		FRESHWATER LAKE RIVER	18.97 ACRES 5.43 MILES	HUC14: 02040202120060 As of 2010 contains the following monitoring sites and associated SWQS Classification 01467368 FW2-NT AN0665 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Insufficient Information Not Supporting Not Supporting Insufficient Information Insufficient Information Fully Supporting	N N N N	Oxygen, Dissolved Mercury in Fish Tissue Polychlorinated biphenyls	2010 2006 2006	Medium Priority Completed Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202120070-01	Little Timber Creek (Glo	ucester City)	RIVER	8.29 MILES	HUC14: 02040202120070 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0666 FW2-NT DSR 11R FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric Depositon -

Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Toxics
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Municipal     Point Source
Industrial Water Supply	Insufficient Information	Ν				Discharges <ul> <li>Agriculture</li> </ul>
Primary Contact Recreation	Insufficient Information	Ν				• Urban Runoff/Storm
Public Water Supply	Insufficient Information	Ν				Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202120080-01	confl)		FRESHWATER LAKE	5.72 ACRES	HUC14: 02040202120080 As of the following monitoring sites at	
			RIVER	20.31 MILES	the following monitoring sites and associated SWQS Classification AN0664 FW2-NT Big Timber FW2-NT DSR 8R FW2-NT NJ 9 FW2- NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006	Low Priority Low Priority	<ul> <li>Industrial</li> <li>Point Source</li> <li>Discharge</li> <li>Municipal</li> </ul>
Industrial Water Supply	Insufficient Information	Ν				<ul> <li>Municipal</li> <li>Point Source</li> <li>Discharges</li> </ul>
Primary Contact Recreation	Insufficient Information	Ν				• Agriculture
Public Water Supply	Insufficient Information	Ν				• Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202120090-01	Newton Creek (LDRV-K	aighn Ave to	FRESHWATER LAKE	111.69 ACRES	HUC14: 02040202120090 As of	
	LT Ck)		RIVER	11.39 MILES	the following monitoring sites an SWQS Classification 01467312	FW2-NT
					AN0653 FW2-NT AN0654 FW2 FW2-NT DSR 35L FW2-NT DS EWQ0653 FW2-NT Newton Cr	R 44L FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Industrial
Aquatic Life	Not Supporting	Ν	Copper pH	2006 2006	Low Priority Medium Priority	Point Source Discharge

Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Not Supporting Fully Supporting Not Supporting Not Supporting	N N N	Phosphorus (Total) Chlordane in Fish Tissue DDD DDE DDT PCB in Fish Tissue Escherichia coli Arsenic	2006 2008 2008 2008 2010 2008 2008 2008	Medium Priority Low Priority Low Priority Low Priority Low Priority Medium Priority Low Priority	<ul> <li>Municipal Point Source Discharges</li> <li>Package Plant or Other Permitted Small Flows Discharges</li> <li>Urban Runoff/Storm Sewers</li> <li>Combined Sewer</li> <li>Overflows</li> <li>Upstream Impoundments (e.g., Pl-566 NRCS Structures)</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202120100-01	Woodbury Creek (above	Rt 45)	FRESHWATER LAKE RIVER	44.03 ACRES 4.78 MILES	HUC14: 02040202120100 As of 2010 contains the following monitoring sites and associated SWQS Classification DSR 69L FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Fully Supporting Not Supporting Not Supporting Fully Supporting	N N N	pH Chlordane in Fish Tissue DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2006 2008 2008 2008 2010 2008 2008	Medium Priority Low Priority Low Priority Low Priority Low Priority Completed Low Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Source Unknown</li> <li>Atmospheric Depositon - Toxics</li> </ul>
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202120110-01	Woodbury Ck (below Rt	45)/LDRV to	FRESHWATER LAKE	6.28 ACRES	HUC14: 02040202120110 As or	f 2010 contains

	B T Ck		RIVER	19.82 MILES the following monitoring sit SWQS Classification 01474 DSR 4M DRBC NJ00-0077 DRBC		) SE2 AN0667 SE2	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Not Supporting Fully Supporting Insufficient Information Fully Supporting	N N N N N	pH Polychlorinated biphenyls	2006 2006	Medium Priority Low Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> </ul>	
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040202120120-01	Main Ditch / Little Mante	ua Creek	RIVER	11.34 MILES	HUC14: 02040202120120	HUC14: 02040202120120	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Insufficient Information Insufficient Information Not Supporting Insufficient Information Insufficient Information Insufficient Information	N N N N	Polychlorinated biphenyls	2006	Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Industrial Point Source Discharge</li> <li>Municipal Point Source Discharges</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>	
AUID	AU Name		Water Type	Size	Location Description		
NJ02040202130010-01	Mantua Creek (above Rt	47)	FRESHWATER LAKE RIVER	37.92 ACRES 8.2 MILES	HUC14: 02040202130010 As a the following monitoring sites a SWQS Classification AN0668	and associated	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Insufficient Information	Ν					

Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	N				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202130020-01			FRESHWATER LAKE	13.02 ACRES	HUC14: 02040202130020 As of	
	47)		RIVER	14.38 MILES	the following monitoring sites and associated SWQS Classification AN0669 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2008	Completed	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202130030-01	Chestnut Branch (above s	Sewell)	FRESHWATER LAKE	27.84 ACRES	HUC14: 02040202130030 As of	
			RIVER	13.29 MILES	the following monitoring sites an SWQS Classification AN0670 F FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				Industrial     Point Source
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2008	Medium Priority	Discharge
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Completed	<ul> <li>Agriculture</li> <li>Urban</li> </ul>
Industrial Water Supply	Insufficient Information	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Insufficient Information	Ν				

Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202130040-01	Mantua Ck (Edwards Run to rd to Sewell)		FRESHWATER LAKE RIVER	15.6 ACRES 23.63 MILES	HUC14: 02040202130040 a the following monitoring si SWQS Classification 01475 01475045 FW2-NT AN067 FW2-NT NJW268 1 FW2-N NT NJW268 OUTLET FW	es and associated 042 FW2-NT 1 FW2-NT AN0672 NT NJW268 2 FW2-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Not Supporting	N N N	pH Phosphorus (Total) Mercury in Fish Tissue Polychlorinated biphenyls	2008 2006 2008 2006	Medium Priority Medium Priority Low Priority Low Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> </ul>
Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Fully Supporting	N N N	Escherichia coli	2008	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202130050-01	Edwards Run		FRESHWATER LAKE RIVER	3.4 ACRES 20.99 MILES	HUC14: 02040202130050 <i>A</i> the following monitoring sit SWQS Classification 01475 AN0673 FW2-NT AN0674 FW2-NT BA218 FW2-NT BA220 FW2-NT	es and associated 090 FW2-NT FW2-NT BA217
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Not Supporting	N N N	Phosphorus (Total) Total Suspended Solids (TSS) Turbidity PCB in Fish Tissue	2006 2008 2010 2008	Medium Priority Medium Priority Medium Priority Low Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> </ul>

Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202130060-01	Mantua Creek (below Edwards Run)		RIVER	18.92 MILES	HUC14: 02040202130060 As of 2010 contains the following monitoring sites and associated SWQS Classification DSR 40R SE2 Mantua SE2 NJ 4 SE2	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric
Aquatic Life	Insufficient Information	Ν				Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	<ul><li> Agriculture</li><li> Urban</li></ul>
Industrial Water Supply	Insufficient Information	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202140010-01	NehonseyBk/Clonmell Ck(LDRV to MantuaCk)		FRESHWATER LAKE	19.23 ACRES	HUC14: 02040202140010 As of 2010 contains the following monitoring sites and associated SWQS Classification 332052 DRBC DSR 36R DRBC NJ01-0078 DRBC NJ03-0078 DRBC	
1.002070202170010-01		k(LDRV to	RIVER	24.31 MILES	SWQS Classification 332052 DI	RBC DSR 36R
Use		K(LDRV to		24.31 MILES Cycle First Listed	SWQS Classification 332052 DI	RBC DSR 36R
	MantuaČk)		RIVER		SWQS Classification 332052 DI DRBC NJ01-0078 DRBC NJ03-	RBC DSR 36R 0078 DRBC
Use	MantuaČk) Attainment	Threatened	RIVER		SWQS Classification 332052 DI DRBC NJ01-0078 DRBC NJ03-	RBC DSR 36R 0078 DRBC
Use Agricultural Water Supply	MantuaČk) Attainment Insufficient Information	<b>Threatened</b> N	RIVER		SWQS Classification 332052 DI DRBC NJ01-0078 DRBC NJ03-	RBC DSR 36R 0078 DRBC
Use Agricultural Water Supply Aquatic Life	MantuaČk) Attainment Insufficient Information Insufficient Information	<b>Threatened</b> N N	RIVER		SWQS Classification 332052 DI DRBC NJ01-0078 DRBC NJ03-	RBC DSR 36R 0078 DRBC
Use Agricultural Water Supply Aquatic Life Fish Consumption	MantuaČk) Attainment Insufficient Information Insufficient Information Insufficient Information	<b>Threatened</b> N N N	RIVER		SWQS Classification 332052 DI DRBC NJ01-0078 DRBC NJ03-	RBC DSR 36R 0078 DRBC
Use Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	MantuaČk) Attainment Insufficient Information Insufficient Information Insufficient Information Insufficient Information	Threatened N N N N	RIVER		SWQS Classification 332052 DI DRBC NJ01-0078 DRBC NJ03-	RBC DSR 36R 0078 DRBC
Use Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation	MantuaČk) Attainment Insufficient Information Insufficient Information Insufficient Information Insufficient Information Insufficient Information	Threatened N N N N N	RIVER		SWQS Classification 332052 DI DRBC NJ01-0078 DRBC NJ03-	RBC DSR 36R 0078 DRBC

	Rd)		RIVER	14.57 MILES	the following monitoring sites and associated SWQS Classification 01476600 FW2-NT AN0675 FW2-NT BA93 FW2-NT		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Fully Supporting	Ν				Agriculture	
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	• Urban Runoff/Storm	
Fish Consumption	Insufficient Information	Ν				Sewers	
Industrial Water Supply	Fully Supporting	Ν					
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed		
Public Water Supply	Fully Supporting	Ν					
AU ID	AU Name V		Water Type	Size	Location Description		
NJ02040202140030-01	Pargay Creek		FRESHWATER LAKE	22.41 ACRES	HUC14: 02040202140030 As of the fellowing maritering sites		
			RIVER	12.2 MILES	the following monitoring sites and associated SWQS Classification 01476625 FW2-NT 01476640 FW2-NT AN0676 FW2-NT AN0677 FW2-NT EWQ0677 FW2-NT		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture	
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2008	Medium Priority		
Fish Consumption	Insufficient Information	Ν					
Industrial Water Supply	Fully Supporting	Ν					
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Medium Priority		
Public Water Supply	Fully Supporting	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040202140040-01	Moss Branch / Little Tim	ber Ck	FRESHWATER LAKE	7.07 ACRES	HUC14: 02040202140040 As a the following monitoring sites		
	(Repaupo)		RIVER	16.77 MILES	the following monitoring sites SWQS Classification AN0678	FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Insufficient Information	N				• Atmospheric	

Agricultural Water Supply	Insufficient Information	Ν				<ul><li> Agriculture</li><li> Urban</li></ul>
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
NJ02040202150010-01	Raccoon Ck (above Clems Run)		FRESHWATER LAKE RIVER	34.71 ACRES 10.4 MILES	HUC14: 02040202150010 As the following monitoring sites SWQS Classification 0147708 01477082 FW2-NT 01477083 FW2-NT NJW005 1 FW2-NT NT NJW005 3 FW2-NT NJW0 NT N	and associated 1 FW2-NT FW2-NT AN0679 NJW005 2 FW2-
AU ID	AU Name		Water Type	Size	Location Description	
Public Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	N				Sewers
Aquatic Life Fish Consumption	Insufficient Information Not Supporting	N N	Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006	Low Priority Low Priority	<ul> <li>Autospheric</li> <li>Depositon -</li> <li>Toxics</li> <li>Agriculture</li> <li>Urban</li> <li>Runoff/Storm</li> </ul>
Use Agricultural Water Supply	Attainment Insufficient Information	Threatened N	Cause	Cycle First Listed	TMDL Status	Source • Atmospheric
			RIVER	24.61 MILES	SWQS Classification NJ00-00 0079 DRBC	79 DRBC NJ02-
NJ02040202140050-01	2040202140050-01 RepaupoCk(belowTomlin Sta Rd)/CedarSwamp		FRESHWATER LAKE	96.4 ACRES	HUC14: 02040202140050 As the following monitoring sites	and associated
AU ID	AU Name		Water Type	Size	Location Description	
Public Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	N				Sewers
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006	Low Priority Low Priority	• Urban Runoff/Storm
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Depositon - Toxics • Agriculture

Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202150020-01	Raccoon Ck (Rt 45 to/incl Clems Run)		FRESHWATER LAKE RIVER	14.81 ACRES 17.52 MILES	HUC14: 02040202150020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01477100 FW2-NT 01477102 FW2-NT 01477105 FW2-NT 01477. FW2-NT 01477107 FW2-NT 01477109 FW2-N 0147710950 FW2-NT AN0680 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2010	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Completed	Sewers
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202150030-01	Raccoon Ck SB		RIVER	14.88 MILES	HUC14: 02040202150030 As of the following monitoring sites an SWQS Classification 01477118 AN0681 FW2-NT AN0682 FW2 FW2-NT	nd associated FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				Agriculture
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers

Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202150040-01	Raccoon Ck (Russell Mill Rd to Rt 45)		RIVER	10.52 MILES	0147712018-RAC-1 As of 2010 following monitoring sites and a Classification 01477110 FW2-N FW2-NT 01477125 FW2-NT 18 AN0683 FW2-NT	ssociated SWQS T 01477120
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Package Plant
Aquatic Life Fish Consumption	Not Supporting	N	Phosphorus (Total) Silver Turbidity Chlordane	2006 2006 2006 2006	Medium Priority Low Priority Medium Priority Low Priority	or Other Permitted Small Flows Discharges • Urban Runoff/Storm
Fish Consumption	Not Supporting	IN .	DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006	Low Priority Low Priority Low Priority Completed Low Priority	Sewers • Atmospheric Depositon - Toxics • Source Unknown
Industrial Water Supply	Fully Supporting	Ν				• Agriculture
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202150050-01	Raccoon Ck (Swedesbord RussellMillRd)	o rd-	FRESHWATER LAKE RIVER	38.82 ACRES 15.18 MILES	HUC14: 02040202150050 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0684 FW2-NT AN0685 SE2 DSR 28R FW2-NT NJW148 1 FW2-NT NJW148 OUTLET FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	

Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Insufficient Information Insufficient Information Insufficient Information Insufficient Information	N N N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202150060-01	Raccoon Ck (below Swedesboro rd)/BirchCk		FRESHWATER LAKE RIVER	68.73 ACRES 21.1 MILES	HUC14: 02040202150060 As of 2010 contains the following monitoring sites and associated SWQS Classification 01477160 SE2 NJ 1 SE2 Raccoon SE2	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation	Fully Supporting Not Supporting Insufficient Information Fully Supporting Insufficient Information	N N N N	Phosphorus (Total) Total Suspended Solids (TSS)	2006 2006	Medium Priority Medium Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Municipal Point Source Discharges</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Public Water Supply	Fully Supporting	N				
AU ID NJ02040202150070-01	AU Name Birch Creek		Water Type FRESHWATER LAKE RIVER	Size 9.37 ACRES 11 MILES	Location Description Birch Creek	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life Fish Consumption Industrial Water Supply	Not Supporting Insufficient Information Fully Supporting	N N N	Phosphorus (Total) Total Suspended Solids (TSS)	2010 2010	Medium Priority Medium Priority	

Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202160010-01	Oldmans Creek (above Commissioners Rd)		FRESHWATER LAKE RIVER	13.49 ACRES 6.75 MILES	HUC14: 02040202160010 As of the following monitoring sites a SWQS Classification 01477440 01477445 FW2-NT AN0686 F FW2-NT	nd associated ) FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Fully Supporting Not Supporting Insufficient Information Fully Supporting	N N N	Phosphorus (Total)	2008	Medium Priority	Agriculture     Urban     Runoff/Storm     Sewers
Primary Contact Recreation Public Water Supply	Not Supporting Fully Supporting	N N	Fecal Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202160020-01	Oldmans Creek (Rt45 to Commissioners Rd)		FRESHWATER LAKE RIVER	17.98 ACRES 9.12 MILES	HUC14: 02040202160020 As o the following monitoring sites a SWQS Classification AN0687 FW2-NT BA91 FW2-NT NJW NJW196 2 FW2-NT	nd associated FW2-NT BA90
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Phosphorus (Total)	2008	Completed	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Not Supporting Fully Supporting Not Supporting Fully Supporting	N N N	Mercury in Fish Tissue Fecal Coliform	2008 2006	Low Priority Completed	Atmospheric Depositon - Toxics

NJ02040202160030-01			FRESHWATER LAKE RIVER	9.85 ACRES 20.73 MILES	HUC14: 02040202160030 As of 2010 contains the following monitoring sites and associated SWQS Classification 01477470 FW2-NT 01477475 FW2-NT 01477480 FW2-NT 0147748 FW2-NT 01477490 FW2-NT 01477495 FW2-NT 01477500 FW2-NT 01477509 FW2-NT 0147751	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status Source	
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Completed	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202160040-01	Beaver Creek (Oldmans	Creek)	RIVER	15.37 MILES	HUC14: 02040202160040	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric Depositon -
Aquatic Life	Insufficient Information	Ν				Toxics
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	<ul> <li>Agriculture</li> <li>Urban</li> </ul>
Industrial Water Supply	Insufficient Information	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202160050-01	Oldmans Creek (Center S KingsHwy)	q Rd to	RIVER	31.87 MILES	HUC14: 02040202160050 As of 2010 contains the following monitoring sites and associated SWQS Classification 01477520 FW2-NT AN0688 FW2-NT AN0689 FW2-NT EWQ0689 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Not Supporting Fully Supporting Not Supporting Fully Supporting	N N N N N	Phosphorus (Total) Total Suspended Solids (TSS) PCB in Fish Tissue Fecal Coliform	2006 2006 2008 2006	Completed Medium Priority Low Priority Completed	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040202160060-01	Oldmans Creek (below Center Sq Rd)		RIVER	24.9 MILES	HUC14: 02040202160060 As of the following monitoring sites an SWQS Classification 01477600 Oldmans SE1	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Insufficient Information Insufficient Information Not Supporting Insufficient Information Insufficient Information Insufficient Information	N N N N	Polychlorinated biphenyls	2006	Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206020010-01	LDRV tribs (Lakeview A Oldmans Ck)	ve to	FRESHWATER LAKE RIVER	130.49 ACRES 31.87 MILES	HUC14: 02040206020010 As of the following monitoring sites ar SWQS Classification NJW153 1 SE1	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Insufficient Information Insufficient Information Not Supporting	N N N	Polychlorinated biphenyls	2006	Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Industrial Point Source</li> </ul>

Industrial Water Supply Primary Contact Recreation Public Water Supply	Insufficient Information Insufficient Information Insufficient Information	N N N				Discharge • Municipal Point Source Discharges • Package Plant or Other Permitted Small Flows Discharges • Agriculture • Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206020020-01	LDRV tribs (Marsh Pt-M Pennsville)	ain St	RIVER	65.22 MILES	HUC14: 02040206020020	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Insufficient Information Insufficient Information Not Supporting Insufficient Information Insufficient Information Insufficient Information	N N N N	DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006	Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Municipal Point Source Discharges</li> <li>Source Unknown</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Industrial Point Source Discharge</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206030010-01	Salem River (above Woodstown gage)		ESTUARY FRESHWATER LAKE RIVER	19.69 SQUARE MILES 116.96 ACRES 20.62 MILES	HUC14: 02040206030010 As of 2010 contains the following monitoring sites and associated SWQS Classification 01482455 FW2-NT AN0690 FW2-NT AN0691 FW2-NT BA73 FW2- NT BA74 FW2-NT BA75A FW2-NT BA76A FW2-NT BA77	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Use	Attainment	Threatened	Cause	Cycle First Listed	FW2-NT TMDL Status	Source
NJ02040206030030-01	Salem R (CountyHomeRd to Woodstown gage)		RIVER	15.48 MILES	HUC14: 02040206030030 As of the following monitoring sites an SWQS Classification 01482500 01482503 FW2-NT 01482505 F FW2-NT 393855075195200 FW	nd associated FW2-NT W2-NT 01482508
AU ID	AU Name		Water Type	Size	Location Description	
Public Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Industrial Water Supply	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	N				
Agricultural Water Supply Aquatic Life	Insufficient Information Not Supporting	N N	pH Phosphorus (Total)	2010 2010	Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
NJ02040206030020-01	Nichomus Run		RIVER	8.26 MILES	HUC14: 02040206030020 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0692 FW2-NT S10 FW2-NT	
AU ID	AU Name		Water Type	Size	Location Description	
Public Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Industrial Water Supply	Fully Supporting	N				
Fish Consumption	Not Supporting	N	Total Suspended Solids (TSS) Mercury in Fish Tissue	2010 2008	Medium Priority Completed	Toxics
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved pH Phosphorus (Total) Temperature, water	2010 2006 2006 2010	Medium Priority Medium Priority Completed Medium Priority	Runoff/Storm Sewers • Atmospheric Depositon -
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>

Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Insufficient Information Fully Supporting Not Supporting Fully Supporting	N N N N N	Oxygen, Dissolved pH Phosphorus (Total) Fecal Coliform	2010 2006 2006 2006	Medium Priority Medium Priority Medium Priority Completed	<ul> <li>Package Plant or Other</li> <li>Permitted Small</li> <li>Flows</li> <li>Discharges</li> <li>Agriculture</li> <li>Urban</li> <li>Runoff/Storm</li> <li>Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206030040-01	CountyHomeRd)		FRESHWATER LAKE RIVER	23.91 ACRES 15.21 MILES	HUC14: 02040206030040 As of 2010 contains the following monitoring sites and associated SWQS Classification 01482519 FW2-NT 01482520 FW2-NT 01482530 FW2-NT 01482537 FW2-NT AN0693 FW2-NT AN0694 FW2-NT BA215 FW2-NT BA216 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Oxygen, Dissolved pH Phosphorus (Total) Temperature, water	2008 2008 2006 2006	Medium Priority Medium Priority Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Upstream Impoundments (e.g., PI-566</li> </ul>
Fish Consumption	Insufficient Information	Ν				NRCS Structures)
Industrial Water Supply	Not Supporting	Ν	Total Suspended Solids (TSS)	2006	Medium Priority	Sudotales)
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206030050-01	Game Creek (above Rt 4	8)	FRESHWATER LAKE RIVER	28.42 ACRES 15.12 MILES	HUC14: 02040206030050 As of the following monitoring sites an SWQS Classification 01482560 AN0695 FW2-NT AN0696 FW2 NT BA81 FW2-NT BA83 FW2- NT	nd associated FW2-NT 2-NT BA80 FW2-

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Phosphorus (Total)	2006	Medium Priority	• Package Plant or Other Permitted Small
Fish Consumption	Insufficient Information	N				Flows Discharges
Industrial Water Supply	Fully Supporting	Ν				<ul><li> Agriculture</li><li> Urban</li></ul>
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	Runoff/Storm Sewers
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206030060-01	Salem R (39-40-14 dam-		FRESHWATER LAKE	52.13 ACRES	HUC14: 02040206030060 As of	
	CoursesLndg)/Canal		RIVER	20.55 MILES	the following monitoring sites and associated SWQS Classification BA70 FW2-NT NJW156 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Insufficient Information Not Supporting	N N	Phosphorus (Total) Temperature, water	2006 2006	Medium Priority Medium Priority	Agriculture     Urban Runoff/Storm Sewers
Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Insufficient Information Insufficient Information Not Supporting Insufficient Information	N N N	Fecal Coliform	2006	Completed	• Upstream Impoundments (e.g., PI-566 NRCS Structures)
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206030070-01	Game Creek (below Rt 4	8)	FRESHWATER LAKE RIVER	43.81 ACRES 20.03 MILES	HUC14: 02040206030070 As of the following monitoring sites at SWQS Classification 01482570 NJW048 1 FW2-NT NJW048 2	nd associated FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	N	Oxygen, Dissolved Phosphorus (Total)	2010 2010	Medium Priority Medium Priority	

Aquatic Life	Not Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206030080-01	Salem Canal		FRESHWATER LAKE	2.64 ACRES	Salem Canal As of 2010 contain	
			RIVER	2.12 MILES	monitoring sites and associated S Classification 01482580 FW2-N	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved Phosphorus (Total) Temperature, water	2010 2010 2010	Medium Priority Medium Priority Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	N				
Primary Contact Recreation	Not Supporting	N	Escherichia coli	2010	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206040010-01	Mannington Creek		RIVER	31.39 MILES	HUC14: 02040206040010 As of the following monitoring sites an SWQS Classification 01482645 AN0697 FW2-NT AN0698 FW2	nd associated FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Insufficient Information Not Supporting	N N	Oxygen, Dissolved pH Phosphorus (Total)	2010 2010 2008	Medium Priority Medium Priority Medium Priority	<ul> <li>Package Plant or Other</li> <li>Permitted Small</li> <li>Flows</li> <li>Discharges</li> <li>Agriculture</li> </ul>

Fish Consumption	Insufficient Information	Ν				
-						
Industrial Water Supply	Insufficient Information	N				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2010	Medium Priority	
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206040020-01	Fenwick Creek / Keasbey	vs Creek	ESTUARY	33.07 SQUARE MILES	HUC14: 02040206040020	
			RIVER	28.82 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric
Aquatic Life	Insufficient Information	Ν				Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Industrial     Point Source
Industrial Water Supply	Insufficient Information	Ν				Discharge • Agriculture
Primary Contact Recreation	Insufficient Information	Ν				Urban Runoff/Storm
Public Water Supply	Insufficient Information					Sewers
		1				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206040030-01	Salem R (Fenwick Ck to dam)	39d40m14s	RIVER	157.7 MILES	HUC14: 02040206040030 As of 2010 contains the following monitoring sites and associated SWQS Classification NJ03-0273 SE1 R57 SE1 Salem SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics
Fish Consumption	Not Supporting	N	Polychlorinated biphenyls	2006	Low Priority	<ul><li>Agriculture</li><li>Urban</li></ul>
Industrial Water Supply	Insufficient Information	N				Runoff/Storm Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206040040-01	Salem R (below Fenwick	Creek)	RIVER	67.52 MILES	HUC14: 02040206040040 As of 2010 contains the following monitoring sites and associated SWQS Classification NJ 3 SE1 NJ02-0272 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	N				• Atmospheric Depositon -
Aquatic Life	Fully Supporting	Ν				Toxics <ul> <li>Municipal</li> </ul>
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Point Source Discharges
Industrial Water Supply	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Primary Contact Recreation	Insufficient Information	Ν				Runoff/Storm
Public Water Supply	Insufficient Information	Ν				Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206060010-01	Cool Run		FRESHWATER LAKE	38.54 ACRES	HUC14: 02040206060010 As of	
			RIVER	7.53 MILES	the following monitoring sites an SWQS Classification AN0700 F	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				Agriculture
Aquatic Life	Fully Supporting	Ν				<ul> <li>Urban Runoff/Storm</li> </ul>
Fish Consumption	Insufficient Information	N				Sewers
Industrial Water Supply	Insufficient Information	N				
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206060020-01	Alloway Ck (above Alloway- Woodstown Rd)		RIVER	16.39 MILES	HUC14: 02040206060020 As of the following monitoring sites an SWQS Classification 01482880 AN0699 FW2-NT	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Phosphorus (Total) Total Suspended Solids (TSS)	2006 2008	Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Not Supporting	N	Total Suspended Solids (TSS)	2008	Medium Priority	
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name Wa		Water Type	Size	Location Description	
NJ02040206060030-01	Cedar Brook / Carlisle Run FR		FRESHWATER LAKE	32.9 ACRES	HUC14: 02040206060030 As of the following monitoring sites an	
			RIVER	7.28 MILES	SWQS Classification AN0701 F	W2-NT NJW130
					1 FW2-NT NJW130 2 FW2-NT OUTLET FW2-NT	NJW130
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206060040-01	Deep Run (Alloway)		FRESHWATER LAKE	22.32 ACRES	HUC14: 02040206060040 As of	
			RIVER	12.88 MILES	the following monitoring sites an SWQS Classification 01483010 AN0703 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Agriculture
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				

Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206060050-01			FRESHWATER LAKE	101.44 ACRES	HUC14: 02040206060050 As of 2010 contains	
	WdstwnRd)		RIVER	20.12 MILES	the following monitoring sites ar SWQS Classification AN0702 S	E1
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric Depositon -
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	Toxics
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	<ul><li>Agriculture</li><li>Urban</li></ul>
Industrial Water Supply	Insufficient Information	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206060060-01	Alloway Creek (New Bri Quinton)	dge to	RIVER	24.03 MILES	HUC14: 02040206060060	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Fully Supporting	Ν				• Atmospheric
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Depositon - Toxics
Primary Contact Recreation	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Shellfish Harvesting	Fully Supporting	Ν				Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206060070-01	Harmony trib (Alloway Creek)		RIVER	15.49 MILES	HUC14: 02040206060070 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0704 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply Shellfish Harvesting	Insufficient Information Fully Supporting Not Supporting Insufficient Information Insufficient Information Insufficient Information Fully Supporting	N N N N N	Polychlorinated biphenyls	2006	Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Package Plant or Other Permitted Small Flows Discharges</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
AU ID	AU Name V		Water Type	Size	Location Description	
NJ02040206060080-01	Alloway Ck (HancocksB NewBridge)	ridge to	RIVER	26.84 MILES	HUC14: 02040206060080	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation Shellfish Harvesting	Fully Supporting Not Supporting Insufficient Information Fully Supporting	N N N	Polychlorinated biphenyls	2006	Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206060090-01	Alloway Ck (below Hand Salem R	cocksBr) to	RIVER	179.23 MILES	HUC14: 02040206060090 As of 2010 contains the following monitoring sites and associated SWQS Classification NJ00-0095 SE1 R56 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation Shellfish Harvesting	Fully Supporting Not Supporting Insufficient Information Fully Supporting	N N N	Polychlorinated biphenyls	2006	Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Package Plant or Other Permitted Small Flows Discharges</li> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>

						Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206060100-01	Hope Creek / Artificial Is	land	ESTUARY RIVER	0.01 SQUARE MILES 143.63 MILES	HUC14: 02040206060100 As o the following monitoring sites a SWQS Classification R55 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation Shellfish Harvesting	Fully Supporting Not Supporting Insufficient Information Fully Supporting	N N N	Polychlorinated biphenyls	2006	Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206070010-01	Fishing Creek / Bucks Ditch/Pattys Fork		RIVER	64.78 MILES	HUC14: 02040206070010	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation Shellfish Harvesting	Insufficient Information Not Supporting Insufficient Information Fully Supporting	N N N	Polychlorinated biphenyls	2006	Low Priority	• Atmospheric Depositon - Toxics
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206070020-01	Mad Horse Ck / Little Ck Fork	z / Turners	ESTUARY RIVER	0.02 SQUARE MILES 167.25 MILES	HUC14: 02040206070020 As o the following monitoring sites a SWQS Classification R52 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation Shellfish Harvesting	Fully Supporting Not Supporting Insufficient Information Fully Supporting	N N N	Polychlorinated biphenyls	2006	Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206070030-01	Canton Drain (above Ma	skell Mill)	FRESHWATER LAKE RIVER	71.96 ACRES 11.53 MILES	HUC14: 02040206070030 As of the following monitoring sites a SWQS Classification 01413065 26L FW2-NT	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation	Fully Supporting Not Supporting Not Supporting Fully Supporting Fully Supporting	N N N N	pH Mercury in Fish Tissue	2006 2008	Medium Priority Completed	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> </ul>
Public Water Supply	Fully Supporting AU Name	N	Water Type	Size	Location Description	
NJ02040206070040-01	Canton Drain (below Ma	skell Mill)	RIVER	11.5 MILES	HUC14: 02040206070040 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0707 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation Shellfish Harvesting	Not Supporting Not Supporting Insufficient Information Fully Supporting	N N N	Cause Unknown Polychlorinated biphenyls	2006 2006	Medium Priority Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206070050-01	Stow Creek (above Jerich	io Road)	FRESHWATER LAKE RIVER	30.55 ACRES 21.68 MILES	HUC14: 02040206070050 As of the following monitoring sites a SWQS Classification AN0705 F 1 FW2-NT NJW179 2 FW2-NT	nd associated W2-NT NJW179
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				

`		Water Type	Size	Location Description	
Stow Creek (Canton Road to Jericho Road)		RIVER	22.5 MILES	HUC14: 02040206070060 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0706 FW2-NT NJT07 STCEP1 SE1	
tainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
ot Supporting sufficient Information	N N N	Polychlorinated biphenyls	2006	Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Package Plant or Other Permitted Small Flows Discharges</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
J Name		Water Type	Size	Location Description	
ccoon Ditch (Stow Cree	ek)	FRESHWATER LAKE RIVER	38.73 ACRES 28.43 MILES	HUC14: 02040206070070 As of 2010 contains the following monitoring sites and associated SWQS Classification 01413080 FW2-NT AN0708 FW2-NT NJW006 1 FW2-NT NJW006 2 FW2-NT NJW006 3 FW2-NT NJW006 Center FW2-NT NJW006 OUTLET FW2-NT R51	
tainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
ot Supporting	N N N	Cause Unknown PCB in Fish Tissue	2008 2008	Medium Priority Low Priority	• Atmospheric Depositon - Toxics
ot Suff suff lly ; U N cco tain lly ; ot Su	upporting Ticient Information Supporting ame oon Ditch (Stow Creation nment Supporting upporting	upporting     N       icient Information     N       Supporting     N       ame	In botNPolychlorinated biphenylsupportingNPolychlorinated biphenylsSupportingN-SupportingN-SupportingN-SupportingFRESHWATER LAKE RIVERInmentThreatenedSupportingNupportingNCauseNSupportingNCause Unknown	In orNPolychlorinated biphenyls2006upportingNN $N$ SupportingNNameVater TypeSizeion Ditch (Stow CressonFRESHWATER LAKE RIVER38.73 ACRES 28.43 MILESnmentThreatened NCauseSupportingNCauseSupportingNCause Unknown20062008	upporting upportingN NPolychlorinated biphenyls2006Low PrioritySupportingNNSupportingLow PriorityameVater TypeSizeLocation DescriptionNon Ditch (Stow Cress)FRESHWATER LAKE RIVER38.73 ACRES 28.43 MILESHUC14: 02040206070070 As of the following monitoring sites an SWQS Classification 014130801 AN0708 FW2-NT NJW006 3 FW2-NT FW2-NT NJW006 10TLET FWnmentThreatenedCauseCycle First ListedTMDL StatusSupporting upportingN NCause Unknown2008Medium Priority

Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206070080-01	Stow Creek (below Canton Rd)		ESTUARY	0.05 SQUARE MILES	HUC14: 02040206070080 As of 2010 contains the following monitoring sites and associated SWQS Classification NJ01-0088 SE1 NJ03-0269 SE1 R49 SE1 R50 SE1 R53 SE1 R54 SE1	
			RIVER	85.12 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	• Atmospheric Depositon -
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Toxics
Primary Contact Recreation	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Shellfish Harvesting	Fully Supporting	Ν				Runoff/Storm Sewers
	AU Name					
AU ID	AU Name		Water Type	Size	Location Description	
AU ID NJ02040206070090-01	AU Name Phillips Creek / Jacobs C	reek	Water Type ESTUARY	Size 0.06 SQUARE MILES	Location Description HUC14: 02040206070090	
-		reek	**			
-		reek Threatened	ESTUARY	0.06 SQUARE MILES		Source
NJ02040206070090-01	Phillips Creek / Jacobs C		ESTUARY RIVER	0.06 SQUARE MILES 52.14 MILES	HUC14: 02040206070090	Atmospheric
NJ02040206070090-01 Use	Phillips Creek / Jacobs C Attainment	Threatened	ESTUARY RIVER	0.06 SQUARE MILES 52.14 MILES	HUC14: 02040206070090	• Atmospheric Depositon - Toxics
NJ02040206070090-01 Use Aquatic Life	Phillips Creek / Jacobs C Attainment Insufficient Information	<b>Threatened</b> N	ESTUARY RIVER Cause	0.06 SQUARE MILES 52.14 MILES Cycle First Listed	HUC14: 02040206070090 TMDL Status	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban</li> </ul>
NJ02040206070090-01 Use Aquatic Life Fish Consumption	Phillips Creek / Jacobs C Attainment Insufficient Information Not Supporting	<b>Threatened</b> N N	ESTUARY RIVER Cause	0.06 SQUARE MILES 52.14 MILES Cycle First Listed	HUC14: 02040206070090 TMDL Status	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> </ul>
NJ02040206070090-01 Use Aquatic Life Fish Consumption Primary Contact Recreation	Phillips Creek / Jacobs C Attainment Insufficient Information Not Supporting Insufficient Information	Threatened N N N	ESTUARY RIVER Cause	0.06 SQUARE MILES 52.14 MILES Cycle First Listed	HUC14: 02040206070090 TMDL Status	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
NJ02040206070090-01 Use Aquatic Life Fish Consumption Primary Contact Recreation Shellfish Harvesting	Phillips Creek / Jacobs C Attainment Insufficient Information Not Supporting Insufficient Information Fully Supporting	Threatened N N N N	ESTUARY RIVER Cause Polychlorinated biphenyls	0.06 SQUARE MILES 52.14 MILES Cycle First Listed 2006	HUC14: 02040206070090 TMDL Status Low Priority Location Description 0141280017-COH-1 As of 2010	Atmospheric Depositon - Toxics     Agriculture     Urban Runoff/Storm Sewers     contains the
NJ02040206070090-01 Use Aquatic Life Fish Consumption Primary Contact Recreation Shellfish Harvesting AU ID	Phillips Creek / Jacobs C Attainment Insufficient Information Not Supporting Insufficient Information Fully Supporting AU Name	Threatened N N N N	ESTUARY RIVER Cause Polychlorinated biphenyls Water Type	0.06 SQUARE MILES 52.14 MILES Cycle First Listed 2006	HUC14: 02040206070090 TMDL Status Low Priority Location Description	Atmospheric Depositon - Toxics     Agriculture     Urban Runoff/Storm Sewers     contains the ssociated SWQS

Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Phosphorus (Total)	2006	Completed	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206080020-01			FRESHWATER LAKE	37.74 ACRES	0141280017-COH-1 As of 2010	
	Mill)		RIVER	14.36 MILES	following monitoring sites and associated SW Classification AN0710 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Completed	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206080030-01	Parsonage Run / Foster R	un	FRESHWATER LAKE	3.95 ACRES	HUC14: 02040206080030 As of	
			RIVER	7.17 MILES	the following monitoring sites an SWQS Classification 01412710 AN0711 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Industrial
Aquatic Life	Not Supporting	Ν	Phosphorus (Total) Total Suspended Solids (TSS)	2006 2010	Completed Medium Priority	Point Source Discharge • Agriculture • Urban
Fish Consumption	Insufficient Information	Ν				<ul> <li>Orban</li> <li>Runoff/Storm</li> <li>Sewers</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				564615

Primary Contact Recreation	Not Supporting	N	Escherichia coli	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206080040-01	Cohansey R (incl Beebe Run to HandsPond)		RIVER	13.82 MILES	0141280017-COH-1 As of 2010 contains the following monitoring sites and associated SWQS Classification 01412800 FW2-NT 17-COH-1 FW2-NT AN0712 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Completed	Orban     Runoff/Storm     Sewers
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206080050-01	Cohansey R (incl CornwellRun - BeebeRun)		FRESHWATER LAKE RIVER	10.68 ACRES 9.36 MILES	0141280017-COH-1 As of 2010 contains the following monitoring sites and associated SWQS Classification DSR 64L FW2-NT NJW04459- 120-1 FW2-NT NJW04459-120-2 FW2-NT NJW04459-120-3 FW2-NT NJW120 1 FW2-NT NJW120 2 FW2-NT NJW120 3 FW2-NT NJW120 cen	
					NJ W 120 Cell	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Use Agricultural Water Supply	Attainment Fully Supporting	<b>Threatened</b> N	Cause	Cycle First Listed		Agriculture
			<b>Cause</b> Phosphorus (Total)	Cycle First Listed		<ul> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
Agricultural Water Supply	Fully Supporting	Ν			TMDL Status	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric</li> </ul>
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Phosphorus (Total)	2006	TMDL Status Completed	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Not Supporting	N N N	Phosphorus (Total)	2006	TMDL Status Completed	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon -</li> </ul>

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206090010-01	Barrett Run (above West Ave)		FRESHWATER LAKE RIVER	22.15 ACRES 10.27 MILES	HUC14: 02040206090010 As of 2010 contains the following monitoring sites and associated SWQS Classification 01413013 FW2-NT AN0713 FW2-NT AN0714 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206090020-01	Indian Fields Branch / Jac	ckson Run	FRESHWATER LAKE	19.13 ACRES	HUC14: 02040206090020 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0715 FW2-NT	
			RIVER	7.22 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206090030-01	Cohansey R (Rocaps Rur Run)	to Cornwell	FRESHWATER LAKE RIVER	92.55 ACRES 14.13 MILES	HUC14: 02040206090030 As of the following monitoring sites an SWQS Classification AN0716 F 0270 SE1 NJW04459-120-O FW FW2-NT NJW061 OUTLET FW	nd associated W2-NT NJ02- V2-NT NJW061 1

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Cause Unknown	2008	Medium Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Urban</li> </ul>
Fish Consumption	Not Supporting	N	Mercury in Fish Tissue PCB in Fish Tissue	2008 2008	Completed Low Priority	Runoff/Storm Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206090040-01	Mill Creek (above/incl M Bk)	aple House	RIVER	3.82 MILES	HUC14: 02040206090040	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206090050-01	Mill Creek (below Maple	House Bk)	FRESHWATER LAKE	126.07 ACRES	HUC14: 02040206090050	
			RIVER	7.46 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				• Atmospheric Depositon -
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	<ul><li>Depositori - Toxics</li><li>Agriculture</li></ul>
Primary Contact Recreation	Insufficient Information	Ν				• Agriculture

Shellfish Harvesting	Fully Supporting	Ν				• Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206090060-01	Cohansey R (75d15m to/ Run)	incl Rocaps	RIVER	40.91 MILES	HUC14: 02040206090060 As of 2010 contain the following monitoring sites and associated SWQS Classification NJ00-0097 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2008	Completed	• Agriculture
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	• Urban Runoff/Storm
Primary Contact Recreation	Insufficient Information	Ν				Sewers <ul> <li>Atmospheric</li> </ul>
Shellfish Harvesting	Fully Supporting	Ν				Depositon - Toxics
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206090070-01	Cohansey R (75d17m50s	to 75d15m)	RIVER	45.51 MILES	HUC14: 02040206090070	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Fully Supporting	Ν				• Atmospheric Depositon -
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Toxics
Primary Contact Recreation	Insufficient Information	Ν				<ul><li> Agriculture</li><li> Urban</li></ul>
Shellfish Harvesting	Fully Supporting	Ν				Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206090080-01	Cohansey R (Greenwich	to	FRESHWATER LAKE	64.87 ACRES	HUC14: 02040206090080 As o	
	75d17m50s)		RIVER	50.18 MILES	the following monitoring sites a SWQS Classification NJW143 NJW143 2 FW2-NT NJW143 (	1 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Fully Supporting Not Supporting	N N	Chlordane DDD	2006 2006	Low Priority Low Priority	<ul> <li>Source Unknown</li> <li>Atmospheric Depositon -</li> </ul>

			DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2006 2006 2006 2008	Low Priority Low Priority Low Priority Low Priority	Toxics • Urban Runoff/Storm Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206090090-01	Pine Mount Creek		RIVER	14.39 MILES	HUC14: 02040206090090 As of the following monitoring sites at SWQS Classification AN0717 F	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
					Location Description	
AU ID	AU Name		Water Type	Size	Location Description	
AU ID NJ02040206090100-01	AU Name Cohansey R (below Gree	nwich)	Water Type RIVER	Size 54.74 MILES	Location Description HUC14: 02040206090100 As of the following monitoring sites at SWQS Classification DSR 9M S	nd associated
-		nwich) Threatened			HUC14: 02040206090100 As of the following monitoring sites an	nd associated
NJ02040206090100-01	Cohansey R (below Gree		RIVER	54.74 MILES	HUC14: 02040206090100 As of the following monitoring sites at SWQS Classification DSR 9M S	nd associated SE1 R48 SE1 • Atmospheric Depositon - Toxics • Source Unknown • Agriculture • Urban
NJ02040206090100-01 Use Aquatic Life	Cohansey R (below Gree Attainment Fully Supporting	<b>Threatened</b> N	RIVER Cause Chlordane DDD DDE DDT	54.74 MILES	HUC14: 02040206090100 As of the following monitoring sites an SWQS Classification DSR 9M S TMDL Status Low Priority Low Priority Low Priority Low Priority Low Priority	nd associated SE1 R48 SE1 • Atmospheric Depositon - Toxics • Source Unknown • Agriculture
NJ02040206090100-01 Use Aquatic Life Fish Consumption	Cohansey R (below Gree Attainment Fully Supporting Not Supporting	Threatened N N	RIVER Cause Chlordane DDD DDE DDT	54.74 MILES	HUC14: 02040206090100 As of the following monitoring sites an SWQS Classification DSR 9M S TMDL Status Low Priority Low Priority Low Priority Low Priority Low Priority	nd associated SE1 R48 SE1 Source • Atmospheric Depositon - Toxics • Source Unknown • Agriculture • Urban Runoff/Storm
NJ02040206090100-01 Use Aquatic Life Fish Consumption Primary Contact Recreation	Cohansey R (below Gree Attainment Fully Supporting Not Supporting Insufficient Information	Threatened N N	RIVER Cause Chlordane DDD DDE DDT Polychlorinated biphenyls	54.74 MILES           Cycle First Listed           2006           2006           2006           2006           2006           2006	HUC14: 02040206090100 As of the following monitoring sites as SWQS Classification DSR 9M S TMDL Status Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority	nd associated SE1 R48 SE1 Source • Atmospheric Depositon - Toxics • Source Unknown • Agriculture • Urban Runoff/Storm

	Breeze)		RIVER	46.97 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation	Insufficient Information Not Supporting Insufficient Information	N N N	Polychlorinated biphenyls	2006	Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban</li> </ul>
Shellfish Harvesting	Not Supporting	N	Total Coliform	2006	Completed	Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206100020-01	Bridges Sticks Creek / O	gden Creek	ESTUARY RIVER	29.82 SQUARE MILES 26.75 MILES	HUC14: 02040206100020	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation Shellfish Harvesting	Insufficient Information Not Supporting Insufficient Information Fully Supporting	N N N	Polychlorinated biphenyls	2006	Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206100030-01	Back Creek (Sea Breeze Ck)	Rd to Cedar	ESTUARY RIVER	0.03 SQUARE MILES 156.97 MILES	HUC14: 02040206100030 As of 2010 contains the following monitoring sites and associated SWQS Classification NJ02-0266 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation Shellfish Harvesting	Insufficient Information Not Supporting Insufficient Information Fully Supporting	N N N	Polychlorinated biphenyls	2006	Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206100040-01	Cedar Creek (above Rt 5	53)	FRESHWATER LAKE	46.22 ACRES	HUC14: 02040206100040 As or	f 2010 contains

			RIVER	6.95 MILES	the following monitoring sites and associated SWQS Classification 01412250 FW2-NT NJ CEDBS1 FW2-NT NJW173 1 FW2-NT NJW 1 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Low Priority	
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206100050-01	Cedar Creek (below Rt 5	53)	FRESHWATER LAKE	17.82 ACRES	HUC14: 02040206100050 As o	
			RIVER	49.5 MILES	the following monitoring sites and associated SWQS Classification AN0718 FW2-NT NJW02 1 FW2-NT NJW025 2 FW2-NT NJW025 Cente FW2-NT NJW243 OUTLET	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Not Supporting	Ν	PCB in Fish Tissue	2008	Low Priority	
Primary Contact Recreation	Insufficient Information	Ν				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206100060-01	Nantuxent Creek (above Landing)	Newport	FRESHWATER LAKE RIVER	56.8 ACRES 20.07 MILES	HUC14: 02040206100060 As of the following monitoring sites a SWQS Classification 01412200 AN0719 FW2-NT NJ01-0086 S CDPGN1 FW2-NT	nd associated FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric Depositon -

Aquatic Life Fish Consumption	Not Supporting Not Supporting	N N	Cause Unknown Mercury in Fish Tissue Polychlorinated biphenyls	2008 2010 2006	Medium Priority Completed Low Priority	Toxics • Agriculture • Urban Runoff/Storm
Industrial Water Supply	Fully Supporting	Ν				Sewers
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206100070-01	Nantuxent Creek (below Newport Landing)		RIVER	45.41 MILES	HUC14: 02040206100070 As o the following monitoring sites a SWQS Classification NJ03-026	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation Shellfish Harvesting	Insufficient Information Not Supporting Insufficient Information Not Supporting	N N N	Polychlorinated biphenyls Total Coliform	2006 2006	Low Priority Completed	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206110010-01	Newport Neck (Nantuxer Ck)	nt to Beadons	ESTUARY RIVER	0.02 SQUARE MILES 90.12 MILES	HUC14: 02040206110010	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation Shellfish Harvesting	Insufficient Information Not Supporting Insufficient Information Fully Supporting	N N N	Polychlorinated biphenyls	2006	Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206110020-01	Fortesque Ck / Fishing C	k / Straight	ESTUARY	0.08 SQUARE MILES	HUC14: 02040206110020 As o	f 2010 contains

	Ck		RIVER	142.88 MILES	the following monitoring sit SWQS Classification R46 S	es and associated E1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2010	Medium Priority	• Atmospheric	
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Depositon - Toxics	
Primary Contact Recreation	Insufficient Information	Ν				• Urban Runoff/Storm	
Shellfish Harvesting	Fully Supporting	Ν				Sewers	
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040206110030-01	J02040206110030-01 Oranoaken Creek		ESTUARY	0.01 SQUARE MILES	HUC14: 02040206110030 A		
			RIVER	119.34 MILES	the following monitoring sit SWQS Classification R45 S	es and associated	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	• Atmospheric	
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Depositon - Toxics	
Primary Contact Recreation	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>	
Shellfish Harvesting	Fully Supporting	Ν				Runoff/Storm Sewers	
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040206110040-01	Mill Creek (Dividing Cre	eek)	FRESHWATER LAKE	9.67 ACRES	HUC14: 02040206110040		
			RIVER	5.22 MILES			
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Aquatic Life	Insufficient Information	Ν				• Atmospheric	
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Depositon - Toxics	
Primary Contact Recreation	Insufficient Information	Ν				<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>	
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040206110050-01	Dividing Creek (above N	Iill Creek)	FRESHWATER LAKE	80.9 ACRES	HUC14: 02040206110050 A	HUC14: 02040206110050 As of 2010 contains	

			RIVER	24.53 MILES	the following monitoring sites SWQS Classification AN0720		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Aquatic Life Fish Consumption Primary Contact Recreation	Not Supporting Not Supporting Insufficient Information	N N N	Oxygen, Dissolved Polychlorinated biphenyls	2006 2006	Medium Priority Low Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Agriculture</li> <li>Urban</li> </ul>	
Shellfish Harvesting	Fully Supporting	Ν				Runoff/Storm Sewers • Atmospheric Depositon - Toxics	
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040206110060-01	Dividing Creek (below Mill Creek)		RIVER	96.49 MILES	the following monitoring sites SWQS Classification 3840B S	HUC14: 02040206110060 As of 2010 contains the following monitoring sites and associated SWQS Classification 3840B SE1 3840C SE1 3840D SE1 3840E SE1 3840F SE1 NJ02-0264 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	• Agriculture	
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	• Urban Runoff/Storm	
Primary Contact Recreation	Insufficient Information	Ν				<ul><li>Sewers</li><li>Atmospheric</li></ul>	
Shellfish Harvesting	Fully Supporting	Ν				Depositon - Toxics	
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040206110070-01	New England Creek (Ker	nny Pt to	FRESHWATER LAKE	35.15 ACRES	HUC14: 02040206110070		
	Elder Pt)		RIVER	28.2 MILES			
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Aquatic Life Fish Consumption Primary Contact Recreation	Insufficient Information Not Supporting Insufficient Information	N N N	Polychlorinated biphenyls	2006	Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban</li> </ul>	

						Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206120010-01	Little Ease Run (above Academy Rd)		RIVER	19.41 MILES	HUC14: 02040206120010 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0726 FW2-NT AN0726A FW2-NT BA64B FW2-NT BA65 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
	Little Ease Run (below Academy Rd)					
NJ02040206120020-01	Little Ease Run (below A	cademy Rd)	FRESHWATER LAKE RIVER	42.72 ACRES 8.53 MILES	HUC14: 02040206120020 As of the following monitoring sites at SWQS Classification 01411457 01411458 FW2-NT AN0727 FW FW2-NT BA66 FW2-NT BA67 FW2-NT NJW236 1 F	nd associated FW2-NT /2-NT AN0728
NJ02040206120020-01 Use	Little Ease Run (below A	cademy Rd) Threatened			the following monitoring sites an SWQS Classification 01411457 01411458 FW2-NT AN0727 FW FW2-NT BA66 FW2-NT BA67	nd associated FW2-NT /2-NT AN0728
			RIVER	8.53 MILES	the following monitoring sites at SWQS Classification 01411457 01411458 FW2-NT AN0727 FW FW2-NT BA66 FW2-NT BA67 FW2-NT NJW236 1 F	nd associated FW2-NT 72-NT AN0728 FW2-NT BA68 Source • Agriculture
Use	Attainment	Threatened	RIVER	8.53 MILES	the following monitoring sites at SWQS Classification 01411457 01411458 FW2-NT AN0727 FW FW2-NT BA66 FW2-NT BA67 FW2-NT NJW236 1 F	nd associated FW2-NT /2-NT AN0728 FW2-NT BA68 Source • Agriculture • Urban Runoff/Storm
Use Agricultural Water Supply	Attainment Fully Supporting	<b>Threatened</b> N	RIVER	8.53 MILES Cycle First Listed	the following monitoring sites at SWQS Classification 01411457 01411458 FW2-NT AN0727 FW FW2-NT BA66 FW2-NT BA67 FW2-NT NJW236 1 F TMDL Status	nd associated FW2-NT 72-NT AN0728 FW2-NT BA68 Source • Agriculture • Urban
Use Agricultural Water Supply Aquatic Life	Attainment Fully Supporting Not Supporting	<b>Threatened</b> N N	RIVER	8.53 MILES Cycle First Listed	the following monitoring sites at SWQS Classification 01411457 01411458 FW2-NT AN0727 FW FW2-NT BA66 FW2-NT BA67 FW2-NT NJW236 1 F TMDL Status	nd associated FW2-NT /2-NT AN0728 FW2-NT BA68 Source • Agriculture • Urban Runoff/Storm
Use Agricultural Water Supply Aquatic Life Fish Consumption	Attainment Fully Supporting Not Supporting Insufficient Information	Threatened N N N	RIVER	8.53 MILES Cycle First Listed	the following monitoring sites at SWQS Classification 01411457 01411458 FW2-NT AN0727 FW FW2-NT BA66 FW2-NT BA67 FW2-NT NJW236 1 F TMDL Status	nd associated FW2-NT /2-NT AN0728 FW2-NT BA68 Source • Agriculture • Urban Runoff/Storm
Use Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Attainment Fully Supporting Not Supporting Insufficient Information Fully Supporting	Threatened N N N N	RIVER Cause pH	8.53 MILES Cycle First Listed 2006	the following monitoring sites an SWQS Classification 01411457 01411458 FW2-NT AN0727 FW FW2-NT BA66 FW2-NT BA67 FW2-NT NJW236 1 F TMDL Status Medium Priority	nd associated FW2-NT /2-NT AN0728 FW2-NT BA68 Source • Agriculture • Urban Runoff/Storm

NJ02040206120030-01	Still Run (above Silver L	ake Road)	FRESHWATER LAKE	50.5 ACRES	HUC14: 02040206120030 As of	
			RIVER	10.67 MILES	the following monitoring sites an SWQS Classification AN0729 F	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206120040-01	Reed Branch (Still Run)		FRESHWATER LAKE RIVER	50.04 ACRES 17.96 MILES	HUC14: 02040206120040 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0731 FW2-NT NJW04459-088-1 FW2-NT NJW04459-088-0 FW2-NT NJW088 1 FW2-NT NJW088 center FW2-NT NJW088 OUTLET FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	N	Cause Unknown	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206120050-01	Still Run (WillowGroveL SilverLakeRd)	k -	FRESHWATER LAKE RIVER	32.32 ACRES 21.2 MILES	HUC14: 02040206120050 As of the following monitoring sites ar SWQS Classification 01411452 01411453 FW2-NT AN0730 FW FW2-NT	nd associated FW2-NT

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206130010-01	Scotland Run (above Frie	es Mill)	FRESHWATER LAKE	61.47 ACRES	HUC14: 02040206130010 As of	
			RIVER	10.47 MILES	the following monitoring sites and associated SWQS Classification AN0721 FW2-NT DSR 3 FW2-NT NJT07 WILBS1 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Completed	
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206130020-01	Scotland Run (Delsea Dr	ive to	FRESHWATER LAKE	50.62 ACRES	HUC14: 02040206130020 As of	
	FriesMill)		RIVER	11.5 MILES	the following monitoring sites an SWQS Classification AN0722 F FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	N				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				

Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206130030-01	Indian Branch (Scotland	Run)	RIVER	8.11 MILES	HUC14: 02040206130030 As of 2010 contains the following monitoring sites and associated SWQS Classification 01411466 FW2-NT AN0724 FW2-NT BA69 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life	Not Supporting	Ν	рН	2006	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206130040-01	Scotland Run (below Del	sea Drive)	FRESHWATER LAKE	102.93 ACRES	HUC14: 02040206130040 As of the following monitoring sites an	
			RIVER	6.93 MILES	SWQS Classification AN0725 F FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Completed	
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206140010-01	MauriceR(BlkwtrBr to/ir WillowGroveLk)	cl	FRESHWATER LAKE RIVER	123.54 ACRES 7.55 MILES	HUC14: 02040206140010 As the following monitoring sites SWQS Classification AN0733 FW2-NT	and associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Not Supporting Fully Supporting Not Supporting Not Supporting	N N N N N	Cause Unknown Mercury in Fish Tissue Escherichia coli Arsenic	2010 2008 2008 2006	Medium Priority Completed Completed Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Natural Sources</li> </ul>
AUID	AU Name		Water Type	Size	Location Description	
NJ02040206140020-01	Burnt Mill Branch / Huds	son Branch	FRESHWATER LAKE RIVER	23.61 ACRES 8.78 MILES	0141148317-HUD-1 As of 20 following monitoring sites and Classification 01411483 FW2- FW2-NT AN0734 FW2-NT A NJW014 1 FW2-NT NJW014 NJW014 OUTLET FW2-NT	associated SWQS NT 17-HUD-1 N0735 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Insufficient Information Not Supporting Insufficient Information Fully Supporting	N N N	рН	2010	Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Industrial Point Source Discharge</li> </ul>
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2008	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206140030-01	Green Branch / Endless H	Branch	FRESHWATER LAKE RIVER	3.26 ACRES 11.2 MILES	HUC14: 02040206140030 As the following monitoring sites SWQS Classification 0141149	and associated

					AN0736 FW2-NT AN0737 FW	/2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				Agriculture
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	Mercury in Water Column	2010	Medium Priority	Sewers
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Not Supporting	Ν	Mercury in Water Column	2010	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206140040-01	Blackwater Branch (abov Br)	ve/incl Pine	RIVER	8.58 MILES	HUC14: 02040206140040 As of the following monitoring sites SWQS Classification AN0738	and associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric Depositon -
Aquatic Life	Fully Supporting	Ν				Toxics • Industrial
Fish Consumption	Not Supporting	Ν	Mercury in Water Column	2008	Low Priority	Point Source
Industrial Water Supply	Fully Supporting	Ν				Discharge <ul> <li>Agriculture</li> </ul>
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	• Urban Runoff/Storm
Public Water Supply	Not Supporting	Ν	Mercury in Water Column	2008	Low Priority	Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206140050-01	Blackwater Branch (belo Branch)	w Pine	RIVER	6.5 MILES	HUC14: 02040206140050 As of the following monitoring sites SWQS Classification 0141149: AN0739 FW2-NT	and associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric Depositon -
Aquatic Life	Fully Supporting	Ν				<ul><li>Deposition - Toxics</li><li>Agriculture</li></ul>

Fish Consumption Industrial Water Supply	Not Supporting Fully Supporting	N N	Mercury in Water Column	2008	Low Priority	• Urban Runoff/Storm Sewers
			Fecal Coliform	2008	Completed	Seweis
Primary Contact Recreation	Not Supporting	N			Completed	
Public Water Supply	Not Supporting	N	Mercury in Water Column	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206140060-01	Maurice R (Sherman Ave to Blackwater Br)		RIVER	19.17 MILES	0141180017-MAU-1 As of 2010 contains the following monitoring sites and associated SWQS Classification 01411500 FW2-NT 01411800 FW2-NT AN0740 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				• Agriculture
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				<ul><li>Sewers</li><li>Industrial</li></ul>
Industrial Water Supply	Fully Supporting	Ν				Point Source Discharge
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206140070-01	Parvin Branch / Tarkiln E	Branch	ESTUARY	8.01 SQUARE MILES	HUC14: 02040206140070 As of	
			FRESHWATER LAKE	23.15 ACRES	the following monitoring sites an SWQS Classification AN0750 F	
			RIVER	8.03 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	N				Sewers
Industrial Water Supply	Insufficient Information	N				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	

Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206150010-01	Muddy Run (above/incl H	Elmer Lake)	FRESHWATER LAKE	59.51 ACRES	HUC14: 02040206150010 As of the following monitoring sites an	
			RIVER	20.61 MILES	SWQS Classification AN0741 F FW2-NT	W2-NT AN0742
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206150020-01	Muddy Run (incl Palatine Lk)	e Lk to Elmer	FRESHWATER LAKE	79.2 ACRES	HUC14: 02040206150020 As of	
	LK)		RIVER	12.52 MILES	the following monitoring sites and associated SWQS Classification AN0745 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206150030-01	Palatine Branch (Muddy	Run)	RIVER	6.8 MILES	HUC14: 02040206150030 As of 2010 contains the following monitoring sites and associated SWQS Classification 01411680 FW2-NT AN0743 FW2-NT AN0744 FW2-NT	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206150040-01	Indian Run (Muddy Run)		RIVER	11.22 MILES	HUC14: 02040206150040 As of the following monitoring sites ar SWQS Classification 01411695 AN0746 FW2-NT AN0747 FW2	nd associated FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206150050-01	Muddy Run (incl ParvinI	k to Palatine	FRESHWATER LAKE	146.92 ACRES	HUC14: 02040206150050 As of	
	Lk)		RIVER	13.58 MILES	the following monitoring sites ar SWQS Classification NJT07 PA	RBS1 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Not Supporting	Ν	DDD DDE	2010 2010	Low Priority Low Priority	

			DDT Mercury in Fish Tissue PCB in Fish Tissue	2010 2010 2010	Low Priority Completed Low Priority	
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206150060-01	Lake)		FRESHWATER LAKE RIVER	84.43 ACRES 8.23 MILES	HUC14: 02040206150060 As of the following monitoring sites ar SWQS Classification AN0748 F	d associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206150070-01	Muddy Run (below Land	is Ave)	RIVER	6.11 MILES	HUC14: 02040206150070 As of 2010 contains the following monitoring sites and associated SWQS Classification 01411780 FW2-NT AN0749 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				

Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206160010-01	Lebanon Branch (Mill Creek)		RIVER	9.68 MILES	HUC14: 02040206160010 As of 2010 contait the following monitoring sites and associated SWQS Classification AN0752 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206160020-01	Chatfield Branch (Mill C	reek)	RIVER	5.52 MILES	HUC14: 02040206160020	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206160030-01	Maurice River(Union Lake to Sherman Ave)		FRESHWATER LAKE RIVER	828.34 ACRES 2.33 MILES	0141180017-MAU-1 As of 2010 contains the following monitoring sites and associated SWQ Classification 17-MAU-1 FW2-NT AN0751 FW2-NT BA86 FW2-NT DSR 2L FW2-NT NJT07 ULBS1 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

[]					
Fully Supporting	Ν				
Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Not Supporting	Ν	Mercury in Fish Tissue	2008	Low Priority	
Fully Supporting	Ν				
Not Supporting	Ν	Escherichia coli	2010	Completed	
Not Supporting	Ν	Arsenic	2006	Low Priority	
AU Name		Water Type	Size	Location Description	
Mill Creek (lower)		FRESHWATER LAKE	1.73 ACRES		
1		RIVER	3.55 MILES		
Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Fully Supporting	N				
Not Supporting	Ν	Cause Unknown	2010	Medium Priority	
Not Supporting	Ν	Mercury in Fish Tissue	2010	Low Priority	
Fully Supporting	Ν				
Not Supporting	Ν	Escherichia coli	2010	Completed	
Not Supporting	Ν	Arsenic	2010	Low Priority	
AU Name		Water Type	Size	Location Description	
Hankins Pond trib (Millv	ille)	FRESHWATER LAKE	9.21 ACRES		
		RIVER	4.46 MILES	SWQS Classification NJW04459	9-118-1 FW2-NT
				FW2-NT NJW118 1 FW2-NT N	JW118 2 FW2-
				NT NJW118 center FW2-NT NJ FW2-	W118 OUTLET
Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Insufficient Information	Ν				• Atmospheric
Not Supporting	Ν	Phosphorus (Total)	2010	Medium Priority	Depositon - Toxics
Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	<ul> <li>Industrial Point Source</li> </ul>
	Not Supporting         Fully Supporting         Not Supporting         Not Supporting         Not Supporting         AU Name         Attainment         Fully Supporting         Not Supporting         Hankins Pond trib (Milly)         Attainment         Insufficient Information         Not Supporting	Not SupportingNNot SupportingNFully SupportingNNot SupportingNNot SupportingNNot SupportingNMill Creek (lower)IAttainmentIneatenetSuby SupportingNNot SupportingNNot SupportingNNot SupportingNNot SupportingNNot SupportingNNot SupportingNNot SupportingNNot SupportingNNot SupportingNAttainmentIneatenetAttainentNSuby SupportingNNot SupportingNNot SupportingNAttainentIneatenetAttainentIneatenetInsufficient InformationNNot SupportingNNot SupportingN	Nor SupportingNCause UnknownNot SupportingNMercury in Fish TissueFully SupportingNEscherichia coliNot SupportingNArsenicAutamenNKater TypeMill Creek (lower)FRESHWATER LAKE RIVERFully SupportingNCauseNot SupportingNSecherichia coliMill Creek (lower)FRESHWATER LAKE RIVERFully SupportingNCauseFully SupportingNCause UnknownNot SupportingNSecherichia coliNot SupportingNSecherichia coliSecherichia ColiSecherichia coliSecherichia ColiSecherichia coliSecherichia ColiSecherichia coliSecheri	Not SupportingNCause Unknown2008Not SupportingNMercury in Fish Tissue2008Fully SupportingNEscherichia coli2010Not SupportingNEscherichia coli2010Not SupportingNArsenic2006AtumeVater TypeSizeMill Creek (lower)FRESHWATER LAKE1.73 ACRESMill Creek (lower)FRESHWATER LAKE1.73 ACRESMill Creek (lower)NGause UnknownCycle First ListedFully SupportingNAcause Unknown2010Not SupportingNCause Unknown2010Not SupportingNCause Unknown2010Not SupportingNCause Unknown2010Not SupportingNEscherichia coli2010Not SupportingNEscherichia coli2010MulticityInterficient InformatioNStaterAutimetInterficient InformatioN </td <td>Not SupportingNCause Unknown2008Medium PriorityNot SupportingNMercury in Fish Tissue2008Low PriorityFully SupportingNEscherichia coli2010CompletedNot SupportingNEscherichia coli2010CompletedNot SupportingNArsenic2006Low Priority<b>AumentVater Type</b>SizeLoadiont/SignatureMill Creek (lower)FRESHWATER LAKE RTVER1.73 ACRES 3.55 MILES1041180017-MAU-1 As of 2010 following monitoring sites and Classification AN0753 FW2-NTAttaimentTheratenedCauseCycle First Listed1041181017-MAU-1 As of 2010 following monitoring sites and softwareFully SupportingNFRESHWATER LAKE RTVERJ.73 ACRES ASTMLES1011180017-MAU-1 As of 2010 following monitoring sites and softwareFully SupportingNFucery in Fish Tissue2010Medium PriorityFully SupportingNCause Unknown2010Low PrioritySoft SupportingNAsenic2010CompletedNot SupportingNAsenic2010CompletedNot SupportingNAsenic2010Low PriorityMulti SupportingNAsenic2010CompletedNot SupportingNAsenic2010Low PriorityMulti SupportingNAsenic2010Not HorityHurdi SupportingNFRESHWATER LAKE RIVERSize Cause fraction NVMUHS SUPALSTN NYTNN Hill 1</br></td>	Not SupportingNCause Unknown2008Medium PriorityNot SupportingNMercury in Fish Tissue2008Low PriorityFully SupportingNEscherichia coli2010CompletedNot SupportingNEscherichia coli2010CompletedNot SupportingNArsenic2006Low Priority <b>AumentVater Type</b> SizeLoadiont/SignatureMill Creek (lower)FRESHWATER LAKE RTVER1.73 ACRES 3.55 MILES1041180017-MAU-1 As of 2010 following monitoring sites and 

Industrial Water Supply Primary Contact Recreation Public Water Supply	Insufficient Information Insufficient Information Insufficient Information	N N N				Discharge • Agriculture • Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206170020-01			ESTUARY FRESHWATER LAKE RIVER	5.15 SQUARE MILES 1.09 ACRES 5.26 MILES	HUC14: 02040206170020 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0754 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply AU ID NJ02040206170030-01	Fully Supporting         Not Supporting         Insufficient Information         Fully Supporting         Insufficient Information         Fully Supporting         AU Name         Maurice River(Menantice UnionLake)	N N N N N O Ck to	Cause Unknown Water Type RIVER	2008 Size 38.28 MILES	Medium Priority Location Description HUC14: 02040206170030 As of the following monitoring sites at SWQS Classification 01411907 AN0755 FW2-NT NJ00-0093 SI SE1 NJ02-0268 SE1 NJ03-0271 MAUBS1 SE1 R40 SE1	nd associated FW2-NT E1 NJ01-0090
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation Shellfish Harvesting	Not Supporting Not Supporting Insufficient Information Fully Supporting	N N N	Cause Unknown Mercury in Fish Tissue Polychlorinated biphenyls	2008 2010 2006	Medium Priority Low Priority Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Municipal Point Source Discharges</li> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>

						Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206170040-01	Buckshutem Creek (above Rt 555)		RIVER	11.41 MILES	HUC14: 02040206170040 As of the following monitoring sites a SWQS Classification 01411950 AN0756 FW2-NT	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Fully Supporting	Ν				• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206170050-01	Buckshutem Creek (below	w Rt 555)	FRESHWATER LAKE RIVER	173.49 ACRES 6.12 MILES	HUC14: 02040206170050 As of the following monitoring sites a SWQS Classification 01411955	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	<ul><li>Agriculture</li><li>Urban</li></ul>
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206180010-01	Panther Branch (Menanti	co Creek)	RIVER	10.59 MILES	HUC14: 02040206180010 As of 2010 contain the following monitoring sites and associated SWQS Classification AN0758 FW2-NT	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206180020-01	Cedar Branch (Menantice	o Creek)	FRESHWATER LAKE	14.44 ACRES	HUC14: 02040206180020 As of	
			RIVER	6.92 MILES	the following monitoring sites and associated SWQS Classification AN0757 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2008	Completed	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206180030-01	Menantico Creek (above	Rt 552)	FRESHWATER LAKE	34.38 ACRES	HUC14: 02040206180030 As of	
			RIVER	8.62 MILES	the following monitoring sites ar SWQS Classification AN0759 F	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	N				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Not Supporting	Ν	DDD DDE DDT	2010 2010 2010	Low Priority Low Priority Low Priority	

			Dioxin (including 2,3,7,8-TCDD) Mercury in Fish Tissue Polychlorinated biphenyls	2010 2010 2010	Low Priority Low Priority Low Priority	
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206180040-01	Berryman Branch (Menantico Creek)		RIVER	5.47 MILES	HUC14: 02040206180040 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0761 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206180050-01	Menantico Creek (below	Rt 552)	FRESHWATER LAKE	75.41 ACRES	HUC14: 02040206180050 As of	
			RIVER	14.49 MILES	the following monitoring sites and associated SWQS Classification 01412005 FW2-NT AN0760 FW2-NT NJT07 MSPBS1 FW2-NT NJW032 1 FW2-NT NJW032 2 FW2-NT NJW032 Center FW2-NT NJW032 OUTLET FW2-NT R41	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	Orban Runoff/Storm Sewers
Fish Consumption	Not Supporting	Ν	DDD DDE DDT	2010 2010 2010	Low Priority Low Priority Low Priority	<ul> <li>Atmospheric</li> <li>Depositon -</li> </ul>

	FUG C	N	Mercury in Fish Tissue Polychlorinated biphenyls	2010 2006	Completed Low Priority	Toxics • Natural Sources
Industrial Water Supply	Fully Supporting	N	Escherichia coli	2008	Completed	
Primary Contact Recreation	Not Supporting	Ν				
Public Water Supply	Not Supporting	N	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206190010-01	Manumuskin River (above/incl BigNealBr)		RIVER	16.74 MILES	HUC14: 02040206190010 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0762 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	N				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206190020-01	Manumuskin River (Rt 4	9 to Big Neal	FRESHWATER LAKE	36.32 ACRES	HUC14: 02040206190020 As of	
	Br)		RIVER	23.68 MILES	the following monitoring sites an SWQS Classification NJW053 1	PL
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206190030-01	Manumuskin River (below Rt 49)		RIVER	23.73 MILES	HUC14: 02040206190030 As o the following monitoring sites a SWQS Classification 01412080 FW2-NT AN0763 FW2-NT AN NJW053 OUTLET PL R42 SE1	nd associated PL 01412100 0763A PL
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	<ul><li>Agriculture</li><li>Urban</li></ul>
Industrial Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206200010-01	Middle Branch / Slab Bra	inch	RIVER	11.3 MILES	HUC14: 02040206200010	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric Depositon -
Aquatic Life	Fully Supporting	Ν				Toxics
Fish Consumption	Not Supporting	Ν	Mercury in Water Column	2008	Low Priority	
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Not Supporting	Ν	Mercury in Water Column	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206200020-01	Muskee Creek		FRESHWATER LAKE	50.77 ACRES	HUC14: 02040206200020 As o	
			RIVER	16.06 MILES	the following monitoring sites a SWQS Classification 01412120	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric Depositon -
Aquatic Life	Fully Supporting	Ν				Toxics

Fish Consumption	Not Supporting	Ν	Mercury in Water Column Polychlorinated biphenyls	2008 2006	Low Priority Low Priority	<ul> <li>Industrial Point Source Discharge</li> <li>Agriculture</li> </ul>
Primary Contact Recreation	Insufficient Information	Ν				• Urban Runoff/Storm
Public Water Supply	Not Supporting	Ν	Mercury in Water Column	2008	Low Priority	Sewers
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206200030-01	Maurice River (Rt 548 to	Menantico	FRESHWATER LAKE	222.98 ACRES	HUC14: 02040206200030 As of	
	Ck)		RIVER	67.39 MILES	the following monitoring sites and associated SWQS Classification DSR 10M SE1 R43 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Fully Supporting	Ν				• Atmospheric
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Depositon - Toxics
Primary Contact Recreation	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Shellfish Harvesting	Fully Supporting	Ν				Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206200040-01	Maurice River (Leesburg	to Rt 548)	FRESHWATER LAKE	89.87 ACRES	HUC14: 02040206200040	
			RIVER	88.3 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Fully Supporting	Ν				• Atmospheric
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Depositon - Toxics
Primary Contact Recreation	Insufficient Information	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2008	Completed	Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
		ESTUARY	0.42 SQUARE MILES	HUC14: 02040206200050 As of 2010 contains		
NJ02040206200050-01	Maurice River (below Le EastPt	esburg) to	LITOART	0.12 SQUITE MILLS	the following monitoring sites an	

					3900J SE1 3900L SE1 390	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	• Industrial
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Point Source Discharge
Primary Contact Recreation	Not Supporting	Ν	Enterococcus	2008	Completed / Medium Priority	<ul><li>Agriculture</li><li>Urban</li></ul>
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	Runoff/Storm Sewers • Atmospheric Depositon - Toxics
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206210010-01	Riggins Ditch (Moores B	each to East	FRESHWATER LAKE	1.79 ACRES	HUC14: 02040206210010 As of	
	Pt)		RIVER	79.96 MILES	the following monitoring sites an SWQS Classification 391214074	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation Shellfish Harvesting	Insufficient Information Not Supporting Insufficient Information Not Supporting	N N N	Polychlorinated biphenyls Total Coliform	2006 2008	Low Priority Completed	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Package Plant or Other Permitted Small Flows</li> <li>Discharges</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206210020-01	West Ck (above Rt 550)		FRESHWATER LAKE RIVER	8.85 ACRES 8.36 MILES	HUC14: 02040206210020 As of the following monitoring sites an SWQS Classification 01411444	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				

		1			BA39 PL DSR 37L PL NJT07 N	UMGN1 PL
NJ02040206210050-01	Savages Run (above East Creek Pond)		FRESHWATER LAKE RIVER	24.7 ACRES 11.02 MILES	HUC14: 02040206210050 As of 2010 contains the following monitoring sites and associated SWQS Classification 01411441 PL AN0766 PL BA39 PL DSR 37L PL NJT07 NUMGN1 PL	
AU ID	AU Name		Water Type	Size	Location Description	
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2008	Completed / Medium Priority	Runoff/Storm Sewers
Primary Contact Recreation	Insufficient Information	Ν				<ul><li> Agriculture</li><li> Urban</li></ul>
Fish Consumption	Not Supporting	N	Polychlorinated biphenyls	2006	Low Priority	Depositon - Toxics
Aquatic Life	Insufficient Information	N				Atmospheric
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
NJ02040206210040-01	West Ck (below PaperMi MooresBch	illRd) to	RIVER	71.45 MILES	HUC14: 02040206210040 As of the following monitoring sites an SWQS Classification NJ01-0084	nd associated
AU ID	AU Name	•	Water Type	Size	Location Description	
Public Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	N				
Agricultural Water Supply	Fully Supporting	Ν				
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
			RIVER	6.85 MILES		
NJ02040206210030-01	West Ck (Paper Mill Rd to Rt 550) FRE		FRESHWATER LAKE	105.28 ACRES	HUC14: 02040206210030	
AU ID	AU Name	1	Water Type	Size	Location Description	
Public Water Supply	Fully Supporting	N				
Primary Contact Recreation	Fully Supporting	N				
Fish Consumption	Insufficient Information	Ν				

Agricultural Water Supply Aquatic Life	Fully Supporting Fully Supporting	N N				• Atmospheric Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Mercury	2008	Completed	<ul><li> Agriculture</li><li> Urban</li></ul>
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2006	Completed	Runoff/Storm Sewers
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206210060-01	East Creek		FRESHWATER LAKE	68.15 ACRES	HUC14: 02040206210060 As of	
			RIVER	26.01 MILES	the following monitoring sites an SWQS Classification DSR 23L ECLBS1 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Insufficient Information Not Supporting	N N	Mercury in Fish Tissue Polychlorinated biphenyls	2008 2006	Completed Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban</li> </ul>
Primary Contact Recreation	Insufficient Information	Ν				Runoff/Storm Sewers
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2008	Completed / Medium Priority	Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206220010-01	Dennis Ck / Cedar Swam 550)	p(Rt 47 to Rt	FRESHWATER LAKE RIVER	22.27 ACRES 14.8 MILES	HUC14: 02040206220010 As of 2010 contains the following monitoring sites and associated SWQS Classification R38 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation Shellfish Harvesting	Not Supporting Not Supporting Insufficient Information Fully Supporting	N N N	Oxygen, Dissolved Polychlorinated biphenyls	2006 2006	Medium Priority Low Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206220020-01	Sluice Creek		FRESHWATER LAKE	42.06 ACRES	HUC14: 02040206220020 As of the following monitoring sites an	

			RIVER	20.41 MILES	SWQS Classification NJW073 1 FW2-NT NJW073 OUTLET FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation Shellfish Harvesting	Insufficient Information Not Supporting Insufficient Information Not Supporting	N N N	Polychlorinated biphenyls Total Coliform	2006 2008	Low Priority Completed / Medium Priority	Atmospheric Depositon - Toxics     Agriculture     Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206220030-01	Dennis Creek (Jakes Landing Rd to Rt 47)		FRESHWATER LAKE RIVER	105.33 ACRES 34.85 MILES	HUC14: 02040206220030 As of 2010 contains the following monitoring sites and associated SWQS Classification 01411427 PL 01411428 FW2-NT 01411438 FW2-NT AN0767 FW2-NT AN0768 FW2-NT NJ02-0262 SE1 NJW046 1 PL NJW046 2 PL NJW046 OUTLET FW2-N	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Not Supporting Fully Supporting Fully Supporting Fully Supporting	N N N N N	Oxygen, Dissolved pH Polychlorinated biphenyls	2006 2006 2006	Medium Priority Medium Priority Low Priority	<ul> <li>Transfer of Water from an Outside Watershed</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> </ul>
Shellfish Harvesting	Not Supporting	N	Total Coliform	2008	Completed / Medium Priority	
AU ID NJ02040206220040-01	AU Name Dennis Creek (below Jak Rd)	es Landing	Water Type RIVER	Size 57.53 MILES	Location Description           HUC14: 02040206220040 As of the following monitoring sites at SWQS Classification 01411440 AN0769 FW2-NT NJ00-0087 S	nd associated FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply Shellfish Harvesting	Fully Supporting Not Supporting Not Supporting Fully Supporting Fully Supporting Fully Supporting Not Supporting	N N N N N	Oxygen, Dissolved Polychlorinated biphenyls Total Coliform	2006 2006 2008	Medium Priority Low Priority Completed / Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206230010-01	Bidwell Creek (above Rt	47)	FRESHWATER LAKE RIVER	7.04 ACRES 29.22 MILES	HUC14: 02040206230010 As of 2010 contains the following monitoring sites and associated SWQS Classification R39 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation Shellfish Harvesting	Not Supporting Not Supporting Insufficient Information Not Supporting	N N N	Oxygen, Dissolved Polychlorinated biphenyls Total Coliform	2006 2006 2006	Medium Priority Low Priority Completed	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206230020-01	Bidwell Ck(below Rt 47) GoshenCk	-Dias to	RIVER	35.64 MILES	HUC14: 02040206230020	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Not Supporting Not Supporting	N N	Oxygen, Dissolved Polychlorinated biphenyls	2006 2006	Medium Priority Low Priority	• Transfer of Water from an Outside Watershed
Primary Contact Recreation Shellfish Harvesting	Insufficient Information Not Supporting	N N	Total Coliform	2006	Completed	<ul> <li>Agriculture</li> <li>Urban</li> <li>Runoff/Storm</li> <li>Sewers</li> <li>Atmospheric</li> <li>Depositon - Toxics</li> </ul>

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206230030-01	Dias Creek		RIVER	10.92 MILES	HUC14: 02040206230030 As the following monitoring sites SWQS Classification 0141140 0141140850 SE1	and associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	• Agriculture
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	• Urban Runoff/Storm
Primary Contact Recreation	Insufficient Information	Ν				<ul><li>Sewers</li><li>Atmospheric</li></ul>
Shellfish Harvesting	Fully Supporting	Ν				Depositon - Toxics
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206230040-01	Green Ck (Norburys Lan	dng to Pierces	FRESHWATER LAKE	9.22 ACRES	HUC14: 02040206230040 As	
	Pt)		RIVER	16.49 MILES	the following monitoring sites and associated SWQS Classification 01411404 FW2-NT AN0770 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved Phosphorus (Total)	2006 2007	Medium Priority Medium Priority	Agriculture     Urban
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Runoff/Storm Sewers
Primary Contact Recreation	Insufficient Information	Ν				• Atmospheric Depositon -
Shellfish Harvesting	Fully Supporting	Ν				Toxics
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206230050-01	Fishing Creek / Fishing M	Aill Stream	FRESHWATER LAKE	14.56 ACRES	HUC14: 02040206230050 As	
			RIVER	14.03 MILES	the following monitoring sites SWQS Classification 0141140 AN0771 FW2-NT NJW04459- NJW04459-095-O FW2-NT N NJW095 center FW2-NT NJW FW2-NT	0 FW2-NT -095-1 FW2-NT JW095 1 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	N	Cause Unknown	2008	Medium Priority	• Atmospheric

Fish Consumption Primary Contact Recreation Shellfish Harvesting	Not Supporting Fully Supporting Fully Supporting	N N N	Polychlorinated biphenyls	2006	Low Priority	Depositon - Toxics • Agriculture • Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206230060-01	Cox Hall Creek / Mickels Run (to Rullas)		RIVER	6.48 MILES	HUC14: 02040206230060 As of the following monitoring sites an SWQS Classification 01411397	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation Shellfish Harvesting	Not Supporting Not Supporting Not Supporting Fully Supporting	N N N	Oxygen, Dissolved Turbidity Polychlorinated biphenyls Enterococcus	2006 2010 2006 2008	Medium Priority Medium Priority Low Priority Medium Priority	<ul> <li>Municipal Point Source Discharges</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040206230070-01	Pond Creek / Cape May Canal West		FRESHWATER LAKE RIVER	21.61 ACRES 8.57 MILES	HUC14: 02040206230070 As of 2010 contains the following monitoring sites and associated SWQS Classification CCMPCC1173 SC NJ00- 0083 SE1 NJ00-0085 SE1 NJ02-0260 SE1	
					0083 SE1 NJ00-0085 SE1 NJ02	
Use	Attainment	Threatened	Cause	Cycle First Listed	0083 SE1 NJ00-0085 SE1 NJ02 TMDL Status	
Use Aquatic Life Fish Consumption Primary Contact Recreation Shellfish Harvesting	Attainment       Insufficient Information       Not Supporting       Fully Supporting       Fully Supporting	Threatened N N N N	Cause Polychlorinated biphenyls	Cycle First Listed         2006		-0260 SE1
Aquatic Life Fish Consumption Primary Contact Recreation	Insufficient Information Not Supporting Fully Supporting	N N N			TMDL Status	-0260 SE1 Source • Atmospheric Depositon - Toxics • Agriculture • Urban Runoff/Storm

					NT AN0500 FW2-NT BA29 FV Lake FW2-NT MB-146 FW2-N NT N	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Industrial     Point Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved Phosphorus (Total)	2006 2006	Medium Priority Completed	<ul><li>Point Source</li><li>Discharge</li><li>Agriculture</li><li>Urban</li></ul>
Fish Consumption	Not Supporting	Ν	Chlordane in Fish Tissue DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2010 2010 2010 2010 2010 2010 2010	Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority	• Urban Runoff/Storm Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301020020-01	Metedeconk R NB(Rt 9 t	o I-195)	FRESHWATER LAKE RIVER	8.33 ACRES 22.81 MILES	HUC14: 02040301020020 As of 2010 contains the following monitoring sites and associated SWQS Classification 6 FW2-NT AN0499 FW2- NT AN0500 FW2-NT BA29 FW2-NT Brainerd Lake FW2-NT MB-146 FW2-NT MB-148 FW2- NT NL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				• Upstream
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved Temperature, water	2006 2006	Medium Priority Medium Priority	Impoundments (e.g., Pl-566 NRCS Structures)
Aquatic Life - Trout	Not Supporting	Ν	Oxygen, Dissolved Temperature, water	2006 2006	Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
Fish Consumption	Insufficient Information	Ν				Sewers <ul> <li>Natural</li> </ul>
	1					Sources
Industrial Water Supply	Fully Supporting	Ν	Fecal Coliform			Sources

Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301020030-01	Haystack Brook		FRESHWATER LAKE RIVER	17.66 ACRES 13.35 MILES	HUC14: 02040301020030 As the following monitoring sites SWQS Classification 0140811 FW2-NT 67 FW2-NT AN050 FW2-NT HS-1 FW2-NT MB- 1	and associated 0 FW2-NT 18 3 FW2-NT AN0504
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Insufficient Information	N N N	Cause Unknown	2008	Medium Priority	• Agriculture • Urban Runoff/Storm Sewers
Industrial Water Supply Primary Contact Recreation	Fully Supporting Not Supporting	N N	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301020040-01	Muddy Ford Brook		RIVER	11.81 MILES	HUC14: 02040301020040 As of 2010 contains the following monitoring sites and associated SWQS Classification 17 FW2-TM AN0505 FW2 TM MB-17 FW2-TM MF 1 FW2-TM MF-1 FW2 TM	
					SWQS Classification 17 FW2 TM MB-17 FW2-TM MF 1 F	-TM AN0505 FW2-
Use	Attainment	Threatened	Cause	Cycle First Listed	SWQS Classification 17 FW2 TM MB-17 FW2-TM MF 1 F	-TM AN0505 FW2-
Use Agricultural Water Supply	Attainment Fully Supporting	<b>Threatened</b> N	Cause	Cycle First Listed	SWQS Classification 17 FW2 TM MB-17 FW2-TM MF 1 F TM	-TM AN0505 FW2- W2-TM MF-1 FW2- Source • Agriculture
			Cause Phosphorus (Total) Total Suspended Solids (TSS)	Cycle First Listed         2006         2006	SWQS Classification 17 FW2 TM MB-17 FW2-TM MF 1 F TM	-TM AN0505 FW2- W2-TM MF-1 FW2- Source • Agriculture • Urban Runoff/Storm Sewers
Agricultural Water Supply	Fully Supporting	Ν	Phosphorus (Total)	2006	SWQS Classification 17 FW2 TM MB-17 FW2-TM MF 1 F TM TMDL Status Medium Priority	-TM AN0505 FW2- W2-TM MF-1 FW2- Source • Agriculture • Urban Runoff/Storm Sewers • Atmospheric Depositon -
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Phosphorus (Total) Total Suspended Solids (TSS)	2006 2006	SWQS Classification 17 FW2 TM MB-17 FW2-TM MF 1 F TM TMDL Status Medium Priority Medium Priority	-TM AN0505 FW2- W2-TM MF-1 FW2- Source • Agriculture • Urban Runoff/Storm Sewers • Atmospheric
Agricultural Water Supply Aquatic Life Aquatic Life - Trout	Fully Supporting Not Supporting Not Supporting	N N N	Phosphorus (Total) Total Suspended Solids (TSS) Phosphorus (Total)	2006 2006 2006	SWQS Classification 17 FW2 TM MB-17 FW2-TM MF 1 F TM TMDL Status Medium Priority Medium Priority Medium Priority	-TM AN0505 FW2- W2-TM MF-1 FW2- Source • Agriculture • Urban Runoff/Storm Sewers • Atmospheric Depositon -

Public Water Supply	Not Supporting	Ν	Arsenic Mercury in Water Column	2008 2008	Low Priority Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301020050-01	Metedeconk R NB (confluence to Rt 9)		FRESHWATER LAKE RIVER	13.38 ACRES 16.8 MILES	HUC14: 02040301020050 As of 2010 contains the following monitoring sites and associated SWQS Classification 01408123 FW2-NT AN0506 FW2-NT AN0507 FW2-NT CB-1 FW2 NT NA FW2-NT NB FW2-NT NC FW2-TM NI	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Aquatic Life - Trout Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply AU ID NJ02040301030010-01	Fully SupportingNot SupportingNot SupportingInsufficient InformationFully SupportingNot SupportingNot SupportingAU NameMetedeconk R SB (above 21 rd)	N N N N N N e I-195 exit	Temperature, water Temperature, water Fecal Coliform Arsenic <b>Water Type</b> RIVER	2006 2006 2006 2008 <b>Size</b> 16.29 MILES	Medium Priority Medium Priority Completed Low Priority <b>Location Description</b> HUC14: 02040301030010 As of the following monitoring sites an SWQS Classification AN0508 F	nd associated W2-NT SL FW2-
			~		NT SM FW2-NT SN FW2-NT S	1
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	N		2010		Agriculture
Aquatic Life	Not Supporting	N	Oxygen, Dissolved	2010	Medium Priority	
Fish Consumption	Insufficient Information	N				
Industrial Water Supply	Fully Supporting	N				
Primary Contact Recreation	Insufficient Information	N		2000	L D' '	
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301030020-01	Metedeconk R SB (74d19m15s to I- 195 X21)		FRESHWATER LAKE RIVER	12.27 ACRES 17.53 MILES	HUC14: 02040301030020 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0509 FW2-NT SK FW2 NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status Source	
Agricultural Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life	Fully Supporting	Ν				Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301030030-01	Metedeconk R SB(Benne 74d19m15s)	ttsPd to	FRESHWATER LAKE RIVER	23.28 ACRES 23.14 MILES	HUC14: 02040301030030 As of the following monitoring sites an SWQS Classification AN0510A FW2-NT NJT07 ENLBS1 FW2- FW2-NT NJW079 2 FW2-NT N FW2-NT SJ FW2-NT	nd associated FW2-NT BA26 NT NJW079 1
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2010	Medium Priority	
Fish Consumption	Not Supporting	Ν	Chlordane in Fish Tissue Mercury in Fish Tissue Polychlorinated biphenyls	2010 2010 2010	Low Priority Low Priority Low Priority	
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	

NJ02040301030040-01	Metedeconk R SB (Rt 9 to Bennetts Pond)		FRESHWATER LAKE RIVER	88.22 ACRES 13.89 MILES	HUC14: 02040301030040 As of 2010 contains the following monitoring sites and associated SWQS Classification 01408136 FW2-NT AN0510 FW2-NT DSR 19L FW2-NT NF14 FW2-NT NJW034 1 FW2-NT NJW034 2 FW2- NT NJW034 Center FW2-NT NJW034 OUTLET	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status Source	
Agricultural Water Supply Aquatic Life Aquatic Life - Trout	Insufficient Information Fully Supporting Fully Supporting	N N N				<ul> <li>Atmospheric Depositon - Toxics</li> <li>Industrial Point Source</li> </ul>
Fish Consumption Industrial Water Supply	Not Supporting Fully Supporting	N N	Mercury	2008	Completed	Discharge • Urban Runoff/Storm Sewers
Primary Contact Recreation	Not Supporting	N	Fecal Coliform	2008	Completed	
Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301030050-01	Metedeconk R SB (confl 9)	uence to Rt	FRESHWATER LAKE RIVER	51.91 ACRES 9.21 MILES	HUC14: 02040301030050 As of 2010 contains the following monitoring sites and associated SWQS Classification 01408152 FW2-NT AN0511 FW2-NT AN0512 FW2-NT BA27 FW2- NT BA28 FW2-NT NJT07 SHLBS1 FW2-NT SA FW2-NT SB	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting	N				• Urban Runoff/Storm
Fish Consumption	Fully Supporting Insufficient Information Fully Supporting	N N N				Sewers • Natural Sources
Fish Consumption	Insufficient Information	Ν	Fecal Coliform	2006	Completed	Natural
Fish Consumption Industrial Water Supply	Insufficient Information Fully Supporting	N N	Fecal Coliform Arsenic	2006 2008	Completed Low Priority	Natural
Fish Consumption Industrial Water Supply Primary Contact Recreation	Insufficient Information Fully Supporting Not Supporting	N N N			-	Natural

					the following monitoring sites ar SWQS Classification AN0513 F	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301040020-01	confl)		ESTUARY FRESHWATER LAKE RIVER	<ul><li>1.59 SQUARE MILES</li><li>51.21 ACRES</li><li>12.91 MILES</li></ul>	HUC14: 02040301040020 As of 2010 contains the following monitoring sites and associated SWQS Classification 1600D SE1 AN0514 FW2- NT BTMUA INTAKE FW2-NT CCMPOC0103 SE1 INTAKE FW2-NT L6953934658 SE1 NJ01 0052 SE1 NJ03-0241 SE1 R08	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply	Fully Supporting Not Supporting Insufficient Information Fully Supporting	N N N	Cause Unknown	2008	Medium Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Industrial Point Source Discharge</li> </ul>
Primary Contact Recreation	Not Supporting	N	Enterococcus	2008	Completed / Medium Priority	
Public Water Supply	Not Supporting	N	Arsenic	2008	Low Priority	
Shellfish Harvesting	Not Supporting	N	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301040030-01	Metedeconk R (below Be Creek)	averdam	ESTUARY FRESHWATER LAKE	0.63 SQUARE MILES 29.98 ACRES	HUC14: 02040301040030 As of the following monitoring sites ar SWQS Classification 1601B SE	nd associated

			RIVER	2.8 MILES	SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301050010-01	Kettle Creek (above Lake	e Riviera	FRESHWATER LAKE	85.19 ACRES	HUC14: 02040301050010 As of	
	outlet)		RIVER	6.4 MILES	the following monitoring sites and associated SWQS Classification AN0515 FW2-NT NJW0 1 FW2-NT NJW077 2 FW2-NT NJW077 OUTLET 1 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301050020-01	Kettle Creek (below Lake	e Riviera	ESTUARY	0.72 SQUARE MILES	HUC14: 02040301050020 As of	
	outlet)		FRESHWATER LAKE	11.4 ACRES	the following monitoring sites an SWQS Classification 01408175	FW2-NT 1613A
			RIVER	13.35 MILES	SE1 1613B SE1 1614 SE1 AN0	51
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Not Supporting Insufficient Information	N N	Cause Unknown	2006	Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>

Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301050030-01	Metedekunk Neck tribs (below Heron Is)		RIVER	4.55 MILES	HUC14: 02040301050030	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301050040-01	Barnegat North tribs (Tide Ck to Rt 37)		RIVER	14.94 MILES	HUC14: 02040301050040 As of 2010 contains the following monitoring sites and associated SWQS Classification CCMPOC0112 SE1 R10 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Not Supporting	Ν	DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2010 2010 2010 2010 2010 2010	Medium Priority Medium Priority Medium Priority Medium Priority Medium Priority	
Primary Contact Recreation	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301050050-01	Barnegat Bay North (abo bridge)	ve Rt 37	ESTUARY RIVER	12.39 SQUARE MILES 3.84 MILES	HUC14: 02040301050050 As of the following monitoring sites an SWQS Classification 1605A SE 1615A SE1 1617E SE1 1618A S 1629B SE1 CCMPOC0023 SE1	nd associated 1 1609B SE1 SE1 1627 SE1
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	• Urban Runoff/Storm

Fish Consumption	Insufficient Information	Ν				Sewers
Primary Contact Recreation	Not Supporting	Ν	Enterococcus	2008	Completed / Medium Priority	
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301060010-01	Toms River (above Francis Mills)		RIVER	23.84 MILES	HUC14: 02040301060010 As of 2010 contains the following monitoring sites and associated SWQS Classification 7 FW2-NT AN0517 FW2- NT AN0518 FW2-NT AN0519A FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	<ul><li>Sewers</li><li>Atmospheric</li></ul>
Industrial Water Supply	Fully Supporting	Ν				Depositon - Toxics
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301060020-01	Toms River (74-22-30 rd FrancisMills)	to	FRESHWATER LAKE	11.66 ACRES	HUC14: 02040301060020 As of the following monitoring sites ar	
	Franciswinis)		RIVER	26.45 MILES	SWQS Classification 01408260 PL-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Transfer of
Aquatic Life	Not Supporting	Ν	pH Temperature, water	2006 2008	Medium Priority Medium Priority	Water from an Outside Watershed • Agriculture
Fish Consumption	Insufficient Information	Ν				Urban Runoff/Storm
Industrial Water Supply	Insufficient Information	Ν				Sewers
Primary Contact Recreation	Insufficient Information	Ν				• Upstream Impoundments
Public Water Supply	Fully Supporting	Ν				(e.g., Pl-566 NRCS Structures)

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301060030-01	Toms River (Bowman Ro road)	l to 74-22-30	RIVER	22.24 MILES	HUC14: 02040301060030 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0520 FW2-TM	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Package Plant     or Other
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	Permitted Small Flows
Aquatic Life - Trout	Not Supporting	Ν	pH Temperature, water	2006 2008	Medium Priority Medium Priority	<ul> <li>Flows</li> <li>Discharges</li> <li>Agriculture</li> <li>Urban</li> </ul>
Fish Consumption	Insufficient Information	Ν				Croan     Runoff/Storm     Sewers
Industrial Water Supply	Insufficient Information	Ν				• Upstream
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	Impoundments (e.g., Pl-566 NRCS
Public Water Supply	Fully Supporting	Ν				Structures)
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301060040-01	Maple Root Branch (Ton	ns River)	RIVER	10.53 MILES	HUC14: 02040301060040 As of 2010 contains the following monitoring sites and associated SWQS Classification 01408285 PL AN0521 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301060050-01	Dove Mill Branch (Toms	River)	FRESHWATER LAKE RIVER	55.06 ACRES 11.77 MILES	HUC14: 02040301060050 As of 2010 contains the following monitoring sites and associated SWQS Classification 01408290 PL AN0522 PL DSR 49L FW2-NT	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric
Aquatic Life	Not Supporting	Ν	pH	2010	Medium Priority	Depositon - Toxics
Aquatic Life - Trout	Not Supporting	Ν	pH	2010	Medium Priority	<ul><li>Agriculture</li><li>Urban</li></ul>
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Completed	Runoff/Storm Sewers
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301060060-01	Toms River (Hope Chape	el Rd to	FRESHWATER LAKE	209.23 ACRES	014085000140830013-TOM-1	
	Bowman Rd)		RIVER	17.06 MILES	contains the following monitoring sites and associated SWQS Classification BA22 PL-TR	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric Depositon -
Aquatic Life	Fully Supporting	Ν				Toxics
Aquatic Life - Trout	Fully Supporting	Ν				<ul> <li>Agriculture</li> <li>Urban</li> </ul>
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Runoff/Storm Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301060070-01	Toms River (Rt 70 to Ho Road)	pe Chapel	RIVER	8 MILES	014085000140830013-TOM-1 A contains the following monitorin associated SWQS Classification TM AN0523 PL-TM BA23 PL-	g sites and 01408300 PL-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				

Aquatic Life - Trout	Fully Supporting	N				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	N				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301060080-01	Toms River (Oak Ridge I 70)	Parkway to Rt	RIVER	8.62 MILES	014085000140830013-TOM-1 A contains the following monitorin associated SWQS Classification NT AN0524 FW2-NT BA24 FW FW2-TM	g sites and 13-TOM-1 FW2-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric Depositon -
Aquatic Life	Fully Supporting	Ν				<ul><li>Deposition - Toxics</li><li>Agriculture</li></ul>
Aquatic Life - Trout	Fully Supporting	Ν				<ul> <li>Agriculture</li> <li>Urban</li> <li>Runoff/Storm</li> </ul>
Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2006	Low Priority	Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301070010-01	Shannae Brook		FRESHWATER LAKE	174.26 ACRES	HUC14: 02040301070010 As of	
			RIVER	26.64 MILES	the following monitoring sites an SWQS Classification 01408480 AN0526 PL DSR 63L PL NJT0 NJW04459-247-1 PL NJW0445 NJW04459-247-0 PL NJW247	PL AN0525A PL 7 TMPBS1 PL 9-247-2 PL
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	рН	2006	Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>

Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Completed	• Atmospheric
Primary Contact Recreation	Fully Supporting	Ν				Depositon - Toxics
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301070020-01	Harris Branch / Bordens	Mill Branch	RIVER	12.01 MILES	HUC14: 02040301070020 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0525 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301070030-01	Ridgeway Br (Hope Chapel Rd to HarrisBr)		RIVER	22.87 MILES	HUC14: 02040301070030 As of 2010 contains the following monitoring sites and associated SWQS Classification 01408485 PL AN0527 PL	
					SwQS Classification 01408485	PL AN0527 PL
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	PL AN0527 PL Source
Use Agricultural Water Supply	Attainment Fully Supporting	<b>Threatened</b> N	Cause	Cycle First Listed	~	Source <ul> <li>Atmospheric</li> </ul>
			Cause	Cycle First Listed	~	Source • Atmospheric Depositon - Toxics
Agricultural Water Supply	Fully Supporting	N	<b>Cause</b> Mercury in Fish Tissue	Cycle First Listed	~	Source • Atmospheric Depositon - Toxics • Agriculture • Urban
Agricultural Water Supply Aquatic Life	Fully Supporting Fully Supporting	N N			TMDL Status	Source • Atmospheric Depositon - Toxics • Agriculture
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Fully Supporting Not Supporting	N N N			TMDL Status	Source • Atmospheric Depositon - Toxics • Agriculture • Urban Runoff/Storm
Agricultural Water Supply Aquatic Life Fish Consumption Primary Contact Recreation	Fully Supporting Fully Supporting Not Supporting Insufficient Information	N N N N			TMDL Status	Source • Atmospheric Depositon - Toxics • Agriculture • Urban Runoff/Storm

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	рН	2006	Medium Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> </ul>
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2006	Completed	<ul> <li>Urban Runoff/Storm</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301070050-01	Blacks Branch (above 74	d22m05s)	FRESHWATER LAKE	65.79 ACRES	HUC14: 02040301070050 As of	
			RIVER	11.54 MILES	the following monitoring sites and associated SWQS Classification AN0529 PL NJW008 1 PL NJW008 2 PL NJW008 Center PL NJW008 OUTLET PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301070060-01	Old Hurricane Brook (ab 74d22m30s)	ove	RIVER	14.43 MILES	HUC14: 02040301070060 As of the following monitoring sites an SWQS Classification AN0531 P	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				

Public Water Supply	Insufficient Information	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301070070-01	Old Hurricane Brook (below 74d22m30s)		RIVER	9.7 MILES	HUC14: 02040301070070	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	N				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301070080-01	Manapaqua Brook		RIVER	12 MILES	HUC14: 02040301070080 As of the following monitoring sites at SWQS Classification 01408460 AN0532 FW2-NT	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Mercury in Water Column	2008	Completed / Low Priority	Industrial     Point Source
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Completed	Discharge • Urban
Public Water Supply	Not Supporting	Ν	Mercury in Water Column	2008	Completed / Low Priority	Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301070090-01	Union Branch (below Bla 74d22m05s)	icks Br	ESTUARY FRESHWATER LAKE RIVER	20.06 SQUARE MILES 119.7 ACRES 14.11 MILES	HUC14: 02040301070090 As of 2010 contains the following monitoring sites and associated SWQS Classification 01408380 PL 01408462 FW2-NT 01408495 FW2-NT AN0530 PL AN0533 FW2-NT AN0534 FW2-NT DSR 19R FW2-NT NJT07 HORBS1 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Fully Supporting Not Supporting	N N N	Chlordane in Fish Tissue DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2010 2010 2010 2010 2006 2010	Low Priority Low Priority Low Priority Low Priority Completed Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301080010-01	Wrangel Brook (above Michaels Branch)		RIVER	11.49 MILES	HUC14: 02040301080010 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0536 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301080020-01	Michaels Branch (Wrangel Brook)		FRESHWATER LAKE RIVER	6.48 ACRES 13.29 MILES	HUC14: 02040301080020 As of 2010 contains the following monitoring sites and associated SWQS Classification NJW042 1 PL NJW042 OUTLET PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	рН	2010	Medium Priority	

Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply AU ID	Insufficient Information Insufficient Information Insufficient Information Insufficient Information AU Name	N N N	Water Type	Size	Location Description	
NJ02040301080030-01	Road)		FRESHWATER LAKE RIVER	13.7 ACRES 17.57 MILES	HUC14: 02040301080030 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0540 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Primary Contact Recreation Public Water Supply	Insufficient Information Insufficient Information Not Supporting Insufficient Information Insufficient Information	N N N N	Mercury in Fish Tissue	2008	Completed	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Industrial Point Source Discharge</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301080040-01	Davenport Branch (below Road)	v Pinewald	RIVER	11.62 MILES	HUC14: 02040301080040 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0541 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	

NJ02040301080050-01	Wrangel Brook (below Michaels Branch)		RIVER	17.47 MILES	HUC14: 02040301080050 As of the following monitoring sites a SWQS Classification 01408598 01408600 FW2-NT AN0537 F FW2-NT AN0539 FW2-NT	and associated 8 FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2010	Medium Priority	
Fish Consumption	Not Supporting	Ν	Mercury in Water Column	2010	Medium Priority	
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Not Supporting	Ν	Mercury in Water Column	2010	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301080060-01	Toms R Lwr (Rt 166 to Oak Ridge Pkwy)		RIVER	8.31 MILES	014085000140830013-TOM-1 contains the following monitor associated SWQS Classificatio NT AN0535 FW2-NT	ing sites and
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Not Supporting	N N N	Cadmium Chromium (total) Copper Lead Nickel Zinc Chlordane DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2008 2007 2007 2007 2007 2007 2007 2006 2006	Low Priority Low Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Agriculture</li> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> </ul>
Industrial Water Supply Primary Contact Recreation	Fully Supporting Not Supporting	N N	Fecal Coliform	2008	Completed	

Public Water Supply	Not Supporting	Ν	Arsenic	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301080070-01	Jakes Branch (Lower Toms River)		RIVER	19.22 MILES	HUC14: 02040301080070 As of 2010 contains the following monitoring sites and associated SWQS Classification 01408702 PL AN0542 PL AN0543 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301080080-01	Long Swamp Creek		FRESHWATER LAKE	2.8 ACRES	HUC14: 02040301080080 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0544 FW2-NT	
			RIVER	4.36 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301080090-01	Toms R Lwr (below Rt 1	66)	ESTUARY	2.78 SQUARE MILES	HUC14: 02040301080090 As of the following monitoring sites an	
			FRESHWATER LAKE	34.52 ACRES	SWQS Classification 1502A SE	1 1506A SE1
			RIVER	7.4 MILES	509200033A SE1 CCMPOC0111 SE1 CCMPOC0113 SE1 CCMPOC0115 SE1 CCMPOC0116 SE1 CCMPOC0117 SE1	

					CCMPOC0118 SE	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Cadmium Chromium (total) Copper Lead Nickel Zinc	2008 2006 2006 2007 2006 2006	Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority	• Urban Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Enterococcus	2008	Completed / Medium Priority	
Public Water Supply	Not Supporting	Ν	Arsenic	2006	Low Priority	
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301090010-01	Webbs Mill Branch		RIVER	16.14 MILES	HUC14: 02040301090010 As of 2010 contains the following monitoring sites and associated SWQS Classification 01408800 FW1 AN0545 FW1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301090020-01	Chamberlain Branch		RIVER	21.08 MILES	HUC14: 02040301090020	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
NJ02040301090050-01	Cedar Creek (GS Parkwa 74d16m38s)	y to	FRESHWATER LAKE RIVER	28.7 ACRES 23.3 MILES	HUC14: 02040301090050 As of the following monitoring sites at SWQS Classification AN0548 P	nd associated
AU ID	AU Name		Water Type	Size	Location Description	
Public Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Agricultural Water Supply	Insufficient Information	N				
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
NJ02040301090040-01	Factory Br / Newbolds B Br	r / Daniels	RIVER	28.3 MILES	HUC14: 02040301090040 As of the following monitoring sites at SWQS Classification AN0547 P	nd associated
AU ID	AU Name		Water Type	Size	Location Description	
Public Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	N				
Agricultural Water Supply	Fully Supporting	N				
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
NJ02040301090030-01	Cedar Creek (74-16-38 to Chamberlain Br)		FRESHWATER LAKE RIVER	60.32 ACRES 21.54 MILES	HUC14: 02040301090030 As of the following monitoring sites an SWQS Classification 01408830	nd associated
AU ID	AU Name		Water Type	Size	Location Description	
Public Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				

Agricultural Water Supply Aquatic Life	Insufficient Information Insufficient Information	N N				• Atmospheric Depositon - Toxics
Fish Consumption	Not Supporting	N	Mercury in Fish Tissue	2008	Completed	
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	N				
AUID	AU Name		Water Type	Size	Location Description	
NJ02040301090060-01	Cedar Creek (below GS Parkway)		ESTUARY	0.32 SQUARE MILES	HUC14: 02040301090060 As of	
			FRESHWATER LAKE	5.87 ACRES	the following monitoring sites an SWQS Classification 01409000 AN0549 FW2-NT R12 FW2-NT	FW2-NT
			RIVER	11.96 MILES	AN0549 FW2-N1 K12 FW2-N1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301100010-01	Barnegat Cntrl tribs (Rt 3 Ck)	7 to Cedar	RIVER	13.53 MILES	HUC14: 02040301100010 As of the following monitoring sites at SWQS Classification CCMPOC CCMPOC0122 SE1	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301100020-01	Barnegat Cntrl tribs(Ceda R)	arCk - Forked	RIVER	12.4 MILES	HUC14: 02040301100020	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301100030-01			ESTUARY	14.18 SQUARE MILES	HUC14: 02040301100030 As of the following monitoring sites an	
	Inlet)		RIVER	7.41 MILES	SWQS Classification 1651D SE	1 1653A SE1
					1661D SE1 1661F SE1 1662A SE1 L694713320 SE1 L6955233341 SE1 NJ00-0047 SE1 NJ01- 0048	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Primary Contact Recreation	Not Supporting	Ν	Enterococcus	2008	Completed / Medium Priority	
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301100040-01	Barnegat Bay Cntrl (Torr Crk)	ıs R-Cedar	BAY(S) & HARBOR	12.72 SQUARE MILES	Barnegat Bay Cntrl (Toms R-Cedar Crk) As of 2010 contains the following monitoring sites and associated SWQS Classification 1631E SE1 1632B SE1 1635E SE1 1636A SE1 1645C SE1 1645G SE1 1648A SE1 1648B	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Enterococcus	2010	Completed / Medium Priority	
Shellfish Harvesting	Fully Supporting	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301110010-01	Forked River NB(above ograde)	old RR	RIVER	21.03 MILES	HUC14: 02040301110010 As of 2010 contains the following monitoring sites and associated SWQS Classification 01409030 PL AN0550 P	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301110020-01	Forked River NB(below old RR grade)		FRESHWATER LAKE RIVER	135.69 ACRES 10.46 MILES	HUC14: 02040301110020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01409048 PL 01409050 P AN0551 PL NJW068 1 FW2-NT NJW068 2 FW2-NT NJW068 OUTLET FW2-NT NJW288 FW2-NT NJW288 2 FW2-NT R13	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301110030-01	Forked River(below NB incl Mid/South Br)		ESTUARY RIVER	0.23 SQUARE MILES 24.41 MILES	HUC14: 02040301110030 As of 2010 contains the following monitoring sites and associated SWQS Classification 1661A SE1 NJ03-0236 SE1 R14 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

## Appendix A

Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301110040-01	R		FRESHWATER LAKE	23.62 ACRES	HUC14: 02040301110040	
			RESERVOIR	24 ACRES		
			RIVER	18.48 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301110050-01	Oyster Creek (below Rt 5	32)	ESTUARY	0.13 SQUARE MILES	HUC14: 02040301110050 As of	
			RIVER	11.09 MILES	the following monitoring sites an SWQS Classification 1663 SE1 R14A SE1 R15 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301120010-01	Waretown Creek / Lochie	el Creek	FRESHWATER LAKE RIVER	8.61 ACRES 16.41 MILES	HUC14: 02040301120010 As of the following monitoring sites at SWQS Classification 01409108 R16 FW2-NT	nd associated

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301120020-01	Barnegat South tribs (bel	ow Lochiel	ESTUARY	0.5 SQUARE MILES	HUC14: 02040301120020 As of	
	Ck)		RIVER	68.87 MILES	the following monitoring sites an SWQS Classification 1675 SE1 NJ01-0110 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301120030-01	Barnegat Bay So (Brngt I	nlet-Surf	ESTUARY	12.23 SQUARE MILES	HUC14: 02040301120030 As of	
	City)		RIVER	21.71 MILES	the following monitoring sites an SWQS Classification 1674B SE 1683C SE1 CCMPOC0055 SE1 SE1 CCMPOC0142 SE1 NJ00-0 0234 SE1	1 1680B SE1 CCMPOC0124
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	

NJ02040301120040-01	Barnegat Bay ( Barnegat to Surf City)		ESTUARY RIVER	11.67 SQUARE MILES 3.75 MILES	Barnegat Bay As of 2010 contains the following monitoring sites and associated SWQS Classification 1663A SE1 1670D SE1 1670F SE 1688B SE1 1691A SE1 1691E SE1 NJ01-0046 SE1 NJ01-0108 SE1 NJ02-0235 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status Source	
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301130010-01	Four Mile Branch (Mill C	Creek)	FRESHWATER LAKE	44.96 ACRES	HUC14: 02040301130010 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0554 FW2-NT	
			RIVER	11.63 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301130020-01	Mill Ck (above GS Parkv	vay)	FRESHWATER LAKE	7.94 ACRES	HUC14: 02040301130020 As of	
			RIVER	17.86 MILES	the following monitoring sites an SWQS Classification 01409150 NJW224 1 PL NJW224 2 PL NJ NJW224 OUTLET PL	PL AN0555A PL
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Not Supporting	Ν	рН	2006	Medium Priority	Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers

Primary Contact Recreation	Insufficient Information	N				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301130030-01	Mill Ck (below GS Parkway)/Manahawkin Ck		FRESHWATER LAKE RIVER	110.49 ACRES 48.35 MILES	HUC14: 02040301130030 As o the following monitoring sites a SWQS Classification 1706 SE1 CCMPOC0125 SE1 L69598321 L6960632198 SE1 NJT07 LME	nd associated AN0555 FW2-NT 36 SE1
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Industrial Water Supply Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Not Supporting Insufficient Information Fully Supporting Fully Supporting	N N N N	pH Chlordane in Fish Tissue DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2006 2010 2010 2010 2010 2010 2010	Medium Priority Low Priority Low Priority Low Priority Low Priority Completed Low Priority	• Agriculture • Urban Runoff/Storm Sewers
Shellfish Harvesting	Fully Supporting AU Name	N	Weden True	Size	I	
NJ02040301130040-01	Cedar Run		Water Type RIVER	22.64 MILES	Location Description HUC14: 02040301130040 As o the following monitoring sites a SWQS Classification 01409255 FW2-NT R17 SE1	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	N				
Fish Consumption	Insufficient Information	Ν				

Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	N				
Public Water Supply	Fully Supporting	N				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301130050-01	Parkway)		FRESHWATER LAKE RIVER	157.73 ACRES 22.11 MILES	HUC14: 02040301130050 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0557A PL DSR 40L PL NJW190 1 PL NJW190 2 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Completed	
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301130060-01	Westecunk Creek (below Parkway)	GS	RIVER	24.26 MILES	HUC14: 02040301130060 As of the following monitoring sites ar SWQS Classification 1712 SE1 AN0558 SE1 L6975631940 SE1	nd associated AN0557 PL
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Fully Supporting	Ν				• Urban
Fish Consumption	Insufficient Information	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2008	Completed / Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301130070-01	Dinner Point Creek & tril	DS	RIVER	30.32 MILES	HUC14: 02040301130070	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

## Appendix A

Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed / Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301130080-01	Westecunk Cr)		ESTUARY RIVER	8.9 SQUARE MILES 3.61 MILES	HUC14: 02040301130080 As of 2010 contains the following monitoring sites and associated SWQS Classification 1707C SE1 1710A SE1 1718B SE1 1719E SE1 1721 SE1 1721C SE1 CCMPOC0073 SE1 L6949031987 SE1 L695273	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
AU ID NJ02040301130090-01	AU Name Manahawkin/LEH Bay (I TurtleCove)	MillCrk-	Water Type ESTUARY FRESHWATER LAKE RIVER	Size 4.97 SQUARE MILES 3.34 ACRES 9.45 MILES	Location Description Manahawkin As of 2010 contain monitoring sites and associated S Classification 1700A SE1 1703 S 1704 SE1 CCMPOC0069 SE1 C SE1 L6947132281 SE1 L695623 SE1	SWQS SE1 1703C SE1 CCMPOC0136
	Manahawkin/LEH Bay (I	MillCrk- Threatened	ESTUARY FRESHWATER LAKE	4.97 SQUARE MILES 3.34 ACRES	Manahawkin As of 2010 contain monitoring sites and associated S Classification 1700A SE1 1703 1704 SE1 CCMPOC0069 SE1 C SE1 L6947132281 SE1 L695623	SWQS SE1 1703C SE1 CCMPOC0136
NJ02040301130090-01	Manahawkin/LEH Bay (I TurtleCove)		ESTUARY FRESHWATER LAKE RIVER	4.97 SQUARE MILES 3.34 ACRES 9.45 MILES	Manahawkin As of 2010 contain monitoring sites and associated S Classification 1700A SE1 1703 1704 SE1 CCMPOC0069 SE1 C SE1 L6947132281 SE1 L695623 SE1	SWQS SE1 1703C SE1 CCMPOC0136 32216 SE1 MB
NJ02040301130090-01 Use	Manahawkin/LEH Bay (I TurtleCove) Attainment	Threatened	ESTUARY FRESHWATER LAKE RIVER	4.97 SQUARE MILES 3.34 ACRES 9.45 MILES	Manahawkin As of 2010 contain monitoring sites and associated S Classification 1700A SE1 1703 1704 SE1 CCMPOC0069 SE1 C SE1 L6947132281 SE1 L695623 SE1	SWQS SE1 1703C SE1 CCMPOC0136 32216 SE1 MB
NJ02040301130090-01 Use Aquatic Life	Manahawkin/LEH Bay (I TurtleCove) Attainment Insufficient Information	Threatened N	ESTUARY FRESHWATER LAKE RIVER	4.97 SQUARE MILES 3.34 ACRES 9.45 MILES	Manahawkin As of 2010 contain monitoring sites and associated S Classification 1700A SE1 1703 1704 SE1 CCMPOC0069 SE1 C SE1 L6947132281 SE1 L695623 SE1	SWQS SE1 1703C SE1 CCMPOC0136 32216 SE1 MB
NJ02040301130090-01 Use Aquatic Life Fish Consumption	Manahawkin/LEH Bay (I TurtleCove) Attainment Insufficient Information Insufficient Information	Threatened N N	ESTUARY FRESHWATER LAKE RIVER	4.97 SQUARE MILES 3.34 ACRES 9.45 MILES	Manahawkin As of 2010 contain monitoring sites and associated S Classification 1700A SE1 1703 1704 SE1 CCMPOC0069 SE1 C SE1 L6947132281 SE1 L695623 SE1	SWQS SE1 1703C SE1 CCMPOC0136 32216 SE1 MB
NJ02040301130090-01 Use Aquatic Life Fish Consumption Primary Contact Recreation	Manahawkin/LEH Bay (I TurtleCove) Attainment Insufficient Information Insufficient Information Fully Supporting	Threatened N N N	ESTUARY FRESHWATER LAKE RIVER	4.97 SQUARE MILES 3.34 ACRES 9.45 MILES	Manahawkin As of 2010 contain monitoring sites and associated S Classification 1700A SE1 1703 1704 SE1 CCMPOC0069 SE1 C SE1 L6947132281 SE1 L695623 SE1	SWQS SE1 1703C SE1 CCMPOC0136 32216 SE1 MB

					SWQS Classification AN0559A	FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301140020-01	Mill Branch (below GS Parkway)		RIVER	3.36 MILES	HUC14: 02040301140020 As of the following monitoring sites a SWQS Classification 01409305 AN0559 FW2-NT	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue PCB in Fish Tissue	2010 2010	Completed Low Priority	
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301140030-01	Tuckerton Creek (below	Mill Branch)	FRESHWATER LAKE	35.39 ACRES	HUC14: 02040301140030 As of	
			RIVER	11.78 MILES	the following monitoring sites an SWQS Classification NJT07 PC R20 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2008	Completed	
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Completed	

Appendix A

Primary Contact Recreation	Insufficient Information	Ν					
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed		
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040301140040-01	LEH Bay tribs(Westecunk Ck- Tuckerton Ck)		ESTUARY RIVER	0.01 SQUARE MILES 39.39 MILES	HUC14: 02040301140040 As of 2010 contai the following monitoring sites and associated SWQS Classification CCMPOC0126 SE1 R1 SE1		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Aquatic Life	Insufficient Information	Ν					
Fish Consumption	Insufficient Information	Ν					
Primary Contact Recreation	Fully Supporting	Ν					
Shellfish Harvesting	Fully Supporting	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040301140050-01	LEH Bay tribs (Willis Cr Inlet)	eek to LE	RIVER	57.32 MILES	HUC14: 02040301140050		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Aquatic Life	Insufficient Information	Ν					
Fish Consumption	Insufficient Information	Ν					
Primary Contact Recreation	Insufficient Information	Ν					
Shellfish Harvesting	Fully Supporting	N					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040301140060-01	Little Egg HarborBay(Westecunk to Inlet)		ESTUARY RIVER	21.62 SQUARE MILES 17.57 MILES	HUC14: 02040301140060 As of 2010 contains the following monitoring sites and associated SWQS Classification 1800B SE1 1800D SE1 1802A SE1 1818B SE1 1818D SE1 1820A SE 1824A SE1 1824B SE1 1826A		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Aquatic Life	Insufficient Information	Ν					
Fish Consumption	Insufficient Information	N					

Primary Contact Recreation	Fully Supporting	N				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301150010-01			FRESHWATER LAKE RIVER	11.79 ACRES 22.89 MILES	HUC14: 02040301150010 As of the following monitoring sites an SWQS Classification AN0579 P PL BBART532 PL BBATS532 I PL	nd associated L BBACARRZ
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Primary Contact Recreation	Fully Supporting Not Supporting Insufficient Information Insufficient Information	N N N	рН	2006	Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301150020-01	Skit Branch (Batsto River)			3 ACRES	HUC14: 02040301150020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01409435 FW1 01409439 PL AN0580 PL AN0581 FW1 BSKBEAVD PI BSKITCAR FW1 BSKITHAM PL BSKWIDE FW1 BTOIMPCA PL BTOMCARR PI	
1992040301130020-01	Skit Branch (Batsto Rive	r)	FRESHWATER LAKE RIVER	28.5 MILES	the following monitoring sites an SWQS Classification 01409435 PL AN0580 PL AN0581 FW1 B	nd associated FW1 01409439 SKBEAVD PL PL BSKWIDEN
NJ02040301150020-01 Use	Skit Branch (Batsto Rive	r) Threatened			the following monitoring sites an SWQS Classification 01409435 PL AN0580 PL AN0581 FW1 B BSKITCAR FW1 BSKITHAM	nd associated FW1 01409439 SKBEAVD PL PL BSKWIDEN
		, 	RIVER	28.5 MILES	the following monitoring sites an SWQS Classification 01409435 PL AN0580 PL AN0581 FW1 B BSKITCAR FW1 BSKITHAM FW1 BTOIMPCA PL BTOMCA	d associated FW1 01409439 SKBEAVD PL PL BSKWIDEN ARR PL
Use	Attainment	Threatened	RIVER	28.5 MILES	the following monitoring sites an SWQS Classification 01409435 PL AN0580 PL AN0581 FW1 B BSKITCAR FW1 BSKITHAM FW1 BTOIMPCA PL BTOMCA	d associated FW1 01409439 SKBEAVD PL PL BSKWIDEN ARR PL
Use Agricultural Water Supply	Attainment Fully Supporting	<b>Threatened</b> N	RIVER	28.5 MILES	the following monitoring sites an SWQS Classification 01409435 PL AN0580 PL AN0581 FW1 B BSKITCAR FW1 BSKITHAM FW1 BTOIMPCA PL BTOMCA	d associated FW1 01409439 SKBEAVD PL PL BSKWIDEN ARR PL
Use Agricultural Water Supply Aquatic Life	Attainment       Fully Supporting       Fully Supporting	<b>Threatened</b> N N	RIVER	28.5 MILES	the following monitoring sites an SWQS Classification 01409435 PL AN0580 PL AN0581 FW1 B BSKITCAR FW1 BSKITHAM FW1 BTOIMPCA PL BTOMCA	d associated FW1 01409439 SKBEAVD PL PL BSKWIDEN ARR PL
Use Agricultural Water Supply Aquatic Life Fish Consumption	Attainment         Fully Supporting         Fully Supporting         Insufficient Information	Threatened N N N	RIVER	28.5 MILES	the following monitoring sites an SWQS Classification 01409435 PL AN0580 PL AN0581 FW1 B BSKITCAR FW1 BSKITHAM FW1 BTOIMPCA PL BTOMCA	d associated FW1 01409439 SKBEAVD PL PL BSKWIDEN ARR PL
Use Agricultural Water Supply Aquatic Life Fish Consumption Primary Contact Recreation	Attainment         Fully Supporting         Fully Supporting         Insufficient Information         Fully Supporting	Threatened N N N N	RIVER	28.5 MILES	the following monitoring sites an SWQS Classification 01409435 PL AN0580 PL AN0581 FW1 B BSKITCAR FW1 BSKITHAM FW1 BTOIMPCA PL BTOMCA	d associated FW1 01409439 SKBEAVD PL PL BSKWIDEN ARR PL

	Brook		RIVER	17.4 MILES	the following monitoring sites and associated SWQS Classification 01409449 PL AN0582 PL AN0583 PL BINSCHOO PL BINSHADS PL BINSHADW PL BMULAKED PL BMUSKTUC PL NJW065 1 PL NJW065 OUTLET PL		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Fully Supporting	N				• Transfer of	
Aquatic Life	Not Supporting	Ν	рН	2006	Medium Priority	Water from an Outside	
Fish Consumption	Insufficient Information	Ν				<ul><li>Watershed</li><li>Agriculture</li></ul>	
Primary Contact Recreation	Insufficient Information	Ν				• Urban Runoff/Storm	
Public Water Supply	Fully Supporting	Ν				Sewers	
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040301150040-01	Springers Brook / Deep F	Run	FRESHWATER LAKE	51 ACRES	HUC14: 02040301150040		
			RIVER	28.36 MILES	the following monitoring si SWQS Classification 0140 AN0585 PL BDEEPDKE I BSPRDIKE PL BSPRIHA	9455 PL AN0584 PL PL BDEEPIMP FW1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Fully Supporting	Ν				Agriculture	
Aquatic Life	Not Supporting	Ν	рН	2006	Medium Priority	• Urban Runoff/Storm	
Fish Consumption	Insufficient Information	Ν				Sewers	
Primary Contact Recreation	Insufficient Information	Ν					
Public Water Supply	Fully Supporting	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040301150050-01	Batsto River (CNJRR to Hampton Gate)		RIVER	21.69 MILES	the following monitoring si SWQS Classification 0140	HUC14: 02040301150050 As of 2010 contains the following monitoring sites and associated SWQS Classification 01409432 PL AN0586A PL BBARRBRG PL BBATHAMP PL BBATRCAR PL BBATRMOO PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Fully Supporting	Ν				Agriculture	

Aquatic Life	Not Supporting	N	pН	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	N	ſ			Sewers
Primary Contact Recreation	Insufficient Information	N				
Public Water Supply	Fully Supporting	N				
AUID	AU Name		Water Type	Size	Location Description	
NJ02040301150060-01			RIVER	21.2 MILES	HUC14: 02040301150060 As of 2010 contains the following monitoring sites and associated SWQS Classification BBALFORG PL BBATRMAN FW1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301150070-01	Penn Swamp Branch		RIVER	7.73 MILES	HUC14: 02040301150070 As of the following monitoring sites at SWQS Classification AN0587 F FW1	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	

NJ02040301150080-01	Batsto R (Batsto gage to Quaker Bridge)		FRESHWATER LAKE RIVER	67.65 ACRES 16.24 MILES	0140950014-BAT-1 As of 201 following monitoring sites and Classification 01409470 PL 01 BAT-1 PL AN0586 PL AN053 PL BBAQUAKR PL BBATLA PL NJT07 BATBS1 PL	associated SWQS 409500 PL 14- 88 PL BBAPENNS
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Completed	
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301160010-01	Alquatka Branch		FRESHWATER LAKE	3 ACRES	HUC14: 02040301160010 As	
			RIVER	20.75 MILES	the following monitoring sites SWQS Classification MALTR	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301160020-01	Mullica River (above Jac	kson Road)	FRESHWATER LAKE	11 ACRES	HUC14: 02040301160020 As	
			RIVER	11.62 MILES	the following monitoring sites and associated SWQS Classification 01409375 PL 0140938 AN0560 PL MMULADYL PL MMULADY MMULJACK PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>

Aquatic Life Fish Consumption	Not Supporting Not Supporting	N N	Oxygen, Dissolved pH DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006 2006 2006	Medium Priority Medium Priority Low Priority Low Priority Low Priority Low Priority Low Priority	Runoff/Storm Sewers • Atmospheric Depositon - Toxics • Source Unknown	
Primary Contact Recreation	Insufficient Information	Ν					
Public Water Supply	Fully Supporting	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040301160030-01	Road)		FRESHWATER LAKE RIVER	116.08 ACRES 15.13 MILES	0140938714-MUL-2 As of 2014 following monitoring sites and a Classification 01409385 PL 014 MUL-2 PL AN0561 PL AN056 MMUATSIO PL MMUDIKES PL NJT07 ATSBS1 PL NJW04	associated SWQS 409387 PL 14- 2 PL DSR 41L PL PL MMUGOSHN	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Not Supporting	N N N	Oxygen, Dissolved DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006	Medium Priority Low Priority Low Priority Low Priority Completed Low Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> </ul>	
Primary Contact Recreation	Fully Supporting	Ν					
Public Water Supply	Fully Supporting	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040301160040-01	Wisickaman Creek		FRESHWATER LAKE RIVER	4.82 ACRES 9.25 MILES	the following monitoring sites a	HUC14: 02040301160040 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0563 PL MWEATSIO PL MWETHREE PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Insufficient Information	Ν					

Aquatic Life	Not Supporting	Ν	Cause Unknown	2006	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301160050-01			FRESHWATER LAKE	21.33 ACRES	HUC14: 02040301160050 As of	
	Ave)		RIVER	6.72 MILES	the following monitoring sites and associated SWQS Classification 01409401 PL 01409402 I AN0565 PL MHAATCOL PL NJW278 1 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301160060-01	Sleeper Branch (Rt 206 t	o Tremont	FRESHWATER LAKE	21.32 ACRES	HUC14: 02040301160060 As of	
	Ave)		RIVER	22.72 MILES	the following monitoring sites an SWQS Classification 014094020 0140940370 PL AN0566 PL MC	00 PL
					MCOIMPNT PL MHATREMO PL MSLMAPLE PL MSLSALT MWIBEAVR PL MWIBURNT	PL MSLEPARK
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301160070-01	Pump Branch (above 74c	53m road)	FRESHWATER LAKE	8.45 ACRES	HUC14: 02040301160070	
			RIVER	5.16 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Transfer of
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	Water from an Outside
Fish Consumption	Insufficient Information	Ν				Watershed <ul> <li>Agriculture</li> </ul>
Primary Contact Recreation	Fully Supporting	Ν				• Urban Runoff/Storm
Public Water Supply	Fully Supporting	Ν				Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301160080-01	Pump Branch (below 740	153m road)	FRESHWATER LAKE RIVER	86.72 ACRES 5.3 MILES	HUC14: 02040301160080 As the following monitoring sites SWQS Classification 0140940 NPUHALUW PL NPUIMPNT PL	and associated 8 PL AN0569 PL
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	рН	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301160090-01	Clark Branch (above/incl Branch)	Price	RIVER	8.26 MILES	HUC14: 02040301160090 As the following monitoring sites SWQS Classification AN0567 MCLBURNT PL MPRBURNT	and associated PL AN0568 PL
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				

Aquatic Life	Not Supporting	Ν	Cause Unknown	2010	Medium Priority	
Fish Consumption	Insufficient Information	N				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AUID	AU Name		Water Type	Size	Location Description	
NJ02040301160100-01	Blue Anchor Brook F		FRESHWATER LAKE	34.62 ACRES	HUC14: 02040301160100 As of the following monitoring sites ar	
			RIVER	5.97 MILES	SWQS Classification 0140940950 PL AN0570 PI NBLABBOG PL NBLSPRNG PL NJW235 1 PL NJW235 Center PL NJW235 OUTLET PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Upstream
Aquatic Life	Not Supporting	Ν	pH Temperature, water	2006 2006	Medium Priority Medium Priority	Impoundments (e.g., Pl-566 NRCS Structures)
Fish Consumption	Insufficient Information	Ν				<ul> <li>Agriculture</li> <li>Urban</li> </ul>
Primary Contact Recreation	Fully Supporting	Ν				Runoff/Storm Sewers
Public Water Supply	Fully Supporting	Ν				Seweis
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301160110-01	Albertson Brook / Gun B	ranch	FRESHWATER LAKE	25.59 ACRES	HUC14: 02040301160110 As of	
			RIVER	6.71 MILES	the following monitoring sites and associated SWQS Classification 0140940970 PL AN0571 PL AN0572 PL NALBFLEM PL NALDEREL PL NALPARAD PL NBLCONFL PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301160120-01	Great Swamp Branch (ab	ove Rt 206)	FRESHWATER LAKE RIVER	20.14 ACRES 12 MILES	HUC14: 02040301160120 As of the following monitoring sites an SWQS Classification 01409410: NGREAR30 PL NGRMYRTL F	nd associated 50 PL AN0573 PI
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Insufficient Information	N N	pH Temperature, water	2006 2008	Medium Priority Medium Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Upstream Impoundments</li> </ul>
Primary Contact Recreation	Fully Supporting	N				(e.g., Pl-566 NRCS
Public Water Supply	Not Supporting	N	Nitrates	2006	Medium Priority	Structures)
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301160130-01	Great Swamp Branch (below Rt 206)		RIVER	14.82 MILES	HUC14: 02040301160130 As of the following monitoring sites an SWQS Classification 01409410' 0140941075 PL AN0574 PL AN NCEAIRPO PL NGRMIDDL PL	nd associated 70 PL 10575 PL
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	N	рН	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	N				Sewers
Primary Contact Recreation	Not Supporting	N	Escherichia coli	2008	Completed / Medium Priority	
Public Water Supply	Not Supporting	Ν	Nitrates	2006	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301160140-01	02040301160140-01 Mullica River (39d40m30s to Rt 206)		RIVER	84.57 MILES	0140938714-MUL-2 As of 2010 contains the following monitoring sites and associated SWQS Classification 01409400 PL 0140940050 PL AN0564 PL DSR 10R PL DSR 44R PL MMUCONST PL MMURRBRG PL MMUTRQUA PL MMUWILDR PL MSL206BG	

					PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	рН	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006	Low Priority Low Priority Low Priority Completed Low Priority	Sewers • Atmospheric Depositon - Toxics • Source Unknown
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301160150-01	NJ02040301160150-01 Mullica R (Pleasant Mills to 39d40m30s)		FRESHWATER LAKE	17.31 ACRES	HUC14: 02040301160150 As o	
			RIVER	15.84 MILES	the following monitoring sites and associated SWQS Classification 01409411 PL AN0576 PL NNEMILLS PL NNEWESTM PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	
Fish Consumption	Not Supporting	Ν	DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2006 2006 2006 2006 2006 2010	Low Priority Low Priority Low Priority Completed Low Priority	
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301160160-01	Gun Branch		FRESHWATER LAKE	10.02 ACRES	HUC14: 02040301160160	
			RIVER	9.69 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	N	рН	2010	Medium Priority	
Fish Consumption	Insufficient Information	N				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301160170-01	Sleeper Branch		FRESHWATER LAKE	57.89 ACRES	HUC14: 02040301160170 As of	
			RIVER	47.58 MILES	the following monitoring sites and associated SWQS Classification 0140940480 PL 01409405 PL MCLIMPNT PL MCLJOHNS PL MSLPLEAS PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				
Aquatic Life	Not Supporting	Ν	pH	2010	Medium Priority	
Fish Consumption	Not Supporting	Ν	DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2010 2010 2010 2010 2010 2010	Low Priority Low Priority Low Priority Low Priority Low Priority	
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301170010-01	Hammonton Creek (abov	e 74d43m)	FRESHWATER LAKE	61.4 ACRES	0140941614-HAM-1, 14-HAM-	
			RIVER	8.74 MILES	contains the following monitorin associated SWQS Classification 01409412 PL 01409414 PL 0140 0140941580 PL 01409416 PL 14 HAM-2 PL AN0577 PL BA33 P	0140941198 PL 0941510 PL 4-HAM-1, 14-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Copper pH	2008 2006	Low Priority Medium Priority	• Industrial Point Source Discharge

Fish Consumption Primary Contact Recreation Public Water Supply	Not Supporting Not Supporting Not Supporting	N N N	Phosphorus (Total) Zinc Mercury in Water Column Escherichia coli Arsenic Mercury in Water Column Nitrates	2006 2006 2010 2006 2006 2010 2006	Medium Priority Low Priority Medium Priority Completed Low Priority Medium Priority Medium Priority	<ul> <li>Municipal Point Source Discharges</li> <li>Urban Runoff/Storm Sewers</li> <li>Agriculture</li> <li>Natural Sources</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301170020-01	Hammonton Creek (Colu 74d43m)	umbia Rd to	RIVER	10.5 MILES	0140941614-HAM-1, 14-HAM- contains the following monitorin associated SWQS Classification	g sites and
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Not Supporting Not Supporting Not Supporting	N N N N	Copper pH Phosphorus (Total) Zinc Mercury in Water Column Escherichia coli Arsenic Mercury in Water Column Nitrates	2008 2006 2006 2006 2008 2008 2006 2006	Low Priority Medium Priority Medium Priority Low Priority Low Priority Completed Low Priority Low Priority Medium Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Agriculture</li> <li>Atmospheric Depositon - Toxics</li> <li>Natural Sources</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301170030-01	Hammonton Creek (belo Rd)	w Columbia	FRESHWATER LAKE RIVER	36.82 ACRES 11.78 MILES	HUC14: 02040301170030 As of the following monitoring sites an SWQS Classification AN0578 P	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Insufficient Information Fully Supporting Insufficient Information	N N N				

Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301170040-01	Mullica River (BatstoR to PleasantMills)	)	RIVER	6.34 MILES	0140950014-BAT-1 As of 2010 following monitoring sites and a Classification NJ02-0232 PL R2	ssociated SWQS
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2006 2006 2006 2006 2010	Low Priority Low Priority Low Priority Low Priority Low Priority	Sewers • Atmospheric Depositon - Toxics
Primary Contact Recreation	Not Supporting	N	Escherichia coli	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301170050-01	Bull Creek / Little Bull C	reek	FRESHWATER LAKE	17.71 ACRES	HUC14: 02040301170050	
			RIVER	11.34 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301170060-01	Mullica River (Rt 563 to River)	Batsto	RIVER	23.53 MILES	HUC14: 02040301170060 As o the following monitoring sites a	

					SWQS Classification 01409 DSR 42R PL Mullica PL N	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Upstream
Aquatic Life	Not Supporting	Ν	pH Phosphorus (Total) Temperature, water	2006 2006 2006	Medium Priority Medium Priority Medium Priority	Impoundments (e.g., PI-566 NRCS Structures) • Transfer of
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006	Low Priority Low Priority	Water from an Outside Watershed
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2006	Completed	<ul><li>Agriculture</li><li>Urban</li></ul>
Public Water Supply	Insufficient Information	Ν				Runoff/Storm Sewers
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	• Atmospheric Depositon - Toxics
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301170070-01	Nergo Creek		RIVER	9.1 MILES	HUC14: 02040301170070	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301170080-01	Mullica River (Lower Ba	nk Rd to Rt	FRESHWATER LAKE	6.32 ACRES	HUC14: 02040301170080 the following monitoring si	
	303)		RIVER	27.67 MILES	SWQS Classification NJ00	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Upstream Impoundments
Aquatic Life	Not Supporting	Ν	рН	2006	Medium Priority	(e.g., Pl-566

Fish Consumption Primary Contact Recreation Public Water Supply Shellfish Harvesting	Not Supporting Not Supporting Insufficient Information Not Supporting	N N N	Phosphorus (Total) Temperature, water Mercury in Fish Tissue Polychlorinated biphenyls Escherichia coli Total Coliform	2006 2006 2006 2006 2010 2006	Medium Priority Medium Priority Low Priority Low Priority Completed / Medium Priority Completed	NRCS Structures) • Agriculture • Urban Runoff/Storm Sewers • Atmospheric Depositon - Toxics
AU ID	AU Name V		Water Type	Size	Location Description	
NJ02040301170090-01			FRESHWATER LAKE	35.41 ACRES	HUC14: 02040301170090 As of the following monitoring sites ar	nd associated
			RIVER	11.33 MILES	SWQS Classification 01409601 LINLAKED PL	PL AN0593 PL
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	<ul> <li>Orban</li> <li>Runoff/Storm</li> <li>Sewers</li> </ul>
Fish Consumption	Insufficient Information	Ν				Sewers
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301170100-01	Landing Creek (above Rt	563)	FRESHWATER LAKE	40.49 ACRES	01409600 As of 2010 contains th monitoring sites and associated S	
			RIVER	8.44 MILES	Classification 01409570 PL 0140 01409600 PL AN0590 PL LLAN	09571 PL
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2008	Medium Priority	Sewers
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Completed	

Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301170110-01	Landing Creek (Indian Ca Rt563)	abin Ck to	RIVER	13.41 MILES	HUC14: 02040301170110	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301170120-01	Landing Creek (below Indian Cabin Ck)		RIVER	22.95 MILES	HUC14: 02040301170120 As of the following monitoring sites at SWQS Classification 01409605 AN0594 PL LINCABIN PL	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301170130-01	Mullica River(Turtle Ck BankRd)	to Lower	RIVER	67.09 MILES	HUC14: 02040301170130 As of the following monitoring sites at SWQS Classification NJ00-0037 PL NJ02-0229 PL R28 PL	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Aquatic Life	Not Supporting	N	Total Suspended Solids (TSS)	2010	Medium Priority	• Atmospheric Depositon -
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006	Low Priority Low Priority	Toxics <ul> <li>Agriculture</li> </ul>
Primary Contact Recreation	Fully Supporting	N				<ul> <li>Urban Runoff/Storm</li> </ul>
Shellfish Harvesting	Not Supporting	N	Total Coliform	2006	Completed	Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301170140-01	Mullica R. (BatstoR to N	lescochague	FRESHWATER LAKE	0 ACRES	Mullica R.	
	Lake)		RIVER	4.94 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	pH	2010	Medium Priority	
Fish Consumption	Not Supporting	Ν	DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2010 2010 2010 2010 2010 2010	Low Priority Low Priority Low Priority Low Priority Low Priority	
Primary Contact Recreation	Not Supporting	N	Escherichia coli	2010	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301180010-01	Yellow Dam Branch		RIVER	10.26 MILES	HUC14: 02040301180010	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	

NJ02040301180020-01	Oswego River (above Rt 539)		FRESHWATER LAKE RIVER	5 ACRES 16.56 MILES	HUC14: 02040301180020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01409880 PL AN0603 P OOSCEDRI PL OOSHOWIM PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2008	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301180030-01 Plains Branch (Oswego River)		liver)	FRESHWATER LAKE	12 ACRES	HUC14: 02040301180030 As of 2010 contain the following monitoring sites and associated SWQS Classification AN0604 PL OPLTRIM	
			RIVER	15.51 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301180040-01	Oswego River (Sim Place 539)	Resv to Rt	RIVER	21.9 MILES	HUC14: 02040301180040 As of the following monitoring sites at SWQS Classification 01409930 PL	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Oxygen, Dissolved	2008	Medium Priority	• Urban Runoff/Storm Sewers

Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301180050-01	Papoose Branch (Oswego River)		RIVER	11.79 MILES	HUC14: 02040301180050 As of the following monitoring sites ar SWQS Classification 01409960 OPAPOOSE PL	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
	AU Name					
AU ID	AU Name		Water Type	Size	Location Description	
AU ID NJ02040301180060-01	AU Name Oswego R (Andrews Rd Resv)	to Sim Place	Water Type FRESHWATER LAKE RIVER	Size           117.32 ACRES           33.02 MILES	Location Description HUC14: 02040301180060 As of the following monitoring sites ar SWQS Classification AN0606 P OSWBS1 PL OOSLAKUP PL C	nd associated L NJT07
	Oswego R (Andrews Rd	to Sim Place Threatened	FRESHWATER LAKE	117.32 ACRES	HUC14: 02040301180060 As of the following monitoring sites ar SWQS Classification AN0606 P	nd associated L NJT07
NJ02040301180060-01	Oswego R (Andrews Rd Resv)		FRESHWATER LAKE RIVER	117.32 ACRES 33.02 MILES	HUC14: 02040301180060 As of the following monitoring sites ar SWQS Classification AN0606 P OSWBS1 PL OOSLAKUP PL C	nd associated L NJT07 DOSWLAKE PL
NJ02040301180060-01 Use	Oswego R (Andrews Rd Resv) Attainment	Threatened	FRESHWATER LAKE RIVER	117.32 ACRES 33.02 MILES	HUC14: 02040301180060 As of the following monitoring sites ar SWQS Classification AN0606 P OSWBS1 PL OOSLAKUP PL C	nd associated L NJT07 DOSWLAKE PL
NJ02040301180060-01 Use Agricultural Water Supply	Oswego R (Andrews Rd Resv) Attainment Insufficient Information	<b>Threatened</b> N	FRESHWATER LAKE RIVER	117.32 ACRES 33.02 MILES	HUC14: 02040301180060 As of the following monitoring sites ar SWQS Classification AN0606 P OSWBS1 PL OOSLAKUP PL C	nd associated L NJT07 DOSWLAKE PL
NJ02040301180060-01 Use Agricultural Water Supply Aquatic Life	Oswego R (Andrews Rd Resv) Attainment Insufficient Information Insufficient Information	<b>Threatened</b> N N	FRESHWATER LAKE RIVER Cause Mercury in Fish Tissue	117.32 ACRES 33.02 MILES Cycle First Listed 2010	HUC14: 02040301180060 As of the following monitoring sites ar SWQS Classification AN0606 P OSWBS1 PL OOSLAKUP PL C TMDL Status Completed	nd associated L NJT07 DOSWLAKE PL
NJ02040301180060-01 Use Agricultural Water Supply Aquatic Life Fish Consumption	Oswego R (Andrews Rd Resv) Attainment Insufficient Information Insufficient Information Not Supporting	<b>Threatened</b> N N N	FRESHWATER LAKE RIVER Cause Mercury in Fish Tissue	117.32 ACRES 33.02 MILES Cycle First Listed 2010	HUC14: 02040301180060 As of the following monitoring sites ar SWQS Classification AN0606 P OSWBS1 PL OOSLAKUP PL C TMDL Status Completed	nd associated L NJT07 DOSWLAKE PL
NJ02040301180060-01 Use Agricultural Water Supply Aquatic Life Fish Consumption Primary Contact Recreation	Oswego R (Andrews Rd Resv) Attainment Insufficient Information Insufficient Information Not Supporting Insufficient Information	Threatened N N N	FRESHWATER LAKE RIVER Cause Mercury in Fish Tissue	117.32 ACRES 33.02 MILES Cycle First Listed 2010	HUC14: 02040301180060 As of the following monitoring sites ar SWQS Classification AN0606 P OSWBS1 PL OOSLAKUP PL C TMDL Status Completed	nd associated L NJT07 DOSWLAKE PL

			RIVER	23.46 MILES	following monitoring sites and a Classification 01410000 PL 14-( AN0607 PL DSR 39L PL NJTO NJW057 1 PL NJW057 2 PL NJ 1 PL NJW057 OUTLET 2 PL O	OSW-1 PL 7 HARA1 PL W057 OUTLET
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status Source	
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Completed	
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301190010-01	Shoal Branch (above/incl Branch)	Pope	RIVER	20.72 MILES	HUC14: 02040301190010	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301190020-01	Wading River WB (above	e Rt 532)	FRESHWATER LAKE	82.9 ACRES	HUC14: 02040301190020 As of	
			RIVER	20.99 MILES	the following monitoring sites an SWQS Classification 01409690	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				

Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301190030-01	Wading River WB (Rt 563 to Rt 532)		RIVER	33.93 MILES	HUC14: 02040301190030 As of the following monitoring sites an SWQS Classification AN0596 P WAD2A1 PL	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301190040-01	Shoal Branch (below Pop	be Branch)	FRESHWATER LAKE	21.27 ACRES	HUC14: 02040301190040 As of	
			RIVER	30.77 MILES	the following monitoring sites and associated SWQS Classification AN0597 PL AN0597A PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301190050-01	Wading River WB (Jenki 563)	ins Rd to Rt	RIVER	26.63 MILES	HUC14: 02040301190050 As of the following monitoring sites an SWQS Classification 01409750 AN0598 PL AN0601 PL WHOS WLIHAUKN PL WWEFORDR	nd associated PL 01409790 PL SPITA PL

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric Depositon -
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2008	Medium Priority	Toxics <ul> <li>Agriculture</li> </ul>
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2006	Completed	• Urban Runoff/Storm
Primary Contact Recreation	Fully Supporting	Ν				Sewers
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301190060-01	Tulpehocken Creek		FRESHWATER LAKE	5 ACRES	HUC14: 02040301190060 As of	
			RIVER	36.38 MILES	the following monitoring sites and associated SWQS Classification 01409780 PL AN0599 FW AN0600 PL WBUOTTER PL WFEACARR PL WFEIMPD1 PL WSA4DIKE PL WSACARRA PL WTUHAWKN PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301190070-01	Wading River WB (Oswa Jenkins Rd)	ego R to	RIVER	9.87 MILES	HUC14: 02040301190070 As of the following monitoring sites at SWQS Classification 01409815 R21 PL WWEEVANB PL	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics
Fish Consumption	Not Supporting	N	Mercury in Fish Tissue	2006	Low Priority	<ul><li>Agriculture</li><li>Urban</li></ul>
Primary Contact Recreation	Fully Supporting	N				Runoff/Storm Sewers

Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301200010-01	Beaver Branch (Wading	River)	RIVER	12.76 MILES	HUC14: 02040301200010	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric
Aquatic Life	Insufficient Information	Ν				Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2006	Completed	<ul><li>Agriculture</li><li>Urban</li></ul>
Primary Contact Recreation	Insufficient Information	Ν				Runoff/Storm Sewers
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
	Wading River (Rt 542 to	Oswego	FRESHWATER LAKE	1.48 ACRES	HUC14: 02040301200020 As o	
	River)		RIVER	28.95 MILES	the following monitoring sites and associated SWQS Classification AN0608 PL AN0609 PL DSR 9R PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2006	Low Priority	<ul><li>Agriculture</li><li>Urban</li></ul>
Primary Contact Recreation	Insufficient Information	Ν				Runoff/Storm Sewers
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301200030-01	Wading River (below Rt	542)	FRESHWATER LAKE	76.86 ACRES	HUC14: 02040301200030 As o	
			RIVER	55.65 MILES	the following monitoring sites a SWQS Classification R23 PL	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric
Aquatic Life	Fully Supporting	Ν				Depositon - Toxics

Fish Consumption Primary Contact Recreation Public Water Supply	Not Supporting Fully Supporting Insufficient Information	N N N	Mercury in Fish Tissue	2010	Low Priority	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301200040-01	Bass River WB		FRESHWATER LAKE RIVER	21.32 ACRES 9.55 MILES	HUC14: 02040301200040 As of 2010 contain the following monitoring sites and associated SWQS Classification AN0610 PL AWEPILG PL AWESTAGE PL NJW04459-112-1 PL NJW04459-112-0 PL NJW112 1 PL NJW112 center PL NJW112 OUTLET PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301200050-01	Bass River EB		FRESHWATER LAKE RIVER	52.59 ACRES 15.18 MILES	0141015014-EBR-1 As of 2010 contains the following monitoring sites and associated SWQS Classification 01410150 PL 14-EBR-1 PL AEAABSDW PL AEASTAGE PL AN0611 PL AN0612 PL NJT07 ABSBS1 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2008	Completed	
Fish Consumption	Not Supporting	Ν	DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2010 2010 2010 2010 2010	Low Priority Low Priority Low Priority Completed Low Priority	
Primary Contact Recreation	Fully Supporting	Ν		1		

Public Water Supply	Fully Supporting	N				
AU ID	AU Name	1	Water Type	Size	Location Description	
NJ02040301200060-01	Bass River (below WB /	EB)	RIVER	46.69 MILES	HUC14: 02040301200060 As of 2010 contains the following monitoring sites and associated SWQS Classification R24 SE1 R25 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	N				
Industrial Water Supply	Insufficient Information	N				
Primary Contact Recreation	Insufficient Information	N				
Shellfish Harvesting	Not Supporting	N	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301200070-01	Ballanger Creek		RIVER	35.9 MILES	HUC14: 02040301200070	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301200080-01	Mullica River (GSP bridg Ck)	ge to Turtle	FRESHWATER LAKE RIVER	15.2 ACRES 35.65 MILES	HUC14: 02040301200080 As of the following monitoring sites an SWQS Classification 2011A PL NJ01-0038 PL NJ03-0038 PL	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Fully Supporting	Ν	Mercury in Fish Tissue	2010	Low Priority	• Atmospheric Depositon - Toxics

Fish Consumption	Not Supporting	Ν	Polychlorinated biphenyls	2010	Low Priority	<ul><li>Agriculture</li><li>Urban</li><li>Runoff/Storm</li></ul>
Primary Contact Recreation	Fully Supporting	Ν	Total Coliform	2006	Completed	Sewers
Shellfish Harvesting	Not Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301200090-01			FRESHWATER LAKE	0.29 ACRES	HUC14: 02040301200090 As of the following monitoring sites at	
			RIVER	9.53 MILES	the following monitoring sites and associated SWQS Classification AN0613 SE1 LCLODESS PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301200100-01	Morses Mill Stream		FRESHWATER LAKE	75.59 ACRES	HUC14: 02040301200100 As of the following monitoring sites an	
			RIVER	5.66 MILES	SWQS Classification AN0614 S PL LMOSTOCK PL NJW027 1 SE1 NJW027 Center SE1 NJW0 NJW274 1 PL NJW274 2 PL	E1 LMORSESM SE1 NJW027 2
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
r ish Consumption	Insumerent information					
Industrial Water Supply	Fully Supporting	N				
_						

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301200110-01	Mattix Run (Nacote Cree	k)	ESTUARY	7.11 SQUARE MILES	HUC14: 02040301200110 As of 2010 contains the following monitoring sites and associated	
			FRESHWATER LAKE	10.59 ACRES	SWQS Classification 01410230	
			RIVER	8.11 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2008	Medium Priority	Runoff/Storm Sewers
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301200120-01	Nacote Creek (below/inc	l Mill Pond)	FRESHWATER LAKE	47.44 ACRES	HUC14: 02040301200120 As of 2010 contains the following monitoring sites and associated SWQS Classification R30 SE1 R31 SE1	
			RIVER	21.08 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2010	Medium Priority	Agriculture
Fish Consumption	Insufficient Information	Ν				• Urban Runoff/Storm
Primary Contact Recreation	Insufficient Information	Ν				Sewers
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301210010-01	Mullica River (below GS	P bridge)	ESTUARY	0.01 SQUARE MILES	HUC14: 02040301210010 As of the following monitoring sites an	
			RIVER	50.58 MILES	the following monitoring sites a SWQS Classification 1900B SE 2005 SE1 2009A SE1 44360003 443600067A SE1 L7022531503 SE1 R29	1 2002A SE1 30 SE1

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Not Supporting Not Supporting	N N	Oxygen, Dissolved Mercury in Fish Tissue Polychlorinated biphenyls	2008 2010 2010	Medium Priority Low Priority Low Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon -</li> </ul>
Primary Contact Recreation	Fully Supporting	Ν				Toxics
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301210020-01	Mott Creek (Oysterbed P Ck)	t to Oyster	FRESHWATER LAKE RIVER	3.14 ACRES 45.24 MILES	HUC14: 02040301210020	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301210030-01	Little Bay & tribs		ESTUARY RIVER	8.01 SQUARE MILES 207.61 MILES	HUC14: 02040301210030 As of 2010 contains the following monitoring sites and associated SWQS Classification 1911A SE1 2100A SE1 2101A SE1 2102B SE1 2106A SE1 2108A SE1 NJ01-0034 SE1 NJ02-0227 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301210040-01	Great Bay		ESTUARY	14.66 SQUARE MILES	HUC14: 02040301210040 As of	2010 contains

			RIVER	3.14 MILES	the following monitoring sites ar SWQS Classification 1903 SE1 SE1 1906D SE1 1908C SE1 191 SE1 1921B SE1 192	1903E SE1 1903L
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301210050-01	02040301210050-01 Great Bay tribs		ESTUARY	0.14 SQUARE MILES	Great Bay tribs As of 2010 conta	
			RIVER	16.47 MILES	monitoring sites and associated SWQS Classification 1823B SE1 1924 SE1 1924B S	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301910010-01	Atl Coast(Manasquan/Herring Is)		OCEAN	13.46 SQUARE MILES	HUC14: 02040301910010 As of the following monitoring sites an SWQS Classification A26A SC SC CCMPOC1004 SC CCMPOC CCMPOC1012 SC CCMPOC11 JC41 SC JC41E SC J	nd associated CCMPOC1002 C1005 SC
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Not Supporting Not Supporting	N N	Oxygen, Dissolved DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006	Medium Priority Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> <li>Source</li> </ul>

Primary Contact Recreation	Fully Supporting	N				Unknown
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301910020-01	Atl Coast (Herring Is to Rt 37)		OCEAN	28.17 SQUARE MILES	HUC14: 02040301910020 As of the following monitoring sites at SWQS Classification A30B SC SC CCMPOC1014 SC CCMPO CCMPOC1020 SC CCMPOC10 CCMPOC1025 SC CCMPOC10	nd associated A34A SC A35A C1019 SC 024 SC
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006	Low Priority Low Priority Low Priority Low Priority Low Priority	Sewers • Atmospheric Depositon - Toxics • Source
Primary Contact Recreation	Fully Supporting	Ν				Unknown
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301910030-01	Atl Cst(Rt 37 to Barnega	ıt Inlet)	OCEAN	48 SQUARE MILES	HUC14: 02040301910030 As of 2010 contains the following monitoring sites and associated SWQS Classification A38A2 SC A40C SC CCMPOC1042 SC CCMPOC1044 SC CCMPOC1046 SC CCMPOC1084 SC CCMPOC1085 SC CCMPOC1086 SC CCMPOC1090 SC CCMPO	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006	Low Priority Low Priority Low Priority Low Priority Low Priority	Sewers • Atmospheric Depositon - Toxics • Source Unknown

Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301920010-01	Atl Coast(Barnegat to Surf City)		OCEAN	25.28 SQUARE MILES	HUC14: 02040301920010 As of 2010 contains the following monitoring sites and associated SWQS Classification A47A SC A47B SC AX50A1 SC CCMPOC1048 SC CCMPOC1050 SC CCMPOC1052 SC CCMPOC1054 SC CCMPOC1058 SC CCMPOC1097 SC CCMPO	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Not Supporting Not Supporting	N N	Oxygen, Dissolved DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006	Medium Priority Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> </ul>
Primary Contact Recreation	Fully Supporting	Ν				UIKIIOWII
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301920020-01	Atl Coast(Surf City to H	aven Be)	OCEAN	23.15 SQUARE MILES	HUC14: 02040301920020 As of 2010 contains the following monitoring sites and associated SWQS Classification A54B SC CCMPOC1062 SC CCMPOC1068 SC CCMPOC1070 SC CCMPOC1072 SC CCMPOC1091 SC CCMPOC1099 SC CCMPOC1100 SC CCMPOC10101 SC JC65	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006	Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Kunon/Storm</li> <li>Sewers</li> <li>Atmospheric</li> <li>Depositon -</li> <li>Toxics</li> <li>Source</li> <li>Unknown</li> </ul>
Primary Contact Recreation	Fully Supporting	Ν				2 millio (rit

Shellfish Harvesting	Fully Supporting	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040301920030-01	Atl Coast(Haven Bch to Lit Egg)		OCEAN	27.58 SQUARE MILES	HUC14: 02040301920030 As of 2010 contains the following monitoring sites and associated SWQS Classification CCMPOC1076 SC CCMPOC1078 SC CCMPOC1080 SC CCMPOC1092 SC CCMPOC1102 SC JC67 SC JC69 SC JC69E SC JC69G SC	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Not Supporting Not Supporting	N N	Oxygen, Dissolved DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006	Medium Priority Low Priority Low Priority Low Priority Low Priority Low Priority	Urban Runoff/Storm Sewers     Atmospheric Depositon - Toxics     Source Unknown
Primary Contact Recreation	Fully Supporting	Ν				Unknown
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302010010-01	Reeds Bay / Absecon Ba	y & tribs	ESTUARY FRESHWATER LAKE RIVER	14.16 SQUARE MILES 28.09 ACRES 154.77 MILES	HUC14: 02040302010010 As of 2010 contains the following monitoring sites and associated SWQS Classification 2202A SE1 2202B SE1 2215A SE1 2301 SE1 2305C SE1 2306C SE1 2307B SE1 2311 SE1 2311D	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2008	Completed	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302020010-01	Absecon Creek NB		RIVER	3.31 MILES	HUC14: 02040302020010 As of 2010 contains the following monitoring sites and associated	

					SWQS Classification AN0616 F ANOABGSP FW2-NT	W2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	pН	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Low Priority	<ul><li>Sewers</li><li>Atmospheric</li></ul>
Primary Contact Recreation	Insufficient Information	Ν				Depositon - Toxics
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302020020-01	Absecon Creek SB		RIVER	2.28 MILES	HUC14: 02040302020020 As of 2010 contains the following monitoring sites and associated SWQS Classification 01410455 PL AN0617 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Not Supporting	Ν	Mercury in Water Column	2008	Medium Priority	
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Not Supporting	Ν	Mercury in Water Column	2008	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302020030-01	Absecon Ck (AC Reserve SB)	iors) (gage to	FRESHWATER LAKE	21.17 ACRES	HUC14: 02040302020030 As of the following monitoring sites an	
	SB)		RESERVOIR	162 ACRES	SWQS Classification DSR 24L I ACRLBS1 FW2-NT	
			RIVER	3.27 MILES	ACKLDSI FW2-IVI	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Not Supporting	Ν	Mercury in Water Column	2010	Medium Priority	

Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Not Supporting	Ν	Mercury in Water Column	2010	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302020040-01	Absecon Creek (below gage)		FRESHWATER LAKE RIVER	3.82 ACRES 17.3 MILES	HUC14: 02040302020040 As of 2010 contains the following monitoring sites and associated SWQS Classification 2401 SE1 L7030230680 SE1 R32 SE1 R33 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	• Municipal
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Low Priority	Point Source Discharges
Primary Contact Recreation	Insufficient Information	Ν				<ul><li> Agriculture</li><li> Urban</li></ul>
Shellfish Harvesting	Fully Supporting	Ν				Runoff/Storm Sewers • Atmospheric
						Depositon - Toxics
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302030010-01	Great Egg Harbor R(abo	ve New	FRESHWATER LAKE	34.6 ACRES	0141078415-GEH-1UGR536SP	
	Freedom Rd)		RIVER	17.74 MILES	contains the following monitorin associated SWQS Classification NT AN0620 FW2-NT UGRRT6	01410770 FW2-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Package Plant
Aquatic Life	Not Supporting	Ν	рН	2006	Medium Priority	or Other Permitted Small
Fish Consumption	Insufficient Information	Ν				Flows Discharges
Primary Contact Recreation	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Public Water Supply	Fully Supporting	Ν				Runoff/Storm Sewers
	AU Name				Location Description	
AU ID	AU Name		Water Type	Size	Location Description	

	Freedom Rd)		RIVER	11.88 MILES	contains the following monitori associated SWQS Classification 01410788 PL 01410789 FW2-N AN0621 PL DSR 27L PL UGR UGREA536 PL	01410784 PL NT 15-GEH-1 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Fully Supporting	Ν				Agriculture	
Aquatic Life	Not Supporting	Ν	рН	2006	Medium Priority	• Urban Runoff/Storm	
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Completed	Sewers <ul> <li>Atmospheric</li> </ul>	
Primary Contact Recreation	Fully Supporting	Ν				Depositon - Toxics	
Public Water Supply	Fully Supporting	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040302030030-01	Four Mile Branch (GEH	R)	FRESHWATER LAKE RIVER	8.34 ACRES 9.94 MILES	the following monitoring sites a	HUC14: 02040302030030 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0622 FW2-NT NJW045 1 FW2-NT LIFORT536 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Insufficient Information	Ν					
Aquatic Life	Not Supporting	Ν	Phosphorus (Total)	2010	Medium Priority		
Fish Consumption	Insufficient Information	Ν					
Industrial Water Supply	Fully Supporting	Ν					
Primary Contact Recreation	Insufficient Information	Ν					
Public Water Supply	Insufficient Information	Ν					
	AU Name				Location Description		
AU ID	AU Name		Water Type	Size	Location Description		
AU ID NJ02040302030040-01	AU Name         GEHR (Broad Lane road Expressway)	to AC	Water Type RIVER	Size 7.25 MILES	Location Description           0141100015-GEH-2UGRERT5           contains the following monitori           associated SWQS Classification	ng sites and	
-	GEHR (Broad Lane road	to AC Threatened			0141100015-GEH-2UGRERT5 contains the following monitori	ng sites and	

Aquatic Life	Not Supporting	Ν	Copper pH	2006 2006	Low Priority Medium Priority	Sewers <ul> <li>Agriculture</li> </ul>
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Completed / Medium Priority	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302030050-01	Squankum Branch (GEHR)		RIVER	9.5 MILES	HUC14: 02040302030050 As of 2010 contains the following monitoring sites and associated SWQS Classification 01410850 PL 01410860 PL 01410861 PL 01410862 PL 01410863 PL 01410865 PL AN0624 PL USQMALAG PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	• Urban Runoff/Storm Sewers
Fish Consumption	Not Supporting	Ν	Mercury in Water Column	2010	Medium Priority	Sewers
Primary Contact Recreation	Not Supporting	Ν	Escherichia coli	2008	Completed	
Public Water Supply	Not Supporting	Ν	Mercury in Water Column	2010	Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302030060-01	GEHR (Piney Hollow Rd Lane rd)	l to Broad	RIVER	14.97 MILES	0141100015-GEH-2UGRERT54 contains the following monitorin associated SWQS Classification AN0623 PL UGRRT723 PL	g sites and
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban Runoff/Storm
Aquatic Life	Not Supporting	Ν	Copper pH	2006 2006	Low Priority Medium Priority	Sewers • Agriculture
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302030070-01	Penny Pot Stream (GEHR)		RIVER	20.11 MILES	HUC14: 02040302030070 As o the following monitoring sites a SWQS Classification AN0626 I PL UPENNY54 PL	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	рН	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302030080-01	GEHR (Hospitality Br to Piney Hollow Rd)		RIVER	16.68 MILES	0141100015-GEH-2UGRERT5 contains the following monitori associated SWQS Classification GEH-2 PL AN0625 PL UGREE	ng sites and 01411000 PL 15-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban
Aquatic Life	Not Supporting	Ν	Copper pH	2006 2006	Low Priority Medium Priority	Runoff/Storm Sewers • Agriculture
Fish Consumption	Insufficient Information	N				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302040010-01	Hospitality Branch (abov Rd)	e Whitehouse	FRESHWATER LAKE	89.68 ACRES	01411035HHOBLUEB As of 2 following monitoring sites and a	
			RIVER	9.96 MILES	Classification 01411035 PL AN HHOBLUEB PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	рН	2006	Medium Priority	• Transfer of Water from an Outside Watershed
Fish Consumption Primary Contact Recreation Public Water Supply	Insufficient Information Not Supporting Fully Supporting	N N N	Escherichia coli	2006	Completed	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302040020-01	Hospitality Br (Rt 538 to Rd)	Whitehouse	FRESHWATER LAKE RIVER	125.14 ACRES 5.89 MILES	HUC14: 02040302040020 As of 2010 contai the following monitoring sites and associated SWQS Classification 01411050 PL AN0628 HHORT538 PL HHOWHITE PL HWHBLU PL HWHWHITE PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Insufficient Information Fully Supporting Fully Supporting	N N N N	рН	2006	Medium Priority	• Agriculture • Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302040030-01	Hospitality Br (Piney Ho Rt538)	llowRd to	FRESHWATER LAKE RIVER	22.94 ACRES 8.22 MILES	HUC14: 02040302040030 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0629 PL HFAJACKS PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Insufficient Information Fully Supporting Fully Supporting	N N N N	рН	2006	Medium Priority	• Agriculture • Urban Runoff/Storm Sewers

AU ID	AU Name		Water Type	Size	Location Description		
NJ02040302040040-01	White Oak Branch (Hospitality Branch)		RIVER	6.98 MILES	HUC14: 02040302040040 As the following monitoring sites SWQS Classification AN0630 PL	and associated	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Insufficient Information	Ν					
Aquatic Life	Fully Supporting	Ν					
Fish Consumption	Insufficient Information	Ν					
Primary Contact Recreation	Insufficient Information	Ν					
Public Water Supply	Insufficient Information	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040302040050-01	Collings Lakes trib (Hosp Branch)	bitality	FRESHWATER LAKE RIVER	140.94 ACRES 16.71 MILES	the following monitoring sites SWQS Classification AN0631 DSR 50L PL HMABLUEA PI	HUC14: 02040302040050 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0631 PL AN0632 PL DSR 50L PL HMABLUEA PL HMAJACKS PL HMAPINEY PL HMAUNEXS PL NJW162 1 PL NJW162 2 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	
Agricultural Water Supply	Insufficient Information	Ν				Agriculture	
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	• Urban Runoff/Storm	
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2008	Completed	<ul><li>Sewers</li><li>Atmospheric</li></ul>	
Primary Contact Recreation	Insufficient Information	Ν				Depositon - Toxics	
Public Water Supply	Insufficient Information	Ν					
AU ID	AU Name		Water Type	Size	Location Description		
NJ02040302040060-01	Three Pond Branch (Hos Branch)	pitality	FRESHWATER LAKE RIVER	1.6 ACRES 6.08 MILES	the following monitoring sites	HUC14: 02040302040060 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0634 PL HTHREE54 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source	

Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	N				
Primary Contact Recreation	Insufficient Information	N				
Public Water Supply	Insufficient Information	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302040070-01	Rd)		FRESHWATER LAKE RIVER	141.04 ACRES 6.51 MILES	01411071HHORRBDG As of 2010 contains the following monitoring sites and associated SWQS Classification 01411071 PL AN0633 PL HHOCAINS PL HHODIAMO PL HHOEIGHT PL HHORBDG PL NJW170 1 PL NJW170 2 PL NJW170 3 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Agriculture
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Primary Contact Recreation	Not Supporting	Ν	Fecal Coliform	2008	Completed	
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302040080-01	GEHR (39d32m50s to He	ospitality	FRESHWATER LAKE	1.16 ACRES	0141111015-GEH-3	
	Branch)		RIVER	19.89 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Urban
Aquatic Life	Not Supporting	Ν	Copper pH	2006 2006	Low Priority Medium Priority	Runoff/Storm Sewers • Agriculture
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302040090-01	GEHR (Rt 322 to 39d32r	n50s)	RIVER	20.15 MILES	0141111015-GEH-3 As of 2010 following monitoring sites and Classification 01411105 PL 014 GEH-3 PL AN0635 PL BA37 I	associated SWQS 411107 PL 15-
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N		2005		• Transfer of Water from an
Aquatic Life	Not Supporting	Ν	Copper pH	2006 2006	Low Priority Medium Priority	Outside Watershed • Urban
Fish Consumption	Insufficient Information	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Fully Supporting	Ν				Agriculture
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302040100-01	Makepeace Stream (above Makepeace Lake)		RIVER	7.67 MILES	HUC14: 02040302040100	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302040110-01	GEHR (Mare Run to Rt 3	322)	FRESHWATER LAKE	296.38 ACRES	0141111015-GEH-3 As of 2010	
			RIVER	30.45 MILES	following monitoring sites and associated SWQS Classification 01411110 PL MMKRT623 PL NJW04459-108-1 PL NJW04459-108-2 PL NJW04459-108-O PL NJW108 1 PL NJW108 2 PL NJW108 center PL NJW108 OUTLET PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply Aquatic Life	Fully Supporting Not Supporting	N N	Copper pH	2006 2006	Low Priority Medium Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Agriculture</li> </ul>
Fish Consumption	Insufficient Information	N				
Primary Contact Recreation	Fully Supporting	N				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302040120-01	Deep Run (GEHR)		FRESHWATER LAKE RIVER	25.78 ACRES 27.09 MILES	01411140MDEEP559 As of 201 following monitoring sites and a Classification 01411140 PL AN( PL MDEEP559 PL MDEEPR54 PL NJW150 1 PL NJW150 2 PL OUTLET PL	ssociated SWQS 0636 PL AN0637 PL MDEPANCS
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption Primary Contact Recreation Public Water Supply	Fully Supporting Not Supporting Insufficient Information Insufficient Information Fully Supporting	N N N N	рН	2006	Medium Priority	Municipal Point Source Discharges Agriculture Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302040130-01	GEHR (Lake Lenape to M	/lare Run)	FRESHWATER LAKE RIVER	318.25 ACRES 10.87 MILES	0141111015-GEH-3 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0638 PL DSR 36L PL MGREA616 PL MMARE559 PL NJT07 LENBS1 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Fully Supporting Not Supporting Not Supporting	N N N	Copper pH Mercury in Fish Tissue	2006 2006 2008	Low Priority Medium Priority Completed	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Agriculture</li> <li>Atmospheric Depositon -</li> </ul>

						Toxics
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302050010-01	Creek)		FRESHWATER LAKE RIVER	6.33 ACRES 15.42 MILES	HUC14: 02040302050010 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0639 PL LWATER50 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302050020-01	Babcock Creek (GEHR)		FRESHWATER LAKE RIVER	9.14 ACRES 23.98 MILES	01411196LBABC322 As of 2010 contains the following monitoring sites and associated SWQS Classification 01411196 PL AN0640 PL AN0640A PL AN0640B PL LBABC322 PL LJALEIPZ PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Municipal Point Source
Aquatic Life	Not Supporting	Ν	рН	2006	Medium Priority	Discharges <ul> <li>Agriculture</li> </ul>
Fish Consumption	Insufficient Information	Ν				• Urban
Primary Contact Recreation	Fully Supporting	Ν				Runoff/Storm Sewers
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302050030-01	South River (above 39d2	6m15s)	RIVER	18.98 MILES	01411220LSOFORTY As of 2010 contains the following monitoring sites and associated SWQS Classification AN0643 PL LSOESTEL PL	

					LSOUT552 PL 01411220 PL A LCEHARDS PL LSOFORTY P	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Transfer of Water from an
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	Outside Watershed
Fish Consumption	Insufficient Information	Ν				• Agriculture
Primary Contact Recreation	Fully Supporting	Ν				• Urban Runoff/Storm
Public Water Supply	Fully Supporting	Ν				Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302050040-01	South River (below 39d2	6m15s)	FRESHWATER LAKE	13.98 ACRES	01411220LSOFORTY	
			RIVER	24.86 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				• Transfer of Water from an
Aquatic Life	Not Supporting	Ν	рН	2006	Medium Priority	Outside Watershed
Fish Consumption	Insufficient Information	Ν				• Agriculture
Industrial Water Supply	Insufficient Information	Ν				• Urban Runoff/Storm
Primary Contact Recreation	Fully Supporting	Ν				Sewers
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302050050-01	Gravelly Run (above Gra road)	velly Run	FRESHWATER LAKE	2.5 ACRES	HUC14: 02040302050050 As of the following monitoring sites a	
	1020)		RIVER	11.26 MILES	SWQS Classification 01411208 LGRAV559 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				

Primary Contact Recreation	Insufficient Information	N				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302050060-01	GEHR (Miry Run to Lake Lenape)		RIVER	16.85 MILES	HUC14: 02040302050060 As of 2010 contains the following monitoring sites and associated SWQS Classification 2822A SE1 2827A SE1 NJ00-0031 SE1 NJ02-0224 SE1 NJ03-0225 SE R36 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Insufficient Information Not Supporting	N N	Arsenic Cadmium Chromium, hexavalent Copper Lead Mercury in Water Column Nickel Zinc	2006 2008 2008 2008 2006 2008 2006 2006	Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> <li>Agriculture</li> </ul>
Fish Consumption	Not Supporting	Ν	Mercury in Water Column	2008	Low Priority	
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Not Supporting	Ν	Mercury in Water Column	2008	Low Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302050070-01	Miry Run (GEHR)		RIVER	8.82 MILES	HUC14: 02040302050070 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0642 FW2-NT LMIRT559 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				

Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302050080-01	Stephen Creek (GEHR)		FRESHWATER LAKE	61.23 ACRES	01411230LSTEP50S As of 2010	
			RIVER	23.05 MILES	following monitoring sites and associated SWQS Classification 01411230 FW2-NT AN0645 PL AN0646 FW2-NT LSTELEVE PL LSTEP50S	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				<ul><li>Agriculture</li><li>Urban</li></ul>
Aquatic Life	Not Supporting	Ν	рН	2006	Medium Priority	Runoff/Storm
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue PCB in Fish Tissue	2010 2010	Low Priority Low Priority	Sewers
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302050090-01	English Creek / Flat Ck / Ck	Cranberry	FRESHWATER LAKE	12.72 ACRES	HUC14: 02040302050090 As of the following monitoring sites an	
	CK		RIVER	31.89 MILES	SWQS Classification 01411258	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	<ul><li>Agriculture</li><li>Urban</li></ul>
Fish Consumption	Insufficient Information	Ν				Runoff/Storm Sewers
Primary Contact Recreation	Insufficient Information	Ν				Sewers
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302050100-01	Gibson Creek / Jackson Creek		FRESHWATER LAKE RIVER	2.99 ACRES 23.1 MILES	01411241LGIBSO50 As of 2010 contains the following monitoring sites and associated SWQS Classification 01411241 FW2-NT AN0647 FW2- NT LGIBSO50 FW2-NT	

Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302050110-01	Lakes Creek (GEHR)		FRESHWATER LAKE	0.62 ACRES	HUC14: 02040302050110 As of 2010 contains the following monitoring sites and associated SWQS Classification 2803 SE1	
			RIVER	9.78 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2008	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302050120-01	Middle River / Peters Cre	ek	ESTUARY	0.01 SQUARE MILES	HUC14: 02040302050120 As of	
			FRESHWATER LAKE	514.03 ACRES	the following monitoring sites ar SWQS Classification 2900 SE1 2900B SE1 2900C SE1 2900D S	2900A SE1
			RIVER	88.83 MILES	2900B SEI 2900C SEI 2900D S DSR 25L SEI	EI 2900E SEI
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	N	Oxygen, Dissolved	2006	Medium Priority	• Agriculture
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Completed	• Urban Runoff/Storm
Primary Contact Recreation	Insufficient Information	Ν				Sewers
Shellfish Harvesting	Fully Supporting	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302050130-01	Great Egg Harbor R (GEH Bay to Miry Run)		RIVER	29.97 MILES	HUC14: 02040302050130 As of 2010 contains the following monitoring sites and associated SWQS Classification 2814 SE1 2814A SE1 2821B SE1 NJ00-0027 SE1 NJ01-0032 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Cadmium Chromium (total) Copper Lead Nickel Oxygen, Dissolved Zinc	2006 2008 2008 2006 2006 2006 2006	Low Priority Low Priority Low Priority Low Priority Medium Priority Low Priority	
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Low Priority	
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302050140-01	Great Egg Harbor R (GE Gibson Crk)	H Bay to	RIVER	27.71 MILES	HUC14: 02040302050140 As of 2010 contains the following monitoring sites and associated SWQS Classification 2801 SE1 2801A SE1 2804 SE1 2812 SE1 NJ02-0221 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Cadmium Chromium (total) Copper Lead Nickel Oxygen, Dissolved Zinc	2010 2010 2010 2010 2010 2010 2010	Low Priority Low Priority Low Priority Low Priority Low Priority Medium Priority Low Priority	
Fish Consumption	Not Supporting	Ν	Mercury in Fish Tissue	2010	Low Priority	
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2010	Completed	
AU ID	AU Name		Water Type	Size	Location Description	

NJ02040302060010-01	Mill Br (above Cardiff-Bargaintown rd)		RIVER	8.22 MILES	HUC14: 02040302060010 As of the following monitoring sites a SWQS Classification AMILL68	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Not Supporting	Ν	Cause Unknown	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302060020-01	Maple Run/Mill Br(Zion	Rd to Cardiff	FRESHWATER LAKE	38.97 ACRES	HUC14: 02040302060020 As of the following monitoring sites a	
	rd)		RIVER	11.03 MILES	SWQS Classification 01411305 PL AMAMILI FW2-NT AN0619 FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Industrial Water Supply	Fully Supporting	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302060030-01	Patcong Creek (Somers A Rd)	Ave to Zion	FRESHWATER LAKE RIVER	50.48 ACRES 35.06 MILES	HUC14: 02040302060030 As c the following monitoring sites a SWQS Classification 2863B SE 2863D SE1 2863E SE1 2863G 2863L SE1 2863M SE1 NJW04	nd associated E1 2863C SE1 SE1 2863H SE1
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2008	Medium Priority	• Urban

						Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302060040-01	GEH Bay/Lakes Bay/Sku	Ill Bay/Peck	ESTUARY	16.23 SQUARE MILES	HUC14: 02040302060040 As of	
	Bay R		RIVER	173.11 MILES	the following monitoring sites and associated SWQS Classification 2507A SE1 2510A SE1 2511A SE1 2520 SE1 2522A SE1 2524 SE1 2536 SE1 2604A SE1 270	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	• Transfer of Water from an
Fish Consumption	Insufficient Information	Ν				Outside
Primary Contact Recreation	Fully Supporting	Ν				<ul><li>Watershed</li><li>Agriculture</li></ul>
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2008	Completed	• Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
				14.14 ACRES	HUC14: 02040302070010	
NJ02040302070010-01	Tuckahoe R (above Cum	berland Ave)	FRESHWATER LAKE	THITTHERED	110 0111 020 10502070010	
NJ02040302070010-01	Tuckahoe R (above Cum	berland Ave)	FRESHWATER LAKE RIVER	12.39 MILES	110011.020102070010	
NJ02040302070010-01 Use	Tuckahoe R (above Cum Attainment	Threatened			TMDL Status	Source
	, , , , , , , , , , , , , , , , , , ,	,	RIVER	12.39 MILES		Agriculture
Use	Attainment	Threatened	RIVER	12.39 MILES		<ul> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
Use Agricultural Water Supply	Attainment Fully Supporting	<b>Threatened</b> N	RIVER Cause	12.39 MILES Cycle First Listed	TMDL Status	<ul><li>Agriculture</li><li>Urban</li></ul>
Use Agricultural Water Supply Aquatic Life	Attainment Fully Supporting Not Supporting	<b>Threatened</b> N N	RIVER Cause	12.39 MILES Cycle First Listed	TMDL Status	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
Use Agricultural Water Supply Aquatic Life Fish Consumption	Attainment       Fully Supporting       Not Supporting       Insufficient Information	Threatened N N N	RIVER Cause	12.39 MILES Cycle First Listed	TMDL Status	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
Use Agricultural Water Supply Aquatic Life Fish Consumption Primary Contact Recreation	Attainment         Fully Supporting         Not Supporting         Insufficient Information         Insufficient Information	Threatened N N N N	RIVER Cause	12.39 MILES Cycle First Listed	TMDL Status	<ul> <li>Agriculture</li> <li>Urban Runoff/Storm</li> </ul>
Use Agricultural Water Supply Aquatic Life Fish Consumption Primary Contact Recreation Public Water Supply	Attainment         Fully Supporting         Not Supporting         Insufficient Information         Insufficient Information         Fully Supporting	Threatened N N N N	RIVER Cause pH	12.39 MILES Cycle First Listed 2006	TMDL Status Medium Priority	Agriculture     Urban Runoff/Storm Sewers

					TTUCUMBS PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	N				Agriculture
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name V		Water Type	Size	Location Description	
NJ02040302070030-01	McNeals Branch (Tuckahoe River)		RIVER	9.78 MILES	HUC14: 02040302070030 As of the following monitoring sites a SWQS Classification AN0651 F	nd associated
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302070040-01	Tuckahoe River (Rt 49 to 39d19m52s)	,	RIVER	8.66 MILES	HUC14: 02040302070040 As or the following monitoring sites a SWQS Classification 01411295 AN0650 FW2-NT TTU49HUN	nd associated PL AN0649 PL
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Fully Supporting	Ν				Agriculture
Aquatic Life	Not Supporting	Ν	pH	2006	Medium Priority	Urban Runoff/Storm
Fish Consumption	Insufficient Information	Ν				Sewers
Primary Contact Recreation	Fully Supporting	Ν				

Public Water Supply	Fully Supporting	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302070050-01	Tarkiln Brook (Tuckahoe River)		RIVER	10.41 MILES	HUC14: 02040302070050 As of 2010 contain the following monitoring sites and associated SWQS Classification TTAR548S PL TTARKBOG PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Public Water Supply	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302070060-01	Mill Creek / Back Run (T River)	[°] uckahoe	FRESHWATER LAKE RIVER	11.55 ACRES 10.83 MILES	HUC14: 02040302070060 As of 2010 contains the following monitoring sites and associated SWQS Classification AN0652 PL TMILL557 PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302070070-01	Halfway Creek		FRESHWATER LAKE	19.39 ACRES	HUC14: 02040302070070	
			RIVER	14.12 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				

Primary Contact Recreation	Insufficient Information	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302070080-01	Cedar Swamp Ck/Cedar	Swamp	FRESHWATER LAKE	203.04 ACRES	HUC14: 02040302070080 As of	
	(above Rt 50)		RIVER	16.34 MILES	the following monitoring sites an SWQS Classification NJW284 1	FW2-NT
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302070090-01	Cedar Swamp Ck (below	Rt 50)	RIVER	22.24 MILES	HUC14: 02040302070090	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	N				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302070100-01	Willis Thorofare / Hughe	s Creek	RIVER	34.14 MILES	HUC14: 02040302070100	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Shellfish Harvesting	Fully Supporting	N				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302070110-01	Tuckahoe River (below F	Rt 49)	FRESHWATER LAKE RIVER	25.85 ACRES 21.53 MILES	HUC14: 02040302070110 As of 2010 contains the following monitoring sites and associated SWQS Classification 01411300 FW2-NT NJ0 0024 SE1 NJ03-0218 SE1 R37 SE1 TTU49HE FW2-NT TWAAETNA PL	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved pH	2006 2010	Medium Priority Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302070120-01	Tuckahoe River (lower)		FRESHWATER LAKE RIVER	8.45 ACRES 42.33 MILES	HUC14: 02040302070120 As of 2010 contains the following monitoring sites and associated SWQS Classification 2901A SE1 2902A SE1 NJ02-0219 SE1	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	pH	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302080010-01	Crook Horn Creek (above Island)	e Devils	ESTUARY	0.32 SQUARE MILES	HUC14: 02040302080010 As of	
	Island)		FRESHWATER LAKE	3.52 ACRES	the following monitoring sites a SWQS Classification 3007A SE	1 3011C SE1
			RIVER	33.32 MILES	3101A SE1 CCMPCC0010 SE1 SE1 L7062129334 SE1	L/060429545
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	• Industrial Point Source

Fish Consumption Primary Contact Recreation Shellfish Harvesting	Insufficient Information Fully Supporting Not Supporting	N N N	Total Coliform	2008	Completed / Medium Priority	Discharge • Municipal Point Source Discharges • Agriculture • Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302080020-01			ESTUARY RIVER	3.43 SQUARE MILES 79.05 MILES	HUC14: 02040302080020 As of 2010 contains the following monitoring sites and associated SWQS Classification 3103A SE1 3105A SE1 3115 SE1 3122A SE1 CCMPCC0095 SE1 CCMPCC0102 SE1 L7063129306 SE1 L7063329228 SE1 L7066629	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302080030-01	Mill Creek / Sunks Ck / F Creek	Big Elder	ESTUARY FRESHWATER LAKE RIVER	0.09 SQUARE MILES 33.96 ACRES 29.48 MILES	HUC14: 02040302080030 As of 2010 contains the following monitoring sites and associated SWQS Classification NJW228 1 FW2-NT NJW228 2 FW2-NT NJW228 Center FW2-NT NJW228 OUTLET FW2-NT	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Fully Supporting	Ν				Agriculture
Fish Consumption	Insufficient Information	Ν				• Urban Runoff/Storm
Primary Contact Recreation	Insufficient Information	Ν				Sewers
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2008	Completed / Medium Priority	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302080040-01	Cape May Bays (Reuben	s Wharf-	ESTUARY	3.7 SQUARE MILES	HUC14: 02040302080040 As of	2010 contains

	BigElderCk)		FRESHWATER LAKE RIVER	2.06 ACRES 126.3 MILES	the following monitoring sites a SWQS Classification 3127C SE SE1 3214B SE1 3215 SE1 3215 CCMPCC0016 SE1 CCMPCC0 CCMPCC	1 3201 SE1 3214 A SE1
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302080050-01 Cape May Court		bs	ESTUARY	0.07 SQUARE MILES	HUC14: 02040302080050 As of the following monitoring sites a	
			FRESHWATER LAKE	23.2 ACRES	the following monitoring sites and associated SWQS Classification 3307T SE1	
			RIVER	24.05 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Fully Supporting	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Insufficient Information	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302080060-01	Mommy Teal Ck / Cresse Gravelly Run	e Ck /	ESTUARY	0.12 SQUARE MILES	HUC14: 02040302080060	
	Graveny Kun		FRESHWATER LAKE	10.28 ACRES		
			RIVER	53.19 MILES		
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	Ν				
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	Ν				

AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302080070-01	Cape May Bays (Rt 47 to Wharf)	Reubens	ESTUARY RIVER	10.87 SQUARE MILES 123.53 MILES	HUC14: 02040302080070 As of 2010 contains the following monitoring sites and associated SWQS Classification 3307A SE1 3307B SE1 3307N SE1 3312 SE1 3403C SE1 3409H SE1 3411E SE1 3503B SE1 3504	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status Source	
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302080080-01	Creek		ESTUARY FRESHWATER LAKE RIVER	0.03 SQUARE MILES 12.12 ACRES 40.94 MILES	HUC14: 02040302080080	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Insufficient Information	N				
Fish Consumption	Insufficient Information	N				
Primary Contact Recreation	Fully Supporting	N				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2008	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302080090-01	Cape May Harbor & Bays (below Rt 47)		ESTUARY RIVER	2.75 SQUARE MILES 61.95 MILES	HUC14: 02040302080090 As of 2010 contains the following monitoring sites and associated SWQS Classification 3516C SE1 3602D SE1 3607 SE1 3607A SE1 3614 SE1 3614A SE1 3616 SE1 3616B SE1 3617	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2010	Medium Priority	
Fish Consumption	Insufficient Information	Ν				

		I				
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2006	Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302910010-01	, , , , , , , , , , , , , , , , , , , ,		OCEAN RIVER	36.35 SQUARE MILES 0.07 MILES	HUC14: 02040302910010 As of 2010 contains the following monitoring sites and associated SWQS Classification A65B SC A65B2 SC A66B SC A66B2 SC A68B2 SC CCMPAC1001 SC CCMPAC1092 SC JC73 SC	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Not Supporting Not Supporting	N N	Oxygen, Dissolved DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006	Medium Priority Low Priority Low Priority Low Priority Low Priority Low Priority	Urban Runoff/Storm Sewers Atmospheric Depositon - Toxics Source Unknown
Primary Contact Recreation	Fully Supporting	Ν				Unknown
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302920010-01	Atl Coast(Absecon In to	Ventnor)	OCEAN	15.56 SQUARE MILES	HUC14: 02040302920010 As of 2010 contains the following monitoring sites and associated SWQS Classification A71A SC A74A SC CCMPAC1004 SC CCMPAC1007 SC CCMPAC1012 SC CCMPAC1015 SC CCMPAC1016 SC CCMPAC1017 SC CCMPAC1067 SC CCMP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Not Supporting Not Supporting	N N	Oxygen, Dissolved DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006	Medium Priority Low Priority Low Priority Low Priority Low Priority Low Priority	Municipal Point Source Discharges     Urban Runoff/Storm Sewers
			Polychiofmated bipmenyis	2000	Low Thomy	<ul> <li>Atmospheric Depositon -</li> </ul>

Shellfish Harvesting	Fully Supporting	Ν				• Source Unknown
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302920020-01	Atl Coast(Ventnor to Great Egg)		OCEAN	17.14 SQUARE MILES	HUC14: 02040302920020 As the following monitoring sites SWQS Classification A77B S SC CCMPAC1038 SC CCMF CCMPAC1086 SC CCMPAC CCMPAC1088 SC CCMPAC CCMPAC1094 SC CCMPAC	and associated C CCMPAC1024 AC1044 SC 1087 SC 1089 SC
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Not Supporting Not Supporting	N N	Oxygen, Dissolved DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006	Medium Priority Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> </ul>
Primary Contact Recreation	Fully Supporting	Ν				UIKIIOWII
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302930010-01	Atl Coast(Great Egg to 3	4th St)	OCEAN	16.89 SQUARE MILES	HUC14: 02040302930010 As of 2010 contains the following monitoring sites and associated SWQS Classification A81B SC A82A2 SC CCMPCC1101 SC CCMPCC1103 SC CCMPCC1104 SC CCMPCC1160 SC CCMPCC1162 SC CCMPCC1181 SC CCMPCC1182 SC CCMPC	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006	Low Priority Low Priority Low Priority Low Priority Low Priority	Kunoff/Storm Sewers • Atmospheric Depositon - Toxics • Source Unknown
Primary Contact Recreation	Fully Supporting	Ν				Chkhowh

Shellfish Harvesting	Fully Supporting	N				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302940010-01	Atl Coast(34th St to Corson Inl)		OCEAN	11.54 SQUARE MILES	HUC14: 02040302940010 As the following monitoring sites SWQS Classification A85A2 CCMPCC1105 SC CCMPCC JC85E SC JC85G SC L70452 L7056129238 SC	and associated SC A87A SC 1184 SC JC83 SC
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Not Supporting Not Supporting	N N	Oxygen, Dissolved DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006	Medium Priority Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> </ul>
Primary Contact Recreation	Fully Supporting	Ν				UIKIIOWII
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302940020-01	At Coast(Corson to Tow	nsends In)	OCEAN	23.01 SQUARE MILES	HUC14: 02030902940020 As the following monitoring sites SWQS Classification CCMPC CCMPCC1107 SC CCMPCC CCMPCC1163 SC CCMPCC CCMPCC1177 SC CCMPCC CCMPCC1186 SC CCMPCC CCMPCC11	and associated C1106 SC 1108 SC 1166 SC 1185 SC
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Not Supporting Not Supporting	N N	Oxygen, Dissolved DDD	2010 2010	Medium Priority Low Priority	• Urban Runoff/Storm Sewers
Ŷ			DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2010 2010 2010 2010	Low Priority Low Priority Low Priority Low Priority	<ul> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> </ul>
Primary Contact Recreation	Fully Supporting	Ν				

Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302940030-01	Atl Cst(Townsends to H	ereford In)	OCEAN	30.93 SQUARE MILES	HUC14: 02030902940030 As o the following monitoring sites a SWQS Classification 3310 SC 3 SC A94A SC A94A2 SC CCMI CCMPCC1111 SC CCMPCC11 CCMPCC1156 SC	nd associated 3310A SC A93A2 PCC1051 SC
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Not Supporting Not Supporting	N N	Oxygen, Dissolved DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2010 2010 2010 2010 2010 2010	Medium Priority Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> </ul>
Primary Contact Recreation	Fully Supporting	Ν				Unknown
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302940040-01	Atl Cst(Hereford to Cape	e May In)	OCEAN	19.42 SQUARE MILES	HUC14: 02040302940040 As o the following monitoring sites a SWQS Classification A101A St CCMPCC1116 SC CCMPCC11 CCMPCC1120 SC CCMPCC11 CCMPCC1122 SC CCMPCC11 CCMPCC1124 SC CCMPCC	nd associated C A105A2 SC 19 SC 21 SC
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2006	Medium Priority	• Urban Runoff/Storm
Fish Consumption	Not Supporting	Ν	DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006	Low Priority Low Priority Low Priority Low Priority Low Priority	Runoff/Storm Sewers • Atmospheric Depositon - Toxics • Source Unknown
Primary Contact Recreation	Fully Supporting	Ν				

Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040302940050-01	Atl Cst(CM Inlet to Cape	e May Pt)	OCEAN	19.42 SQUARE MILES	HUC14: 02040302940050 As of 2010 contains the following monitoring sites and associated SWQS Classification A107A SC A110A SC A110B SC C106A1 SC CCMPCC1129 SC CCMPCC1130 SC CCMPCC1133 SC CCMPCC1134 SC CCMPCC1135 SC CCMP	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Not Supporting Not Supporting	N N	Oxygen, Dissolved DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2006 2006 2006 2006 2006 2010	Medium Priority Low Priority Low Priority Low Priority Low Priority Low Priority	• Atmospheric Depositon - Toxics
Primary Contact Recreation	Fully Supporting	Ν				
Shellfish Harvesting	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJ02040303060201-01	Atl Coast (off Cape May	Pt)	OCEAN	6.64 SQUARE MILES	Atlantic Coast (off Cape May Pt	)
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Not Supporting	Ν	Oxygen, Dissolved	2010	Medium Priority	
Fish Consumption	Not Supporting	Ν	DDD DDE	2010 2010	Low Priority Low Priority	
			DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2010 2010 2010 2010	Low Priority Low Priority Low Priority	
Primary Contact Recreation	Fully Supporting	N	DDT Mercury in Fish Tissue	2010 2010	Low Priority Low Priority	
Primary Contact Recreation Shellfish Harvesting	Fully Supporting Fully Supporting	N N	DDT Mercury in Fish Tissue	2010 2010	Low Priority Low Priority	
-			DDT Mercury in Fish Tissue	2010 2010	Low Priority Low Priority	
Shellfish Harvesting	Fully Supporting		DDT Mercury in Fish Tissue PCB in Fish Tissue	2010 2010 2010	Low Priority Low Priority Low Priority	

Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric
Aquatic Life Fish Consumption Industrial Water Supply	Not Supporting Not Supporting Insufficient Information	N N N	pH Chlordane DDD DDE DDT Mercury in Fish Tissue Polychlorinated biphenyls	2008 2006 2006 2006 2006 2006 2006	Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority Low Priority	Depositon - Toxics • Source Unknown • Industrial Point Source Discharge • Municipal Point Source Discharges • Package Plant or Other
Primary Contact Recreation Public Water Supply	Fully Supporting Fully Supporting	N N				Permitted Small Flows Discharges • Urban Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJDELAWARE RIVER 15	Delaware River 2		RIVER	25 MILES	HUC14: Delaware River	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life Fish Consumption	Insufficient Information Not Supporting Not Supporting	N N N	Oxygen, Dissolved Turbidity Chlordane DDD DDE DDT Dieldrin Mercury in Fish Tissue PCB in Fish Tissue	2010 2010 2006 2006 2006 2006 2006 2006	Low Priority Low Priority Medium Priority Medium Priority Medium Priority Low Priority Low Priority Low Priority Completed	Atmospheric Depositon - Toxics     Source Unknown     Industrial Point Source Discharge     Municipal Point Source Discharges     Package Plant
Aquatic Life	Not Supporting	Ν	Turbidity Chlordane DDD DDE DDT Dieldrin Mercury in Fish Tissue	2010 2006 2006 2006 2006 2006 2006	Low Priority Medium Priority Medium Priority Medium Priority Low Priority Low Priority	Depositon - Toxics • Source Unknown • Industrial Point Source Discharge • Municipal Point Source Discharges

NJDELAWARE RIVER 16	Delaware River 3		RIVER	13.4 MILES	HUC14: Delaware River	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply Aquatic Life	Insufficient Information Fully Supporting	N N				• Atmospheric Depositon - Toxics
Fish Consumption	Not Supporting	Ν	Chlordane DDD DDE DDT Dieldrin Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006 2008	Medium Priority Medium Priority Medium Priority Medium Priority Low Priority Low Priority Completed	<ul> <li>Source Unknown</li> <li>Combined Sewer Overflows</li> <li>Industrial Point Source Discharge</li> <li>Maniating</li> </ul>
Industrial Water Supply	Insufficient Information	Ν				Municipal     Point Source     Discharges
Primary Contact Recreation	Fully Supporting	Ν				Urban Runoff/Storm
Public Water Supply	Fully Supporting	Ν				Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJDELAWARE RIVER 17	Delaware River 4		RIVER	16.2 MILES	HUC14: Delaware River	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Insufficient Information	Ν				• Atmospheric Depositon -
Aquatic Life	Fully Supporting	Ν				Toxics • Source
Fish Consumption	Not Supporting	Ν	Chlordane DDD DDE DDT Dieldrin Mercury in Fish Tissue PCB in Fish Tissue	2006 2006 2006 2006 2006 2006 2008	Medium Priority Medium Priority Medium Priority Medium Priority Low Priority Low Priority Completed	<ul> <li>Source</li> <li>Unknown</li> <li>Industrial</li> <li>Point Source</li> <li>Discharge</li> <li>Municipal</li> <li>Point Source</li> <li>Discharges</li> <li>Urban</li> </ul>
Primary Contact Recreation	Fully Supporting	Ν				Runoff/Storm Sewers
AU ID	AU Name		Water Type	Size	Location Description	
NJDELAWARE RIVER 18	Delaware River 5A		RIVER	8.4 MILES	HUC14: Delaware River	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Aquatic Life Fish Consumption Primary Contact Recreation	Not Supporting Not Supporting Fully Supporting	N N	Oxygen, Dissolved Chlordane in Fish Tissue DDD DDE DDT Dieldrin Mercury in Fish Tissue PCB in Fish Tissue	2008 2008 2006 2006 2006 2006 2006 2008	Low Priority Medium Priority Medium Priority Medium Priority Low Priority Medium Priority Completed	<ul> <li>Industrial Point Source Discharge</li> <li>Municipal Point Source Discharges</li> <li>Package Plant or Other Permitted Small Flows Discharges</li> <li>Urban Runoff/Storm Sewers</li> <li>Source Unknown</li> <li>Atmospheric Depositon - Toxics</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJDELAWARE RIVER 19	Delaware River 5B		RIVER	10 MILES	HUC14: Delaware River: DRB0 ending at Alloway Creek. Repre portions of old Zone 5.	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption Primary Contact Recreation	Not Supporting Not Supporting Fully Supporting	N N N	Oxygen, Dissolved Chlordane DDD DDE DDT Dieldrin Mercury in Fish Tissue Polychlorinated biphenyls	2008 2006 2006 2006 2006 2006 2006 2008	Low Priority Medium Priority Medium Priority Medium Priority Low Priority Low Priority Medium Priority Completed	<ul> <li>Industrial Point Source Discharge</li> <li>Municipal Point Source Discharges</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> <li>Source Unknown</li> </ul>
AU ID	AU Name		Water Type	Size	Location Description	
NJDELAWARE RIVER 2	Delaware River 1C		RIVER	37.8 MILES	HUC14: Delaware River	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source

Agricultural Water Supply Aquatic Life Fish Consumption	Insufficient Information Insufficient Information Not Supporting	N N N	Chlordane in Fish Tissue DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2008 2006 2006 2006 2006 2006 2008	Medium Priority Medium Priority Medium Priority Medium Priority Low Priority Low Priority	<ul> <li>Source Unknown</li> <li>Atmospheric Depositon - Toxics</li> </ul>
Industrial Water Supply	Insufficient Information	Ν				
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				
AU ID	AU Name		Water Type	Size	Location Description	
NJDELAWARE RIVER 20	Delaware River 5C		ESTUARY RIVER	8.12 SQUARE MILES 15 MILES	HUC14: Delaware River Downs extention is alloway creek, just u designated shellfish waters.	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life Fish Consumption	Not Supporting Not Supporting	N N	Oxygen, Dissolved Chlordane DDD DDE DDT Dieldrin Mercury in Fish Tissue Polychlorinated biphenyls	2006 2006 2006 2006 2006 2006 2006 2008	Low Priority Medium Priority Medium Priority Medium Priority Low Priority Low Priority Medium Priority Completed	<ul> <li>Industrial Point Source Discharge</li> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Atmospheric Depositon - Toxics</li> </ul>
Primary Contact Recreation	Fully Supporting	N				• Source
Shellfish Harvesting	Not Supporting	Ν	Total Coliform	2008	Completed	Unknown
AU ID	AU Name		Water Type	Size	Location Description	
NJDELAWARE RIVER 6	Delaware Bay Zone 6 ( N portion)	lew Jersey	BAY(S) & HARBOR	359.8 SQUARE MILES	NJ portion of the Delaware Bay. Specifically the NJ portion of DRBC's Zone 6. Note AU number is taken from the Del R (Deep Water) HUC-14 unit	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Aquatic Life	Fully Supporting	Ν				

Fish Consumption Primary Contact Recreation Shellfish Harvesting	Not Supporting Not Supporting Not Supporting	N N N	Chlordane in Fish Tissue DDD DDE DDT Dieldrin Mercury in Fish Tissue PCB in Fish Tissue Enterococcus Total Coliform	2010 2010 2010 2010 2010 2010 2010 2010	Low Priority Low Priority Low Priority Low Priority Low Priority Completed / Low Priority Completed Completed	
AU ID	AU Name		Water Type	Size	Location Description	
NJDELAWARE RIVER 8	Delaware River 1D		RIVER	33.3 MILES	HUC14: Delaware River	
Use	Attainment	Threatened	Cause	Cycle First Listed	TMDL Status	Source
Agricultural Water Supply	Not Assessed	Ν				• Source Unknown
Aquatic Life	Fully Supporting	Ν				Atmospheric     Depositon -
Fish Consumption	Not Supporting	Ν	Chlordane in Fish Tissue DDD DDE DDT Mercury in Fish Tissue PCB in Fish Tissue	2008 2006 2006 2006 2006 2008	Medium Priority Low Priority Low Priority Low Priority Low Priority Low Priority	<ul> <li>Depositori - Toxics</li> <li>Industrial Point Source Discharge</li> <li>Urban Runoff/Storm Sewers</li> </ul>
Industrial Water Supply	Insufficient Information	Ν				50 WC15
Primary Contact Recreation	Fully Supporting	Ν				
Public Water Supply	Fully Supporting	Ν				

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02040302020030-01	Absecon Ck (AC Reserviors) (gage to SB)	Mercury in Water Column	М	Beyond 2012
NJ02040302020040-01	Absecon Creek (below gage)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040302020040-01	Absecon Creek (below gage)	Oxygen, Dissolved	М	Beyond 2012
NJ02040302020010-01	Absecon Creek NB	pH	М	Beyond 2012
NJ02040302020010-01	Absecon Creek NB	Mercury in Fish Tissue	L	Beyond 2012 Beyond 2012
				Defond 2012
NJ02040302020020-01	Absecon Creek SB	Mercury in Water Column	М	Beyond 2012
NJ02040301160110-01	Albertson Brook / Gun Branch	pH	М	Beyond 2012
NJ02040105210010-01	Alexauken Ck (above 74d 55m)	Temperature, water	М	Beyond 2012
NJ02040105210020-01	Alexauken Ck (below 74d 55m to 11BA06)	Temperature, water	М	Beyond 2012 Beyond 2012
		Total Suspended Solids		201002012
NJ02040206060020-01	Alloway Ck (above Alloway-Woodstown Rd)	(TSS)	М	Beyond 2012
NJ02040206060020-01	Alloway Ck (above Alloway-Woodstown Rd)	Phosphorus (Total)	M	Beyond 2012 Beyond 2012
NJ02040206060020-01	Alloway Ck (above Alloway-Woodstown Rd)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02040206060090-01	Alloway Ck (below HancocksBr) to Salem R	Polychlorinated biphenyls	L	Beyond 2012 Beyond 2012
NJ02040206060080-01	Alloway Ck (HancocksBridge to NewBridge)	Polychlorinated biphenyls	L	Beyond 2012 Beyond 2012
NJ02040206060050-01	Alloway Ck (Quinton to Alloway-WdstwnRd)	Cause Unknown	M	Beyond 2012 Beyond 2012
NJ02040206060050-01	Alloway Ck (Quinton to Alloway-Wdstwirkd)	Polychlorinated biphenyls	L	Beyond 2012 Beyond 2012
NJ02040206060060-01	Alloway Creek (New Bridge to Quinton)	Polychlorinated biphenyls	L	Beyond 2012 Beyond 2012
NJ02040202120060-01	Almonesson Creek	Oxygen, Dissolved	M	Beyond 2012 Beyond 2012
NJ02040202120060-01	Almonesson Creek	Polychlorinated biphenyls	L	Beyond 2012 Beyond 2012
NJ02030105120120-01	Ambrose Brook (below Lake Nelson)	Cause Unknown	M	Beyond 2012 Beyond 2012
NJ02030103120120-01	Androse Brook (delow Lake Nelson)		IVI	Beyond 2012
NJ02030104050120-01	Arthur Kill waterfront (below Grasselli)	Hexachlorobenzene	М	Beyond 2012
11302030104030120 01	Andra Kin waternone (below Grasseni)	Dioxin (including 2,3,7,8-	111	Deyond 2012
NJ02030104050120-01	Arthur Kill waterfront (below Grasselli)	TCDD)	М	Beyond 2012
NJ02030104050120-01	Arthur Kill waterfront (below Grasselli)	Dieldrin	M	Beyond 2012 Beyond 2012
NJ02030104050120-01	Arthur Kill waterfront (below Grasselli)	DDT	M	Beyond 2012 Beyond 2012
NJ02030104050120-01	Arthur Kill waterfront (below Grasselli)	DDE	M	Beyond 2012 Beyond 2012
NJ02030104050120-01	Arthur Kill waterfront (below Grasselli)	DDD	M	Beyond 2012 Beyond 2012
NJ02030104050120-01	Arthur Kill waterfront (below Grasselli)	Chlordane	M	Beyond 2012 Beyond 2012
NJ02030104050120-01	Arthur Kill waterfront (below Grasselli)	Cause Unknown	M	Beyond 2012 Beyond 2012
NJ02030104050120-01	Arthur Kill waterfront (below Grasselli)	Benzo(a)pyrene (PAHs)	M	Beyond 2012 Beyond 2012
NJ02030104050120-01	Arthur Kill waterfront (below Grasselli)	Heptachlor epoxide	M	Beyond 2012 Beyond 2012
NJ02030104050120-01	Arthur Kill waterfront (below Grasselli)	PCB in Fish Tissue	M	Beyond 2012 Beyond 2012
NJ02040201100040-01	Assiscunk Ck (Jacksonville rd to Rt 206)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02040201100040-01	Assiscunk Ck (Jacksonville rd to Rt 200)	Cause Unknown	M	Beyond 2012 Beyond 2012
NJ02040201100050-01	Assiscunk Ck (Neck Rd to Jacksonville rd)	Polychlorinated biphenyls	L	Beyond 2012 Beyond 2012
NJ02040201100050-01	Assiscunk Ck(Neck Rd to Jacksonville rd)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02040201100050-01	Assiscunk Ck(Neck Rd to Jacksonville rd)	Cause Unknown	M	Beyond 2012 Beyond 2012
1302070201100030-01		Total Suspended Solids	141	
NJ02040201100010-01	Assiscunk Creek (above Rt 206)	(TSS)	М	Beyond 2012
NJ02040201100010-01	Assiscunk Creek (above Rt 200)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02040201100010-01	Assiscunk Creek (below Neck Rd)	Polychlorinated biphenyls	L	-
				Beyond 2012
NJ02040105230010-01	Assunpink Ck (above Assunpink Lake)	Cause Unknown	M	Beyond 2012
NJ02040105230020-01	Assunpink Ck (NewSharonBr to/incl Lake)	Mercury in Fish Tissue	L	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02040105230020-01	Assunpink Ck (NewSharonBr to/incl Lake)	Phosphorus (Total)	М	Beyond 2012
		Total Suspended Solids		
NJ02040105230020-01	Assunpink Ck (NewSharonBr to/incl Lake)	(TSS)	М	Beyond 2012
NJ02040105230050-01	Assunpink Ck (Shipetaukin to Trenton Rd)	Arsenic	L	Beyond 2012
NJ02040105230050-01	Assunpink Ck (Shipetaukin to Trenton Rd)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040105230050-01	Assunpink Ck (Shipetaukin to Trenton Rd)	Cause Unknown	М	Beyond 2012
NJ02040105230040-01	Assunpink Ck (TrentonRd to NewSharonBr)	Escherichia coli	М	Beyond 2012
NJ02040105230040-01	Assunpink Ck (TrentonRd to NewSharonBr)	Cause Unknown	М	Beyond 2012
NJ02040105230040-01	Assunpink Ck (TrentonRd to NewSharonBr)	Arsenic	L	Beyond 2012
NJ02040105230040-01	Assunpink Ck (TrentonRd to NewSharonBr)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040105240060-01	Assunpink Creek (below Shipetaukin Ck)	pH	М	Beyond 2012
NJ02040105240060-01	Assunpink Creek (below Shipetaukin Ck)	Arsenic	L	Beyond 2012
NJ02040105240060-01	Assunpink Creek (below Shipetaukin Ck)	Lead	L	Beyond 2012
NJ02040105240060-01	Assunpink Creek (below Shipetaukin Ck)	Phosphorus (Total)	М	Beyond 2012
NJ02040105240060-01	Assunpink Creek (below Shipetaukin Ck)	Oxygen, Dissolved	М	Beyond 2012
NJ02040105240060-01	Assunpink Creek (below Shipetaukin Ck)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040302940020-01	At Coast(Corson to Townsends In)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040302940020-01	At Coast(Corson to Townsends In)	DDD	L	Beyond 2012
NJ02040302940020-01	At Coast(Corson to Townsends In)	DDE	L	Beyond 2012
NJ02040302940020-01	At Coast(Corson to Townsends In)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040302940020-01	At Coast(Corson to Townsends In)	DDT	L	Beyond 2012
NJ02040302940020-01	At Coast(Corson to Townsends In)	Oxygen, Dissolved	М	Beyond 2012
NJ02040301910020-01	Atl Coast (Herring Is to Rt 37)	DDD	L	Beyond 2012
NJ02040301910020-01	Atl Coast (Herring Is to Rt 37)	DDE	L	Beyond 2012
NJ02040301910020-01	Atl Coast (Herring Is to Rt 37)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301910020-01	Atl Coast (Herring Is to Rt 37)	Oxygen, Dissolved	М	Beyond 2012
NJ02040301910020-01	Atl Coast (Herring Is to Rt 37)	DDT	L	Beyond 2012
NJ02040301910020-01	Atl Coast (Herring Is to Rt 37)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040303060201-01	Atl Coast (off Cape May Pt)	PCB in Fish Tissue	L	Beyond 2012
NJ02040303060201-01	Atl Coast (off Cape May Pt)	DDD	L	Beyond 2012
NJ02040303060201-01	Atl Coast (off Cape May Pt)	DDE	L	Beyond 2012
NJ02040303060201-01	Atl Coast (off Cape May Pt)	DDT	L	Beyond 2012
NJ02040303060201-01	Atl Coast (off Cape May Pt)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040303060201-01	Atl Coast (off Cape May Pt)	Oxygen, Dissolved	М	Beyond 2012
NJ02030104930020-01	Atl Coast (Shark R to Manasquan)	Polychlorinated biphenyls	L	Beyond 2012
NJ02030104930020-01	Atl Coast (Shark R to Manasquan)	DDT	L	Beyond 2012
NJ02030104930020-01	Atl Coast (Shark R to Manasquan)	DDE	L	Beyond 2012
NJ02030104930020-01	Atl Coast (Shark R to Manasquan)	Oxygen, Dissolved	М	Beyond 2012
NJ02030104930020-01	Atl Coast (Shark R to Manasquan)	DDD	L	Beyond 2012
NJ02030104930020-01	Atl Coast (Shark R to Manasquan)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040302940010-01	Atl Coast(34th St to Corson Inl)	DDT	L	Beyond 2012
NJ02040302940010-01	Atl Coast(34th St to Corson Inl)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040302940010-01	Atl Coast(34th St to Corson Inl)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040302940010-01	Atl Coast(34th St to Corson Inl)	DDE	L	Beyond 2012
NJ02040302940010-01	Atl Coast(34th St to Corson Inl)	DDD	L	Beyond 2012
NJ02040302940010-01	Atl Coast(34th St to Corson Inl)	Oxygen, Dissolved	М	Beyond 2012
NJ02040302920010-01	Atl Coast(Absecon In to Ventnor)	Mercury in Fish Tissue	L	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02040302920010-01	Atl Coast(Absecon In to Ventnor)	DDT	L	Beyond 2012
NJ02040302920010-01	Atl Coast(Absecon In to Ventnor)	DDD	L	Beyond 2012
NJ02040302920010-01	Atl Coast(Absecon In to Ventnor)	DDE	L	Beyond 2012
NJ02040302920010-01	Atl Coast(Absecon In to Ventnor)	Oxygen, Dissolved	М	Beyond 2012
NJ02040302920010-01	Atl Coast(Absecon In to Ventnor)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040301920010-01	Atl Coast(Barnegat to Surf City)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301920010-01	Atl Coast(Barnegat to Surf City)	Oxygen, Dissolved	M	Beyond 2012
NJ02040301920010-01	Atl Coast(Barnegat to Surf City)	DDD	L	Beyond 2012
NJ02040301920010-01	Atl Coast(Barnegat to Surf City)	DDT	L	Beyond 2012
NJ02040301920010-01	Atl Coast(Barnegat to Surf City)	DDE	L	Beyond 2012
NJ02040301920010-01	Atl Coast(Barnegat to Surf City)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040302930010-01	Atl Coast(Great Egg to 34th St)	DDD	L	Beyond 2012
NJ02040302930010-01	Atl Coast(Great Egg to 34th St)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040302930010-01	Atl Coast(Great Egg to 34th St)	DDE	L	Beyond 2012
NJ02040302930010-01	Atl Coast(Great Egg to 34th St)	DDT	L	Beyond 2012
NJ02040302930010-01	Atl Coast(Great Egg to 34th St)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040302930010-01	Atl Coast(Great Egg to 34th St)	Oxygen, Dissolved	M	Beyond 2012
NJ02040301920030-01	Atl Coast(Haven Bch to Lit Egg)	DDT	L	Beyond 2012
NJ02040301920030-01	Atl Coast(Haven Bch to Lit Egg)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301920030-01	Atl Coast(Haven Bch to Lit Egg)	Oxygen, Dissolved	М	Beyond 2012
NJ02040301920030-01	Atl Coast(Haven Bch to Lit Egg)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040301920030-01	Atl Coast(Haven Bch to Lit Egg)	DDD	L	Beyond 2012
NJ02040301920030-01	Atl Coast(Haven Bch to Lit Egg)	DDE	L	Beyond 2012
NJ02040302910010-01	Atl Coast(Ltl Egg to Absecon In)	DDT	L	Beyond 2012
NJ02040302910010-01	Atl Coast(Ltl Egg to Absecon In)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040302910010-01	Atl Coast(Ltl Egg to Absecon In)	Oxygen, Dissolved	М	Beyond 2012
NJ02040302910010-01	Atl Coast(Ltl Egg to Absecon In)	DDD	L	Beyond 2012
NJ02040302910010-01	Atl Coast(Ltl Egg to Absecon In)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040302910010-01	Atl Coast(Ltl Egg to Absecon In)	DDE	L	Beyond 2012
NJ02040301910010-01	Atl Coast(Manasquan/Herring Is)	DDT	L	Beyond 2012
NJ02040301910010-01	Atl Coast(Manasquan/Herring Is)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040301910010-01	Atl Coast(Manasquan/Herring Is)	Oxygen, Dissolved	М	Beyond 2012
NJ02040301910010-01	Atl Coast(Manasquan/Herring Is)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301910010-01	Atl Coast(Manasquan/Herring Is)	DDD	L	Beyond 2012
NJ02040301910010-01	Atl Coast(Manasquan/Herring Is)	DDE	L	Beyond 2012
NJ02030104920010-01	Atl Coast(Sandy H to Navesink R)	Oxygen, Dissolved	М	Beyond 2012
NJ02030104920010-01	Atl Coast(Sandy H to Navesink R)	Mercury in Fish Tissue	L	Beyond 2012
NJ02030104920010-01	Atl Coast(Sandy H to Navesink R)	DDT	L	Beyond 2012
NJ02030104920010-01	Atl Coast(Sandy H to Navesink R)	DDE	L	Beyond 2012
NJ02030104920010-01	Atl Coast(Sandy H to Navesink R)	Polychlorinated biphenyls	L	Beyond 2012
NJ02030104920010-01	Atl Coast(Sandy H to Navesink R)	DDD	L	Beyond 2012
NJ02040301920020-01	Atl Coast(Surf City to Haven Be)	Oxygen, Dissolved	М	Beyond 2012
NJ02040301920020-01	Atl Coast(Surf City to Haven Be)	DDD	L	Beyond 2012
NJ02040301920020-01	Atl Coast(Surf City to Haven Be)	DDE	L	Beyond 2012
NJ02040301920020-01	Atl Coast(Surf City to Haven Be)	DDT	L	Beyond 2012
NJ02040301920020-01	Atl Coast(Surf City to Haven Be)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301920020-01	Atl Coast(Surf City to Haven Be)	Polychlorinated biphenyls	L	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02040302920020-01	Atl Coast(Ventnor to Great Egg)	DDE	L	Beyond 2012
NJ02040302920020-01	Atl Coast(Ventnor to Great Egg)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040302920020-01	Atl Coast(Ventnor to Great Egg)	Oxygen, Dissolved	М	Beyond 2012
NJ02040302920020-01	Atl Coast(Ventnor to Great Egg)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040302920020-01	Atl Coast(Ventnor to Great Egg)	DDD	L	Beyond 2012
NJ02040302920020-01	Atl Coast(Ventnor to Great Egg)	DDT	L	Beyond 2012
NJ02030104930010-01	Atl Coast(Whale Pond to Shark R)	DDE	L	Beyond 2012
NJ02030104930010-01	Atl Coast(Whale Pond to Shark R)	DDD	L	Beyond 2012
NJ02030104930010-01	Atl Coast(Whale Pond to Shark R)	Oxygen, Dissolved	М	Beyond 2012
NJ02030104930010-01	Atl Coast(Whale Pond to Shark R)	Polychlorinated biphenyls	L	Beyond 2012
NJ02030104930010-01	Atl Coast(Whale Pond to Shark R)	DDT	L	Beyond 2012
NJ02030104930010-01	Atl Coast(Whale Pond to Shark R)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040302940050-01	Atl Cst(CM Inlet to Cape May Pt)	PCB in Fish Tissue	L	Beyond 2012
NJ02040302940050-01	Atl Cst(CM Inlet to Cape May Pt)	Oxygen, Dissolved	М	Beyond 2012
NJ02040302940050-01	Atl Cst(CM Inlet to Cape May Pt)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040302940050-01	Atl Cst(CM Inlet to Cape May Pt)	DDT	L	Beyond 2012
NJ02040302940050-01	Atl Cst(CM Inlet to Cape May Pt)	DDD	L	Beyond 2012
NJ02040302940050-01	Atl Cst(CM Inlet to Cape May Pt)	DDE	L	Beyond 2012
NJ02040302940040-01	Atl Cst(Hereford to Cape May In)	DDE	L	Beyond 2012
NJ02040302940040-01	Atl Cst(Hereford to Cape May In)	DDD	L	Beyond 2012
NJ02040302940040-01	Atl Cst(Hereford to Cape May In)	DDT	L	Beyond 2012
NJ02040302940040-01	Atl Cst(Hereford to Cape May In)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040302940040-01	Atl Cst(Hereford to Cape May In)	Oxygen, Dissolved	М	Beyond 2012
NJ02040302940040-01	Atl Cst(Hereford to Cape May In)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040301910030-01	Atl Cst(Rt 37 to Barnegat Inlet)	DDD	L	Beyond 2012
NJ02040301910030-01	Atl Cst(Rt 37 to Barnegat Inlet)	DDE	L	Beyond 2012
NJ02040301910030-01	Atl Cst(Rt 37 to Barnegat Inlet)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301910030-01	Atl Cst(Rt 37 to Barnegat Inlet)	DDT	L	Beyond 2012
NJ02040301910030-01	Atl Cst(Rt 37 to Barnegat Inlet)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040301910030-01	Atl Cst(Rt 37 to Barnegat Inlet)	Oxygen, Dissolved	М	Beyond 2012
NJ02040302940030-01	Atl Cst(Townsends to Hereford In)	DDE	L	Beyond 2012
NJ02040302940030-01	Atl Cst(Townsends to Hereford In)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040302940030-01	Atl Cst(Townsends to Hereford In)	DDD	L	Beyond 2012
NJ02040302940030-01	Atl Cst(Townsends to Hereford In)	Oxygen, Dissolved	М	Beyond 2012
NJ02040302940030-01	Atl Cst(Townsends to Hereford In)	DDT	L	Beyond 2012
NJ02040302940030-01	Atl Cst(Townsends to Hereford In)	Mercury in Fish Tissue	L	Beyond 2012
NJ02030104090090-01	Atl drainage (Shark R - Deal Lk)	Chlordane	L	Beyond 2012
NJ02030104090090-01	Atl drainage (Shark R - Deal Lk)	DDD	L	Beyond 2012
NJ02030104090090-01	Atl drainage (Shark R - Deal Lk)	DDT	L	Beyond 2012
NJ02030104090090-01	Atl drainage (Shark R - Deal Lk)	Mercury in Fish Tissue	L	Beyond 2012
NJ02030104090090-01	Atl drainage (Shark R - Deal Lk)	Polychlorinated biphenyls	L	Beyond 2012
NJ02030104090090-01	Atl drainage ( Shark R - Deal Lk)	DDE	L	Beyond 2012
NJ02030104090090-01	Atl drainage ( Shark R - Deal Lk)	Oxygen, Dissolved	М	Beyond 2012
NJ02030104920020-01	AtlCoast(Navesink R to WhalePond)	DDE	L	Beyond 2012
NJ02030104920020-01	AtlCoast(Navesink R to WhalePond)	Polychlorinated biphenyls	L	Beyond 2012
NJ02030104920020-01	AtlCoast(Navesink R to WhalePond)	Oxygen, Dissolved	М	Beyond 2012
NJ02030104920020-01	AtlCoast(Navesink R to WhalePond)	DDT	L	Beyond 2012

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NJ02030104920020-01	AtlCoast(Navesink R to WhalePond)	DDD	L	Beyond 2012
NJ02030104920020-01	AtlCoast(Navesink R to WhalePond)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040302050020-01	Babcock Creek (GEHR)	pH	М	Beyond 2012
NJ02030105030050-01	Back Brook	Cause Unknown	М	Beyond 2012
NJ02040201070010-01	Back Creek (above Yardville-H Sq Road)	Phosphorus (Total)	М	Beyond 2012
NJ02040206100030-01	Back Creek (Sea Breeze Rd to Cedar Ck)	Polychlorinated biphenyls	L	Beyond 2012
NJ02030105150050-01	Barclay Brook	pH	М	Beyond 2012
NJ02030105150050-01	Barclay Brook	Escherichia coli	М	Beyond 2012
NJ02040201100020-01	Barkers Brook (above 40d02m30s)	Arsenic	L	Beyond 2012
NJ02040301050050-01	Barnegat Bay North (above Rt 37 bridge)	Oxygen, Dissolved	М	Beyond 2012
NJ02040301050040-01	Barnegat North tribs (Tide Ck to Rt 37)	DDT	М	Beyond 2012
NJ02040301050040-01	Barnegat North tribs (Tide Ck to Rt 37)	Polychlorinated biphenyls	М	Beyond 2012
NJ02040301050040-01	Barnegat North tribs (Tide Ck to Rt 37)	Mercury in Fish Tissue	М	Beyond 2012
NJ02040301050040-01	Barnegat North tribs (Tide Ck to Rt 37)	DDD	М	Beyond 2012
NJ02040301050040-01	Barnegat North tribs (Tide Ck to Rt 37)	DDE	М	Beyond 2012
NJ02040206090010-01	Barrett Run (above West Ave)	Phosphorus (Total)	М	Beyond 2012
NJ02040202060040-01	Barton Run (above Kettle Run Road)	pH	М	Beyond 2012
NJ02040202060040-01	Barton Run (above Kettle Run Road)	Oxygen, Dissolved	М	Beyond 2012
NJ02040202060040-01	Barton Run (above Kettle Run Road)	Arsenic	L	Beyond 2012
NJ02040202060050-01	Barton Run (below Kettle Run Road)	pH	М	Beyond 2012
NJ02040202060050-01	Barton Run (below Kettle Run Road)	Phosphorus (Total)	М	Beyond 2012
NJ02040202060050-01	Barton Run (below Kettle Run Road)	Oxygen, Dissolved	М	Beyond 2012
NJ02040202060050-01	Barton Run (below Kettle Run Road)	Arsenic	L	Beyond 2012
NJ02040301200050-01	Bass River EB	DDE	L	Beyond 2012
NJ02040301200050-01	Bass River EB	DDT	L	Beyond 2012
NJ02040301200050-01	Bass River EB	PCB in Fish Tissue	L	Beyond 2012
NJ02040301200050-01	Bass River EB	DDD	L	Beyond 2012
NJ02040301150080-01	Batsto R (Batsto gage to Quaker Bridge)	pН	М	Beyond 2012
NJ02040301150010-01	Batsto River (above Hampton Gate)	pH	М	Beyond 2012
NJ02040301150050-01	Batsto River (CNJRR to Hampton Gate)	pH	М	Beyond 2012
NJ02040301150060-01	Batsto River (Quaker Bridge to CNJRR)	pH	М	Beyond 2012
NJ02030105100120-01	Bear Brook (above Trenton Road)	Arsenic	L	Beyond 2012
NJ02030105100120-01	Bear Brook (above Trenton Road)	Cause Unknown	М	Beyond 2012
NJ02030105100120-01	Bear Brook (above Trenton Road)	Escherichia coli	М	Beyond 2012
NJ02030105100130-01	Bear Brook (below Trenton Road)	Arsenic	L	Beyond 2012
NJ02030105100130-01	Bear Brook (below Trenton Road)	Oxygen, Dissolved	М	Beyond 2012
NJ02030105100130-01	Bear Brook (below Trenton Road)	Escherichia coli	М	Beyond 2012
NJ02040105080010-01	Bear Brook (Sussex/Warren Co)	Cause Unknown	М	Beyond 2012
NJ02040202060060-01	Bear Swamp River	Cause Unknown	М	Beyond 2012
NJ02030105020050-01	Beaver Brook (Clinton)	pН	Н	2012
NJ02030105020050-01	Beaver Brook (Clinton)	Phosphorus (Total)	Н	2012
NJ02030105020050-01	Beaver Brook (Clinton)	Temperature, water	М	Beyond 2012
NJ02030103030110-01	Beaver Brook (Morris County)	pH	М	Beyond 2012
NJ02040202160040-01	Beaver Creek (Oldmans Creek)	Polychlorinated biphenyls	L	Beyond 2012
NJ02020007010060-01	Beaver Run	Cause Unknown	М	Beyond 2012
NJ02040301040010-01	Beaverdam Creek	Cause Unknown	М	Beyond 2012
NJ02030105110040-01	Beden Brook (above Province Line Rd)	Cause Unknown	М	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02030105110040-01	Beden Brook (above Province Line Rd)	Escherichia coli	М	Beyond 2012
NJ02030105110050-01	Beden Brook (below Province Line Rd)	Arsenic	L	Beyond 2012
NJ02030105110050-01	Beden Brook (below Province Line Rd)	Phosphorus (Total)	М	Beyond 2012
NJ02030103070020-01	Belcher Creek (Pinecliff Lake & below)	Cause Unknown	М	Beyond 2012
		Dioxin (including 2,3,7,8-		
NJ02030103180060-01	Berrys Creek (above Paterson Ave)	TCDD)	М	Beyond 2012
NJ02030103180060-01	Berrys Creek (above Paterson Ave)	Chlordane	М	Beyond 2012
NJ02030103180060-01	Berrys Creek (above Paterson Ave)	Turbidity	М	Beyond 2012
NJ02030103180060-01	Berrys Creek (above Paterson Ave)	PCB in Fish Tissue	М	Beyond 2012
NJ02030103180060-01	Berrys Creek (above Paterson Ave)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103180060-01	Berrys Creek (above Paterson Ave)	Lead	L	Beyond 2012
NJ02030103180060-01	Berrys Creek (above Paterson Ave)	Dieldrin	М	Beyond 2012
NJ02030103180060-01	Berrys Creek (above Paterson Ave)	DDT	М	Beyond 2012
NJ02030103180060-01	Berrys Creek (above Paterson Ave)	DDE	М	Beyond 2012
NJ02030103180060-01	Berrys Creek (above Paterson Ave)	Copper	L	Beyond 2012
NJ02030103180060-01	Berrys Creek (above Paterson Ave)	Cadmium	L	Beyond 2012
NJ02030103180060-01	Berrys Creek (above Paterson Ave)	Benzo(a)pyrene (PAHs)	М	Beyond 2012
NJ02030103180060-01	Berrys Creek (above Paterson Ave)	Arsenic	L	Beyond 2012
NJ02030103180060-01	Berrys Creek (above Paterson Ave)	Ammonia (Un-ionized)	М	Beyond 2012
NJ02030103180060-01	Berrys Creek (above Paterson Ave)	Mercury in Fish Tissue	М	Beyond 2012
NJ02030103180060-01	Berrys Creek (above Paterson Ave)	DDD	М	Beyond 2012
NJ02030103180070-01	Berrys Creek (below Paterson Ave)	Chlordane	М	Beyond 2012
		Dioxin (including 2,3,7,8-		<u>,</u>
NJ02030103180070-01	Berrys Creek (below Paterson Ave)	TCDD)	М	Beyond 2012
NJ02030103180070-01	Berrys Creek (below Paterson Ave)	Lead	L	Beyond 2012
NJ02030103180070-01	Berrys Creek (below Paterson Ave)	DDT	М	Beyond 2012
NJ02030103180070-01	Berrys Creek (below Paterson Ave)	Mercury in Fish Tissue	М	Beyond 2012
NJ02030103180070-01	Berrys Creek (below Paterson Ave)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103180070-01	Berrys Creek (below Paterson Ave)	PCB in Fish Tissue	М	Beyond 2012
NJ02030103180070-01	Berrys Creek (below Paterson Ave)	Turbidity	М	Beyond 2012
NJ02030103180070-01	Berrys Creek (below Paterson Ave)	DDE	М	Beyond 2012
NJ02030103180070-01	Berrys Creek (below Paterson Ave)	DDD	М	Beyond 2012
NJ02030103180070-01	Berrys Creek (below Paterson Ave)	Dieldrin	М	Beyond 2012
NJ02030103180070-01	Berrys Creek (below Paterson Ave)	Chromium, hexavalent	L	Beyond 2012
NJ02030103180070-01	Berrys Creek (below Paterson Ave)	Ammonia (Un-ionized)	М	Beyond 2012
NJ02030103180070-01	Berrys Creek (below Paterson Ave)	Benzo(a)pyrene (PAHs)	М	Beyond 2012
NJ02030103180070-01	Berrys Creek (below Paterson Ave)	Arsenic	L	Beyond 2012
NJ02030103180070-01	Berrys Creek (below Paterson Ave)	Copper	L	Beyond 2012
NJ02030103180070-01	Berrys Creek (below Paterson Ave)	Cadmium	L	Beyond 2012
NJ02040206230020-01	Bidwell Ck(below Rt 47)-Dias to GoshenCk	Oxygen, Dissolved	М	Beyond 2012
NJ02040206230020-01	Bidwell Ck(below Rt 47)-Dias to GoshenCk	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206230010-01	Bidwell Creek (above Rt 47)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206230010-01	Bidwell Creek (above Rt 47)	Oxygen, Dissolved	М	Beyond 2012
NJ02030104070030-01	Big Brook	pH	М	Beyond 2012
NJ02030104070030-01	Big Brook	Phosphorus (Total)	М	Beyond 2012
NJ02040104140040-01	Big Flat Brook (Confluence to Kittle Rd)	pH	М	Beyond 2012
NJ02040202120040-01	Big T Ck SB(incl Bull Run to LakelandRd)	Arsenic	L	Beyond 2012

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NJ02040202120080-01	Big Timber Creek (below NB/SB confl)	Cause Unknown	M	Beyond 2012
NJ02040202120080-01	Big Timber Creek (below NB/SB confl)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040202120080-01	Big Timber Creek (below NB/SB confl)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202120010-01	Big Timber Creek NB (above Laurel Rd)	Phosphorus (Total)	М	Beyond 2012
NJ02040202120020-01	Big Timber Creek NB (below Laurel Rd)	Phosphorus (Total)	М	Beyond 2012
NJ02040202120030-01	Big Timber Creek SB (above Lakeland Rd)	Phosphorus (Total)	М	Beyond 2012
NJ02040202120050-01	Big Timber Creek SB (below Bull Run)	Phosphorus (Total)	M	Beyond 2012
NJ02040202120050-01	Big Timber Creek SB (below Bull Run)	Polychlorinated biphenyls	L	Beyond 2012 Beyond 2012
NJ02040202150070-01	Birch Creek	Phosphorus (Total)	M	Beyond 2012
		Total Suspended Solids		Defond 2012
NJ02040202150070-01	Birch Creek	(TSS)	М	Beyond 2012
NJ02030103010060-01	Black Brook (Great Swamp NWR)	Total Dissolved Solids	М	Beyond 2012
NJ02030103010060-01	Black Brook (Great Swamp NWR)	Oxygen, Dissolved	М	Beyond 2012
NJ02020007040010-01	Black Ck(above/incl G.Gorge Resort trib)	Temperature, water	М	Beyond 2012 Beyond 2012
NJ02020007040020-01	Black Creek (below G. Gorge Resort trib)	Oxygen, Dissolved	М	Beyond 2012
NJ02040201080030-01	Blacks Creek (below Bacons Run)	Escherichia coli	М	Beyond 2012
NJ02040201080030-01	Blacks Creek (below Bacons Run)	Phosphorus (Total)	М	Beyond 2012
NJ02040201080030-01	Blacks Creek (below Bacons Run)	Polychlorinated biphenyls	L	Beyond 2012
		Total Suspended Solids		
NJ02040201080030-01	Blacks Creek (below Bacons Run)	(TSS)	М	Beyond 2012
NJ02040206140040-01	Blackwater Branch (above/incl Pine Br)	Mercury in Water Column	L	Beyond 2012
NJ02040206140050-01	Blackwater Branch (below Pine Branch)	Mercury in Water Column	L	Beyond 2012
NJ02040301160100-01	Blue Anchor Brook	Temperature, water	М	Beyond 2012
NJ02040301160100-01	Blue Anchor Brook	pH	М	Beyond 2012
NJ02040202070010-01	Bobbys Run	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202070010-01	Bobbys Run	Cause Unknown	М	Beyond 2012
		Dioxin (including 2,3,7,8-		
NJ02030105120100-01	Bound Brook (below fork at 74d 25m 15s)	TCDD)	М	Beyond 2012
NJ02030105120100-01	Bound Brook (below fork at 74d 25m 15s)	Polychlorinated biphenyls	М	Beyond 2012
NJ02030105120100-01	Bound Brook (below fork at 74d 25m 15s)	Phosphorus (Total)	М	Beyond 2012
NJ02030104080030-01	Branchport Creek	DDT	L	Beyond 2012
NJ02030104080030-01	Branchport Creek	Mercury in Fish Tissue	L	Beyond 2012
NJ02030104080030-01	Branchport Creek	Polychlorinated biphenyls	L	Beyond 2012
NJ02030104080030-01	Branchport Creek	DDD	L	Beyond 2012
NJ02030104080030-01	Branchport Creek	Oxygen, Dissolved	М	Beyond 2012
NJ02030104080030-01	Branchport Creek	DDE	L	Beyond 2012
NJ02040206100020-01	Bridges Sticks Creek / Ogden Creek	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206170050-01	Buckshutem Creek (below Rt 555)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206140020-01	Burnt Mill Branch / Hudson Branch	Arsenic	L	Beyond 2012
NJ02040206140020-01	Burnt Mill Branch / Hudson Branch	pH	М	Beyond 2012
NJ02040202050010-01	Burrs Mill Bk (above 39d51m30s road)	Oxygen, Dissolved	М	Beyond 2012
NJ02040202050010-01	Burrs Mill Bk (above 39d51m30s road)	Arsenic	L	Beyond 2012
NJ02040202050020-01	Burrs Mill Bk (Burnt Br Br- 39-51-30 rd)	Arsenic	L	Beyond 2012
NJ02040202050020-01	Burrs Mill Bk (Burnt Br Br- 39-51-30 rd)	Oxygen, Dissolved	М	Beyond 2012
NJ02040202050030-01	Burrs Mill Bk (BurrsMill to Burnt Br Br)	Oxygen, Dissolved	М	Beyond 2012
NJ02040202050030-01	Burrs Mill Bk (BurrsMill to Burnt Br Br)	Arsenic	L	Beyond 2012
NJ02030105020060-01	Cakepoulin Creek	DDD	L	Beyond 2012

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NJ02030105020060-01	Cakepoulin Creek	Temperature, water	М	Beyond 2012
NJ02030105020060-01	Cakepoulin Creek	DDT	L	Beyond 2012
NJ02030105020060-01	Cakepoulin Creek	DDE	L	Beyond 2012
NJ02040206070030-01	Canton Drain (above Maskell Mill)	pН	М	Beyond 2012
NJ02040206070040-01	Canton Drain (below Maskell Mill)	Cause Unknown	М	Beyond 2012
NJ02040206070040-01	Canton Drain (below Maskell Mill)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040302080040-01	Cape May Bays (Reubens Wharf-BigElderCk)	Oxygen, Dissolved	М	Beyond 2012
NJ02040302080070-01	Cape May Bays (Rt 47 to Reubens Wharf)	Oxygen, Dissolved	М	Beyond 2012
NJ02040302080090-01	Cape May Harbor & Bays (below Rt 47)	Oxygen, Dissolved	М	Beyond 2012
NJ02040206100040-01	Cedar Creek (above Rt 553)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040206100050-01	Cedar Creek (below Rt 553)	PCB in Fish Tissue	L	Beyond 2012
NJ02030105070020-01	Chambers Brook	Cause Unknown	М	Beyond 2012
NJ02030104060010-01	Cheesequake Creek / Whale Creek	DDD	М	Beyond 2012
NJ02030104060010-01	Cheesequake Creek / Whale Creek	DDT	М	Beyond 2012
NJ02030104060010-01	Cheesequake Creek / Whale Creek	Chlordane	М	Beyond 2012
NJ02030104060010-01	Cheesequake Creek / Whale Creek	DDE	М	Beyond 2012
NJ02030104060010-01	Cheesequake Creek / Whale Creek	Mercury in Fish Tissue	М	Beyond 2012
NJ02030104060010-01	Cheesequake Creek / Whale Creek	Polychlorinated biphenyls	М	Beyond 2012
NJ02040202130030-01	Chestnut Branch (above Sewell)	Phosphorus (Total)	М	Beyond 2012
NJ02030104060040-01	Chingarora Creek to Thorns Creek	Mercury in Fish Tissue	М	Beyond 2012
NJ02030104060040-01	Chingarora Creek to Thorns Creek	Polychlorinated biphenyls	М	Beyond 2012
NJ02030104060040-01	Chingarora Creek to Thorns Creek	Enterococcus	М	Beyond 2012
NJ02030104060040-01	Chingarora Creek to Thorns Creek	DDT	М	Beyond 2012
NJ02030104060040-01	Chingarora Creek to Thorns Creek	DDE	М	Beyond 2012
NJ02030104060040-01	Chingarora Creek to Thorns Creek	DDD	М	Beyond 2012
NJ02030104060040-01	Chingarora Creek to Thorns Creek	Chlordane	М	Beyond 2012
NJ02030104060040-01	Chingarora Creek to Thorns Creek	Cause Unknown	М	Beyond 2012
NJ02040301160090-01	Clark Branch (above/incl Price Branch)	Cause Unknown	М	Beyond 2012
NJ02020007020060-01	Clove Brook (Papakating Ck)	Escherichia coli	М	Beyond 2012
NJ02020007020060-01	Clove Brook (Papakating Ck)	Temperature, water	М	Beyond 2012
NJ02020007020060-01	Clove Brook (Papakating Ck)	Cause Unknown	М	Beyond 2012
NJ02040206090060-01	Cohansey R (75d15m to/incl Rocaps Run)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206090070-01	Cohansey R (75d17m50s to 75d15m)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206090100-01	Cohansey R (below Greenwich)	Chlordane	L	Beyond 2012
NJ02040206090100-01	Cohansey R (below Greenwich)	DDD	L	Beyond 2012
NJ02040206090100-01	Cohansey R (below Greenwich)	DDE	L	Beyond 2012
NJ02040206090100-01	Cohansey R (below Greenwich)	DDT	L	Beyond 2012
NJ02040206090100-01	Cohansey R (below Greenwich)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206090080-01	Cohansey R (Greenwich to 75d17m50s)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040206090080-01	Cohansey R (Greenwich to 75d17m50s)	DDT	L	Beyond 2012
NJ02040206090080-01	Cohansey R (Greenwich to 75d17m50s)	Chlordane	L	Beyond 2012
NJ02040206090080-01	Cohansey R (Greenwich to 75d17m50s)	DDD	L	Beyond 2012
NJ02040206090080-01	Cohansey R (Greenwich to 75d17m50s)	DDE	L	Beyond 2012
NJ02040206090080-01	Cohansey R (Greenwich to 75d17m50s)	PCB in Fish Tissue	L	Beyond 2012
NJ02040206090030-01	Cohansey R (Rocaps Run to Cornwell Run)	PCB in Fish Tissue	L	Beyond 2012
NJ02040206090030-01	Cohansey R (Rocaps Run to Cornwell Run)	Cause Unknown	М	Beyond 2012
NJ02030103180010-01	Coles Brook / Van Saun Mill Brook	Total Dissolved Solids	М	Beyond 2012

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NJ02040302040050-01	Collings Lakes trib (Hospitality Branch)	pH	M	Beyond 2012
NJ02040202110040-01	Cooper R (Wallworth gage to Evesham Rd)	Tetrachloroethylene	L	Beyond 2012
NJ02040202110040-01	Cooper R (Wallworth gage to Evesham Rd)	Total Dissolved Solids	М	Beyond 2012
NJ02040202110040-01	Cooper R (Wallworth gage to Evesham Rd)	Lead	L	Beyond 2012
NJ02040202110040-01	Cooper R (Wallworth gage to Evesham Rd)	DDT	L	Beyond 2012
NJ02040202110040-01	Cooper R (Wallworth gage to Evesham Rd)	Trichloroethylene	L	Beyond 2012
NJ02040202110040-01	Cooper R (Wallworth gage to Evesham Rd)	Turbidity	М	Beyond 2012
NJ02040202110040-01	Cooper R (Wallworth gage to Evesham Rd)	DDE	L	Beyond 2012
NJ02040202110040-01	Cooper R (Wallworth gage to Evesham Rd)	Sulfates	L	Beyond 2012
NJ02040202110040-01	Cooper R (Wallworth gage to Evesham Rd)	DDD	L	Beyond 2012
NJ02040202110040-01	Cooper R (Wallworth gage to Evesham Rd)	Chlordane	L	Beyond 2012
NJ02040202110040-01	Cooper R (Wallworth gage to Evesham Rd)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202110040-01	Cooper R (Wallworth gage to Evesham Rd)	Arsenic	L	Beyond 2012
NJ02040202110030-01	Cooper River (above Evesham Road)	Lead	L	Beyond 2012
NJ02040202110030-01	Cooper River (above Evesham Road)	PCB in Fish Tissue	L	Beyond 2012
NJ02040202110030-01	Cooper River (above Evesham Road)	Sulfates	L	Beyond 2012
NJ02040202110030-01	Cooper River (above Evesham Road)	DDT	L	Beyond 2012
NJ02040202110030-01	Cooper River (above Evesham Road)	Total Dissolved Solids	М	Beyond 2012
NJ02040202110030-01	Cooper River (above Evesham Road)	DDE	L	Beyond 2012
NJ02040202110030-01	Cooper River (above Evesham Road)	DDD	L	Beyond 2012
NJ02040202110030-01	Cooper River (above Evesham Road)	Trichloroethylene	L	Beyond 2012
NJ02040202110030-01	Cooper River (above Evesham Road)	Arsenic	L	Beyond 2012
NJ02040202110030-01	Cooper River (above Evesham Road)	Turbidity	М	Beyond 2012
NJ02040202110030-01	Cooper River (above Evesham Road)	Tetrachloroethylene	L	Beyond 2012
NJ02040202110060-01	Cooper River (below Rt 130)	DDD	L	Beyond 2012
NJ02040202110060-01	Cooper River (below Rt 130)	Trichloroethylene	L	Beyond 2012
NJ02040202110060-01	Cooper River (below Rt 130)	Tetrachloroethylene	L	Beyond 2012
NJ02040202110060-01	Cooper River (below Rt 130)	pH	М	Beyond 2012
NJ02040202110060-01	Cooper River (below Rt 130)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202110060-01	Cooper River (below Rt 130)	DDE	L	Beyond 2012
NJ02040202110060-01	Cooper River (below Rt 130)	Arsenic	L	Beyond 2012
NJ02040202110060-01	Cooper River (below Rt 130)	DDT	L	Beyond 2012
NJ02040202110050-01	Cooper River (Rt 130 to Wallworth gage)	Total Dissolved Solids	М	Beyond 2012
NJ02040202110050-01	Cooper River (Rt 130 to Wallworth gage)	Lead	L	Beyond 2012
NJ02040202110050-01	Cooper River (Rt 130 to Wallworth gage)	pH	М	Beyond 2012
NJ02040202110050-01	Cooper River (Rt 130 to Wallworth gage)	DDD	L	Beyond 2012
NJ02040202110050-01	Cooper River (Rt 130 to Wallworth gage)	Chlordane	L	Beyond 2012
NJ02040202110050-01	Cooper River (Rt 130 to Wallworth gage)	DDT	L	Beyond 2012
NJ02040202110050-01	Cooper River (Rt 130 to Wallworth gage)	DDE	L	Beyond 2012
NJ02040202110050-01	Cooper River (Rt 130 to Wallworth gage)	Trichloroethylene	L	Beyond 2012
NJ02040202110050-01	Cooper River (Rt 130 to Wallworth gage)	Tetrachloroethylene	L	Beyond 2012
NJ02040202110050-01	Cooper River (Rt 130 to Wallworth gage)	Sulfates	L	Beyond 2012
NJ02040202110050-01	Cooper River (Rt 130 to Wallworth gage)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202110050-01	Cooper River (Rt 130 to Wallworth gage)	Turbidity	М	Beyond 2012
NJ02040202110050-01	Cooper River (Rt 130 to Wallworth gage)	Arsenic	L	Beyond 2012
NJ02040202110010-01	Cooper River NB(above Springdale Road)	DDD	L	Beyond 2012
NJ02040202110010-01	Cooper River NB(above Springdale Road)	Arsenic	L	Beyond 2012

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NJ02040202110010-01	Cooper River NB(above Springdale Road)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202110010-01	Cooper River NB(above Springdale Road)	Oxygen, Dissolved	М	Beyond 2012
NJ02040202110010-01	Cooper River NB(above Springdale Road)	DDT	L	Beyond 2012
NJ02040202110010-01	Cooper River NB(above Springdale Road)	DDE	L	Beyond 2012
NJ02040202110020-01	Cooper River NB(below Springdale Road)	DDT	L	Beyond 2012
NJ02040202110020-01	Cooper River NB(below Springdale Road)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202110020-01	Cooper River NB(below Springdale Road)	Oxygen, Dissolved	М	Beyond 2012
NJ02040202110020-01	Cooper River NB(below Springdale Road)	DDD	L	Beyond 2012
NJ02040202110020-01	Cooper River NB(below Springdale Road)	Arsenic	L	Beyond 2012
NJ02040202110020-01	Cooper River NB(below Springdale Road)	DDE	L	Beyond 2012
NJ02040302080020-01	Corson Inlet & Sound / Ludlam Bay	Oxygen, Dissolved	М	Beyond 2012
NJ02040206230060-01	Cox Hall Creek / Mickels Run (to Villas)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206230060-01	Cox Hall Creek / Mickels Run (to Villas)	Oxygen, Dissolved	М	Beyond 2012
NJ02040206230060-01	Cox Hall Creek / Mickels Run (to Villas)	Enterococcus	М	Beyond 2012
NJ02040206230060-01	Cox Hall Creek / Mickels Run (to Villas)	Turbidity	М	Beyond 2012
NJ02040201090010-01	Crafts Creek (above Rt 206)	Phosphorus (Total)	М	Beyond 2012
NJ02040201090020-01	Crafts Creek (below Rt 206)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040201090020-01	Crafts Creek (below Rt 206)	Arsenic	L	Beyond 2012
NJ02040201090020-01	Crafts Creek (below Rt 206)	Oxygen, Dissolved	М	Beyond 2012
NJ02030105100070-01	Cranbury Brook (above NJ Turnpike)	Cause Unknown	М	Beyond 2012
NJ02030105100090-01	Cranbury Brook (below NJ Turnpike)	Cause Unknown	М	Beyond 2012
NJ02040302080010-01	Crook Horn Creek (above Devils Island)	Oxygen, Dissolved	М	Beyond 2012
NJ02040201070020-01	Crosswicks Ck(below Doctors Creek)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040201070020-01	Crosswicks Ck(below Doctors Creek)	Phosphorus (Total)	М	Beyond 2012
		Total Suspended Solids		-
NJ02040201070020-01	Crosswicks Ck(below Doctors Creek)	(TSS)	М	Beyond 2012
NJ02040201070020-01	Crosswicks Ck(below Doctors Creek)	Turbidity	М	Beyond 2012
NJ02040201070020-01	Crosswicks Ck(below Doctors Creek)	Arsenic	L	Beyond 2012
NJ02040201050070-01	Crosswicks Ck(Doctors Ck-Ellisdale trib)	Turbidity	М	Beyond 2012
NJ02040201050070-01	Crosswicks Ck(Doctors Ck-Ellisdale trib)	Arsenic	L	Beyond 2012
NJ02040201050070-01	Crosswicks Ck(Doctors Ck-Ellisdale trib)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040201050070-01	Crosswicks Ck(Doctors Ck-Ellisdale trib)	Phosphorus (Total)	М	Beyond 2012
NJ02040201050070-01	Crosswicks Ck(Doctors Ck-Ellisdale trib)	Mercury in Water Column	М	Beyond 2012
		Total Suspended Solids		
NJ02040201050070-01	Crosswicks Ck(Doctors Ck-Ellisdale trib)	(TSS)	М	Beyond 2012
NJ02040201050050-01	Crosswicks Ck(Ellisdale trib - Walnford)	Phosphorus (Total)	М	Beyond 2012
NJ02040201050050-01	Crosswicks Ck(Ellisdale trib - Walnford)	Arsenic	L	Beyond 2012
nJ02040201050050-01	Crosswicks Ck(Ellisdale trib - Walnford)	Mercury in Water Column	L	Beyond 2012
NJ02040201050030-01	Crosswicks Ck(Lahaway Ck to New Egypt)	Phosphorus (Total)	М	Beyond 2012
NJ02040201050030-01	Crosswicks Ck(Lahaway Ck to New Egypt)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040201040070-01	Crosswicks Ck(NewEgypt to/incl NorthRun)	Arsenic	L	Beyond 2012
NJ02040201040070-01	Crosswicks Ck(NewEgypt to/incl NorthRun)	Phosphorus (Total)	М	Beyond 2012
NJ02040201040070-01	Crosswicks Ck(NewEgypt to/incl NorthRun)	Mercury in Fish Tissue	L	Beyond 2012
		Total Suspended Solids		
NJ02040201040070-01	Crosswicks Ck(NewEgypt to/incl NorthRun)	(TSS)	М	Beyond 2012
NJ02040201050040-01	Crosswicks Ck(Walnford to Lahaway Ck)	Phosphorus (Total)	М	Beyond 2012
NJ02040201050040-01	Crosswicks Ck(Walnford to Lahaway Ck)	Mercury in Fish Tissue	L	Beyond 2012

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NJ02040201050040-01	Crosswicks Ck(Walnford to Lahaway Ck)	Arsenic	L	Beyond 2012
NJ02030103100060-01	Crystal Lake/Pond Brook	Mercury in Fish Tissue	L	Beyond 2012
NJ02030103100060-01	Crystal Lake/Pond Brook	pH	М	Beyond 2012
NJ02030105120070-01	Cuckels Brook	Cause Unknown	М	Beyond 2012
NJ02040105040010-01	Culvers Creek	Cause Unknown	М	Beyond 2012
		Total Suspended Solids		·
NJ02030103010080-01	Dead River (above Harrisons Brook)	(TSS)	М	Beyond 2012
		Total Suspended Solids		-
NJ02030103010100-01	Dead River (below Harrisons Brook)	(TSS)	М	Beyond 2012
NJ02030103010100-01	Dead River (below Harrisons Brook)	Oxygen, Dissolved	М	Beyond 2012
NJ02030104090030-01	Deal Lake	Chlordane in Fish Tissue	L	Beyond 2012
NJ02030104090030-01	Deal Lake	DDE	L	Beyond 2012
NJ02030104090030-01	Deal Lake	рН	М	Beyond 2012
NJ02030104090030-01	Deal Lake	PCB in Fish Tissue	L	Beyond 2012
NJ02030104090030-01	Deal Lake	DDD	L	Beyond 2012
NJ02030104090030-01	Deal Lake	DDT	L	Beyond 2012
NJ02030105160010-01	Deep Run (above Monmouth Co line)	Oxygen, Dissolved	М	Beyond 2012
NJ02040206060040-01	Deep Run (Alloway)	Arsenic	L	Beyond 2012
NJ02030105160040-01	Deep Run (below Rt 9)	Oxygen, Dissolved	М	Beyond 2012
NJ02040302040120-01	Deep Run (GEHR)	pН	М	Beyond 2012
NJ02030105160020-01	Deep Run (Rt 9 to Monmouth Co line)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103120060-01	Deepavaal Brook	Cause Unknown	М	Beyond 2012
NJ02040105060020-01	Delawanna Creek (incl UDRV)	pH	М	Beyond 2012
NJ02030103030120-01	Den Brook	рН	М	Beyond 2012
NJ02040206220010-01	Dennis Ck / Cedar Swamp(Rt 47 to Rt 550)	Oxygen, Dissolved	М	Beyond 2012
NJ02040206220010-01	Dennis Ck / Cedar Swamp(Rt 47 to Rt 550)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206220040-01	Dennis Creek (below Jakes Landing Rd)	Oxygen, Dissolved	М	Beyond 2012
NJ02040206220040-01	Dennis Creek (below Jakes Landing Rd)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206220030-01	Dennis Creek (Jakes Landing Rd to Rt 47)	Oxygen, Dissolved	М	Beyond 2012
NJ02040206220030-01	Dennis Creek (Jakes Landing Rd to Rt 47)	pH	М	Beyond 2012
NJ02040206220030-01	Dennis Creek (Jakes Landing Rd to Rt 47)	Polychlorinated biphenyls	L	Beyond 2012
NJ02030105100110-01	Devils Brook	Oxygen, Dissolved	М	Beyond 2012
NJ02030105100110-01	Devils Brook	Escherichia coli	М	Beyond 2012
NJ02040206230030-01	Dias Creek	Oxygen, Dissolved	М	Beyond 2012
NJ02040206230030-01	Dias Creek	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206110050-01	Dividing Creek (above Mill Creek)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206110050-01	Dividing Creek (above Mill Creek)	Oxygen, Dissolved	М	Beyond 2012
NJ02040206110060-01	Dividing Creek (below Mill Creek)	Oxygen, Dissolved	М	Beyond 2012
NJ02040206110060-01	Dividing Creek (below Mill Creek)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040201060020-01	Doctors Creek (Allentown to 74d28m40s)	Phosphorus (Total)	М	Beyond 2012
NJ02040301060050-01	Dove Mill Branch (Toms River)	pH	М	Beyond 2012
NJ02030105010020-01	Drakes Brook (below Eyland Ave)	Cause Unknown	М	Beyond 2012
NJ02040105040020-01	Dry Brook	Cause Unknown	М	Beyond 2012
NJ02040201030010-01	Duck Creek and UDRV to Assunpink Ck	Polychlorinated biphenyls	L	Beyond 2012
NJ02040201030010-01	Duck Creek and UDRV to Assunpink Ck	Mercury in Fish Tissue	L	Beyond 2012
NJ02030105090080-01	Duck Pond Run	Cause Unknown	М	Beyond 2012
NJ02030105160030-01	Duhernal Lake / Iresick Brook	Oxygen, Dissolved	М	Beyond 2012

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NJ02030103170050-01	Dwars Kill	Escherichia coli	M	Beyond 2012
NJ02040206210060-01	East Creek	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202130050-01	Edwards Run	Arsenic	L	Beyond 2012
NJ02040202130050-01	Edwards Run	PCB in Fish Tissue	L	Beyond 2012
NJ02040202130050-01	Edwards Run	Phosphorus (Total)	М	Beyond 2012
		Total Suspended Solids		
NJ02040202130050-01	Edwards Run	(TSS)	М	Beyond 2012
NJ02040202130050-01	Edwards Run	Turbidity	М	Beyond 2012
	Elizabeth R (below Elizabeth CORP BDY)			
NJ02030104020030-01		Chlordane	М	Beyond 2012
	Elizabeth R (below Elizabeth CORP BDY)			
NJ02030104020030-01		Hexachlorobenzene	М	Beyond 2012
1.002000101020000001	Elizabeth R (below Elizabeth CORP BDY)			2090112-012
NJ02030104020030-01		Benzo(a)pyrene (PAHs)	М	Beyond 2012
1.002000101020000001	Elizabeth R (below Elizabeth CORP BDY)			2090112-012
NJ02030104020030-01		Copper	L	Beyond 2012
11302030101020030 01	Elizabeth R (below Elizabeth CORP BDY)		<u> </u>	Deyond 2012
NJ02030104020030-01		DDE	М	Beyond 2012
11302030101020030 01	Elizabeth R (below Elizabeth CORP BDY)		171	Deyond 2012
NJ02030104020030-01	Enzabeli R (below Enzabeli Corr DDT)	DDT	М	Beyond 2012
11302030104020030-01	Elizabeth R (below Elizabeth CORP BDY)		111	Deyond 2012
NJ02030104020030-01	Elizabeth R (below Elizabeth CORF DD 1)	Dieldrin	М	Beyond 2012
11302030104020030-01	Elizabeth R (below Elizabeth CORP BDY)	Dicidi III	IVI	Deyolid 2012
NJ02030104020030-01	Elizabeth R (below Elizabeth CORF BD1)	Heptachlor epoxide	М	Beyond 2012
NJ02030104020030-01	Elizabeth R (below Elizabeth CORP BDY)		IVI	Deyolid 2012
NJ02030104020030-01	Elizabeth R (below Elizabeth CORF BD1)	Lead	L	Beyond 2012
NJ02030104020030-01	Elizabeth R (below Elizabeth CORP BDY)	Leau	L	Deyolid 2012
NJ02030104020030-01	Elizabeth R (below Elizabeth CORF BD1)	Mercury in Fish Tissue	М	Beyond 2012
NJ02030104020030-01	Elizabeth R (below Elizabeth CORP BDY)		IVI	Deyolid 2012
NJ02030104020030-01	Elizabeth R (below Elizabeth CORF BD1)	Oxygen, Dissolved	М	Beyond 2012
NJ02030104020030-01	Elizabeth R (below Elizabeth CORP BDY)	Oxygen, Dissolved	IVI	Beyond 2012
NJ02030104020030-01	Elizabetii K (below Elizabetii COKF BD1)	PCB in Fish Tissue	М	Beyond 2012
NJ02030104020030-01	Elizabeth R (below Elizabeth CORP BDY)		IVI	Beyond 2012
NJ02030104020030-01	Elizabeth K (below Elizabeth COKF BD1)	Phosphorus (Total)	М	Beyond 2012
NJ02030104020030-01	Elizabeth R (below Elizabeth CORP BDY)		IVI	Beyond 2012
NJ02030104020030-01	Elizabeth R (below Elizabeth CORF BD1)	Total Dissolved Solids	М	Beyond 2012
NJ02030104020030-01	Elizabeth R (below Elizabeth CORP BDY)	Total Dissolved Solids	IVI	Beyond 2012
NJ02030104020030-01	Elizabeth K (below Elizabeth COKF BD1)	DDD	М	Beyond 2012
NJ02030104020030-01	Elizabeth R (below Elizabeth CORP BDY)	Dioxin (including 2,3,7,8-	IVI	Beyond 2012
NJ02030104020030-01	Elizabeth K (below Elizabeth COKF BD1)	TCDD)	м	Devend 2012
NJ02030104020030-01	Elizabeth R (Elizabeth CORP BDY to I-78)	Oxygen, Dissolved	M M	Beyond 2012 Beyond 2012
NJ02030104020020-01	Elizabeth R (Elizabeth CORP BDY to I-78)	Lead	L M	,
NJ02030104020020-01	Elizabeth R (Elizabeth CORP BD 1 to 1-78) Elizabeth R (Elizabeth CORP BDY to 1-78)		L L	Beyond 2012
NJ02030104020020-01 NJ02030104020020-01	Elizabeth R (Elizabeth CORP BDY to I-78)	Copper Total Dissolved Solids	L M	Beyond 2012
NJ02030104020020-01	Elizabeth R (Elizabeth CORP BD 1 to 1-78) Elizabeth R (Elizabeth CORP BDY to 1-78)		M M	Beyond 2012
NJ02030104020020-01 NJ02040201050060-01	Ellisdale trib (Crosswicks Creek)	Phosphorus (Total) Mercury in Fish Tissue	M L	Beyond 2012
				Beyond 2012
NJ02040201050060-01	Ellisdale trib (Crosswicks Creek)	Cause Unknown	М	Beyond 2012

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NJ02040302050090-01	English Creek / Flat Ck / Cranberry Ck	Oxygen, Dissolved	М	Beyond 2012
NJ02040206040020-01	Fenwick Creek / Keasbeys Creek	Polychlorinated biphenyls	L	Beyond 2012
NJ02030105030010-01	First Neshanic River	Cause Unknown	М	Beyond 2012
NJ02040206070010-01	Fishing Creek / Bucks Ditch/Pattys Fork	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206230050-01	Fishing Creek / Fishing Mill Stream	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206230050-01	Fishing Creek / Fishing Mill Stream	Cause Unknown	М	Beyond 2012
NJ02040104150020-01	Flat Brook (below Tillman Brook)	Temperature, water	М	Beyond 2012
NJ02040104150010-01	Flat Brook (Tillman Brook to Confluence)	Temperature, water	М	Beyond 2012
NJ02040104150010-01	Flat Brook (Tillman Brook to Confluence)	Escherichia coli	М	Beyond 2012
NJ02040301110010-01	Forked River NB(above old RR grade)	Oxygen, Dissolved	М	Beyond 2012
NJ02040206110020-01	Fortesque Ck / Fishing Ck / Straight Ck	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206110020-01	Fortesque Ck / Fishing Ck / Straight Ck	Oxygen, Dissolved	М	Beyond 2012
NJ02040302030030-01	Four Mile Branch (GEHR)	Phosphorus (Total)	М	Beyond 2012
NJ02040202050050-01	Friendship Ck (below/incl Burrs Mill Bk)	Phosphorus (Total)	М	Beyond 2012
NJ02040202050050-01	Friendship Ck (below/incl Burrs Mill Bk)	pH	М	Beyond 2012
NJ02040202050050-01	Friendship Ck (below/incl Burrs Mill Bk)	Escherichia coli	М	Beyond 2012
NJ02040202050050-01	Friendship Ck (below/incl Burrs Mill Bk)	Arsenic	L	Beyond 2012
NJ02040105090050-01	Furnace Brook	Cause Unknown	М	Beyond 2012
NJ02040206030050-01	Game Creek (above Rt 48)	Phosphorus (Total)	М	Beyond 2012
NJ02040206030070-01	Game Creek (below Rt 48)	Oxygen, Dissolved	М	Beyond 2012
NJ02040206030070-01	Game Creek (below Rt 48)	Phosphorus (Total)	М	Beyond 2012
NJ02040202020010-01	Gaunts Brook / Hartshorne Mill Stream	Lead	L	Beyond 2012
NJ02040202020010-01	Gaunts Brook / Hartshorne Mill Stream	Copper	L	Beyond 2012
NJ02040302060040-01	GEH Bay/Lakes Bay/Skull Bay/Peck Bay	Oxygen, Dissolved	М	Beyond 2012
NJ02040302040080-01	GEHR (39d32m50s to Hospitality Branch)	Copper	L	Beyond 2012
NJ02040302040080-01	GEHR (39d32m50s to Hospitality Branch)	pH	М	Beyond 2012
NJ02040302030020-01	GEHR (AC Expressway to New Freedom Rd)	pH	М	Beyond 2012
NJ02040302030040-01	GEHR (Broad Lane road to AC Expressway)	pH	М	Beyond 2012
NJ02040302030040-01	GEHR (Broad Lane road to AC Expressway)	Copper	L	Beyond 2012
NJ02040302030080-01	GEHR (Hospitality Br to Piney Hollow Rd)	рН	М	Beyond 2012
NJ02040302030080-01	GEHR (Hospitality Br to Piney Hollow Rd)	Copper	L	Beyond 2012
NJ02040302040130-01	GEHR (Lake Lenape to Mare Run)	Copper	L	Beyond 2012
NJ02040302040130-01	GEHR (Lake Lenape to Mare Run)	pH	М	Beyond 2012
NJ02040302040110-01	GEHR (Mare Run to Rt 322)	Copper	L	Beyond 2012
NJ02040302040110-01	GEHR (Mare Run to Rt 322)	pH	М	Beyond 2012
NJ02040302050060-01	GEHR (Miry Run to Lake Lenape)	Copper	L	Beyond 2012
NJ02040302050060-01	GEHR (Miry Run to Lake Lenape)	Lead	L	Beyond 2012
NJ02040302050060-01	GEHR (Miry Run to Lake Lenape)	Mercury in Water Column	L	Beyond 2012
NJ02040302050060-01	GEHR (Miry Run to Lake Lenape)	Chromium, hexavalent	L	Beyond 2012
NJ02040302050060-01	GEHR (Miry Run to Lake Lenape)	Nickel	L	Beyond 2012
NJ02040302050060-01	GEHR (Miry Run to Lake Lenape)	Cadmium	L	Beyond 2012
NJ02040302050060-01	GEHR (Miry Run to Lake Lenape)	Arsenic	L	Beyond 2012
NJ02040302050060-01	GEHR (Miry Run to Lake Lenape)	Zinc	L	Beyond 2012
NJ02040302030060-01	GEHR (Piney Hollow Rd to Broad Lane rd)	Copper	L	Beyond 2012
NJ02040302030060-01	GEHR (Piney Hollow Rd to Broad Lane rd)	pН	М	Beyond 2012
NJ02040302040090-01	GEHR (Rt 322 to 39d32m50s)	pН	М	Beyond 2012
NJ02040302040090-01	GEHR (Rt 322 to 39d32m50s)	Copper	L	Beyond 2012

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NJ02030103120050-01	Goffle Brook	Total Dissolved Solids	М	Beyond 2012
NJ02030103120050-01	Goffle Brook	Cause Unknown	М	Beyond 2012
NJ02030103010030-01	Great Brook (above Green Village Rd)	Cause Unknown	М	Beyond 2012
NJ02030103010050-01	Great Brook (below Green Village Rd)	Oxygen, Dissolved	М	Beyond 2012
NJ02040302050140-01	Great Egg Harbor R (GEH Bay to Gibson Crk)	Copper	L	Beyond 2012
NJ02040302050140-01	Great Egg Harbor R (GEH Bay to Gibson Crk)	Chromium (total)	L	Beyond 2012
NJ02040302050140-01	Great Egg Harbor R (GEH Bay to Gibson Crk)	Nickel	L	Beyond 2012
NJ02040302050140-01	Great Egg Harbor R (GEH Bay to Gibson Crk)	Lead	L	Beyond 2012
NJ02040302050140-01	Great Egg Harbor R (GEH Bay to Gibson Crk)	Zinc	L	Beyond 2012
NJ02040302050140-01	Great Egg Harbor R (GEH Bay to Gibson Crk)	Oxygen, Dissolved	М	Beyond 2012
NJ02040302050140-01	Great Egg Harbor R (GEH Bay to Gibson Crk)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040302050140-01	Great Egg Harbor R (GEH Bay to Gibson Crk)	Cadmium	L	Beyond 2012
NJ02040302050130-01	Great Egg Harbor R (GEH Bay to Miry Run)	Chromium (total)	L	Beyond 2012
NJ02040302050130-01	Great Egg Harbor R (GEH Bay to Miry Run)	Copper	L	Beyond 2012
NJ02040302050130-01	Great Egg Harbor R (GEH Bay to Miry Run)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040302050130-01	Great Egg Harbor R (GEH Bay to Miry Run)	Zinc	L	Beyond 2012
NJ02040302050130-01	Great Egg Harbor R (GEH Bay to Miry Run)	Oxygen, Dissolved	М	Beyond 2012
NJ02040302050130-01	Great Egg Harbor R (GEH Bay to Miry Run)	Lead	L	Beyond 2012
NJ02040302050130-01	Great Egg Harbor R (GEH Bay to Miry Run)	Nickel	L	Beyond 2012
NJ02040302050130-01	Great Egg Harbor R (GEH Bay to Miry Run)	Cadmium	L	Beyond 2012
NJ02040302030010-01	Great Egg Harbor R(above New Freedom Rd)	pН	М	Beyond 2012
NJ02040301160120-01	Great Swamp Branch (above Rt 206)	Temperature, water	М	Beyond 2012
NJ02040301160120-01	Great Swamp Branch (above Rt 206)	pH	М	Beyond 2012
NJ02040301160120-01	Great Swamp Branch (above Rt 206)	Nitrates	М	Beyond 2012
NJ02040301160130-01	Great Swamp Branch (below Rt 206)	pH	М	Beyond 2012
NJ02040301160130-01	Great Swamp Branch (below Rt 206)	Nitrates	М	Beyond 2012
NJ02030105120040-01	Green Bk (Bound Bk to N Plainfield gage)	Cause Unknown	М	Beyond 2012
NJ02030105120020-01	Green Bk (N Plainfield gage to Blue Bk)	pН	М	Beyond 2012
NJ02030105120020-01	Green Bk (N Plainfield gage to Blue Bk)	Chloride	L	Beyond 2012
NJ02030105120020-01	Green Bk (N Plainfield gage to Blue Bk)	Total Dissolved Solids	М	Beyond 2012
NJ02040206140030-01	Green Branch / Endless Branch	Mercury in Water Column	М	Beyond 2012
NJ02030105120130-01	Green Brook (below Bound Brook)	Sulfates	L	Beyond 2012
		Total Suspended Solids		
NJ02030105120130-01	Green Brook (below Bound Brook)	(TSS)	М	Beyond 2012
NJ02030105120130-01	Green Brook (below Bound Brook)	Polychlorinated biphenyls	М	Beyond 2012
NJ02030105120130-01	Green Brook (below Bound Brook)	Phosphorus (Total)	М	Beyond 2012 Beyond 2012
NJ02040206230040-01	Green Ck (Norburys Landng to Pierces Pt)	Oxygen, Dissolved	М	Beyond 2012
NJ02040206230040-01	Green Ck (Norburys Landng to Pierces Pt)	Phosphorus (Total)	М	Beyond 2012 Beyond 2012
NJ02040206230040-01	Green Ck (Norburys Landng to Pierces Pt)	Polychlorinated biphenyls	L	Beyond 2012 Beyond 2012
NJ02030103030060-01	Green Pond Brook (below Burnt Meadow Bk)	Cause Unknown	M	Beyond 2012 Beyond 2012
NJ02040202030090-01	Greenwood Br(below CountryLk & MM confl)	Cause Unknown	M	Beyond 2012 Beyond 2012
NJ02040202030090-01	Greenwood Br(below CountryLk & MM confl)	PCB in Fish Tissue	L	Beyond 2012 Beyond 2012
NJ02040202030090-01	Greenwood Br(below CountryLk & MM confl)	DDD	L	Beyond 2012 Beyond 2012
NJ02040202030090-01	Greenwood Br(below CountryLk & MM confl)	DDE	L	Beyond 2012 Beyond 2012
NJ02040202030090-01	Greenwood Br(below CountryLk & MM confl)	DDT	L	Beyond 2012 Beyond 2012
NJ02030103020030-01	Greystone / Watnong Mtn tribs	Cause Unknown	M	Beyond 2012 Beyond 2012
NJ02040301160160-01	Gun Branch	pH	M	Beyond 2012 Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02030103180090-01	Hackensack R (Amtrak bridge to Rt 3)	Dieldrin	М	Beyond 2012
NJ02030103180090-01	Hackensack R (Amtrak bridge to Rt 3)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103180090-01	Hackensack R (Amtrak bridge to Rt 3)	DDT	М	Beyond 2012
NJ02030103180090-01	Hackensack R (Amtrak bridge to Rt 3)	PCB in Fish Tissue	М	Beyond 2012
NJ02030103180090-01	Hackensack R (Amtrak bridge to Rt 3)	Heptachlor epoxide	М	Beyond 2012
NJ02030103180090-01	Hackensack R (Amtrak bridge to Rt 3)	DDD	М	Beyond 2012
NJ02030103180090-01	Hackensack R (Amtrak bridge to Rt 3)	Chlordane	М	Beyond 2012
NJ02030103180090-01	Hackensack R (Amtrak bridge to Rt 3)	Cadmium	L	Beyond 2012
NJ02030103180090-01	Hackensack R (Amtrak bridge to Rt 3)	Benzo(a)pyrene (PAHs)	М	Beyond 2012
NJ02030103180090-01	Hackensack R (Amtrak bridge to Rt 3)	Ammonia (Un-ionized)	М	Beyond 2012
NJ02030103180090-01	Hackensack R (Amtrak bridge to Rt 3)	DDE	М	Beyond 2012
		Dioxin (including 2,3,7,8-		
NJ02030103180090-01	Hackensack R (Amtrak bridge to Rt 3)	TCDD)	М	Beyond 2012
		Dioxin (including 2,3,7,8-		2090112-012
NJ02030103180050-01	Hackensack R (Bellmans Ck to Ft Lee Rd)	TCDD)	М	Beyond 2012
NJ02030103180050-01	Hackensack R (Bellmans Ck to Ft Lee Rd)	Turbidity	М	Beyond 2012
NJ02030103180050-01	Hackensack R (Bellmans Ck to Ft Lee Rd)	Polychlorinated biphenyls	M	Beyond 2012 Beyond 2012
NJ02030103180050-01	Hackensack R (Bellmans Ck to Ft Lee Rd)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103180050-01	Hackensack R (Bellmans Ck to Ft Lee Rd)	Mercury in Fish Tissue	M	Beyond 2012 Beyond 2012
NJ02030103180050-01	Hackensack R (Bellmans Ck to Ft Lee Rd)	Benzo(a)pyrene (PAHs)	М	Beyond 2012
NJ02030103180050-01	Hackensack R (Bellmans Ck to Ft Lee Rd)	Dieldrin	M	Beyond 2012
NJ02030103180050-01	Hackensack R (Bellmans Ck to Ft Lee Rd)	DDT	М	Beyond 2012
NJ02030103180050-01	Hackensack R (Bellmans Ck to Ft Lee Rd)	DDE	M	Beyond 2012 Beyond 2012
NJ02030103180050-01	Hackensack R (Bellmans Ck to Ft Lee Rd)	Chlordane	М	Beyond 2012
NJ02030103180050-01	Hackensack R (Bellmans Ck to Ft Lee Rd)	DDD	M	Beyond 2012
NJ02030103180050-01	Hackensack R (Bellmans Ck to Ft Lee Rd)	Ammonia (Un-ionized)	М	Beyond 2012
NJ02030103180100-01	Hackensack R (below Amtrak bridge)	Benzo(a)pyrene (PAHs)	M	Beyond 2012 Beyond 2012
NJ02030103180100-01	Hackensack R (below Amtrak bridge)	Turbidity	М	Beyond 2012
NJ02030103180100-01	Hackensack R (below Amtrak bridge)	Ammonia (Un-ionized)	M	Beyond 2012 Beyond 2012
NJ02030103180100-01	Hackensack R (below Amtrak bridge)	Cadmium	L	Beyond 2012 Beyond 2012
NJ02030103180100-01	Hackensack R (below Amtrak bridge)	DDD	M	Beyond 2012 Beyond 2012
NJ02030103180100-01	Hackensack R (below Amtrak bridge)	DDE	M	Beyond 2012
NJ02030103180100-01	Hackensack R (below Amtrak bridge)	DDT	M	Beyond 2012 Beyond 2012
NJ02030103180100-01	Hackensack R (below Amtrak bridge)	Dieldrin	M	Beyond 2012
1.002000100100100		Dioxin (including 2,3,7,8-		2090112-012
NJ02030103180100-01	Hackensack R (below Amtrak bridge)	TCDD)	М	Beyond 2012
NJ02030103180100-01	Hackensack R (below Amtrak bridge)	Heptachlor epoxide	M	Beyond 2012 Beyond 2012
NJ02030103180100-01	Hackensack R (below Amtrak bridge)	Mercury in Fish Tissue	M	Beyond 2012 Beyond 2012
NJ02030103180100-01	Hackensack R (below Amtrak bridge)	Oxygen, Dissolved	M	Beyond 2012 Beyond 2012
NJ02030103180100-01	Hackensack R (below Amtrak bridge)	PCB in Fish Tissue	M	Beyond 2012 Beyond 2012
NJ02030103180100-01	Hackensack R (below Amtrak bridge)	pH	M	Beyond 2012 Beyond 2012
NJ02030103180100-01	Hackensack R (below Amtrak bridge)	Chlordane	M	Beyond 2012 Beyond 2012
NJ02030103180100-01	Hackensack R (below Annuak bruge) Hackensack R (Ft Lee Rd to Oradell gage)	Copper	L	Beyond 2012 Beyond 2012
NJ02030103180030-01	Hackensack R (Ft Lee Rd to Oradell gage)	PCB in Fish Tissue	M	Beyond 2012 Beyond 2012
NJ02030103180030-01	Hackensack R (Ft Lee Rd to Oradell gage)	Benzo(a)pyrene (PAHs)	M	Beyond 2012 Beyond 2012
NJ02030103180030-01	Hackensack R (Ft Lee Rd to Oradell gage)	Heptachlor epoxide	M	Beyond 2012 Beyond 2012
NJ02030103180030-01	Hackensack R (Ft Lee Rd to Oradell gage)	Chlordane	M	Beyond 2012 Beyond 2012
11302030103180030-01	Hackensack K (17 Lee Ku to Olauen gage)	Chiordane	141	Deyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02030103180030-01	Hackensack R (Ft Lee Rd to Oradell gage)	Enterococcus	M	Beyond 2012
NJ02030103180030-01	Hackensack R (Ft Lee Rd to Oradell gage)	DDD	М	Beyond 2012
NJ02030103180030-01	Hackensack R (Ft Lee Rd to Oradell gage)	DDE	М	Beyond 2012
NJ02030103180030-01	Hackensack R (Ft Lee Rd to Oradell gage)	DDT	М	Beyond 2012
NJ02030103180030-01	Hackensack R (Ft Lee Rd to Oradell gage)	Dieldrin	М	Beyond 2012
NJ02030103180030-01	Hackensack R (Ft Lee Rd to Oradell gage)	Turbidity	М	Beyond 2012
		Dioxin (including 2,3,7,8-		
NJ02030103180030-01	Hackensack R (Ft Lee Rd to Oradell gage)	TCDD)	М	Beyond 2012
NJ02030103180030-01	Hackensack R (Ft Lee Rd to Oradell gage)	Mercury in Fish Tissue	М	Beyond 2012
NJ02030103170060-01	Hackensack R (Oradell to OldTappan gage)	Phosphorus (Total)	М	Beyond 2012
NJ02030103170060-01	Hackensack R (Oradell to OldTappan gage)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103170060-01	Hackensack R (Oradell to OldTappan gage)	Escherichia coli	М	Beyond 2012
NJ02030103170060-01	Hackensack R (Oradell to OldTappan gage)	Mercury in Fish Tissue	L	Beyond 2012
NJ02030103170060-01	Hackensack R (Oradell to OldTappan gage)	Arsenic	L	Beyond 2012
NJ02030103180080-01	Hackensack R (Rt 3 to Bellmans Ck)	Benzo(a)pyrene (PAHs)	М	Beyond 2012
NJ02030103180080-01	Hackensack R (Rt 3 to Bellmans Ck)	Ammonia (Un-ionized)	М	Beyond 2012
NJ02030103180080-01	Hackensack R (Rt 3 to Bellmans Ck)	Cadmium	L	Beyond 2012
NJ02030103180080-01	Hackensack R (Rt 3 to Bellmans Ck)	Chlordane	М	Beyond 2012
NJ02030103180080-01	Hackensack R (Rt 3 to Bellmans Ck)	DDD	М	Beyond 2012
NJ02030103180080-01	Hackensack R (Rt 3 to Bellmans Ck)	DDE	М	Beyond 2012
NJ02030103180080-01	Hackensack R (Rt 3 to Bellmans Ck)	DDT	М	Beyond 2012
NJ02030103180080-01	Hackensack R (Rt 3 to Bellmans Ck)	PCB in Fish Tissue	М	Beyond 2012
NJ02030103180080-01	Hackensack R (Rt 3 to Bellmans Ck)	Dieldrin	М	Beyond 2012
NJ02030103180080-01	Hackensack R (Rt 3 to Bellmans Ck)	Turbidity	М	Beyond 2012
NJ02030103180080-01	Hackensack R (Rt 3 to Bellmans Ck)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103180080-01	Hackensack R (Rt 3 to Bellmans Ck)	Mercury in Fish Tissue	М	Beyond 2012
NJ02030103180080-01	Hackensack R (Rt 3 to Bellmans Ck)	Heptachlor epoxide	М	Beyond 2012
		Dioxin (including 2,3,7,8-		
NJ02030103180080-01	Hackensack R (Rt 3 to Bellmans Ck)	TCDD)	М	Beyond 2012
NJ02030103170030-01	Hackensack River (above Old Tappan gage)	Arsenic	L	Beyond 2012
NJ02030103170030-01	Hackensack River (above Old Tappan gage)	Phosphorus (Total)	М	Beyond 2012
NJ02030103170030-01	Hackensack River (above Old Tappan gage)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040105170020-01	Hakihokake Creek	Phosphorus (Total)	М	Beyond 2012
NJ02040301170010-01	Hammonton Creek (above 74d43m)	Phosphorus (Total)	М	Beyond 2012
NJ02040301170010-01	Hammonton Creek (above 74d43m)	Copper	L	Beyond 2012
NJ02040301170010-01	Hammonton Creek (above 74d43m)	Mercury in Water Column	М	Beyond 2012
NJ02040301170010-01	Hammonton Creek (above 74d43m)	Nitrates	М	Beyond 2012
NJ02040301170010-01	Hammonton Creek (above 74d43m)	pH	М	Beyond 2012
NJ02040301170010-01	Hammonton Creek (above 74d43m)	Zinc	L	Beyond 2012
NJ02040301170010-01	Hammonton Creek (above 74d43m)	Arsenic	L	Beyond 2012
NJ02040301170020-01	Hammonton Creek (Columbia Rd to 74d43m)	Phosphorus (Total)	М	Beyond 2012
NJ02040301170020-01	Hammonton Creek (Columbia Rd to 74d43m)	Arsenic	L	Beyond 2012
NJ02040301170020-01	Hammonton Creek (Columbia Rd to 74d43m)	Copper	L	Beyond 2012
NJ02040301170020-01	Hammonton Creek (Columbia Rd to 74d43m)	Mercury in Water Column	L	Beyond 2012
NJ02040301170020-01	Hammonton Creek (Columbia Rd to 74d43m)	pН	М	Beyond 2012
NJ02040301170020-01	Hammonton Creek (Columbia Rd to 74d43m)	Nitrates	М	Beyond 2012
NJ02040301170020-01	Hammonton Creek (Columbia Rd to 74d43m)	Zinc	L	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02040206170010-01	Hankins Pond trib (Millville)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206170010-01	Hankins Pond trib (Millville)	Phosphorus (Total)	М	Beyond 2012
NJ02040105170030-01	Harihokake Creek (and to Hakihokake Ck)	Escherichia coli	М	Beyond 2012
NJ02040105170030-01	Harihokake Creek (and to Hakihokake Ck)	Phosphorus (Total)	М	Beyond 2012
NJ02040206060070-01	Harmony trib (Alloway Creek)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202060030-01	Haynes Creek (below Lake Pine)	pH	М	Beyond 2012
NJ02040301160050-01	Hays Mill Creek (above Tremont Ave)	pH	М	Beyond 2012
NJ02040301020030-01	Haystack Brook	Cause Unknown	М	Beyond 2012
NJ02030105030030-01	Headquarters trib (Third Neshanic River)	Oxygen, Dissolved	Н	2012
NJ02030105110010-01	Heathcote Brook	pH	М	Beyond 2012
		Total Suspended Solids		-
NJ02030105110010-01	Heathcote Brook	(TSS)	Н	2012
NJ02030103140010-01	Hohokus Bk (above Godwin Ave)	Total Dissolved Solids	М	Beyond 2012
NJ02030103140010-01	Hohokus Bk (above Godwin Ave)	Phosphorus (Total)	М	Beyond 2012
NJ02030103140030-01	Hohokus Bk(below Pennington Ave)	Phosphorus (Total)	М	Beyond 2012
NJ02030103140030-01	Hohokus Bk(below Pennington Ave)	Nitrates	М	Beyond 2012
NJ02030103140030-01	Hohokus Bk(below Pennington Ave)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103140020-01	Hohokus Bk(Pennington Ave to Godwin Ave)	Cause Unknown	М	Beyond 2012
NJ02030103140020-01	Hohokus Bk(Pennington Ave to Godwin Ave)	Total Dissolved Solids	М	Beyond 2012
NJ02030105040030-01	Holland Brook	Cause Unknown	М	Beyond 2012
NJ02040105100020-01	Honey Run	Oxygen, Dissolved	М	Beyond 2012
NJ02030104070010-01	Hop Brook	Temperature, water	М	Beyond 2012
NJ02030104070010-01	Hop Brook	Phosphorus (Total)	М	Beyond 2012
NJ02030104070010-01	Hop Brook	Arsenic	L	Beyond 2012
		Total Suspended Solids		
NJ02030104070010-01	Hop Brook	(TSS)	М	Beyond 2012
NJ02040206060100-01	Hope Creek / Artificial Island	Polychlorinated biphenyls	L	Beyond 2012
NJ02040302040070-01	Hospitality Br (below Piney Hollow Rd)	pH	М	Beyond 2012
NJ02040302040030-01	Hospitality Br (Piney HollowRd to Rt538)	pH	М	Beyond 2012
NJ02040302040020-01	Hospitality Br (Rt 538 to Whitehouse Rd)	pH	М	Beyond 2012
NJ02040302040010-01	Hospitality Branch (above Whitehouse Rd)	pH	М	Beyond 2012
		Dioxin (including 2,3,7,8-		
NJ02030101170030-01	Hudson River (lower)	TCDD)	М	Beyond 2012
NJ02030101170030-01	Hudson River (lower)	Mercury in Fish Tissue	М	Beyond 2012
NJ02030101170030-01	Hudson River (lower)	DDT	М	Beyond 2012
NJ02030101170030-01	Hudson River (lower)	DDD	М	Beyond 2012
NJ02030101170030-01	Hudson River (lower)	Hexachlorobenzene	М	Beyond 2012
NJ02030101170030-01	Hudson River (lower)	Chlordane	М	Beyond 2012
NJ02030101170030-01	Hudson River (lower)	Cause Unknown	М	Beyond 2012
NJ02030101170030-01	Hudson River (lower)	Benzo(a)pyrene (PAHs)	М	Beyond 2012
NJ02030101170030-01	Hudson River (lower)	DDE	М	Beyond 2012
NJ02030101170030-01	Hudson River (lower)	Polychlorinated biphenyls	М	Beyond 2012
NJ02030101170030-01	Hudson River (lower)	Dieldrin	М	Beyond 2012
NJ02030101170010-01	Hudson River (upper)	PCB in Fish Tissue	М	Beyond 2012
NJ02030101170010-01	Hudson River (upper)	DDT	М	Beyond 2012
NJ02030101170010-01	Hudson River (upper)	DDE	М	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
		Dioxin (including 2,3,7,8-		
NJ02030101170010-01	Hudson River (upper)	TCDD)	М	Beyond 2012
NJ02030101170010-01	Hudson River (upper)	Mercury in Fish Tissue	М	Beyond 2012
NJ02030101170010-01	Hudson River (upper)	Dieldrin	М	Beyond 2012
NJ02030101170010-01	Hudson River (upper)	DDD	М	Beyond 2012
NJ02030101170010-01	Hudson River (upper)	Chlordane in Fish Tissue	L	Beyond 2012
NJ02030101170010-01	Hudson River (upper)	Cause Unknown	М	Beyond 2012
NJ02030101170010-01	Hudson River (upper)	Benzo(a)pyrene (PAHs)	М	Beyond 2012
NJ02030101170010-01	Hudson River (upper)	Hexachlorobenzene	М	Beyond 2012
NJ02040206130030-01	Indian Branch (Scotland Run)	pH	М	Beyond 2012
NJ02040301170090-01	Indian Cabin Creek	Oxygen, Dissolved	М	Beyond 2012
NJ02040206090020-01	Indian Fields Branch / Jackson Run	Cause Unknown	М	Beyond 2012
NJ02040301150030-01	Indian Mills Brook / Muskingum Brook	pН	М	Beyond 2012
NJ02040206150040-01	Indian Run (Muddy Run)	Cause Unknown	М	Beyond 2012
NJ02030105130040-01	Ireland Brook	pH	М	Beyond 2012
NJ02040105210060-01	Jacobs Creek (above Woolsey Brook)	Arsenic	L	Beyond 2012
		Total Suspended Solids		
NJ02040105210060-01	Jacobs Creek (above Woolsey Brook)	(TSS)	М	Beyond 2012
NJ02040105210060-01	Jacobs Creek (above Woolsey Brook)	Phosphorus (Total)	М	Beyond 2012
NJ02040105210060-01	Jacobs Creek (above Woolsey Brook)	Oxygen, Dissolved	М	Beyond 2012
NJ02040105210060-01	Jacobs Creek (above Woolsey Brook)	Mercury in Water Column	L	Beyond 2012
NJ02040202050070-01	Jade Run	pH	М	Beyond 2012
NJ02040202050070-01	Jade Run	Oxygen, Dissolved	М	Beyond 2012
NJ02040202050070-01	Jade Run	Phosphorus (Total)	М	Beyond 2012
NJ02040301080070-01	Jakes Branch (Lower Toms River)	Oxygen, Dissolved	М	Beyond 2012
NJ02040201040040-01	Jumping Brook (Monmouth Co)	Mercury in Fish Tissue	L	Beyond 2012
NJ02030104090050-01	Jumping Brook (Ocean Co)	pH	М	Beyond 2012
NJ02040301050010-01	Kettle Creek (above Lake Riviera outlet)	Cause Unknown	М	Beyond 2012
NJ02040301050020-01	Kettle Creek (below Lake Riviera outlet)	Cause Unknown	М	Beyond 2012
NJ02040202060010-01	Kettle Run (above Centennial Lake)	pН	М	Beyond 2012
		Dioxin (including 2,3,7,8-		
NJ02030104010020-01	Kill Van Kull West	TCDD)	М	Beyond 2012
NJ02030104010020-01	Kill Van Kull West	Dieldrin	М	Beyond 2012
NJ02030104010020-01	Kill Van Kull West	Hexachlorobenzene	М	Beyond 2012
NJ02030104010020-01	Kill Van Kull West	Heptachlor epoxide	М	Beyond 2012
NJ02030104010020-01	Kill Van Kull West	DDT	М	Beyond 2012 Beyond 2012
NJ02030104010020-01	Kill Van Kull West	DDE	M	Beyond 2012 Beyond 2012
NJ02030104010020-01	Kill Van Kull West	DDD	M	Beyond 2012 Beyond 2012
NJ02030104010020-01	Kill Van Kull West	Chlordane	M	Beyond 2012 Beyond 2012
NJ02030104010020-01	Kill Van Kull West	Cause Unknown	M	Beyond 2012 Beyond 2012
NJ02030104010020-01	Kill Van Kull West	Benzo(a)pyrene (PAHs)	M	Beyond 2012 Beyond 2012
NJ02030104010020-01	Kill Van Kull West	PCB in Fish Tissue	M	Beyond 2012 Beyond 2012
NJ02040105170060-01	Kingwood Twp(Warford-Little Nishisakawk)	Phosphorus (Total)	M	Beyond 2012 Beyond 2012
NJ02040105040040-01	Lafayette Swamp tribs	Cause Unknown	M	Beyond 2012 Beyond 2012
NJ02040201050020-01	Lahaway Ck(Allentwn/NE Road-Prospertown)	Phosphorus (Total)	M	Beyond 2012 Beyond 2012
NJ02040201050010-01	Lahaway Creek (above Prospertown)	Cause Unknown	M	Beyond 2012 Beyond 2012
NJ02040105150020-01	Lake Hopatcong	pH	M	Beyond 2012 Beyond 2012
11302070103130020-01		P ¹¹	141	Dey0110 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02040202060020-01	Lake Pine / Centennial Lake & tribs	рН	М	Beyond 2012
NJ02040302050110-01	Lakes Creek (GEHR)	Oxygen, Dissolved	М	Beyond 2012
NJ02030105050030-01	Lamington R (Furnace Rd to Hillside Rd)	Temperature, water	М	Beyond 2012
NJ02030105050020-01	Lamington R (Hillside Rd to Rt 10)	Phosphorus (Total)	Н	2012
NJ02030105050070-01	Lamington R(HallsBrRd-HerzogBrk)	pH	Н	2012
NJ02030105050070-01	Lamington R(HallsBrRd-HerzogBrk)	Phosphorus (Total)	Н	2012
NJ02030105050070-01	Lamington R(HallsBrRd-HerzogBrk)	Temperature, water	М	Beyond 2012
		Total Suspended Solids		
NJ02030105050070-01	Lamington R(HallsBrRd-HerzogBrk)	(TSS)	М	Beyond 2012
NJ02030105050130-01	Lamington R(Hertzog Brk to Pottersville gage)	Temperature, water	М	Beyond 2012
NJ02030105050040-01	Lamington R(Pottersville gage-FurnaceRd)	Temperature, water	М	Beyond 2012
NJ02030105050040-01	Lamington R(Pottersville gage-FurnaceRd)	Cause Unknown	М	Beyond 2012
NJ02040301170100-01	Landing Creek (above Rt 563)	Oxygen, Dissolved	М	Beyond 2012
NJ02030105130070-01	Lawrence Bk (below Milltown/Herberts br)	Polychlorinated biphenyls	L	Beyond 2012
		Dioxin (including 2,3,7,8-		,
NJ02030105130070-01	Lawrence Bk (below Milltown/Herberts br)	TCDD)	L	Beyond 2012
NJ02030105130070-01	Lawrence Bk (below Milltown/Herberts br)	Cause Unknown	М	Beyond 2012
NJ02030105130050-01	Lawrence Bk (Church Lane to Deans Pond)	Escherichia coli	М	Beyond 2012
NJ02030105130050-01	Lawrence Bk (Church Lane to Deans Pond)	Cause Unknown	М	Beyond 2012
NJ02030105130050-01	Lawrence Bk (Church Lane to Deans Pond)	Arsenic	L	Beyond 2012
NJ02030105130060-01	Lawrence Bk (Milltown to Church Lane)	Arsenic	L	Beyond 2012
NJ02030105130060-01	Lawrence Bk (Milltown to Church Lane)	Escherichia coli	М	Beyond 2012
NJ02030105130060-01	Lawrence Bk (Milltown to Church Lane)	pН	М	Beyond 2012
NJ02030105130020-01	Lawrence Brook (above Deans Pond dam)	Cause Unknown	М	Beyond 2012
NJ02030105130020-01	Lawrence Brook (above Deans Pond dam)	Arsenic	L	Beyond 2012
NJ02040201090030-01	LDRV tribs (Assiscunk Ck to Blacks Ck)	PCB in Fish Tissue	L	Beyond 2012
NJ02040201110010-01	LDRV tribs (Beverly to Assiscunk Ck)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040201090040-01	LDRV tribs (Bustleton Creek area)	PCB in Fish Tissue	L	Beyond 2012
NJ02040201090040-01	LDRV tribs (Bustleton Creek area)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040206020010-01	LDRV tribs (Lakeview Ave to Oldmans Ck)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206020020-01	LDRV tribs (Marsh Pt-Main St Pennsville)	DDT	L	Beyond 2012
NJ02040206020020-01	LDRV tribs (Marsh Pt-Main St Pennsville)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040206020020-01	LDRV tribs (Marsh Pt-Main St Pennsville)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206020020-01	LDRV tribs (Marsh Pt-Main St Pennsville)	DDE	L	Beyond 2012
NJ02040206020020-01	LDRV tribs (Marsh Pt-Main St Pennsville)	DDD	L	Beyond 2012
NJ02030103110010-01	Lincoln Park tribs (Pompton River)	Cause Unknown	М	Beyond 2012
NJ02040202060070-01	Little Creek (above Bear Swamp River)	Escherichia coli	М	Beyond 2012
NJ02040206120010-01	Little Ease Run (above Academy Rd)	рН	М	Beyond 2012
NJ02040206120020-01	Little Ease Run (below Academy Rd)	pH	М	Beyond 2012
NJ02040104130010-01	Little Flat Brook (Beerskill and above)	Temperature, water	М	Beyond 2012
NJ02040104130030-01	Little Flat Brook (Confluence to Layton)	Temperature, water	М	Beyond 2012
NJ02040104130020-01	Little Flat Brook (Layton to Beerskill)	Temperature, water	М	Beyond 2012
NJ02040105240050-01	Little Shabakunk Creek	Arsenic	L	Beyond 2012
NJ02040105240050-01	Little Shabakunk Creek	Lead	L	Beyond 2012
NJ02040105240050-01	Little Shabakunk Creek	Phosphorus (Total)	М	Beyond 2012
NJ02040105240050-01	Little Shabakunk Creek	Mercury in Fish Tissue	L	Beyond 2012
NJ02040105240050-01	Little Shabakunk Creek	Oxygen, Dissolved	М	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02030104080010-01	Little Silver Creek / Town Neck Creek	DDE	L	Beyond 2012
NJ02030104080010-01	Little Silver Creek / Town Neck Creek	DDD	L	Beyond 2012
NJ02030104080010-01	Little Silver Creek / Town Neck Creek	Polychlorinated biphenyls	L	Beyond 2012
NJ02030104080010-01	Little Silver Creek / Town Neck Creek	Mercury in Fish Tissue	L	Beyond 2012
NJ02030104080010-01	Little Silver Creek / Town Neck Creek	DDT	L	Beyond 2012
NJ02040202120070-01	Little Timber Creek (Gloucester City)	Cause Unknown	М	Beyond 2012
NJ02040202120070-01	Little Timber Creek (Gloucester City)	Polychlorinated biphenyls	L	Beyond 2012
NJ02030103010040-01	Loantaka Brook	Cause Unknown	М	Beyond 2012
NJ02030103010040-01	Loantaka Brook	Total Dissolved Solids	М	Beyond 2012
NJ02030103010040-01	Loantaka Brook	Escherichia coli	М	Beyond 2012
NJ02040105200010-01	Lockatong Ck (above Rt 12)	Escherichia coli	М	Beyond 2012
NJ02040105200010-01	Lockatong Ck (above Rt 12)	pН	М	Beyond 2012
NJ02040105200010-01	Lockatong Ck (above Rt 12)	Phosphorus (Total)	М	Beyond 2012
NJ02040105200030-01	Lockatong Ck (below Milltown) incl UDRV	рН	М	Beyond 2012
NJ02040105200030-01	Lockatong Ck (below Milltown) incl UDRV	Temperature, water	М	Beyond 2012
NJ02040105200030-01	Lockatong Ck (below Milltown) incl UDRV	Turbidity	М	Beyond 2012
NJ02040105200030-01	Lockatong Ck (below Milltown) incl UDRV	Escherichia coli	М	Beyond 2012
NJ02040105200020-01	Lockatong Ck (Milltown to Rt 12)	Escherichia coli	М	Beyond 2012
NJ02040105200020-01	Lockatong Ck (Milltown to Rt 12)	pН	М	Beyond 2012
NJ02040105200020-01	Lockatong Ck (Milltown to Rt 12)	Phosphorus (Total)	М	Beyond 2012
NJ02040105200020-01	Lockatong Ck (Milltown to Rt 12)	Temperature, water	М	Beyond 2012
NJ02040105200020-01	Lockatong Ck (Milltown to Rt 12)	Turbidity	М	Beyond 2012
NJ02030104080050-01	Long Branch direct Atlantic drainage	DDD	L	Beyond 2012
NJ02030104080050-01	Long Branch direct Atlantic drainage	DDE	L	Beyond 2012
NJ02030104080050-01	Long Branch direct Atlantic drainage	DDT	L	Beyond 2012
NJ02030104080050-01	Long Branch direct Atlantic drainage	Mercury in Fish Tissue	L	Beyond 2012
NJ02030104080050-01	Long Branch direct Atlantic drainage	Polychlorinated biphenyls	L	Beyond 2012
NJ02030104080050-01	Long Branch direct Atlantic drainage	Oxygen, Dissolved	М	Beyond 2012
NJ02020007040060-01	Long House Creek/Upper Greenwood Lake	pH	М	Beyond 2012
NJ02040105120010-01	Lopatcong Creek (above Rt 57)	Phosphorus (Total)	М	Beyond 2012
NJ02040105120020-01	Lopatcong Creek (below Rt 57) incl UDRV	Phosphorus (Total)	М	Beyond 2012
NJ02040202080060-01	LRDV trib- Delanco/Edgewater	PCB in Fish Tissue	L	Beyond 2012
NJ02040105150050-01	Lubbers Run (below Dallis Pond)	pH	М	Beyond 2012
NJ02040105150050-01	Lubbers Run (below Dallis Pond)	Temperature, water	М	Beyond 2012
NJ02040206070020-01	Mad Horse Ck / Little Ck / Turners Fork	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202120120-01	Main Ditch / Little Mantua Creek	Polychlorinated biphenyls	L	Beyond 2012
NJ02030103020060-01	Malapardis Brook	Cause Unknown	М	Beyond 2012
NJ02030105140030-01	Manalapan Brook (below Lake Manalapan)	Arsenic	L	Beyond 2012
NJ02030105140030-01	Manalapan Brook (below Lake Manalapan)	Cause Unknown	М	Beyond 2012
NJ02030104100080-01	Manasquan R (74d07m30s to Squankum gage)	Arsenic	L	Beyond 2012
NJ02030104100050-01	Manasquan R (gage to West Farms Rd)	Temperature, water	М	Beyond 2012
NJ02030104100050-01	Manasquan R (gage to West Farms Rd)	Total Suspended Solids (TSS)	М	Beyond 2012
NJ02030104100090-01	Manasquan R (Rt 70 br to 74d07m30s)	Cause Unknown	М	Beyond 2012 Beyond 2012
NJ02030104100020-01	Manasquan R (Rt 9 to 74d17m50s road)	Total Suspended Solids (TSS)	M	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
		Total Suspended Solids		
NJ02030104100030-01	Manasquan R (West Farms Rd to Rt 9)	(TSS)	М	Beyond 2012
NJ02030104100030-01	Manasquan R (West Farms Rd to Rt 9)	Temperature, water	М	Beyond 2012
NJ02030104100030-01	Manasquan R (West Farms Rd to Rt 9)	Phosphorus (Total)	М	Beyond 2012
NJ02030104100100-01	Manasquan River (below Rt 70 bridge)	Oxygen, Dissolved	М	Beyond 2012
NJ02040206040010-01	Mannington Creek	Escherichia coli	М	Beyond 2012
NJ02040206040010-01	Mannington Creek	Oxygen, Dissolved	М	Beyond 2012
NJ02040206040010-01	Mannington Creek	Arsenic	L	Beyond 2012
NJ02040206040010-01	Mannington Creek	Phosphorus (Total)	М	Beyond 2012
NJ02040206040010-01	Mannington Creek	pH	М	Beyond 2012
NJ02040202130040-01	Mantua Ck (Edwards Run to rd to Sewell)	Escherichia coli	М	Beyond 2012
NJ02040202130040-01	Mantua Ck (Edwards Run to rd to Sewell)	Phosphorus (Total)	М	Beyond 2012
NJ02040202130040-01	Mantua Ck (Edwards Run to rd to Sewell)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202130040-01	Mantua Ck (Edwards Run to rd to Sewell)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040202130040-01	Mantua Ck (Edwards Run to rd to Sewell)	pH	М	Beyond 2012
NJ02040202130010-01	Mantua Creek (above Rt 47)	Cause Unknown	М	Beyond 2012
NJ02040202130060-01	Mantua Creek (below Edwards Run)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206190030-01	Manumuskin River (below Rt 49)	Polychlorinated biphenyls	L	Beyond 2012
NJ02030104100040-01	Marsh Bog Brook	Cause Unknown	М	Beyond 2012
NJ02030104060020-01	Matawan Creek (above Ravine Drive)	Polychlorinated biphenyls	М	Beyond 2012
NJ02030104060020-01	Matawan Creek (above Ravine Drive)	PCB in Fish Tissue	L	Beyond 2012
NJ02030104060020-01	Matawan Creek (above Ravine Drive)	Lead	L	Beyond 2012
NJ02030104060020-01	Matawan Creek (above Ravine Drive)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02030104060020-01	Matawan Creek (above Ravine Drive)	Copper	L	Beyond 2012
NJ02030104060030-01	Matawan Creek (below Ravine Drive)	DDE	M	Beyond 2012
NJ02030104060030-01	Matawan Creek (below Ravine Drive)	Chlordane	М	Beyond 2012
NJ02030104060030-01	Matawan Creek (below Ravine Drive)	Enterococcus	M	Beyond 2012 Beyond 2012
NJ02030104060030-01	Matawan Creek (below Ravine Drive)	pH	M	Beyond 2012 Beyond 2012
NJ02030104060030-01	Matawan Creek (below Ravine Drive)	Polychlorinated biphenyls	M	Beyond 2012 Beyond 2012
NJ02030104060030-01	Matawan Creek (below Ravine Drive)	DDT	M	Beyond 2012 Beyond 2012
NJ02030104060030-01	Matawan Creek (below Ravine Drive)	DDD	M	Beyond 2012 Beyond 2012
NJ02030105150040-01	Matchaponix Brook (above/incl Pine Bk)	Cause Unknown	M	Beyond 2012 Beyond 2012
NJ02030105150060-01	Matchaponix Brook (below Pine Brook)	Oxygen, Dissolved	M	Beyond 2012 Beyond 2012
NJ02030105150060-01	Matchaponix Brook (below Pine Brook)	Phosphorus (Total)	H	2012
NJ02030105150060-01	Matchaponix Brook (below Pine Brook)	Nitrates	M	Beyond 2012
NJ02040301200110-01	Mattix Run (Nacote Creek)	Oxygen, Dissolved	M	Beyond 2012 Beyond 2012
NJ02040206140060-01	Maurice R (Sherman Ave to Blackwater Br)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02040206200050-01	Maurice River (below Leesburg) to EastPt	Oxygen, Dissolved	M	Beyond 2012 Beyond 2012
NJ02040206200050-01	Maurice River (below Leesburg) to East t Maurice River (below Leesburg) to EastPt	Polychlorinated biphenyls	L	Beyond 2012 Beyond 2012
NJ02040206200040-01	Maurice River (below Ecesolig) to East t Maurice River (Leesburg to Rt 548)	Polychlorinated biphenyls	L	Beyond 2012 Beyond 2012
NJ02040206200040-01	Maurice River (Rt 548 to Menantico Ck)	Polychlorinated biphenyls	L	Beyond 2012 Beyond 2012
NJ02040206170030-01	Maurice River (Menantico Ck to UnionLake)	Polychlorinated biphenyls	L	Beyond 2012 Beyond 2012
NJ02040206170030-01	Maurice River(Menantico Ck to UnionLake)	Mercury in Fish Tissue	L L	-
NJ02040206170030-01	Maurice River(Menantico Ck to UnionLake) Maurice River(Menantico Ck to UnionLake)	Cause Unknown		Beyond 2012
NJ02040206170030-01	Maurice River(Menantico Ck to UnionLake) Maurice River(Union Lake to Sherman Ave)	Mercury in Fish Tissue	M L	Beyond 2012
	Maurice River(Union Lake to Sherman Ave) Maurice River(Union Lake to Sherman Ave)			Beyond 2012
NJ02040206160030-01	· · · · · · · · · · · · · · · · · · ·	Cause Unknown	M	Beyond 2012
NJ02040206160030-01	Maurice River(Union Lake to Sherman Ave)	Arsenic	L	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02040206140010-01	MauriceR(BlkwtrBr to/incl WillowGroveLk)	Cause Unknown	М	Beyond 2012
NJ02040206140010-01	MauriceR(BlkwtrBr to/incl WillowGroveLk)	Arsenic	L	Beyond 2012
NJ02030105150030-01	McGellairds Brook (below Taylors Mills)	Phosphorus (Total)	М	Beyond 2012
NJ02030103070060-01	Meadow Brook/High Mountain Brook	Temperature, water	М	Beyond 2012
NJ02040206180030-01	Menantico Creek (above Rt 552)	Mercury in Fish Tissue	L	Beyond 2012
		Dioxin (including 2,3,7,8-		
NJ02040206180030-01	Menantico Creek (above Rt 552)	TCDD)	L	Beyond 2012
NJ02040206180030-01	Menantico Creek (above Rt 552)	DDD	L	Beyond 2012
NJ02040206180030-01	Menantico Creek (above Rt 552)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206180030-01	Menantico Creek (above Rt 552)	DDE	L	Beyond 2012
NJ02040206180030-01	Menantico Creek (above Rt 552)	DDT	L	Beyond 2012
NJ02040206180050-01	Menantico Creek (below Rt 552)	Phosphorus (Total)	М	Beyond 2012
NJ02040206180050-01	Menantico Creek (below Rt 552)	DDT	L	Beyond 2012
NJ02040206180050-01	Menantico Creek (below Rt 552)	DDE	L	Beyond 2012
NJ02040206180050-01	Menantico Creek (below Rt 552)	DDD	L	Beyond 2012
NJ02040206180050-01	Menantico Creek (below Rt 552)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206180050-01	Menantico Creek (below Rt 552)	Arsenic	L	Beyond 2012
NJ02040105210080-01	Mercer (Calhoun St to Jacobs Creek)	Cause Unknown	М	Beyond 2012
NJ02040105140040-01	Merrill Creek	Cause Unknown	М	Beyond 2012
NJ02040301040020-01	Metedeconk R (Beaverdam Ck to confl)	Arsenic	L	Beyond 2012
NJ02040301040020-01	Metedeconk R (Beaverdam Ck to confl)	Cause Unknown	М	Beyond 2012
NJ02040301040030-01	Metedeconk R (below Beaverdam Creek)	Oxygen, Dissolved	М	Beyond 2012
NJ02040301020050-01	Metedeconk R NB (confluence to Rt 9)	Arsenic	L	Beyond 2012
NJ02040301020050-01	Metedeconk R NB (confluence to Rt 9)	Temperature, water	М	Beyond 2012
NJ02040301020010-01	Metedeconk R NB(above I-195)	Oxygen, Dissolved	М	Beyond 2012
NJ02040301020010-01	Metedeconk R NB(above I-195)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301020010-01	Metedeconk R NB(above I-195)	DDD	L	Beyond 2012
NJ02040301020010-01	Metedeconk R NB(above I-195)	Arsenic	L	Beyond 2012
NJ02040301020010-01	Metedeconk R NB(above I-195)	PCB in Fish Tissue	L	Beyond 2012
NJ02040301020010-01	Metedeconk R NB(above I-195)	DDT	L	Beyond 2012
NJ02040301020010-01	Metedeconk R NB(above I-195)	DDE	L	Beyond 2012
NJ02040301020010-01	Metedeconk R NB(above I-195)	Chlordane in Fish Tissue	L	Beyond 2012
NJ02040301020020-01	Metedeconk R NB(Rt 9 to I-195)	Temperature, water	М	Beyond 2012
NJ02040301020020-01	Metedeconk R NB(Rt 9 to I-195)	Oxygen, Dissolved	М	Beyond 2012
NJ02040301020020-01	Metedeconk R NB(Rt 9 to I-195)	Arsenic	L	Beyond 2012
NJ02040301030010-01	Metedeconk R SB (above I-195 exit 21 rd)	Oxygen, Dissolved	М	Beyond 2012
NJ02040301030010-01	Metedeconk R SB (above I-195 exit 21 rd)	Arsenic	L	Beyond 2012
NJ02040301030050-01	Metedeconk R SB (confluence to Rt 9)	Arsenic	L	Beyond 2012
NJ02040301030040-01	Metedeconk R SB (Rt 9 to Bennetts Pond)	Arsenic	L	Beyond 2012
NJ02040301030030-01	Metedeconk R SB(BennettsPd to 74d19m15s)	Cause Unknown	М	Beyond 2012
NJ02040301030030-01	Metedeconk R SB(BennettsPd to 74d19m15s)	Chlordane in Fish Tissue	L	Beyond 2012
NJ02040301030030-01	Metedeconk R SB(BennettsPd to 74d19m15s)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301030030-01	Metedeconk R SB(BennettsPd to 74d19m15s)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040301080020-01	Michaels Branch (Wrangel Brook)	рН	М	Beyond 2012
NJ02040206200010-01	Middle Branch / Slab Branch	Mercury in Water Column	L	Beyond 2012
NJ02030105120180-01	Middle Brook	Arsenic	L	Beyond 2012
NJ02030105120180-01	Middle Brook	Phosphorus (Total)	М	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
		Total Suspended Solids		
NJ02030105120180-01	Middle Brook	(TSS)	М	Beyond 2012
NJ02030105120180-01	Middle Brook	Benzene	L	Beyond 2012
NJ02030105060080-01	Middle Brook (NB Raritan River)	Cause Unknown	М	Beyond 2012
NJ02030105060080-01	Middle Brook (NB Raritan River)	Escherichia coli	М	Beyond 2012
nJ02030105120050-01	Middle Brook EB	Cause Unknown	М	Beyond 2012
NJ02030105120050-01	Middle Brook EB	Chloride	L	Beyond 2012
NJ02030105120050-01	Middle Brook EB	Total Dissolved Solids	М	Beyond 2012
NJ02030105120060-01	Middle Brook WB	Cause Unknown	М	Beyond 2012
NJ02040206100010-01	Middle Marsh Ck (DrumboCk to Sea Breeze)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040302050120-01	Middle River / Peters Creek	Oxygen, Dissolved	М	Beyond 2012
NJ02030105120150-01	Mile Run	Cause Unknown	М	Beyond 2012
NJ02040302060010-01	Mill Br (above Cardiff-Bargaintown rd)	Cause Unknown	М	Beyond 2012
NJ02040301140020-01	Mill Branch (below GS Parkway)	PCB in Fish Tissue	L	Beyond 2012
NJ02040301140020-01	Mill Branch (below GS Parkway)	рН	М	Beyond 2012
NJ02030105160080-01	Mill Brook / Martins Creek	Polychlorinated biphenyls	L	Beyond 2012
NJ02030105160080-01	Mill Brook / Martins Creek	Cause Unknown	М	Beyond 2012
NJ02040301130020-01	Mill Ck (above GS Parkway)	рН	М	Beyond 2012
NJ02040301130030-01	Mill Ck (below GS Parkway)/Manahawkin Ck	DDT	L	Beyond 2012
NJ02040301130030-01	Mill Ck (below GS Parkway)/Manahawkin Ck	Chlordane in Fish Tissue	L	Beyond 2012
NJ02040301130030-01	Mill Ck (below GS Parkway)/Manahawkin Ck	DDD	L	Beyond 2012
NJ02040301130030-01	Mill Ck (below GS Parkway)/Manahawkin Ck	DDE	L	Beyond 2012
NJ02040301130030-01	Mill Ck (below GS Parkway)/Manahawkin Ck	рН	М	Beyond 2012
NJ02040301130030-01	Mill Ck (below GS Parkway)/Manahawkin Ck	PCB in Fish Tissue	L	Beyond 2012
NJ02040206090050-01	Mill Creek (below Maple House Bk)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206110040-01	Mill Creek (Dividing Creek)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206160040-01	Mill Creek (lower)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040206160040-01	Mill Creek (lower)	Cause Unknown	М	Beyond 2012
NJ02040206160040-01	Mill Creek (lower)	Arsenic	L	Beyond 2012
NJ02040202080030-01	Mill Creek (Willingboro)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202080030-01	Mill Creek (Willingboro)	Arsenic	L	Beyond 2012
NJ02040202080030-01	Mill Creek (Willingboro)	pН	М	Beyond 2012
		Total Suspended Solids		
NJ02040202080030-01	Mill Creek (Willingboro)	(TSS)	М	Beyond 2012
NJ02040202080030-01	Mill Creek (Willingboro)	Phosphorus (Total)	М	Beyond 2012
NJ02030105100020-01	Millstone R (Applegarth road to Rt 33)	Arsenic	L	Beyond 2012
NJ02030105100020-01	Millstone R (Applegarth road to Rt 33)	Phosphorus (Total)	Н	2012
		Total Suspended Solids		
NJ02030105100020-01	Millstone R (Applegarth road to Rt 33)	(TSS)	Н	2012
NJ02030105110030-01	Millstone R (Beden Bk to Heathcote Bk)	Temperature, water	М	Beyond 2012
NJ02030105110030-01	Millstone R (Beden Bk to Heathcote Bk)	Phosphorus (Total)	М	Beyond 2012
NJ02030105110030-01	Millstone R (Beden Bk to Heathcote Bk)	Oxygen, Dissolved	М	Beyond 2012
NJ02030105110030-01	Millstone R (Beden Bk to Heathcote Bk)	Arsenic	L	Beyond 2012
NJ02030105110030-01	Millstone R (Beden Bk to Heathcote Bk)	pH	M	Beyond 2012
NJ02030105110030-01	Millstone R (Beden Bk to Heathcote Bk)	Escherichia coli	M	Beyond 2012 Beyond 2012
NJ02030105110110-01	Millstone R (BlackwellsMills to BedenBk)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02030105110110-01	Millstone R (BlackwellsMills to BedenBk)	Phosphorus (Total)	H	2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02030105100060-01	Millstone R (Cranbury Bk to Rocky Bk)	Phosphorus (Total)	Н	2012
NJ02030105100060-01	Millstone R (Cranbury Bk to Rocky Bk)	Arsenic	L	Beyond 2012
NJ02030105100030-01	Millstone R (RockyBk to Applegarth road)	Oxygen, Dissolved	М	Beyond 2012
NJ02030105100030-01	Millstone R (RockyBk to Applegarth road)	Phosphorus (Total)	Н	2012
NJ02030105100140-01	Millstone R (Rt 1 to Cranbury Bk)	Arsenic	L	Beyond 2012
NJ02030105100140-01	Millstone R (Rt 1 to Cranbury Bk)	Phosphorus (Total)	М	Beyond 2012
NJ02030105100140-01	Millstone R (Rt 1 to Cranbury Bk)	Oxygen, Dissolved	М	Beyond 2012
NJ02030105110140-01	Millstone R(AmwellRd to BlackwellsMills)	Arsenic	L	Beyond 2012
NJ02030105110140-01	Millstone R(AmwellRd to BlackwellsMills)	Phosphorus (Total)	Н	2012
NJ02030105100010-01	Millstone River (above Rt 33)	Arsenic	L	Beyond 2012
NJ02030105100010-01	Millstone River (above Rt 33)	Phosphorus (Total)	Н	2012
		Total Suspended Solids		-
NJ02030105100010-01	Millstone River (above Rt 33)	(TSS)	Н	2012
NJ02030105110170-01	Millstone River (below Amwell Rd)	pH	М	Beyond 2012
NJ02030105110170-01	Millstone River (below Amwell Rd)	Phosphorus (Total)	Н	2012
NJ02030104070050-01	Mine Brook (Monmouth Co)	Cause Unknown	М	Beyond 2012
NJ02030104100060-01	Mingamahone Brook (above Asbury Rd)	Turbidity	М	Beyond 2012
		Total Suspended Solids		
NJ02030104100060-01	Mingamahone Brook (above Asbury Rd)	(TSS)	М	Beyond 2012
NJ02040105240030-01	Miry Run (Assunpink Cr)	Oxygen, Dissolved	M	Beyond 2012
NJ02030103120040-01	Molly Ann Brook	Total Dissolved Solids	M	Beyond 2012
NJ02030103120040-01	Molly Ann Brook	Cause Unknown	М	Beyond 2012
NJ02030103030160-01	Montville tribs.	Cause Unknown	M	Beyond 2012
NJ02030104030010-01	Morses Creek / Piles Creek	Total Dissolved Solids	М	Beyond 2012
NJ02030104030010-01	Morses Creek / Piles Creek	Polychlorinated biphenyls	M	Beyond 2012
NJ02030104030010-01	Morses Creek / Piles Creek	Phosphorus (Total)	М	Beyond 2012
NJ02030104030010-01	Morses Creek / Piles Creek	Mercury in Fish Tissue	М	Beyond 2012
NJ02030104030010-01	Morses Creek / Piles Creek	Hexachlorobenzene	М	Beyond 2012
NJ02030104030010-01	Morses Creek / Piles Creek	Heptachlor epoxide	М	Beyond 2012
		Dioxin (including 2,3,7,8-		
NJ02030104030010-01	Morses Creek / Piles Creek	TCDD)	М	Beyond 2012
NJ02030104030010-01	Morses Creek / Piles Creek	DDE	М	Beyond 2012
NJ02030104030010-01	Morses Creek / Piles Creek	Fecal Coliform	М	Beyond 2012
NJ02030104030010-01	Morses Creek / Piles Creek	DDD	М	Beyond 2012
NJ02030104030010-01	Morses Creek / Piles Creek	Chlordane	М	Beyond 2012
NJ02030104030010-01	Morses Creek / Piles Creek	Benzo(a)pyrene (PAHs)	М	Beyond 2012
NJ02030104030010-01	Morses Creek / Piles Creek	DDT	M	Beyond 2012
NJ02030104030010-01	Morses Creek / Piles Creek	Dieldrin	М	Beyond 2012
NJ02040202140040-01	Moss Branch / Little Timber Ck (Repaupo)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040202140040-01	Moss Branch / Little Timber Ck (Repaupo)	Cause Unknown	М	Beyond 2012
NJ02040202140040-01	Moss Branch / Little Timber Ck (Repaupo)	Polychlorinated biphenyls	L	Beyond 2012
		Total Suspended Solids		
NJ02040301020040-01	Muddy Ford Brook	(TSS)	М	Beyond 2012
NJ02040301020040-01	Muddy Ford Brook	Phosphorus (Total)	M	Beyond 2012 Beyond 2012
NJ02040301020040-01	Muddy Ford Brook	Mercury in Water Column	L	Beyond 2012 Beyond 2012
NJ02040301020040-01	Muddy Ford Brook	Arsenic	L	Beyond 2012 Beyond 2012
NJ02040206150020-01	Muddy Run (incl Palatine Lk to Elmer Lk)	Cause Unknown	M	Beyond 2012 Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02040206150050-01	Muddy Run (incl ParvinLk to Palatine Lk)	PCB in Fish Tissue	L	Beyond 2012
NJ02040206150050-01	Muddy Run (incl ParvinLk to Palatine Lk)	DDE	L	Beyond 2012
NJ02040206150050-01	Muddy Run (incl ParvinLk to Palatine Lk)	DDD	L	Beyond 2012
NJ02040206150050-01	Muddy Run (incl ParvinLk to Palatine Lk)	DDT	L	Beyond 2012
NJ02030105020030-01	Mulhockaway Creek	Temperature, water	М	Beyond 2012
NJ02040301160150-01	Mullica R (Pleasant Mills to 39d40m30s)	PCB in Fish Tissue	L	Beyond 2012
NJ02040301160150-01	Mullica R (Pleasant Mills to 39d40m30s)	DDD	L	Beyond 2012
NJ02040301160150-01	Mullica R (Pleasant Mills to 39d40m30s)	DDT	L	Beyond 2012
NJ02040301160150-01	Mullica R (Pleasant Mills to 39d40m30s)	pH	М	Beyond 2012
NJ02040301160150-01	Mullica R (Pleasant Mills to 39d40m30s)	DDE	L	Beyond 2012
NJ02040301170140-01	Mullica R. (BatstoR to Nescochague Lake)	PCB in Fish Tissue	L	Beyond 2012
NJ02040301170140-01	Mullica R. (BatstoR to Nescochague Lake)	DDD	L	Beyond 2012
NJ02040301170140-01	Mullica R. (BatstoR to Nescochague Lake)	DDT	L	Beyond 2012
NJ02040301170140-01	Mullica R. (BatstoR to Nescochague Lake)	pH	М	Beyond 2012
NJ02040301170140-01	Mullica R. (BatstoR to Nescochague Lake)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301170140-01	Mullica R. (BatstoR to Nescochague Lake)	DDE	L	Beyond 2012
NJ02040301160140-01	Mullica River (39d40m30s to Rt 206)	DDD	L	Beyond 2012
NJ02040301160140-01	Mullica River (39d40m30s to Rt 206)	pH	М	Beyond 2012
NJ02040301160140-01	Mullica River (39d40m30s to Rt 206)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040301160140-01	Mullica River (39d40m30s to Rt 206)	DDT	L	Beyond 2012
NJ02040301160140-01	Mullica River (39d40m30s to Rt 206)	DDE	L	Beyond 2012
NJ02040301160020-01	Mullica River (above Jackson Road)	Oxygen, Dissolved	М	Beyond 2012
NJ02040301160020-01	Mullica River (above Jackson Road)	DDT	L	Beyond 2012
NJ02040301160020-01	Mullica River (above Jackson Road)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040301160020-01	Mullica River (above Jackson Road)	pH	М	Beyond 2012
NJ02040301160020-01	Mullica River (above Jackson Road)	DDD	L	Beyond 2012
NJ02040301160020-01	Mullica River (above Jackson Road)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301160020-01	Mullica River (above Jackson Road)	DDE	L	Beyond 2012
NJ02040301170040-01	Mullica River (BatstoR to PleasantMills)	DDE	L	Beyond 2012
NJ02040301170040-01	Mullica River (BatstoR to PleasantMills)	DDD	L	Beyond 2012
NJ02040301170040-01	Mullica River (BatstoR to PleasantMills)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301170040-01	Mullica River (BatstoR to PleasantMills)	PCB in Fish Tissue	L	Beyond 2012
NJ02040301170040-01	Mullica River (BatstoR to PleasantMills)	pH	М	Beyond 2012
NJ02040301170040-01	Mullica River (BatstoR to PleasantMills)	DDT	L	Beyond 2012
NJ02040301210010-01	Mullica River (below GSP bridge)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301210010-01	Mullica River (below GSP bridge)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040301210010-01	Mullica River (below GSP bridge)	Oxygen, Dissolved	М	Beyond 2012
NJ02040301200080-01	Mullica River (GSP bridge to Turtle Ck)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040301200080-01	Mullica River (GSP bridge to Turtle Ck)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301170080-01	Mullica River (Lower Bank Rd to Rt 563)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301170080-01	Mullica River (Lower Bank Rd to Rt 563)	Phosphorus (Total)	М	Beyond 2012
NJ02040301170080-01	Mullica River (Lower Bank Rd to Rt 563)	рН	М	Beyond 2012
NJ02040301170080-01	Mullica River (Lower Bank Rd to Rt 563)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040301170080-01	Mullica River (Lower Bank Rd to Rt 563)	Temperature, water	М	Beyond 2012
NJ02040301160030-01	Mullica River (Rt 206 to Jackson Road)	DDT	L	Beyond 2012
NJ02040301160030-01	Mullica River (Rt 206 to Jackson Road)	DDE	L	Beyond 2012
NJ02040301160030-01	Mullica River (Rt 206 to Jackson Road)	Oxygen, Dissolved	М	Beyond 2012

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NJ02040301160030-01	Mullica River (Rt 206 to Jackson Road)	DDD	L	Beyond 2012
NJ02040301160030-01	Mullica River (Rt 206 to Jackson Road)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040301170060-01	Mullica River (Rt 563 to Batsto River)	Phosphorus (Total)	M	Beyond 2012 Beyond 2012
NJ02040301170060-01	Mullica River (Rt 563 to Batsto River)	Temperature, water	М	Beyond 2012
NJ02040301170060-01	Mullica River (Rt 563 to Batsto River)	Mercury in Fish Tissue	L	Beyond 2012 Beyond 2012
NJ02040301170060-01	Mullica River (Rt 563 to Batsto River)	pH	M	Beyond 2012 Beyond 2012
NJ02040301170060-01	Mullica River (Rt 563 to Batsto River)	Polychlorinated biphenyls	L	Beyond 2012 Beyond 2012
1002010501170000 01		Total Suspended Solids	<u> </u>	Deyona 2012
NJ02040301170130-01	Mullica River(Turtle Ck to Lower BankRd)	(TSS)	М	Beyond 2012
NJ02040301170130-01	Mullica River(Turtle Ck to Lower BankRd)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301170130-01	Mullica River(Turtle Ck to Lower BankRd)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040105160040-01	Musconetcong R (75d 00m to Rt 31)	Temperature, water	М	Beyond 2012
		Total Suspended Solids		
NJ02040105160070-01	Musconetcong R (below Warren Glen)	(TSS)	М	Beyond 2012
NJ02040105160070-01	Musconetcong R (below Warren Glen)	Temperature, water	М	Beyond 2012
NJ02040105160020-01	Musconetcong R (Changewater to HancesBk)	Arsenic	L	Beyond 2012
NJ02040105160020-01	Musconetcong R (Changewater to HancesBk)	Temperature, water	M	Beyond 2012
NJ02040105160010-01	Musconetcong R (Hances Bk thru Trout Bk)	Arsenic	L	Beyond 2012
NJ02040105160010-01	Musconetcong R (Hances Bk thru Trout Bk)	Temperature, water	M	Beyond 2012
NJ02040105160050-01	Musconetcong R (I-78 to 75d 00m)	Temperature, water	М	Beyond 2012
NJ02040105160030-01	Musconetcong R (Rt 31 to Changewater)	Temperature, water	М	Beyond 2012
NJ02040105150080-01	Musconetcong R (SaxtonFalls to Waterloo)	Arsenic	L	Beyond 2012
NJ02040105150100-01	Musconetcong R (Trout Bk to SaxtonFalls)	Arsenic	L	Beyond 2012
NJ02040105150100-01	Musconetcong R (Trout Bk to SaxtonFalls)	Cause Unknown	М	Beyond 2012
NJ02040105160060-01	Musconetcong R (Warren Glen to I-78)	Temperature, water	М	Beyond 2012
NJ02040105150030-01	Musconetcong R (Wills Bk to LkHopatcong)	Temperature, water	М	Beyond 2012
NJ02040105150030-01	Musconetcong R (Wills Bk to LkHopatcong)	pH	М	Beyond 2012
NJ02040105150110-01	Musconetcong R(Waterloo area)	pH	М	Beyond 2012
NJ02040105150110-01	Musconetcong R(Waterloo area)	Temperature, water	М	Beyond 2012
NJ02040105150070-01	Musconetcong R(Waterloo to/incl WillsBk)	pH	М	Beyond 2012
NJ02040105150070-01	Musconetcong R(Waterloo to/incl WillsBk)	Temperature, water	М	Beyond 2012
NJ02040206200020-01	Muskee Creek	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206200020-01	Muskee Creek	Mercury in Water Column	L	Beyond 2012
NJ02040301200120-01	Nacote Creek (below/incl Mill Pond)	Oxygen, Dissolved	М	Beyond 2012
NJ02040206100060-01	Nantuxent Creek (above Newport Landing)	Cause Unknown	М	Beyond 2012
NJ02040206100060-01	Nantuxent Creek (above Newport Landing)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206100070-01	Nantuxent Creek (below Newport Landing)	Polychlorinated biphenyls	L	Beyond 2012
NJ02030104070110-01	Navesink R (below Rt 35)/LowerShrewsbury	DDE	L	Beyond 2012
NJ02030104070110-01	Navesink R (below Rt 35)/LowerShrewsbury	DDT	L	Beyond 2012
NJ02030104070110-01	Navesink R (below Rt 35)/LowerShrewsbury	Oxygen, Dissolved	М	Beyond 2012
NJ02030104070110-01	Navesink R (below Rt 35)/LowerShrewsbury	Polychlorinated biphenyls	L	Beyond 2012 Beyond 2012
NJ02030104070110-01	Navesink R (below Rt 35)/LowerShrewsbury	Turbidity	M	Beyond 2012 Beyond 2012
NJ02030104070110-01	Navesink R (below Rt 35)/LowerShrewsbury	DDD	L	Beyond 2012 Beyond 2012
NJ02030104070120-01	Navesink R mouth	Turbidity	M	Beyond 2012 Beyond 2012
NJ02030104070120-01	Navesink R mouth	DDE	L	Beyond 2012 Beyond 2012
NJ02030104070120-01	Navesink R mouth	DDD	L	Beyond 2012 Beyond 2012
NJ02030104070120-01	Navesink R mouth	Mercury in Fish Tissue	L	Beyond 2012 Beyond 2012

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NJ02030104070120-01	Navesink R mouth	Oxygen, Dissolved	М	Beyond 2012
NJ02030104070120-01	Navesink R mouth	Polychlorinated biphenyls	L	Beyond 2012
NJ02030104070120-01	Navesink R mouth	DDT	L	Beyond 2012
NJ02030105030070-01	Neshanic River (below Black Brk)	Phosphorus (Total)	Н	2012
NJ02030105030070-01	Neshanic River (below Black Brk)	Arsenic	L	Beyond 2012
NJ02030105030070-01	Neshanic River (below Black Brk)	pH	Н	2012
NJ02030105030060-01	Neshanic River (below FNR / SNR confl)	Arsenic	L	Beyond 2012
NJ02030105030060-01	Neshanic River (below FNR / SNR confl)	Oxygen, Dissolved	Н	2012
NJ02030105030060-01	Neshanic River (below FNR / SNR confl)	Phosphorus (Total)	Н	2012
NJ02030105030060-01	Neshanic River (below FNR / SNR confl)	pH	Н	2012
NJ02040206110070-01	New England Creek (Kenny Pt to Elder Pt)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040105230030-01	New Sharon Branch (Assunpink Creek)	Mercury in Fish Tissue	L	Beyond 2012 Beyond 2012
NJ02040105230030-01	New Sharon Branch (Assunpink Creek)	Phosphorus (Total)	M	Beyond 2012 Beyond 2012
NJ02030104010010-01	Newark Airport Peripheral Ditch	DDE	M	Beyond 2012 Beyond 2012
NJ02030104010010-01	Newark Airport Peripheral Ditch	Polychlorinated biphenyls	M	Beyond 2012 Beyond 2012
NJ02030104010010-01	Newark Airport Peripheral Ditch	Phosphorus (Total)	M	Beyond 2012 Beyond 2012
NJ02030104010010-01	Newark Airport Peripheral Ditch	Mercury in Fish Tissue	M	Beyond 2012 Beyond 2012
1130203010+010010 01		Dioxin (including 2,3,7,8-	111	Deyond 2012
NJ02030104010010-01	Newark Airport Peripheral Ditch	TCDD)	М	Beyond 2012
NJ02030104010010-01	Newark Airport Peripheral Ditch	Benzo(a)pyrene (PAHs)	M	Beyond 2012 Beyond 2012
NJ02030104010010-01	Newark Airport Peripheral Ditch	DDT	M	Beyond 2012 Beyond 2012
NJ02030104010010-01	Newark Airport Peripheral Ditch	DDD	M	Beyond 2012 Beyond 2012
NJ02030104010010-01	Newark Airport Peripheral Ditch	Chlordane	M	Beyond 2012 Beyond 2012
NJ02030104010010-01	Newark Airport Peripheral Ditch	Dieldrin	M	Beyond 2012 Beyond 2012
NJ02040206110010-01	Newport Neck (Nantuxent to Beadons Ck)	Polychlorinated biphenyls	L	Beyond 2012 Beyond 2012
NJ02040202120090-01	Newton Creek (LDRV-Kaighn Ave to LT Ck)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02040202120090-01	Newton Creek (LDRV-Kaighn Ave to LT Ck)	PCB in Fish Tissue	L	Beyond 2012 Beyond 2012
NJ02040202120090-01	Newton Creek (LDRV-Kaighn Ave to LT Ck)	pH	M	Beyond 2012 Beyond 2012
NJ02040202120090-01	Newton Creek (LDRV-Kaighn Ave to LT Ck)	DDT	L	Beyond 2012 Beyond 2012
NJ02040202120090-01	Newton Creek (LDRV-Kaighn Ave to LT Ck)	Phosphorus (Total)	M	Beyond 2012 Beyond 2012
NJ02040202120090-01	Newton Creek (LDRV-Kaighn Ave to LT Ck)	DDE	L	Beyond 2012 Beyond 2012
NJ02040202120090-01	Newton Creek (LDRV-Kaighn Ave to LT Ck)	DDD	L	Beyond 2012 Beyond 2012
NJ02040202120090-01	Newton Creek (LDRV-Kaighn Ave to LT Ck)	Copper	L	Beyond 2012 Beyond 2012
NJ02040202120090-01	Newton Creek (LDRV-Kaighn Ave to LT Ck)	Chlordane in Fish Tissue	L	Beyond 2012 Beyond 2012
NJ02040202120090-01	Newton Creek (LDRV-Kaighn Ave to LT Ck)	Escherichia coli	M	Beyond 2012 Beyond 2012
NJ02040206030020-01	Nichomus Run	Phosphorus (Total)	M	Beyond 2012 Beyond 2012
NJ02040206030020-01	Nichomus Run	pH	M	
NJ02040206050020-01		1		Beyond 2012
NJ02040105170040-01 NJ02040105170050-01	Nishisakawick Creek (above 40d 33m) Nishisakawick Creek (below 40d 33m)	pH pH	M M	Beyond 2012
		1		Beyond 2012
NJ02040201040060-01	North Run (above Wrightstown bypass)	Arsenic Desenhorus (Total)	L	Beyond 2012
NJ02040201040060-01	North Run (above Wrightstown bypass)	Phosphorus (Total)	М	Beyond 2012
NJ02040201040060-01	North Run (above Wrightstown bypass)	Total Suspended Solids (TSS)	М	Beyond 2012
NJ02030104070090-01	Nut Swamp Brook	Cause Unknown	М	Beyond 2012
NJ02040202160010-01	Oldmans Creek (above Commissioners Rd)	Phosphorus (Total)	М	Beyond 2012
NJ02040202160060-01	Oldmans Creek (below Center Sq Rd)	Polychlorinated biphenyls	L	Beyond 2012

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		Total Suspended Solids		
NJ02040202160050-01	Oldmans Creek (Center Sq Rd to KingsHwy)	(TSS)	М	Beyond 2012
NJ02040202160050-01	Oldmans Creek (Center Sq Rd to KingsHwy)	PCB in Fish Tissue	L	Beyond 2012
NJ02040202160020-01	Oldmans Creek (Rt45 to Commissioners Rd)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040202020020-01	Ong Run / Jacks Run	pH	М	Beyond 2012
NJ02040206110030-01	Oranoaken Creek	Oxygen, Dissolved	М	Beyond 2012
NJ02040206110030-01	Oranoaken Creek	Polychlorinated biphenyls	L	Beyond 2012
NJ02040301180060-01	Oswego R (Andrews Rd to Sim Place Resv)	PCB in Fish Tissue	L	Beyond 2012
NJ02040301180020-01	Oswego River (above Rt 539)	Oxygen, Dissolved	М	Beyond 2012
NJ02040301180040-01	Oswego River (Sim Place Resv to Rt 539)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103180040-01	Overpeck Creek	Total Dissolved Solids	М	Beyond 2012
NJ02030103180040-01	Overpeck Creek	Lead	L	Beyond 2012
NJ02030103180040-01	Overpeck Creek	Polychlorinated biphenyls	М	Beyond 2012
NJ02030103180040-01	Overpeck Creek	Ammonia (Un-ionized)	М	Beyond 2012
NJ02030103180040-01	Overpeck Creek	Cadmium	L	Beyond 2012
NJ02030103180040-01	Overpeck Creek	Chlordane	М	Beyond 2012
NJ02030103180040-01	Overpeck Creek	Chloride	L	Beyond 2012
NJ02030103180040-01	Overpeck Creek	DDD	М	Beyond 2012
NJ02030103180040-01	Overpeck Creek	DDE	М	Beyond 2012
NJ02030103180040-01	Overpeck Creek	pН	М	Beyond 2012
	•	Dioxin (including 2,3,7,8-		
NJ02030103180040-01	Overpeck Creek	TCDD)	М	Beyond 2012
NJ02030103180040-01	Overpeck Creek	DDT	М	Beyond 2012
NJ02030103180040-01	Overpeck Creek	Escherichia coli	М	Beyond 2012
NJ02040206150030-01	Palatine Branch (Muddy Run)	Cause Unknown	М	Beyond 2012
NJ02020007020030-01	Papakating Ck(Pellettown-Frankford Plns)	Cause Unknown	М	Beyond 2012
NJ02020007020070-01	Papakating Creek (below Pellettown)	Cause Unknown	М	Beyond 2012
NJ02040202140030-01	Pargay Creek	Phosphorus (Total)	М	Beyond 2012
NJ02040202140030-01	Pargay Creek	Escherichia coli	М	Beyond 2012
NJ02040202080010-01	Parkers Creek (above Marne Highway)	Phosphorus (Total)	М	Beyond 2012
NJ02030104080020-01	Parkers Creek / Oceanport Creek	DDT	L	Beyond 2012
NJ02030104080020-01	Parkers Creek / Oceanport Creek	Polychlorinated biphenyls	L	Beyond 2012
NJ02030104080020-01	Parkers Creek / Oceanport Creek	Phosphorus (Total)	М	Beyond 2012
NJ02030104080020-01	Parkers Creek / Oceanport Creek	pH	М	Beyond 2012
NJ02030104080020-01	Parkers Creek / Oceanport Creek	Mercury in Fish Tissue	L	Beyond 2012
NJ02030104080020-01	Parkers Creek / Oceanport Creek	DDE	L	Beyond 2012
NJ02030104080020-01	Parkers Creek / Oceanport Creek	DDD	L	Beyond 2012
NJ02030104080020-01	Parkers Creek / Oceanport Creek	Oxygen, Dissolved	М	Beyond 2012
		Total Suspended Solids		-
NJ02040206080030-01	Parsonage Run / Foster Run	(TSS)	М	Beyond 2012
NJ02040206140070-01	Parvin Branch / Tarkiln Branch	Cause Unknown	М	Beyond 2012
NJ02030103170010-01	Pascack Brook (above Westwood gage)	Cause Unknown	М	Beyond 2012
NJ02030103170010-01	Pascack Brook (above Westwood gage)	Total Dissolved Solids	М	Beyond 2012
NJ02030103170020-01	Pascack Brook (below Westwood gage)	Total Dissolved Solids	М	Beyond 2012
NJ02030103170020-01	Pascack Brook (below Westwood gage)	Phosphorus (Total)	М	Beyond 2012
NJ02030103170020-01	Pascack Brook (below Westwood gage)	pH	М	Beyond 2012
NJ02030103170020-01	Pascack Brook (below Westwood gage)	Oxygen, Dissolved	М	Beyond 2012

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NJ02030103170020-01	Pascack Brook (below Westwood gage)	Arsenic	L	Beyond 2012
NJ02030103150040-01	Passaic R Lwr (4th St br to Second R)	Benzo(a)pyrene (PAHs)	М	Beyond 2012
NJ02030103150040-01	Passaic R Lwr (4th St br to Second R)	PCB in Fish Tissue	М	Beyond 2012
NJ02030103150040-01	Passaic R Lwr (4th St br to Second R)	Arsenic	L	Beyond 2012
NJ02030103150040-01	Passaic R Lwr (4th St br to Second R)	DDD	M	Beyond 2012
NJ02030103150040-01	Passaic R Lwr (4th St br to Second R)	Dieldrin	М	Beyond 2012
NJ02030103150040-01	Passaic R Lwr (4th St br to Second R)	DDT	M	Beyond 2012
NJ02030103150040-01	Passaic R Lwr (4th St br to Second R)	DDE	M	Beyond 2012 Beyond 2012
NJ02030103150040-01	Passaic R Lwr (4th St br to Second R)	Heptachlor epoxide	M	Beyond 2012 Beyond 2012
NJ02030103150040-01	Passaic R Lwr (4th St br to Second R)	Ammonia (Un-ionized)	M	Beyond 2012 Beyond 2012
NJ02030103150040-01	Passaic R Lwr (4th St br to Second R)	Chlordane	M	Beyond 2012 Beyond 2012
NJ02030103150040-01	Passaic R Lwr (4th St br to Second R)	Mercury in Fish Tissue	M	Beyond 2012 Beyond 2012
11302030103130010 01		Dioxin (including 2,3,7,8-	111	Deyond 2012
NJ02030103150040-01	Passaic R Lwr (4th St br to Second R)	TCDD)	М	Beyond 2012
NJ02030103120080-01	Passaic R Lwr (Dundee Dam to F.L. Ave)	Polychlorinated biphenyls	L	Beyond 2012 Beyond 2012
NJ02030103120080-01	Passaic R Lwr (Dundee Dam to F.L. Ave)	Chlordane	L	Beyond 2012 Beyond 2012
NJ02030103120080-01	Passaic R Lwr (Dundee Dam to F.L. Ave)	DDT	L	Beyond 2012 Beyond 2012
NJ02030103120080-01	Passaic R Lwr (Dundee Dam to F.L. Ave)	DDE	L	Beyond 2012 Beyond 2012
NJ02030103120080-01	Passaic R Lwr (Dundee Dam to F.L. Ave)	Cyanide	L	Beyond 2012 Beyond 2012
NJ02030103120080-01	Passaic R Lwr (Dundee Dam to F.L. Ave)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02030103120080-01	Passaic R Lwr (Dundee Dam to F.L. Ave)	Ammonia (Un-ionized)	M	Beyond 2012 Beyond 2012
NJ02030103120080-01	Passaic R Lwr (Dundee Dam to F.L. Ave)	Mercury in Fish Tissue	L	Beyond 2012 Beyond 2012
NJ02030103120080-01	Passaic R Lwr (Dundee Dam to F.L. Ave)	DDD	L	Beyond 2012 Beyond 2012
NJ02030103120080-01	Passaic R Lwr (Fair Lawn Ave to Goffle)	Ammonia (Un-ionized)	M	Beyond 2012 Beyond 2012
NJ02030103120070-01	Passaic R Lwr (Fair Lawn Ave to Goffle)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02030103120070-01	Passaic R Lwr (Fair Lawn Ave to Goffle)	Chlordane	L	Beyond 2012 Beyond 2012
NJ02030103120070-01	Passaic R Lwr (Fair Lawn Ave to Goffle)	Cyanide	L	Beyond 2012 Beyond 2012
NJ02030103120070-01	Passaic R Lwr (Fair Lawn Ave to Goffle)	DDD	L	Beyond 2012 Beyond 2012
NJ02030103120070-01	Passaic R Lwr (Fair Lawn Ave to Goffle)	DDE	L	Beyond 2012 Beyond 2012
NJ02030103120070-01	Passaic R Lwr (Fair Lawn Ave to Goffle)	DDT	L	Beyond 2012 Beyond 2012
NJ02030103120070-01	Passaic R Lwr (Fair Lawn Ave to Goffle)	Polychlorinated biphenyls	L	
NJ02030103120070-01		Mercury in Fish Tissue	L	Beyond 2012
NJ02030103120070-01	Passaic R Lwr (Fair Lawn Ave to Goffle) Passaic R Lwr (Goeffle Bk to Pump stn)	Chlordane	L	Beyond 2012
NJ02030103120110-01	Passaic R Lwr (Goeffle Bk to Pump stn)	Thallium	L	Beyond 2012 Beyond 2012
NJ02030103120110-01	Passaic R Lwr (Goeffle Bk to Pump stn)	DDE	L	
				Beyond 2012
NJ02030103120110-01	Passaic R Lwr (Goeffle Bk to Pump stn)	Arsenic	L	Beyond 2012
NJ02030103120110-01	Passaic R Lwr (Goeffle Bk to Pump stn)	Ammonia (Un-ionized)	M	Beyond 2012
NJ02030103120110-01	Passaic R Lwr (Goeffle Bk to Pump stn)	DDD Chromium (total)	L	Beyond 2012
NJ02030103120110-01	Passaic R Lwr (Goeffle Bk to Pump stn)	Chromium (total)	L	Beyond 2012
NJ02030103120110-01	Passaic R Lwr (Goeffle Bk to Pump stn)	DDT Manaumin Eich Tissue	L	Beyond 2012
NJ02030103120110-01	Passaic R Lwr (Goeffle Bk to Pump stn)	Mercury in Fish Tissue	L	Beyond 2012
NJ02030103120110-01	Passaic R Lwr (Goeffle Bk to Pump stn)	Polychlorinated biphenyls	L	Beyond 2012
NJ02030103120110-01	Passaic R Lwr (Goeffle Bk to Pump stn)	Cyanide	L	Beyond 2012
NJ02030103120100-01	Passaic R Lwr (Goffle Bk to Pompton R)	DDT	L	Beyond 2012
NJ02030103120100-01	Passaic R Lwr (Goffle Bk to Pompton R)	Chlordane in Fish Tissue	L	Beyond 2012
NJ02030103120100-01	Passaic R Lwr (Goffle Bk to Pompton R)	Arsenic	L	Beyond 2012
NJ02030103120100-01	Passaic R Lwr (Goffle Bk to Pompton R)	Ammonia (Un-ionized)	М	Beyond 2012

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NJ02030103120100-01	Passaic R Lwr (Goffle Bk to Pompton R)	Cyanide	L	Beyond 2012
NJ02030103120100-01	Passaic R Lwr (Goffle Bk to Pompton R)	DDD	L	Beyond 2012
NJ02030103120100-01	Passaic R Lwr (Goffle Bk to Pompton R)	DDE	L	Beyond 2012
NJ02030103120100-01	Passaic R Lwr (Goffle Bk to Pompton R)	Mercury in Fish Tissue	L	Beyond 2012
NJ02030103120100-01	Passaic R Lwr (Goffle Bk to Pompton R)	PCB in Fish Tissue	L	Beyond 2012
NJ02030103120100-01	Passaic R Lwr (Goffle Bk to Pompton R)	Thallium	L	Beyond 2012
NJ02030103120100-01	Passaic R Lwr (Goffle Bk to Pompton R)	Chromium (total)	L	Beyond 2012
NJ02030103150050-01	Passaic R Lwr (Nwk Bay to 4th St brdg)	Heptachlor epoxide	M	Beyond 2012 Beyond 2012
1002020100100100000001		Dioxin (including 2,3,7,8-	111	Degona 2012
NJ02030103150050-01	Passaic R Lwr (Nwk Bay to 4th St brdg)	TCDD)	М	Beyond 2012
NJ02030103150050-01	Passaic R Lwr (Nwk Bay to 4th St brdg)	Dieldrin	M	Beyond 2012 Beyond 2012
NJ02030103150050-01	Passaic R Lwr (Nwk Bay to 4th St brdg)	DDT	M	Beyond 2012 Beyond 2012
NJ02030103150050-01	Passaic R Lwr (Nwk Bay to 4th St brdg)	DDE	M	Beyond 2012 Beyond 2012
NJ02030103150050-01	Passaic R Lwr (Nwk Bay to 4th St brdg)	DDD	M	Beyond 2012 Beyond 2012
NJ02030103150050-01	Passaic R Lwr (Nwk Bay to 4th St brdg)	Chlordane	M	Beyond 2012 Beyond 2012
NJ02030103150050-01	Passaic R Lwr (Nwk Bay to 4th St brdg)	Ammonia (Un-ionized)	M	Beyond 2012 Beyond 2012
NJ02030103150050-01	Passaic R Lwr (Nwk Bay to 4th St brdg)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02030103150050-01	Passaic R Lwr (Nwk Bay to 4th St brdg)	Mercury in Fish Tissue	M	Beyond 2012 Beyond 2012
NJ02030103150050-01	Passaic R Lwr (Nwk Bay to 4th St brdg)	Oxygen, Dissolved	M	Beyond 2012 Beyond 2012
NJ02030103150050-01	Passaic R Lwr (Nwk Bay to 4th St brdg)	Polychlorinated biphenyls	M	Beyond 2012 Beyond 2012
NJ02030103150050-01	Passaic R Lwr (Nwk Bay to 4th St brdg)	Benzo(a)pyrene (PAHs)	M	Beyond 2012 Beyond 2012
NJ02030103120090-01	Passaic R Lwr (Saddle R to Dundee Dam)	PCB in Fish Tissue	L	Beyond 2012 Beyond 2012
NJ02030103120090-01	Passaic R Lwr (Saddle R to Dundee Dam)	Mercury in Fish Tissue	L	Beyond 2012 Beyond 2012
NJ02030103120090-01	Passaic R Lwr (Saddle R to Dundee Dam)	DDE	L	Beyond 2012 Beyond 2012
NJ02030103120090-01	Passaic R Lwr (Saddle R to Dundee Dam)	Ammonia (Un-ionized)	M	Beyond 2012 Beyond 2012
NJ02030103120090-01	Passaic R Lwr (Saddle R to Dundee Dam)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02030103120090-01	Passaic R Lwr (Saddle R to Dundee Dam)	Benzo(a)pyrene (PAHs)	L	Beyond 2012
NJ02030103120090-01	Passaic R Lwr (Saddle R to Dundee Dam)	Chlordane in Fish Tissue	L	Beyond 2012
NJ02030103120090-01	Passaic R Lwr (Saddle R to Dundee Dam)	Cyanide	L	Beyond 2012
NJ02030103120090-01	Passaic R Lwr (Saddle R to Dundee Dam)	DDD	L	Beyond 2012
NJ02030103120090-01	Passaic R Lwr (Saddle R to Dundee Dam)	DDT	L	Beyond 2012
NJ02030103120090-01	Passaic R Lwr (Saddle R to Dundee Dam)	Dieldrin	L	Beyond 2012
		Dioxin (including 2,3,7,8-		
NJ02030103120090-01	Passaic R Lwr (Saddle R to Dundee Dam)	TCDD)	L	Beyond 2012
NJ02030103120090-01	Passaic R Lwr (Saddle R to Dundee Dam)	Heptachlor epoxide	L	Beyond 2012
NJ02030103150030-01	Passaic R Lwr (Second R to Saddle R)	Heptachlor epoxide	М	Beyond 2012
NJ02030103150030-01	Passaic R Lwr (Second R to Saddle R)	Benzo(a)pyrene (PAHs)	M	Beyond 2012
NJ02030103150030-01	Passaic R Lwr (Second R to Saddle R)	Arsenic	L	Beyond 2012
NJ02030103150030-01	Passaic R Lwr (Second R to Saddle R)	Ammonia (Un-ionized)	M	Beyond 2012
NJ02030103150030-01	Passaic R Lwr (Second R to Saddle R)	DDD	M	Beyond 2012
NJ02030103150030-01	Passaic R Lwr (Second R to Saddle R)	DDE	M	Beyond 2012 Beyond 2012
NJ02030103150030-01	Passaic R Lwr (Second R to Saddle R)	PCB in Fish Tissue	M	Beyond 2012 Beyond 2012
NJ02030103150030-01	Passaic R Lwr (Second R to Saddle R)	Enterococcus	M	Beyond 2012 Beyond 2012
NJ02030103150030-01	Passaic R Lwr (Second R to Saddle R)	DDT	M	Beyond 2012 Beyond 2012
NJ02030103150030-01	Passaic R Lwr (Second R to Saddle R)	Chlordane	M	Beyond 2012 Beyond 2012
NJ02030103150030-01	Passaic R Lwr (Second R to Saddle R)	Dieldrin	M	Beyond 2012 Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
		Dioxin (including 2,3,7,8-		
NJ02030103150030-01	Passaic R Lwr (Second R to Saddle R)	TCDD)	М	Beyond 2012
NJ02030103010130-01	Passaic R Upr (40d 45m to Snyder Ave)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103010130-01	Passaic R Upr (40d 45m to Snyder Ave)	Cyanide	L	Beyond 2012
NJ02030103010130-01	Passaic R Upr (40d 45m to Snyder Ave)	Arsenic	L	Beyond 2012
		Total Suspended Solids		
NJ02030103010130-01	Passaic R Upr (40d 45m to Snyder Ave)	(TSS)	М	Beyond 2012
NJ02030103010150-01	Passaic R Upr (Columbia Rd to 40d 45m)	Arsenic	L	Beyond 2012
NJ02030103010150-01	Passaic R Upr (Columbia Rd to 40d 45m)	Cyanide	L	Beyond 2012
NJ02030103010150-01	Passaic R Upr (Columbia Rd to 40d 45m)	Total Dissolved Solids	М	Beyond 2012
		Total Suspended Solids		
NJ02030103010150-01	Passaic R Upr (Columbia Rd to 40d 45m)	(TSS)	М	Beyond 2012
NJ02030103010150-01	Passaic R Upr (Columbia Rd to 40d 45m)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103010070-01	Passaic R Upr (Dead R to Osborn Mills)	Arsenic	L	Beyond 2012
NJ02030103010070-01	Passaic R Upr (Dead R to Osborn Mills)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103010070-01	Passaic R Upr (Dead R to Osborn Mills)	Cyanide	L	Beyond 2012
		Total Suspended Solids		v
NJ02030103010160-01	Passaic R Upr (HanoverRR to ColumbiaRd)	(TSS)	М	Beyond 2012
NJ02030103010160-01	Passaic R Upr (HanoverRR to ColumbiaRd)	Total Dissolved Solids	М	Beyond 2012
NJ02030103010180-01	Passaic R Upr (Pine Bk br to Rockaway)	DDD	L	Beyond 2012
NJ02030103010180-01	Passaic R Upr (Pine Bk br to Rockaway)	DDE	L	Beyond 2012
NJ02030103010180-01	Passaic R Upr (Pine Bk br to Rockaway)	Arsenic	L	Beyond 2012
NJ02030103010180-01	Passaic R Upr (Pine Bk br to Rockaway)	Chlordane	L	Beyond 2012
NJ02030103010180-01	Passaic R Upr (Pine Bk br to Rockaway)	DDT	L	Beyond 2012
nJ02030103010180-01	Passaic R Upr (Pine Bk br to Rockaway)	Mercury in Water Column	L	Beyond 2012
NJ02030103010180-01	Passaic R Upr (Pine Bk br to Rockaway)	Polychlorinated biphenyls	L	Beyond 2012
		Total Suspended Solids		,
NJ02030103010110-01	Passaic R Upr (Plainfield Rd to Dead R)	(TSS)	М	Beyond 2012
NJ02030103010110-01	Passaic R Upr (Plainfield Rd to Dead R)	Cyanide	L	Beyond 2012
NJ02030103010110-01	Passaic R Upr (Plainfield Rd to Dead R)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103010110-01	Passaic R Upr (Plainfield Rd to Dead R)	Arsenic	L	Beyond 2012
NJ02030103040010-01	Passaic R Upr (Pompton R to Pine Bk)	PCB in Fish Tissue	L	Beyond 2012
NJ02030103040010-01	Passaic R Upr (Pompton R to Pine Bk)	Mercury in Fish Tissue	L	Beyond 2012
NJ02030103040010-01	Passaic R Upr (Pompton R to Pine Bk)	DDT	L	Beyond 2012
NJ02030103040010-01	Passaic R Upr (Pompton R to Pine Bk)	DDD	L	Beyond 2012
NJ02030103040010-01	Passaic R Upr (Pompton R to Pine Bk)	Chlordane	L	Beyond 2012
NJ02030103040010-01	Passaic R Upr (Pompton R to Pine Bk)	Arsenic	L	Beyond 2012
NJ02030103040010-01	Passaic R Upr (Pompton R to Pine Bk)	DDE	L	Beyond 2012
NJ02030103010170-01	Passaic R Upr (Rockaway to Hanover RR)	Polychlorinated biphenyls	L	Beyond 2012
NJ02030103010170-01	Passaic R Upr (Rockaway to Hanover RR)	Chlordane	L	Beyond 2012
NJ02030103010170-01	Passaic R Upr (Rockaway to Hanover RR)	DDT	L	Beyond 2012
		Total Suspended Solids		· ·
NJ02030103010170-01	Passaic R Upr (Rockaway to Hanover RR)	(TSS)	М	Beyond 2012
NJ02030103010170-01	Passaic R Upr (Rockaway to Hanover RR)	Total Dissolved Solids	М	Beyond 2012
NJ02030103010170-01	Passaic R Upr (Rockaway to Hanover RR)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103010170-01	Passaic R Upr (Rockaway to Hanover RR)	DDD	L	Beyond 2012 Beyond 2012
NJ02030103010170-01	Passaic R Upr (Rockaway to Hanover RR)	DDE	L	Beyond 2012 Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02030103010120-01	Passaic R Upr (Snyder to Plainfield Rd)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103010120-01	Passaic R Upr (Snyder to Plainfield Rd)	Arsenic	L	Beyond 2012
NJ02030103010120-01	Passaic R Upr (Snyder to Plainfield Rd)	Cyanide	L	Beyond 2012
		Total Suspended Solids		-
NJ02030103010120-01	Passaic R Upr (Snyder to Plainfield Rd)	(TSS)	М	Beyond 2012
NJ02040302060030-01	Patcong Creek (Somers Ave to Zion Rd)	Oxygen, Dissolved	М	Beyond 2012
NJ02040105040060-01	Paulins Kill (above Rt 15)	Phosphorus (Total)	М	Beyond 2012
NJ02040105040060-01	Paulins Kill (above Rt 15)	Oxygen, Dissolved	М	Beyond 2012
NJ02040105050050-01	Paulins Kill (below Blairstown gage)	Cause Unknown	М	Beyond 2012
NJ02040105050050-01	Paulins Kill (below Blairstown gage)	Temperature, water	М	Beyond 2012
NJ02040105050010-01	Paulins Kill (Blairstown to Stillwater)	Temperature, water	М	Beyond 2012
NJ02040105040080-01	Paulins Kill (PK Lk outlet to Dry Brook)	Arsenic	L	Beyond 2012
NJ02040105040090-01	Paulins Kill (Stillwater Vil to PK Lake)	Cause Unknown	М	Beyond 2012
NJ02040105040090-01	Paulins Kill (Stillwater Vil to PK Lake)	Temperature, water	М	Beyond 2012
NJ02030103120010-01	Peckman River (above CG Res trib)	Cause Unknown	М	Beyond 2012
NJ02030103120020-01	Peckman River (below CG Res trib)	pH	М	Beyond 2012
NJ02030103120020-01	Peckman River (below CG Res trib)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202040020-01	Pemberton / Ft Dix trib (NB Rancocas Ck)	Cause Unknown	М	Beyond 2012
NJ02040202100060-01	Pennsauken Ck (below NB / SB)	DDT	L	Beyond 2012
NJ02040202100060-01	Pennsauken Ck (below NB / SB)	DDE	L	Beyond 2012
NJ02040202100060-01	Pennsauken Ck (below NB / SB)	DDD	L	Beyond 2012
NJ02040202100060-01	Pennsauken Ck (below NB / SB)	Mercury in Water Column	L	Beyond 2012
NJ02040202100060-01	Pennsauken Ck (below NB / SB)	Copper	L	Beyond 2012
NJ02040202100060-01	Pennsauken Ck (below NB / SB)	Chromium (total)	L	Beyond 2012
NJ02040202100060-01	Pennsauken Ck (below NB / SB)	Oxygen, Dissolved	М	Beyond 2012
NJ02040202100060-01	Pennsauken Ck (below NB / SB)	Arsenic	L	Beyond 2012
NJ02040202100060-01	Pennsauken Ck (below NB / SB)	Chlordane	L	Beyond 2012
NJ02040202100060-01	Pennsauken Ck (below NB / SB)	Lead	L	Beyond 2012
NJ02040202100060-01	Pennsauken Ck (below NB / SB)	Cadmium	L	Beyond 2012
NJ02040202100060-01	Pennsauken Ck (below NB / SB)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202100060-01	Pennsauken Ck (below NB / SB)	Phosphorus (Total)	М	Beyond 2012
NJ02040202100030-01	Pennsauken Ck NB (below Strawbridge Lk)	Cause Unknown	М	Beyond 2012
NJ02040202100030-01	Pennsauken Ck NB (below Strawbridge Lk)	Arsenic	L	Beyond 2012
NJ02040202100020-01	Pennsauken Ck NB (incl StrwbrdgLk-NJTPK)	DDT	L	Beyond 2012
NJ02040202100020-01	Pennsauken Ck NB (incl StrwbrdgLk-NJTPK)	DDE	L	Beyond 2012
NJ02040202100020-01	Pennsauken Ck NB (incl StrwbrdgLk-NJTPK)	DDD	L	Beyond 2012
NJ02040202100020-01	Pennsauken Ck NB (incl StrwbrdgLk-NJTPK)	Chlordane	L	Beyond 2012
NJ02040202100020-01	Pennsauken Ck NB (incl StrwbrdgLk-NJTPK)	PCB in Fish Tissue	L	Beyond 2012
NJ02040202100020-01	Pennsauken Ck NB (incl StrwbrdgLk-NJTPK)	Arsenic	L	Beyond 2012
NJ02040202100040-01	Pennsauken Ck SB (above Rt 41)	Oxygen, Dissolved	М	Beyond 2012
NJ02040202100040-01	Pennsauken Ck SB (above Rt 41)	Phosphorus (Total)	М	Beyond 2012
NJ02040202100040-01	Pennsauken Ck SB (above Rt 41)	Arsenic	L	Beyond 2012
NJ02040202100040-01	Pennsauken Ck SB (above Rt 41)	Total Suspended Solids (TSS)	М	Beyond 2012
NJ02040202100050-01	Pennsauken Ck SB (below Rt 41)	Total Suspended Solids (TSS)	М	Beyond 2012
NJ02040202100050-01	Pennsauken Ck SB (below Rt 41)	Arsenic	L	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02040202100050-01	Pennsauken Ck SB (below Rt 41)	Phosphorus (Total)	М	Beyond 2012
NJ02040302030070-01	Penny Pot Stream (GEHR)	pH	М	Beyond 2012
NJ02030103050030-01	Pequannock R (above OakRidge Res outlet)	Temperature, water	М	Beyond 2012
NJ02030103050010-01	Pequannock R (above Stockholm/Vernon Rd)	Cause Unknown	М	Beyond 2012
NJ02030103050080-01	Pequannock R (below Macopin gage)	DDD	L	Beyond 2012
NJ02030103050080-01	Pequannock R (below Macopin gage)	DDT	L	Beyond 2012
NJ02030103050080-01	Pequannock R (below Macopin gage)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103050080-01	Pequannock R (below Macopin gage)	PCB in Fish Tissue	L	Beyond 2012
NJ02030103050080-01	Pequannock R (below Macopin gage)	DDE	L	Beyond 2012
NJ02030103050080-01	Pequannock R (below Macopin gage)	Chlordane in Fish Tissue	L	Beyond 2012
NJ02030103050050-01	Pequannock R (Charlotteburg to OakRidge)	Temperature, water	М	Beyond 2012
NJ02030103050050-01	Pequannock R (Charlotteburg to OakRidge)	pH	М	Beyond 2012
NJ02030103050060-01	Pequannock R(Macopin gage to Charl'brg)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103050060-01	Pequannock R(Macopin gage to Charl'brg)	Temperature, water	М	Beyond 2012
NJ02040105090060-01	Pequest R (below Furnace Brook)	Temperature, water	М	Beyond 2012
NJ02040105090060-01	Pequest R (below Furnace Brook)	Phosphorus (Total)	М	Beyond 2012
NJ02040105090060-01	Pequest R (below Furnace Brook)	pH	М	Beyond 2012
NJ02040105090060-01	Pequest R (below Furnace Brook)	Arsenic	L	Beyond 2012
		Total Suspended Solids		
NJ02040105090060-01	Pequest R (below Furnace Brook)	(TSS)	М	Beyond 2012
		Total Suspended Solids		
NJ02040105090030-01	Pequest R (Furnace Bk to Cemetary Road)	(TSS)	М	Beyond 2012
NJ02040105070030-01	Pequest River (above Brighton)	Oxygen, Dissolved	М	Beyond 2012
NJ02040105070040-01	Pequest River (Trout Brook to Brighton)	Cause Unknown	М	Beyond 2012
NJ02040105070040-01	Pequest River (Trout Brook to Brighton)	Escherichia coli	М	Beyond 2012
NJ02030105080010-01	Peters Brook	Cause Unknown	М	Beyond 2012
NJ02030104060060-01	Pews Creek to Shrewsbury River	DDD	М	Beyond 2012
NJ02030104060060-01	Pews Creek to Shrewsbury River	Polychlorinated biphenyls	М	Beyond 2012
NJ02030104060060-01	Pews Creek to Shrewsbury River	Phosphorus (Total)	М	Beyond 2012
NJ02030104060060-01	Pews Creek to Shrewsbury River	DDT	М	Beyond 2012
NJ02030104060060-01	Pews Creek to Shrewsbury River	Chlordane	М	Beyond 2012
NJ02030104060060-01	Pews Creek to Shrewsbury River	Mercury in Fish Tissue	М	Beyond 2012
NJ02030104060060-01	Pews Creek to Shrewsbury River	Oxygen, Dissolved	М	Beyond 2012
NJ02030104060060-01	Pews Creek to Shrewsbury River	DDE	М	Beyond 2012
NJ02040206070090-01	Phillips Creek / Jacobs Creek	Polychlorinated biphenyls	L	Beyond 2012
NJ02030105110080-01	Pike Run (above Cruser Brook)	Cause Unknown	М	Beyond 2012
NJ02030105110100-01	Pike Run (below Cruser Brook)	Phosphorus (Total)	Н	2012
NJ02030104070080-01	Pine Brook / Hockhockson Brook	Cause Unknown	М	Beyond 2012
NJ02040206090090-01	Pine Mount Creek	Cause Unknown	М	Beyond 2012
NJ02030105040020-01	Pleasant Run	Escherichia coli	М	Beyond 2012
NJ02030105040020-01	Pleasant Run	Cause Unknown	М	Beyond 2012
NJ02040105140020-01	Pohatcong Ck (Brass Castle Ck to Rt 31)	Oxygen, Dissolved	М	Beyond 2012
NJ02040105140020-01	Pohatcong Ck (Brass Castle Ck to Rt 31)	pH	М	Beyond 2012
NJ02040105140020-01	Pohatcong Ck (Brass Castle Ck to Rt 31)	Phosphorus (Total)	М	Beyond 2012
NJ02040105140020-01	Pohatcong Ck (Brass Castle Ck to Rt 31)	Temperature, water	М	Beyond 2012
NJ02040105140020-01	Pohatcong Ck (Brass Castle Ck to Rt 31)	Total Suspended Solids (TSS)	М	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02040105140030-01	Pohatcong Ck (Edison Rd-Brass Castle Ck)	рН	М	Beyond 2012
NJ02040105140030-01	Pohatcong Ck (Edison Rd-Brass Castle Ck)	Temperature, water	М	Beyond 2012
	-	Total Suspended Solids		
NJ02040105140030-01	Pohatcong Ck (Edison Rd-Brass Castle Ck)	(TSS)	М	Beyond 2012
NJ02040105140030-01	Pohatcong Ck (Edison Rd-Brass Castle Ck)	Phosphorus (Total)	М	Beyond 2012
NJ02040105140050-01	Pohatcong Ck (Merrill Ck to Edison Rd)	pН	М	Beyond 2012
NJ02040105140050-01	Pohatcong Ck (Merrill Ck to Edison Rd)	Temperature, water	М	Beyond 2012
	-	Total Suspended Solids		-
NJ02040105140050-01	Pohatcong Ck (Merrill Ck to Edison Rd)	(TSS)	М	Beyond 2012
NJ02040105140050-01	Pohatcong Ck (Merrill Ck to Edison Rd)	Phosphorus (Total)	М	Beyond 2012
NJ02040105140060-01	Pohatcong Ck (Springtown to Merrill Ck)	Phosphorus (Total)	М	Beyond 2012
NJ02040105140070-01	Pohatcong Ck(below Springtown) incl UDRV	Phosphorus (Total)	М	Beyond 2012
NJ02040105140010-01	Pohatcong Creek (above Rt 31)	Temperature, water	М	Beyond 2012
NJ02040202090030-01	Pompeston Ck (below Rt130/Swede to 40d)	Cause Unknown	М	Beyond 2012
NJ02040202090030-01	Pompeston Ck (below Rt130/Swede to 40d)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202090020-01	Pompeston Creek (above Rt 130)	Phosphorus (Total)	М	Beyond 2012
NJ02040202090020-01	Pompeston Creek (above Rt 130)	pH	М	Beyond 2012
NJ02040202090020-01	Pompeston Creek (above Rt 130)	Oxygen, Dissolved	М	Beyond 2012
NJ02040202090020-01	Pompeston Creek (above Rt 130)	Escherichia coli	М	Beyond 2012
NJ02030103110020-01	Pompton River	Chlordane in Fish Tissue	L	Beyond 2012
NJ02030103110020-01	Pompton River	Chromium (total)	L	Beyond 2012
NJ02030103110020-01	Pompton River	Chromium, hexavalent	L	Beyond 2012
NJ02030103110020-01	Pompton River	DDD	L	Beyond 2012
NJ02030103110020-01	Pompton River	DDT	L	Beyond 2012
NJ02030103110020-01	Pompton River	PCB in Fish Tissue	L	Beyond 2012
NJ02030103110020-01	Pompton River	DDE	L	Beyond 2012
NJ02030103110020-01	Pompton River	Lead	L	Beyond 2012
NJ02030103110020-01	Pompton River	Escherichia coli	М	Beyond 2012
NJ02040206230070-01	Pond Creek / Cape May Canal West	Polychlorinated biphenyls	L	Beyond 2012
		Total Suspended Solids		-
NJ02040105240040-01	Pond Run	(TSS)	М	Beyond 2012
NJ02040105240040-01	Pond Run	Turbidity	М	Beyond 2012
NJ02030104090020-01	Poplar Brook	Phosphorus (Total)	М	Beyond 2012
NJ02030104070100-01	Poricy Bk/Swimming R(below SwimmingR Rd)	Polychlorinated biphenyls	L	Beyond 2012
NJ02030104070100-01	Poricy Bk/Swimming R(below SwimmingR Rd)	DDT	L	Beyond 2012
NJ02030104070100-01	Poricy Bk/Swimming R(below SwimmingR Rd)	Oxygen, Dissolved	М	Beyond 2012
NJ02030104070100-01	Poricy Bk/Swimming R(below SwimmingR Rd)	DDE	L	Beyond 2012
NJ02030104070100-01	Poricy Bk/Swimming R(below SwimmingR Rd)	DDD	L	Beyond 2012
NJ02030103120030-01	Preakness Brook / Naachtpunkt Brook	Cause Unknown	М	Beyond 2012
		Total Suspended Solids		
NJ02030103010020-01	Primrose Brook	(TSS)	М	Beyond 2012
NJ02030103010020-01	Primrose Brook	pH	М	Beyond 2012
NJ02030103010020-01	Primrose Brook	Temperature, water	М	Beyond 2012
NJ02030103010020-01	Primrose Brook	Escherichia coli	М	Beyond 2012
NJ02030103010020-01	Primrose Brook	Oxygen, Dissolved	М	Beyond 2012
NJ02040301160070-01	Pump Branch (above 74d53m road)	pH	М	Beyond 2012
NJ02040301160080-01	Pump Branch (below 74d53m road)	pH	М	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02040202150010-01	Raccoon Ck (above Clems Run)	Cause Unknown	М	Beyond 2012
		Total Suspended Solids		
NJ02040202150060-01	Raccoon Ck (below Swedesboro rd)/BirchCk	(TSS)	М	Beyond 2012
NJ02040202150060-01	Raccoon Ck (below Swedesboro rd)/BirchCk	Phosphorus (Total)	М	Beyond 2012
NJ02040202150020-01	Raccoon Ck (Rt 45 to/incl Clems Run)	Phosphorus (Total)	М	Beyond 2012
NJ02040202150040-01	Raccoon Ck (Russell Mill Rd to Rt 45)	DDT	L	Beyond 2012
NJ02040202150040-01	Raccoon Ck (Russell Mill Rd to Rt 45)	Chlordane	L	Beyond 2012
NJ02040202150040-01	Raccoon Ck (Russell Mill Rd to Rt 45)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202150040-01	Raccoon Ck (Russell Mill Rd to Rt 45)	Turbidity	М	Beyond 2012
NJ02040202150040-01	Raccoon Ck (Russell Mill Rd to Rt 45)	Arsenic	L	Beyond 2012
NJ02040202150040-01	Raccoon Ck (Russell Mill Rd to Rt 45)	Silver	L	Beyond 2012
NJ02040202150040-01	Raccoon Ck (Russell Mill Rd to Rt 45)	Phosphorus (Total)	М	Beyond 2012
NJ02040202150040-01	Raccoon Ck (Russell Mill Rd to Rt 45)	DDD	L	Beyond 2012
NJ02040202150040-01	Raccoon Ck (Russell Mill Rd to Rt 45)	DDE	L	Beyond 2012
NJ02040202150050-01	Raccoon Ck (Swedesboro rd-RussellMillRd)	Cause Unknown	М	Beyond 2012
NJ02040206070070-01	Raccoon Ditch (Stow Creek)	Cause Unknown	М	Beyond 2012
NJ02040206070070-01	Raccoon Ditch (Stow Creek)	PCB in Fish Tissue	L	Beyond 2012
NJ02030104050040-01	Rahway R (Kenilworth Blvd to EB / WB)	Arsenic	L	Beyond 2012
NJ02030104050040-01	Rahway R (Kenilworth Blvd to EB / WB)	Total Dissolved Solids	М	Beyond 2012
NJ02030104050040-01	Rahway R (Kenilworth Blvd to EB / WB)	Phosphorus (Total)	М	Beyond 2012
		Total Suspended Solids		<u>,</u>
NJ02030104050060-01	Rahway R(Robinsons Br to KenilworthBlvd)	(TSS)	М	Beyond 2012
NJ02030104050060-01	Rahway R(Robinsons Br to KenilworthBlvd)	Phosphorus (Total)	М	Beyond 2012
NJ02030104050060-01	Rahway R(Robinsons Br to KenilworthBlvd)	Oxygen, Dissolved	М	Beyond 2012
NJ02030104050060-01	Rahway R(Robinsons Br to KenilworthBlvd)	Mercury in Fish Tissue	М	Beyond 2012
NJ02030104050060-01	Rahway R(Robinsons Br to KenilworthBlvd)	Arsenic	L	Beyond 2012
NJ02030104050100-01	Rahway River (below Robinsons Branch)	Dieldrin	М	Beyond 2012
NJ02030104050100-01	Rahway River (below Robinsons Branch)	Benzo(a)pyrene (PAHs)	М	Beyond 2012
NJ02030104050100-01	Rahway River (below Robinsons Branch)	Chlordane	М	Beyond 2012
NJ02030104050100-01	Rahway River (below Robinsons Branch)	DDD	М	Beyond 2012
NJ02030104050100-01	Rahway River (below Robinsons Branch)	DDT	М	Beyond 2012
		Dioxin (including 2,3,7,8-		
NJ02030104050100-01	Rahway River (below Robinsons Branch)	TCDD)	М	Beyond 2012
NJ02030104050100-01	Rahway River (below Robinsons Branch)	Mercury in Fish Tissue	М	Beyond 2012
NJ02030104050100-01	Rahway River (below Robinsons Branch)	Polychlorinated biphenyls	М	Beyond 2012
NJ02030104050100-01	Rahway River (below Robinsons Branch)	DDE	М	Beyond 2012
NJ02030104050020-01	Rahway River EB	Total Dissolved Solids	М	Beyond 2012
NJ02030104050090-01	Rahway River SB	Polychlorinated biphenyls	М	Beyond 2012
NJ02030104050090-01	Rahway River SB	Phosphorus (Total)	М	Beyond 2012
NJ02030104050090-01	Rahway River SB	Total Dissolved Solids	М	Beyond 2012
NJ02030104050090-01	Rahway River SB	Dioxin (including 2,3,7,8- TCDD)	М	Beyond 2012
NJ02030104050010-01	Rahway River WB	Phosphorus (Total)	M	Beyond 2012 Beyond 2012
NJ02030104050010-01	Rahway River WB	Sulfates	L	Beyond 2012 Beyond 2012
NJ02030104050010-01	Rahway River WB	Chloride	L	Beyond 2012 Beyond 2012
NJ02030104050010-01	Rahway River WB	Total Dissolved Solids	M L	Beyond 2012 Beyond 2012
NJ02030104050010-01	Ramapo R (above 74d 11m 00s)	Oxygen, Dissolved	M	Beyond 2012 Beyond 2012
11302030103100010-01	Kamapo K (above 740 1111 008)	Oxygen, Dissolved	141	Deyona 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02030103100040-01	Ramapo R (Bear Swamp Bk thru Fyke Bk)	pH	М	Beyond 2012
NJ02030103100070-01	Ramapo R (below Crystal Lake bridge)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103100070-01	Ramapo R (below Crystal Lake bridge)	DDD	L	Beyond 2012
NJ02030103100070-01	Ramapo R (below Crystal Lake bridge)	Chlordane	L	Beyond 2012
NJ02030103100070-01	Ramapo R (below Crystal Lake bridge)	pН	М	Beyond 2012
NJ02030103100070-01	Ramapo R (below Crystal Lake bridge)	Mercury in Fish Tissue	М	Beyond 2012
NJ02030103100070-01	Ramapo R (below Crystal Lake bridge)	PCB in Fish Tissue	L	Beyond 2012
NJ02030103100070-01	Ramapo R (below Crystal Lake bridge)	DDT	L	Beyond 2012
NJ02030103100070-01	Ramapo R (below Crystal Lake bridge)	DDE	L	Beyond 2012
NJ02040202020030-01	Rancocas Ck NB (incl Mirror Lk-GauntsBk)	pН	М	Beyond 2012
NJ02040202020030-01	Rancocas Ck NB (incl Mirror Lk-GauntsBk)	Copper	L	Beyond 2012
NJ02040202020030-01	Rancocas Ck NB (incl Mirror Lk-GauntsBk)	Lead	L	Beyond 2012
NJ02040202020030-01	Rancocas Ck NB (incl Mirror Lk-GauntsBk)	Phosphorus (Total)	М	Beyond 2012
NJ02040202020030-01	Rancocas Ck NB (incl Mirror Lk-GauntsBk)	Mercury in Water Column	L	Beyond 2012
NJ02040202020040-01	Rancocas Ck NB (NL dam to Mirror Lk)	Escherichia coli	М	Beyond 2012
NJ02040202020040-01	Rancocas Ck NB (NL dam to Mirror Lk)	Phosphorus (Total)	М	Beyond 2012
NJ02040202020040-01	Rancocas Ck NB (NL dam to Mirror Lk)	pH	М	Beyond 2012
NJ02040202020040-01	Rancocas Ck NB (NL dam to Mirror Lk)	Mercury in Water Column	L	Beyond 2012
NJ02040202040010-01	Rancocas Ck NB (Pemberton br to NL dam)	pH	М	Beyond 2012
NJ02040202040010-01	Rancocas Ck NB (Pemberton br to NL dam)	Lead	L	Beyond 2012
NJ02040202040010-01	Rancocas Ck NB (Pemberton br to NL dam)	Copper	L	Beyond 2012
NJ02040202040010-01	Rancocas Ck NB (Pemberton br to NL dam)	Arsenic	L	Beyond 2012
NJ02040202040030-01	Rancocas Ck NB (Rt 206 to Pemberton br)	Copper	L	Beyond 2012
NJ02040202040030-01	Rancocas Ck NB (Rt 206 to Pemberton br)	Arsenic	L	Beyond 2012
NJ02040202040030-01	Rancocas Ck NB (Rt 206 to Pemberton br)	Phosphorus (Total)	М	Beyond 2012
NJ02040202040030-01	Rancocas Ck NB (Rt 206 to Pemberton br)	Lead	L	Beyond 2012
NJ02040202050090-01	Rancocas Ck SB (BobbysRun to Vincentown)	Phosphorus (Total)	М	Beyond 2012
NJ02040202050090-01	Rancocas Ck SB (BobbysRun to Vincentown)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202050090-01	Rancocas Ck SB (BobbysRun to Vincentown)	Arsenic	L	Beyond 2012
NJ02040202050090-01	Rancocas Ck SB (BobbysRun to Vincentown)	pН	М	Beyond 2012
NJ02040202050080-01	Rancocas Ck SB (Vincentown-FriendshipCk)	Oxygen, Dissolved	М	Beyond 2012
NJ02040202050080-01	Rancocas Ck SB (Vincentown-FriendshipCk)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202050080-01	Rancocas Ck SB (Vincentown-FriendshipCk)	Phosphorus (Total)	М	Beyond 2012
NJ02040202050080-01	Rancocas Ck SB (Vincentown-FriendshipCk)	pH	М	Beyond 2012
NJ02040202050080-01	Rancocas Ck SB (Vincentown-FriendshipCk)	Escherichia coli	М	Beyond 2012
NJ02040202050080-01	Rancocas Ck SB (Vincentown-FriendshipCk)	Arsenic	L	Beyond 2012
NJ02040202060080-01	Rancocas Ck SW Branch (above Medford br)	Phosphorus (Total)	М	Beyond 2012
NJ02040202060080-01	Rancocas Ck SW Branch (above Medford br)	pH	М	Beyond 2012
NJ02040202060080-01	Rancocas Ck SW Branch (above Medford br)	Nitrates	М	Beyond 2012
		Total Suspended Solids		j
NJ02040202060080-01	Rancocas Ck SW Branch (above Medford br)	(TSS)	М	Beyond 2012
NJ02040202060080-01	Rancocas Ck SW Branch (above Medford br)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02040202060100-01	Rancocas Ck SW Branch (below Medford br)	Phosphorus (Total)	M	Beyond 2012 Beyond 2012
NJ02040202060100-01	Rancocas Ck SW Branch (below Medford br)	pH	М	Beyond 2012 Beyond 2012
NJ02040202060100-01	Rancocas Ck SW Branch (below Medford br)	Polychlorinated biphenyls	L	Beyond 2012 Beyond 2012
NJ02040202060100-01	Rancocas Ck SW Branch (below Medford br)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02040202060100-01	Rancocas Ck SW Branch (below Medford br)	Oxygen, Dissolved	M	Beyond 2012 Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02040202080050-01	Rancocas Creek (below Rt 130)	PCB in Fish Tissue	L	Beyond 2012
NJ02040202080020-01	Rancocas Creek (Martins Beach to NB/SB)	Phosphorus (Total)	М	Beyond 2012
NJ02040202080020-01	Rancocas Creek (Martins Beach to NB/SB)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202080040-01	Rancocas Creek (Rt 130 to Martins Beach)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202040050-01	Rancocas Creek NB (below Smithville)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202040050-01	Rancocas Creek NB (below Smithville)	Phosphorus (Total)	М	Beyond 2012
NJ02040202040050-01	Rancocas Creek NB (below Smithville)	Arsenic	L	Beyond 2012
NJ02040202040040-01	Rancocas Creek NB (Smithville to Rt 206)	Arsenic	L	Beyond 2012
NJ02040202040040-01	Rancocas Creek NB (Smithville to Rt 206)	Phosphorus (Total)	М	Beyond 2012
NJ02040202070030-01	Rancocas Creek SB (below Rt 38)	Escherichia coli	М	Beyond 2012
NJ02040202070030-01	Rancocas Creek SB (below Rt 38)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202070030-01	Rancocas Creek SB (below Rt 38)	Arsenic	L	Beyond 2012
NJ02040202070030-01	Rancocas Creek SB (below Rt 38)	Phosphorus (Total)	М	Beyond 2012
NJ02040202070020-01	Rancocas Creek SB (Rt 38 to Bobbys Run)	Escherichia coli	М	Beyond 2012
NJ02040202070020-01	Rancocas Creek SB (Rt 38 to Bobbys Run)	Arsenic	L	Beyond 2012
NJ02040202070020-01	Rancocas Creek SB (Rt 38 to Bobbys Run)	Phosphorus (Total)	М	Beyond 2012
NJ02040202070020-01	Rancocas Creek SB (Rt 38 to Bobbys Run)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202050060-01	Rancocas Creek SB(above Friendship Ck)	Escherichia coli	М	Beyond 2012
NJ02040202050060-01	Rancocas Creek SB(above Friendship Ck)	pH	М	Beyond 2012
NJ02040202050060-01	Rancocas Creek SB(above Friendship Ck)	Phosphorus (Total)	М	Beyond 2012
NJ02040202050060-01	Rancocas Creek SB(above Friendship Ck)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202050060-01	Rancocas Creek SB(above Friendship Ck)	Arsenic	L	Beyond 2012
NJ02030104910030-01	Raritan Bay ( deep water)	DDE	М	Beyond 2012
NJ02030104910030-01	Raritan Bay ( deep water)	Benzo(a)pyrene (PAHs)	М	Beyond 2012
NJ02030104910030-01	Raritan Bay ( deep water)	DDD	М	Beyond 2012
NJ02030104910030-01	Raritan Bay ( deep water)	Total Coliform	М	Beyond 2012
NJ02030104910030-01	Raritan Bay (deep water)	DDT	М	Beyond 2012
NJ02030104910030-01	Raritan Bay ( deep water)	Dieldrin	М	Beyond 2012
		Dioxin (including 2,3,7,8-		-
NJ02030104910030-01	Raritan Bay ( deep water)	TCDD)	М	Beyond 2012
NJ02030104910030-01	Raritan Bay ( deep water)	Mercury in Fish Tissue	М	Beyond 2012
NJ02030104910030-01	Raritan Bay ( deep water)	Oxygen, Dissolved	М	Beyond 2012
NJ02030104910030-01	Raritan Bay ( deep water)	PCB in Fish Tissue	М	Beyond 2012
NJ02030104910030-01	Raritan Bay ( deep water)	Chlordane	М	Beyond 2012
NJ02030104910010-01	Raritan Bay (west of Thorns Ck)	DDT	М	Beyond 2012
NJ02030104910010-01	Raritan Bay (west of Thorns Ck)	Enterococcus	М	Beyond 2012
NJ02030104910010-01	Raritan Bay (west of Thorns Ck)	Oxygen, Dissolved	М	Beyond 2012
NJ02030104910010-01	Raritan Bay (west of Thorns Ck)	Polychlorinated biphenyls	М	Beyond 2012
NJ02030104910010-01	Raritan Bay (west of Thorns Ck)	Dieldrin	М	Beyond 2012
NJ02030104910010-01	Raritan Bay (west of Thorns Ck)	DDE	М	Beyond 2012
NJ02030104910010-01	Raritan Bay (west of Thorns Ck)	DDD	М	Beyond 2012
		Dioxin (including 2,3,7,8-		-
NJ02030104910010-01	Raritan Bay (west of Thorns Ck)	TCDD)	М	Beyond 2012
NJ02030104910010-01	Raritan Bay (west of Thorns Ck)	Benzo(a)pyrene (PAHs)	М	Beyond 2012
NJ02030104910010-01	Raritan Bay (west of Thorns Ck)	Chlordane	М	Beyond 2012
NJ02030105160100-01	Raritan R Lwr (below Lawrence Bk)	Oxygen, Dissolved	М	Beyond 2012
NJ02030105160100-01	Raritan R Lwr (below Lawrence Bk)	DDD	М	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02030105160100-01	Raritan R Lwr (below Lawrence Bk)	Heptachlor epoxide	M	Beyond 2012
NJ02030105160100-01	Raritan R Lwr (below Lawrence Bk)	Dieldrin	М	Beyond 2012
NJ02030105160100-01	Raritan R Lwr (below Lawrence Bk)	Polychlorinated biphenyls	М	Beyond 2012
NJ02030105160100-01	Raritan R Lwr (below Lawrence Bk)	DDE	М	Beyond 2012
NJ02030105160100-01	Raritan R Lwr (below Lawrence Bk)	Mercury in Fish Tissue	М	Beyond 2012
NJ02030105160100-01	Raritan R Lwr (below Lawrence Bk)	Chlordane	M	Beyond 2012 Beyond 2012
NJ02030105160100-01	Raritan R Lwr (below Lawrence Bk)	Cadmium	L	Beyond 2012 Beyond 2012
NJ02030105160100-01	Raritan R Lwr (below Lawrence Bk)	Benzo(a)pyrene (PAHs)	M	Beyond 2012 Beyond 2012
NJ02030105160100-01	Raritan R Lwr (below Lawrence Bk)	DDT	M	Beyond 2012 Beyond 2012
1002000100100100 01		Dioxin (including 2,3,7,8-	1,1	Deyond 2012
NJ02030105160100-01	Raritan R Lwr (below Lawrence Bk)	TCDD)	М	Beyond 2012
NJ02030105120170-01	Raritan R Lwr (Lawrence Bk to Mile Run)	Benzo(a)pyrene (PAHs)	М	Beyond 2012
NJ02030105120170-01	Raritan R Lwr (Lawrence Bk to Mile Run)	Zinc	L	Beyond 2012
		Total Suspended Solids		
NJ02030105120170-01	Raritan R Lwr (Lawrence Bk to Mile Run)	(TSS)	М	Beyond 2012
NJ02030105120170-01	Raritan R Lwr (Lawrence Bk to Mile Run)	Polychlorinated biphenyls	М	Beyond 2012
NJ02030105120170-01	Raritan R Lwr (Lawrence Bk to Mile Run)	Phosphorus (Total)	М	Beyond 2012
NJ02030105120170-01	Raritan R Lwr (Lawrence Bk to Mile Run)	Mercury in Fish Tissue	М	Beyond 2012
NJ02030105120170-01	Raritan R Lwr (Lawrence Bk to Mile Run)	Heptachlor epoxide	М	Beyond 2012
		Dioxin (including 2,3,7,8-		j
NJ02030105120170-01	Raritan R Lwr (Lawrence Bk to Mile Run)	TCDD)	М	Beyond 2012
NJ02030105120170-01	Raritan R Lwr (Lawrence Bk to Mile Run)	Dieldrin	М	Beyond 2012
NJ02030105120170-01	Raritan R Lwr (Lawrence Bk to Mile Run)	DDT	М	Beyond 2012
NJ02030105120170-01	Raritan R Lwr (Lawrence Bk to Mile Run)	DDE	М	Beyond 2012
NJ02030105120170-01	Raritan R Lwr (Lawrence Bk to Mile Run)	DDD	М	Beyond 2012
NJ02030105120170-01	Raritan R Lwr (Lawrence Bk to Mile Run)	Cadmium	L	Beyond 2012
NJ02030105120170-01	Raritan R Lwr (Lawrence Bk to Mile Run)	Arsenic	L	Beyond 2012
NJ02030105120170-01	Raritan R Lwr (Lawrence Bk to Mile Run)	Chlordane	М	Beyond 2012
NJ02030105120160-01	Raritan R Lwr (MileRun to I-287 Pisctwy)	Arsenic	L	Beyond 2012
NJ02030105120160-01	Raritan R Lwr (MileRun to I-287 Pisctwy)	Polychlorinated biphenyls	М	Beyond 2012
		Total Suspended Solids		5
NJ02030105120160-01	Raritan R Lwr (MileRun to I-287 Pisctwy)	(TSS)	М	Beyond 2012
NJ02030105120160-01	Raritan R Lwr (MileRun to I-287 Pisctwy)	Phosphorus (Total)	М	Beyond 2012
NJ02030105120160-01	Raritan R Lwr (MileRun to I-287 Pisctwy)	Benzene	L	Beyond 2012
NJ02030105080030-01	Raritan R Lwr (Millstone to Rt 206)	pН	М	Beyond 2012
		Total Suspended Solids		
NJ02030105080030-01	Raritan R Lwr (Millstone to Rt 206)	(TSS)	Н	2012
NJ02030105080020-01	Raritan R Lwr (Rt 206 to NB / SB)	Phosphorus (Total)	Н	2012
NJ02030105120140-01	Raritan R Lwr(I-287 Piscatway-Millstone)	Arsenic	L	Beyond 2012
NJ02030105120140-01	Raritan R Lwr(I-287 Piscatway-Millstone)	Benzene	L	Beyond 2012
NJ02030105120140-01	Raritan R Lwr(I-287 Piscatway-Millstone)	Phosphorus (Total)	М	Beyond 2012
		Total Suspended Solids		<b>,</b>
NJ02030105120140-01	Raritan R Lwr(I-287 Piscatway-Millstone)	(TSS)	М	Beyond 2012
		Total Suspended Solids		, - ···-
NJ02030105070030-01	Raritan R NB (below Rt 28)	(TSS)	Н	2012
NJ02030105070030-01	Raritan R NB (below Rt 28)	Phosphorus (Total)	Н	2012
	Raritan R NB (Rt 28 to Lamington R)	Cause Unknown		-

	Parameter	Ranking	TMDL Schedule
Raritan R NB(incl McVickers to India Bk)	Temperature, water	М	Beyond 2012
Raritan R NB(incl Mine Bk to Peapack Bk)	Cause Unknown	М	Beyond 2012
Raritan R NB(Peapack Bk to McVickers Bk)	Temperature, water	М	Beyond 2012
Raritan R NB(Peapack Bk to McVickers Bk)	Oxygen, Dissolved	М	Beyond 2012
_	Total Suspended Solids		
Raritan R NB(Peapack Bk to McVickers Bk)	(TSS)	М	Beyond 2012
Raritan R SB(Califon br to Long Valley)	Oxygen, Dissolved	М	Beyond 2012
Raritan R SB(Califon br to Long Valley)	Temperature, water	М	Beyond 2012
	Cause Unknown	М	Beyond 2012
	Temperature, water	М	Beyond 2012
Raritan R SB(NB to Pleasant Run)	Arsenic	L	Beyond 2012
	Total Suspended Solids		
Raritan R SB(NB to Pleasant Run)	(TSS)	Н	2012
Raritan R SB(NB to Pleasant Run)	Phosphorus (Total)	Н	2012
Raritan R SB(NB to Pleasant Run)		Н	2012
Raritan R SB(Pleasant Run-Three Bridges)	Arsenic	L	Beyond 2012
	Phosphorus (Total)	Н	2012
		L	Beyond 2012
	Temperature, water	М	Beyond 2012
			5
Raritan R SB(Prescott Bk to River Rd)	-	Н	2012
Raritan R SB(River Rd to Spruce Run)	-	Н	2012
· · · · · · · · · · · · · · · · · · ·		Н	2012
	-	Н	2012
		М	Beyond 2012
-		М	Beyond 2012
	1	М	Beyond 2012
	Arsenic	L	Beyond 2012
	Phosphorus (Total)	Н	2012
		М	Beyond 2012
			5
Raritan R SB(Three Bridges-Prescott Bk)	-	Н	2012
	· · · ·	М	Beyond 2012
			Beyond 2012
			Beyond 2012
	Benzo(a)pyrene (PAHs)		Beyond 2012
Red Root Creek / Crows Mill Creek		М	Beyond 2012
	,		Beyond 2012
	* *		Beyond 2012 Beyond 2012
			Beyond 2012 Beyond 2012
			Beyond 2012 Beyond 2012
			Beyond 2012 Beyond 2012
Reed Branch (Still Run)	Cause Unknown	M	Beyond 2012 Beyond 2012
			-
RepaupoCk(belowTomlin Sta Rd)/CedarSwamp	Polychlorinated biphenyls	L	Beyond 2012
	Raritan R NB(incl Mine Bk to Peapack Bk)         Raritan R NB(Peapack Bk to McVickers Bk)         Raritan R NB(Peapack Bk to McVickers Bk)         Raritan R NB(Peapack Bk to McVickers Bk)         Raritan R SB(Califon br to Long Valley)         Raritan R SB(Califon br to Long Valley)         Raritan R SB(Califon br to Long Valley)         Raritan R SB(LongValley br to 74d44m15s)         Raritan R SB(LongValley br to 74d44m15s)         Raritan R SB(NB to Pleasant Run)         Raritan R SB(Pleasant Run-Three Bridges)         Raritan R SB(Pleasant Run-Three Bridges)         Raritan R SB(Prescott Bk to River Rd)         Raritan R SB(Prescott Bk to River Rd)         Raritan R SB(River Rd to Spruce Run)         Raritan R SB(River Rd to Spruce Run)         Raritan R SB(River Rd to Spruce Run)         Raritan R SB(StoneMill gage to Califon)         Raritan R SB(Three Bridges-Prescott Bk)         Raritan R SB(Three Bridges-Prescott Bk)     <	Raritan R NB(incl Mine Bk to Peapack Bk)       Cause Unknown         Raritan R NB(Peapack Bk to McVickers Bk)       Temperature, water         Raritan R NB(Peapack Bk to McVickers Bk)       Oxygen, Dissolved         Total Suspended Solids       Total Suspended Solids         Raritan R NB(Peapack Bk to McVickers Bk)       (TSS)         Raritan R SB(Califon br to Long Valley)       Temperature, water         Raritan R SB(Califon br to Long Valley)       Temperature, water         Raritan R SB(LongValley br to 74d44m15s)       Cause Unknown         Raritan R SB(NB to Pleasant Run)       Arsenic         Raritan R SB(NB to Pleasant Run)       Total Suspended Solids         Raritan R SB(NB to Pleasant Run)       Phosphorus (Total)         Raritan R SB(Pleasant Run-Three Bridges)       Arsenic         Raritan R SB(Pleasant Run-Three Bridges)       Phosphorus (Total)         Raritan R SB(Pleasant Run-Three Bridges)       Phosphorus (Total)         Raritan R SB(Prescott Bk to River Rd)       Temperature, water         Total Suspended Solids       (TSS)         Raritan R SB(River Rd to Spruce Run)       Phosphorus (Total)         Raritan R SB(River Rd to Spruce Run)       Phosphorus (Total)         Raritan R SB(Kiver Rd to Spruce Run)       Temperature, water         Raritan R SB(Kiver Rd to Spruce Run)       Temperature, water </td <td>Raritan R NB(incl Mine Bk to Peapack Bk)         Cause Unknown         M           Raritan R NB(Peapack Bk to McVickers Bk)         Temperature, water         M           Raritan R NB(Peapack Bk to McVickers Bk)         Oxygen, Dissolved         M           Raritan R NB(Peapack Bk to McVickers Bk)         (TSS)         M           Raritan R SB(Califon br to Long Valley)         Oxygen, Dissolved         M           Raritan R SB(Califon br to Long Valley)         Temperature, water         M           Raritan R SB(LongValley br to 74444m15s)         Cause Unknown         M           Raritan R SB(ChogValley br to 74444m15s)         Temperature, water         M           Raritan R SB(NB to Pleasant Run)         Arsenic         L           Raritan R SB(NB to Pleasant Run)         Phosphorus (Total)         H           Raritan R SB(NB to Pleasant Run)         pH         H           Raritan R SB(Pleasant Run-Three Bridges)         Arsenic         L           Raritan R SB(Pleasant Run-Three Bridges)         Phosphorus (Total)         H           Raritan R SB(Pleasant Run-Three Bridges)         Phosphorus (Total)         H           Raritan R SB(Prescott Bk to River Rd)         Temperature, water         M           Raritan R SB(Prescott Bk to River Rd)         Total Suspended Solids         Raritan R SB(River Rd to Spruce Run)</td>	Raritan R NB(incl Mine Bk to Peapack Bk)         Cause Unknown         M           Raritan R NB(Peapack Bk to McVickers Bk)         Temperature, water         M           Raritan R NB(Peapack Bk to McVickers Bk)         Oxygen, Dissolved         M           Raritan R NB(Peapack Bk to McVickers Bk)         (TSS)         M           Raritan R SB(Califon br to Long Valley)         Oxygen, Dissolved         M           Raritan R SB(Califon br to Long Valley)         Temperature, water         M           Raritan R SB(LongValley br to 74444m15s)         Cause Unknown         M           Raritan R SB(ChogValley br to 74444m15s)         Temperature, water         M           Raritan R SB(NB to Pleasant Run)         Arsenic         L           Raritan R SB(NB to Pleasant Run)         Phosphorus (Total)         H           Raritan R SB(NB to Pleasant Run)         pH         H           Raritan R SB(Pleasant Run-Three Bridges)         Arsenic         L           Raritan R SB(Pleasant Run-Three Bridges)         Phosphorus (Total)         H           Raritan R SB(Pleasant Run-Three Bridges)         Phosphorus (Total)         H           Raritan R SB(Prescott Bk to River Rd)         Temperature, water         M           Raritan R SB(Prescott Bk to River Rd)         Total Suspended Solids         Raritan R SB(River Rd to Spruce Run)

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02040301070040-01	Ridgeway Br (below Hope Chapel Rd)	pН	M	Beyond 2012
NJ02040206210010-01	Riggins Ditch (Moores Beach to East Pt)	Polychlorinated biphenyls	L	Beyond 2012
NJ02030103070080-01	Ringwood Creek	Temperature, water	М	Beyond 2012
NJ02030103070080-01	Ringwood Creek	Oxygen, Dissolved	М	Beyond 2012
NJ02030103070080-01	Ringwood Creek	Escherichia coli	М	Beyond 2012
NJ02030104050070-01	Robinsons Br Rahway R (above Lake Ave)	Phosphorus (Total)	М	Beyond 2012 Beyond 2012
NJ02030104050080-01	Robinsons Br Rahway R (below Lake Ave)	Phosphorus (Total)	M	Beyond 2012
NJ02030104050080-01	Robinsons Br Rahway R (below Lake Ave)	Arsenic	L	Beyond 2012
NJ02030105050090-01	Rockaway Ck (below McCrea Mills)	pH	M	Beyond 2012
NJ02030105050090-01	Rockaway Ck (below McCrea Mills)	Phosphorus (Total)	H	2012
NJ02030105050100-01	Rockaway Ck SB	Phosphorus (Total)	H	2012
1002020102020100 01		Total Suspended Solids		2012
NJ02030105050100-01	Rockaway Ck SB	(TSS)	Н	2012
NJ02030103030030-01	Rockaway R (above Longwood Lake outlet)	Cause Unknown	M	Beyond 2012
NJ02030103030150-01	Rockaway R (Boonton dam to Stony Brook)	DDT	L	Beyond 2012 Beyond 2012
NJ02030103030150-01	Rockaway R (Boonton dam to Stony Brook)	Polychlorinated biphenyls	L	Beyond 2012 Beyond 2012
NJ02030103030150-01	Rockaway R (Boonton dam to Stony Brook)	Chlordane	L	Beyond 2012 Beyond 2012
NJ02030103030150-01	Rockaway R (Boonton dam to Stony Brook)	DDD	L	Beyond 2012 Beyond 2012
NJ02030103030150-01	Rockaway R (Boonton dam to Stony Brook)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02030103030150-01	Rockaway R (Boonton dam to Stony Brook)	DDE	L	Beyond 2012 Beyond 2012
NJ02030103030150-01	Rockaway R (Boonton dam to Stony Brook)	Tetrachloroethylene	L	Beyond 2012 Beyond 2012
NJ02030103030170-01	Rockaway R (Doonton dam to Stony Drock) Rockaway R (Passaic R to Boonton dam)	Oxygen, Dissolved	M	Beyond 2012 Beyond 2012
NJ02030103030170-01	Rockaway R (Passaic R to Boonton dam)	Tetrachloroethylene	L	Beyond 2012
NJ02030103030040-01	Rockaway R (I assale R to Boonton dam) Rockaway R (Stephens Bk to Longwood Lk)	Cause Unknown	M	Beyond 2012
NJ02030103030140-01	Rockaway R (Stephens BK to Eoligwood EK) Rockaway R (Stony Brook to BM 534 brdg)	Tetrachloroethylene	L	Beyond 2012
NJ02030103030140-01	Rockaway R (Stony Brook to BM 534 brdg)	Cause Unknown	M	Beyond 2012
NJ02030103030140-01	Rockaway R (Stony Brook to BM 534 brdg)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02030105100040-01	Rocky Brook (above Monmouth Co line)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02030105100050-01	Rocky Brook (above Monmouth Co line)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02030105100050-01	Rocky Brook (below Monmouth Co line)	Oxygen, Dissolved	M	Beyond 2012 Beyond 2012
NJ02030105100050-01	Rocky Brook (below Monmouth Co line)	Phosphorus (Total)	H	2012
NJ02030105110150-01	Royce Brook (above Branch Royce Brook)	Cause Unknown	M	Beyond 2012
NJ02030105110150-01	Royce Brook (above Branch Royce Brook) Royce Brook (below/incl Branch Royce Bk)	Cause Unknown	M	Beyond 2012
NJ02030103140040-01	Saddle River (above Ringwood gage)	Temperature, water	M	Beyond 2012
NJ02030103140040-01	Saddle River (above Kingwood gage)	Total Dissolved Solids	M	
NJ02030103140070-01	Saddle Rivel (below Loui gage)		IVI	Beyond 2012
NJ02030103140070-01	Saddle River (below Lodi gage)	Total Suspended Solids (TSS)	М	Beyond 2012
NJ02030103140070-01	Saddle River (below Lodi gage)	Polychlorinated biphenyls	М	Beyond 2012 Beyond 2012
NJ02030103140070-01	Saddle River (below Lodi gage)	Phosphorus (Total)	М	Beyond 2012
NJ02030103140070-01	Saddle River (below Lodi gage)	Nitrates	M	Beyond 2012 Beyond 2012
	Subaro Milor (Solo II 2001 Bugo)	Dioxin (including 2,3,7,8-	111	20,014 2012
NJ02030103140070-01	Saddle River (below Lodi gage)	TCDD)	М	Beyond 2012
NJ02030103140070-01	Saddle River (below Lodi gage)	Arsenic	L	Beyond 2012
NJ02030103140070-01	Saddle River (below Lodi gage)	Ammonia (Un-ionized)	М	Beyond 2012
NJ02030103140080-01	Saddle River (Hohokus to Ridgewood gage)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103140080-01	Saddle River (Hohokus to Ridgewood gage)	Phosphorus (Total)	М	Beyond 2012 Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
		Total Suspended Solids		
NJ02030103140080-01	Saddle River (Hohokus to Ridgewood gage)	(TSS)	М	Beyond 2012
NJ02030103140080-01	Saddle River (Hohokus to Ridgewood gage)	Arsenic	L	Beyond 2012
NJ02030103140060-01	Saddle River (Lodi gage to Rt 4)	Total Dissolved Solids	М	Beyond 2012
NJ02030103140060-01	Saddle River (Lodi gage to Rt 4)	Phosphorus (Total)	М	Beyond 2012
NJ02030103140060-01	Saddle River (Lodi gage to Rt 4)	Nitrates	М	Beyond 2012
NJ02030103140060-01	Saddle River (Lodi gage to Rt 4)	Arsenic	L	Beyond 2012
NJ02030103140060-01	Saddle River (Lodi gage to Rt 4)	Ammonia (Un-ionized)	М	Beyond 2012
		Total Suspended Solids		
NJ02030103140060-01	Saddle River (Lodi gage to Rt 4)	(TSS)	М	Beyond 2012
NJ02030103140050-01	Saddle River (Rt 4 to Rt 17)	Arsenic	L	Beyond 2012
NJ02030103140050-01	Saddle River (Rt 4 to Rt 17)	Phosphorus (Total)	М	Beyond 2012
		Total Suspended Solids		
NJ02030103140050-01	Saddle River (Rt 4 to Rt 17)	(TSS)	М	Beyond 2012
NJ02040206030080-01	Salem Canal	Temperature, water	М	Beyond 2012
NJ02040206030080-01	Salem Canal	Phosphorus (Total)	М	Beyond 2012
NJ02040206030080-01	Salem Canal	Oxygen, Dissolved	М	Beyond 2012
NJ02040206030060-01	Salem R (39-40-14 dam-CoursesLndg)/Canal	Temperature, water	М	Beyond 2012
NJ02040206030060-01	Salem R (39-40-14 dam-CoursesLndg)/Canal	Phosphorus (Total)	М	Beyond 2012
NJ02040206040040-01	Salem R (below Fenwick Creek)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206030030-01	Salem R (CountyHomeRd to Woodstown gage)	Oxygen, Dissolved	М	Beyond 2012
NJ02040206030030-01	Salem R (CountyHomeRd to Woodstown gage)	pH	М	Beyond 2012
NJ02040206030030-01	Salem R (CountyHomeRd to Woodstown gage)	Phosphorus (Total)	М	Beyond 2012
NJ02040206030040-01	Salem R (CoursesLanding to CountyHomeRd)	Oxygen, Dissolved	М	Beyond 2012
		Total Suspended Solids		5
NJ02040206030040-01	Salem R (CoursesLanding to CountyHomeRd)	(TSS)	М	Beyond 2012
NJ02040206030040-01	Salem R (CoursesLanding to CountyHomeRd)	Temperature, water	М	Beyond 2012
NJ02040206030040-01	Salem R (CoursesLanding to CountyHomeRd)	pH	М	Beyond 2012
NJ02040206030040-01	Salem R (CoursesLanding to CountyHomeRd)	Arsenic	L	Beyond 2012
NJ02040206030040-01	Salem R (CoursesLanding to CountyHomeRd)	Phosphorus (Total)	М	Beyond 2012
NJ02040206040030-01	Salem R (Fenwick Ck to 39d40m14s dam)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206030010-01	Salem River (above Woodstown gage)	Oxygen, Dissolved	М	Beyond 2012
NJ02040206030010-01	Salem River (above Woodstown gage)	pH	М	Beyond 2012
		Total Suspended Solids		y
NJ02040206030010-01	Salem River (above Woodstown gage)	(TSS)	М	Beyond 2012
NJ02040206030010-01	Salem River (above Woodstown gage)	Temperature, water	М	Beyond 2012
NJ02030104910020-01	Sandy Hook Bay (east of Thorns Ck)	DDT	М	Beyond 2012
NJ02030104910020-01	Sandy Hook Bay (east of Thorns Ck)	Total Coliform	М	Beyond 2012
NJ02030104910020-01	Sandy Hook Bay (east of Thorns Ck)	PCB in Fish Tissue	М	Beyond 2012
		Dioxin (including 2,3,7,8-		
NJ02030104910020-01	Sandy Hook Bay (east of Thorns Ck)	TCDD)	М	Beyond 2012
NJ02030104910020-01	Sandy Hook Bay (east of Thorns Ck)	Dieldrin	M	Beyond 2012 Beyond 2012
NJ02030104910020-01	Sandy Hook Bay (east of Thorns Ck)	DDD	M	Beyond 2012 Beyond 2012
NJ02030104910020-01	Sandy Hook Bay (east of Thorns Ck)	Chlordane	M	Beyond 2012 Beyond 2012
NJ02030104910020-01	Sandy Hook Bay (east of Thorns Ck)	Benzo(a)pyrene (PAHs)	M	Beyond 2012 Beyond 2012
NJ02030104910020-01	Sandy Hook Bay (east of Thorns Ck)	Oxygen, Dissolved	M	Beyond 2012 Beyond 2012
NJ02030104910020-01	Sandy Hook Bay (east of Thorns Ck)	DDE	M	Beyond 2012 Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02030103150020-01	Second River	Phosphorus (Total)	М	Beyond 2012
NJ02030103150020-01	Second River	pH	М	Beyond 2012
NJ02030103150020-01	Second River	Escherichia coli	М	Beyond 2012
NJ02030103150020-01	Second River	Ammonia (Un-ionized)	М	Beyond 2012
NJ02040105240010-01	Shabakunk Creek	Mercury in Fish Tissue	L	Beyond 2012
NJ02040105240010-01	Shabakunk Creek	Phosphorus (Total)	М	Beyond 2012
NJ02040201070030-01	Shady Brook/Spring Lake/Rowan Lake	Polychlorinated biphenyls	L	Beyond 2012
NJ02040201070030-01	Shady Brook/Spring Lake/Rowan Lake	Mercury in Fish Tissue	L	Beyond 2012
NJ02030105100100-01	Shallow Brook (Devils Brook)	Cause Unknown	М	Beyond 2012
NJ02040301070010-01	Shannae Brook	pН	М	Beyond 2012
NJ02030104090040-01	Shark River (above Remsen Mill gage)	DDT	L	Beyond 2012
NJ02030104090040-01	Shark River (above Remsen Mill gage)	PCB in Fish Tissue	L	Beyond 2012
NJ02030104090040-01	Shark River (above Remsen Mill gage)	DDE	L	Beyond 2012
NJ02030104090040-01	Shark River (above Remsen Mill gage)	Mercury in Fish Tissue	L	Beyond 2012
NJ02030104090040-01	Shark River (above Remsen Mill gage)	Chlordane	L	Beyond 2012
NJ02030104090040-01	Shark River (above Remsen Mill gage)	DDD	L	Beyond 2012
NJ02030104090040-01	Shark River (above Remsen Mill gage)	Phosphorus (Total)	М	Beyond 2012
NJ02030104090060-01	Shark River (below Remsen Mill gage)	Chlordane	L	Beyond 2012
NJ02030104090060-01	Shark River (below Remsen Mill gage)	Polychlorinated biphenyls	L	Beyond 2012
NJ02030104090060-01	Shark River (below Remsen Mill gage)	DDD	L	Beyond 2012
NJ02030104090060-01	Shark River (below Remsen Mill gage)	DDE	L	Beyond 2012
NJ02030104090060-01	Shark River (below Remsen Mill gage)	DDT	L	Beyond 2012
NJ02030104090060-01	Shark River (below Remsen Mill gage)	Mercury in Fish Tissue	L	Beyond 2012
NJ02030104090060-01	Shark River (below Remsen Mill gage)	Oxygen, Dissolved	М	Beyond 2012
NJ02040104090030-01	Shimers Brook	Oxygen, Dissolved	М	Beyond 2012
NJ02040104090030-01	Shimers Brook	Escherichia coli	М	Beyond 2012
NJ02040104090030-01	Shimers Brook	Temperature, water	М	Beyond 2012
NJ02040105230060-01	Shipetaukin Creek	Escherichia coli	М	Beyond 2012
NJ02040105230060-01	Shipetaukin Creek	Oxygen, Dissolved	М	Beyond 2012
NJ02040301190040-01	Shoal Branch (below Pope Branch)	Cause Unknown	М	Beyond 2012
NJ02030104080040-01	Shrewsbury River (above Navesink River)	pH	М	Beyond 2012
NJ02030104080040-01	Shrewsbury River (above Navesink River)	Oxygen, Dissolved	М	Beyond 2012
NJ02030104080040-01	Shrewsbury River (above Navesink River)	Mercury in Fish Tissue	L	Beyond 2012
NJ02030104080040-01	Shrewsbury River (above Navesink River)	DDE	L	Beyond 2012
NJ02030104080040-01	Shrewsbury River (above Navesink River)	DDT	L	Beyond 2012
NJ02030104080040-01	Shrewsbury River (above Navesink River)	DDD	L	Beyond 2012
NJ02030104080040-01	Shrewsbury River (above Navesink River)	Polychlorinated biphenyls	L	Beyond 2012
NJ02030105110120-01	Sixmile Run (above Middlebush Rd)	Phosphorus (Total)	Н	2012
NJ02030105110130-01	Sixmile Run (below Middlebush Rd)	Phosphorus (Total)	Н	2012
NJ02040301160170-01	Sleeper Branch	PCB in Fish Tissue	L	Beyond 2012
NJ02040301160170-01	Sleeper Branch	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301160170-01	Sleeper Branch	DDT	L	Beyond 2012
NJ02040301160170-01	Sleeper Branch	DDE	L	Beyond 2012
NJ02040301160170-01	Sleeper Branch	pH	М	Beyond 2012
NJ02040301160170-01	Sleeper Branch	DDD	L	Beyond 2012
NJ02040301160060-01	Sleeper Branch (Rt 206 to Tremont Ave)	pH	М	Beyond 2012
NJ02030103010190-01	Slough Brook	Oxygen, Dissolved	М	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02030103010190-01	Slough Brook	Total Dissolved Solids	М	Beyond 2012
NJ02040206220020-01	Sluice Creek	Polychlorinated biphenyls	L	Beyond 2012
NJ02030105120080-01	South Fork of Bound Brook	Polychlorinated biphenyls	М	Beyond 2012
NJ02030105120080-01	South Fork of Bound Brook	Phosphorus (Total)	М	Beyond 2012
NJ02040302050030-01	South River (above 39d26m15s)	pH	М	Beyond 2012
NJ02040302050040-01	South River (below 39d26m15s)	pH	М	Beyond 2012
		Dioxin (including 2,3,7,8-		
NJ02030105160070-01	South River (below Duhernal Lake)	TCDD)	М	Beyond 2012
NJ02030105160070-01	South River (below Duhernal Lake)	Lead	L	Beyond 2012
NJ02030105160070-01	South River (below Duhernal Lake)	Chromium (total)	L	Beyond 2012
NJ02030105160070-01	South River (below Duhernal Lake)	Cadmium	L	Beyond 2012
NJ02030105160070-01	South River (below Duhernal Lake)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02030105160070-01	South River (below Duhernal Lake)	Mercury in Water Column	M	Beyond 2012
NJ02030105160070-01	South River (below Duhernal Lake)	Polychlorinated biphenyls	М	Beyond 2012
NJ02030105160070-01	South River (below Duhernal Lake)	Copper	L	Beyond 2012
NJ02040201040020-01	South Run (above 74d35m) (Ft Dix)	pH	M	Beyond 2012 Beyond 2012
NJ02040201040030-01	South Run (Jumping Brook to 74d35m)	pH	M	Beyond 2012 Beyond 2012
NJ02040201040030-01	South Run (Jumping Brook to 74d35m)	Escherichia coli	М	Beyond 2012
NJ02040201040050-01	South Run (North Run to Jumping Brook)	Phosphorus (Total)	M	Beyond 2012 Beyond 2012
NJ02040201040050-01	South Run (North Run to Jumping Brook)	Mercury in Fish Tissue	L	Beyond 2012
NJ02030101170020-01	Sparkill Brook	Phosphorus (Total)	M	Beyond 2012
NJ02030105120090-01	Spring Lake Fork of Bound Brook	Polychlorinated biphenyls	М	Beyond 2012
NJ02030105120090-01	Spring Lake Fork of Bound Brook	Phosphorus (Total)	М	Beyond 2012
NJ02040301150040-01	Springers Brook / Deep Run	pH	М	Beyond 2012
NJ02030105020010-01	Spruce Run (above Glen Gardner)	Temperature, water	М	Beyond 2012
NJ02030105020020-01	Spruce Run (Reservior to Glen Gardner)	Temperature, water	М	Beyond 2012
NJ02030105020040-01	Spruce Run Reservior / Willoughby Brook	pH	М	Beyond 2012
NJ02030105020040-01	Spruce Run Reservior / Willoughby Brook	Phosphorus (Total)	М	Beyond 2012
NJ02030105020040-01	Spruce Run Reservior / Willoughby Brook	Temperature, water	М	Beyond 2012
NJ02040302030050-01	Squankum Branch (GEHR)	Mercury in Water Column	М	Beyond 2012
NJ02040302030050-01	Squankum Branch (GEHR)	pH	М	Beyond 2012
NJ02040302050080-01	Stephen Creek (GEHR)	pH	М	Beyond 2012
NJ02040302050080-01	Stephen Creek (GEHR)	PCB in Fish Tissue	L	Beyond 2012
NJ02040302050080-01	Stephen Creek (GEHR)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040206120030-01	Still Run (above Silver Lake Road)	Cause Unknown	М	Beyond 2012
NJ02040206120050-01	Still Run (WillowGroveLk - SilverLakeRd)	Cause Unknown	М	Beyond 2012
NJ02040202140020-01	Still Run/London Br(above Tomlin Sta Rd)	Cause Unknown	М	Beyond 2012
NJ02030103050070-01	Stone House Brook	Temperature, water	М	Beyond 2012
NJ02030105090020-01	Stony Bk (74d 48m 10s to 74d 49m 15s)	Escherichia coli	М	Beyond 2012
NJ02030105090070-01	Stony Bk (Harrison St to Rt 206)	Phosphorus (Total)	Н	2012
NJ02030105090070-01	Stony Bk (Harrison St to Rt 206)	Arsenic	L	Beyond 2012
NJ02030105090060-01	Stony Bk (Rt 206 to Province Line Rd)	Phosphorus (Total)	Н	2012
NJ02030105090060-01	Stony Bk (Rt 206 to Province Line Rd)	Arsenic	L	Beyond 2012
NJ02030105090090-01	Stony Bk- Princeton drainage	Phosphorus (Total)	М	Beyond 2012
NJ02030105090090-01	Stony Bk- Princeton drainage	Arsenic	L	Beyond 2012
NJ02030105090050-01	Stony Bk(Province Line Rd to 74d46m dam)	Arsenic	L	Beyond 2012
NJ02030105090050-01	Stony Bk(Province Line Rd to 74d46m dam)	Phosphorus (Total)	Н	2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02030103030130-01	Stony Brook (Boonton)	Oxygen, Dissolved	М	Beyond 2012
NJ02030105120030-01	Stony Brook (North Plainfield)	Cause Unknown	М	Beyond 2012
NJ02030105120030-01	Stony Brook (North Plainfield)	Total Dissolved Solids	М	Beyond 2012
NJ02040206070080-01	Stow Creek (below Canton Rd)	Oxygen, Dissolved	М	Beyond 2012
NJ02040206070080-01	Stow Creek (below Canton Rd)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040206070060-01	Stow Creek (Canton Road to Jericho Road)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040105210030-01	Swan Creek (Moore Ck to Alexauken Ck)	Cause Unknown	М	Beyond 2012
NJ02040105030020-01	Swartswood Lake and tribs	Temperature, water	М	Beyond 2012
NJ02040105030010-01	Swartswood trib(41-06-06 thru Lk Owassa)	pH	М	Beyond 2012
NJ02040105030010-01	Swartswood trib(41-06-06 thru Lk Owassa)	Phosphorus (Total)	М	Beyond 2012
NJ02040105030010-01	Swartswood trib(41-06-06 thru Lk Owassa)	Temperature, water	М	Beyond 2012
NJ02040202090010-01	Swede Run	Arsenic	L	Beyond 2012
NJ02040202090010-01	Swede Run	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202090010-01	Swede Run	Oxygen, Dissolved	М	Beyond 2012
		Total Suspended Solids		· <b>)</b> · · ·
NJ02030104070070-01	Swimming River Reservior / Slope Bk	(TSS)	М	Beyond 2012
NJ02030104070070-01	Swimming River Reservior / Slope Bk	Phosphorus (Total)	М	Beyond 2012
NJ02030104070070-01	Swimming River Reservior / Slope Bk	PCB in Fish Tissue	L	Beyond 2012 Beyond 2012
NJ02030104070070-01	Swimming River Reservior / Slope Bk	DDT	L	Beyond 2012
NJ02030104070070-01	Swimming River Reservior / Slope Bk	DDE	L	Beyond 2012 Beyond 2012
NJ02030104070070-01	Swimming River Reservior / Slope Bk	DDD	L	Beyond 2012 Beyond 2012
NJ02030104070070-01	Swimming River Reservior / Slope Bk	Chlordane in Fish Tissue	L	Beyond 2012 Beyond 2012
NJ02030103170040-01	Tenakill Brook	Arsenic	L	Beyond 2012 Beyond 2012
NJ02030103170040-01	Tenakill Brook	Oxygen, Dissolved	M	Beyond 2012 Beyond 2012
NJ02030103170040-01	Tenakill Brook	pH	M	Beyond 2012 Beyond 2012
1.002000100170010 01		Total Suspended Solids		Deyona 2012
NJ02030103170040-01	Tenakill Brook	(TSS)	М	Beyond 2012
NJ02030105030040-01	Third Neshanic River	Oxygen, Dissolved	H	2012
1002050105050010 01		Dioxin (including 2,3,7,8-		2012
NJ02030103150010-01	Third River	TCDD)	М	Beyond 2012
NJ02030103150010-01	Third River	Polychlorinated biphenyls	M	Beyond 2012 Beyond 2012
NJ02030103150010-01	Third River	Phosphorus (Total)	M	Beyond 2012 Beyond 2012
NJ02040301080090-01	Toms R Lwr (below Rt 166)	Zinc	L	Beyond 2012 Beyond 2012
NJ02040301080090-01	Toms R Lwr (below Rt 166)	Nickel	L	Beyond 2012 Beyond 2012
NJ02040301080090-01	Toms R Lwr (below Rt 166)	Arsenic	L	Beyond 2012 Beyond 2012
NJ02040301080090-01	Toms R Lwr (below Rt 166)	Cadmium	L	Beyond 2012 Beyond 2012
NJ02040301080090-01	Toms R Lwr (below Rt 166)	Lead	L	Beyond 2012 Beyond 2012
NJ02040301080090-01	Toms R Lwr (below Rt 166)	Copper	L	Beyond 2012 Beyond 2012
NJ02040301080090-01	Toms R Lwr (below Rt 166)	Chromium (total)	L	Beyond 2012 Beyond 2012
NJ02040301080050-01	Toms R Lwr (Rt 166 to Oak Ridge Pkwy)	DDD	L	Beyond 2012 Beyond 2012
NJ02040301080060-01	Toms R Lwr (Rt 166 to Oak Ridge Pkwy)	Chlordane	L	Beyond 2012 Beyond 2012
NJ02040301080060-01	Toms R Lwr (Rt 166 to Oak Ridge Pkwy)	DDT	L	Beyond 2012 Beyond 2012
NJ02040301080060-01	Toms R Lwr (Rt 166 to Oak Ridge Pkwy)	Copper	L	Beyond 2012 Beyond 2012
NJ02040301080060-01	Toms R Lwr (Rt 166 to Oak Ridge Pkwy)	Nickel	L	Beyond 2012 Beyond 2012
NJ02040301080060-01	Toms R Lwr (Rt 166 to Oak Ridge Pkwy)	DDE	L L	,
NJ02040301080060-01	Toms R Lwr (Rt 166 to Oak Ridge Pkwy)	Cadmium	L L	Beyond 2012 Beyond 2012
NJ02040301080060-01			L L	,
11J02040301080000-01	Toms R Lwr (Rt 166 to Oak Ridge Pkwy)	Zinc	L	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02040301080060-01	Toms R Lwr (Rt 166 to Oak Ridge Pkwy)	Lead	L	Beyond 2012
NJ02040301080060-01	Toms R Lwr (Rt 166 to Oak Ridge Pkwy)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040301080060-01	Toms R Lwr (Rt 166 to Oak Ridge Pkwy)	Chromium (total)	L	Beyond 2012
NJ02040301080060-01	Toms R Lwr (Rt 166 to Oak Ridge Pkwy)	Arsenic	L	Beyond 2012
NJ02040301080060-01	Toms R Lwr (Rt 166 to Oak Ridge Pkwy)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301060020-01	Toms River (74-22-30 rd to FrancisMills)	pH	М	Beyond 2012
NJ02040301060020-01	Toms River (74-22-30 rd to FrancisMills)	Temperature, water	М	Beyond 2012
NJ02040301060010-01	Toms River (above Francis Mills)	Phosphorus (Total)	М	Beyond 2012
NJ02040301060010-01	Toms River (above Francis Mills)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040301060030-01	Toms River (Bowman Rd to 74-22-30 road)	pH	М	Beyond 2012
NJ02040301060030-01	Toms River (Bowman Rd to 74-22-30 road)	Temperature, water	М	Beyond 2012
NJ02040301060060-01	Toms River (Hope Chapel Rd to Bowman Rd)	Polychlorinated biphenyls	L	Beyond 2012
NJ02040301060080-01	Toms River (Oak Ridge Parkway to Rt 70)	Polychlorinated biphenyls	L	Beyond 2012
NJ02030103020080-01	Troy Brook (above Reynolds Ave)	Cause Unknown	М	Beyond 2012
NJ02040302070020-01	Tuckahoe R (39d19m52s to Cumberland Ave)	pН	М	Beyond 2012
NJ02040302070010-01	Tuckahoe R (above Cumberland Ave)	pH	М	Beyond 2012
NJ02040302070110-01	Tuckahoe River (below Rt 49)	pH	М	Beyond 2012
NJ02040302070110-01	Tuckahoe River (below Rt 49)	Oxygen, Dissolved	М	Beyond 2012
NJ02040302070120-01	Tuckahoe River (lower)	pH	М	Beyond 2012
NJ02040302070040-01	Tuckahoe River (Rt 49 to 39d19m52s)	pH	М	Beyond 2012
NJ02040301190060-01	Tulpehocken Creek	Cause Unknown	М	Beyond 2012
NJ02040301070090-01	Union Branch (below Blacks Br 74d22m05s)	PCB in Fish Tissue	L	Beyond 2012
NJ02040301070090-01	Union Branch (below Blacks Br 74d22m05s)	DDT	L	Beyond 2012
NJ02040301070090-01	Union Branch (below Blacks Br 74d22m05s)	Chlordane in Fish Tissue	L	Beyond 2012
NJ02040301070090-01	Union Branch (below Blacks Br 74d22m05s)	DDD	L	Beyond 2012
NJ02040301070090-01	Union Branch (below Blacks Br 74d22m05s)	DDE	L	Beyond 2012
NJ02030104010030-01	Upper NY Bay / Kill Van Kull (74d07m30s)	Dieldrin	М	Beyond 2012
NJ02030104010030-01	Upper NY Bay / Kill Van Kull (74d07m30s)	DDT	М	Beyond 2012
NJ02030104010030-01	Upper NY Bay / Kill Van Kull (74d07m30s)	DDE	М	Beyond 2012
NJ02030104010030-01	Upper NY Bay / Kill Van Kull (74d07m30s)	Benzo(a)pyrene (PAHs)	М	Beyond 2012
NJ02030104010030-01	Upper NY Bay / Kill Van Kull (74d07m30s)	DDD	М	Beyond 2012
NJ02030104010030-01	Upper NY Bay / Kill Van Kull (74d07m30s)	Cause Unknown	М	Beyond 2012
		Dioxin (including 2,3,7,8-		
NJ02030104010030-01	Upper NY Bay / Kill Van Kull (74d07m30s)	TCDD)	М	Beyond 2012
NJ02030104010030-01	Upper NY Bay / Kill Van Kull (74d07m30s)	Heptachlor epoxide	М	Beyond 2012
NJ02030104010030-01	Upper NY Bay / Kill Van Kull (74d07m30s)	PCB in Fish Tissue	М	Beyond 2012
NJ02030104010030-01	Upper NY Bay / Kill Van Kull (74d07m30s)	Hexachlorobenzene	М	Beyond 2012
NJ02030104010030-01	Upper NY Bay / Kill Van Kull (74d07m30s)	Chlordane	М	Beyond 2012
NJ02040104240010-01	Van Campens Brook	рН	М	Beyond 2012
NJ02030104060050-01	Waackaack Creek	DDE	М	Beyond 2012
NJ02030104060050-01	Waackaack Creek	DDD	М	Beyond 2012
NJ02030104060050-01	Waackaack Creek	Chlordane	М	Beyond 2012
NJ02030104060050-01	Waackaack Creek	DDT	М	Beyond 2012
NJ02030104060050-01	Waackaack Creek	Mercury in Fish Tissue	М	Beyond 2012
NJ02030104060050-01	Waackaack Creek	Oxygen, Dissolved	М	Beyond 2012
NJ02030104060050-01	Waackaack Creek	PCB in Fish Tissue	М	Beyond 2012
NJ02030104060050-01	Waackaack Creek	Arsenic	L	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02040301200030-01	Wading River (below Rt 542)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301200020-01	Wading River (Rt 542 to Oswego River)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301190050-01	Wading River WB (Jenkins Rd to Rt 563)	Oxygen, Dissolved	М	Beyond 2012
NJ02040301190070-01	Wading River WB (Oswego R to Jenkins Rd)	Mercury in Fish Tissue	L	Beyond 2012
NJ02040301190030-01	Wading River WB (Rt 563 to Rt 532)	Cause Unknown	М	Beyond 2012
NJ02020007010020-01	Wallkill R (Ogdensburg to SpartaStation)	Temperature, water	М	Beyond 2012
NJ02020007010020-01	Wallkill R (Ogdensburg to SpartaStation)	Cause Unknown	М	Beyond 2012
NJ02020007030010-01	Wallkill R(41d13m30s to Martins Road)	Cause Unknown	М	Beyond 2012
NJ02020007010080-01	Wallkill R(Franklin Pond to Ogdensburg)	Temperature, water	М	Beyond 2012
NJ02020007010040-01	Wallkill R(Hamburg SW Bdy to Ogdensburg)	Temperature, water	М	Beyond 2012
NJ02020007010070-01	Wallkill R(Martins Rd to Hamburg SW Bdy)	Total Dissolved Solids	М	Beyond 2012
NJ02020007030030-01	Wallkill River(Owens gage to 41d13m30s)	pН	М	Beyond 2012
NJ02030103070070-01	Wanaque R/Posts Bk (below reservior)	Cause Unknown	М	Beyond 2012
NJ02030103070050-01	Wanaque Reservior (below Monks gage)	Temperature, water	М	Beyond 2012
NJ02030103070050-01	Wanaque Reservior (below Monks gage)	Oxygen, Dissolved	М	Beyond 2012
NJ02030103070050-01	Wanaque Reservior (below Monks gage)	Escherichia coli	М	Beyond 2012
NJ02020007040050-01	Wawayanda Creek & tribs	Temperature, water	М	Beyond 2012
NJ02030105150010-01	Weamaconk Creek	Turbidity	М	Beyond 2012
NJ02030105150010-01	Weamaconk Creek	Oxygen, Dissolved	М	Beyond 2012
NJ02030105150010-01	Weamaconk Creek	Phosphorus (Total)	Н	2012
		Total Suspended Solids		
NJ02030105150010-01	Weamaconk Creek	(TSS)	М	Beyond 2012
NJ02040301090010-01	Webbs Mill Branch	Cause Unknown	М	Beyond 2012
NJ02030103070040-01	West Brook/Burnt Meadow Brook	Temperature, water	М	Beyond 2012
NJ02030103070040-01	West Brook/Burnt Meadow Brook	Oxygen, Dissolved	М	Beyond 2012
NJ02040206210040-01	West Ck (below PaperMillRd) to MooresBch	Polychlorinated biphenyls	L	Beyond 2012
NJ02030104090010-01	Whale Pond Brook	Cause Unknown	М	Beyond 2012
NJ02030103020050-01	Whippany R (Malapardis to Lk Pocahontas)	pН	М	Beyond 2012
NJ02030103020100-01	Whippany R (Rockaway R to Malapardis Bk)	Lead	L	Beyond 2012
NJ02040206170020-01	White Marsh Run (Millville)	Cause Unknown	М	Beyond 2012
		Total Suspended Solids		
NJ02040105200040-01	Wickecheoke Creek (above Locktown)	(TSS)	М	Beyond 2012
NJ02040105200040-01	Wickecheoke Creek (above Locktown)	pH	М	Beyond 2012
NJ02040105200060-01	Wickecheoke Creek (below Locktown)	Temperature, water	М	Beyond 2012
NJ02040105200060-01	Wickecheoke Creek (below Locktown)	pH	М	Beyond 2012
NJ02030104070020-01	Willow Brook	Phosphorus (Total)	М	Beyond 2012
		Total Suspended Solids		
NJ02030104070020-01	Willow Brook	(TSS)	М	Beyond 2012
NJ02030104070020-01	Willow Brook	pH	М	Beyond 2012
NJ02040301160040-01	Wisickaman Creek	Cause Unknown	М	Beyond 2012
NJ02030104050110-01	Woodbridge Creek	Polychlorinated biphenyls	М	Beyond 2012
		Dioxin (including 2,3,7,8-		
NJ02030104050110-01	Woodbridge Creek	TCDD)	М	Beyond 2012
NJ02040202120110-01	Woodbury Ck (below Rt 45)/LDRV to B T Ck	pH	М	Beyond 2012
NJ02040202120110-01	Woodbury Ck (below Rt 45)/LDRV to B T Ck	Polychlorinated biphenyls	L	Beyond 2012
NJ02040202120100-01	Woodbury Creek (above Rt 45)	DDD	L	Beyond 2012
NJ02040202120100-01	Woodbury Creek (above Rt 45)	PCB in Fish Tissue	L	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	TMDL Schedule
NJ02040202120100-01	Woodbury Creek (above Rt 45)	pH	М	Beyond 2012
NJ02040202120100-01	Woodbury Creek (above Rt 45)	Chlordane in Fish Tissue	L	Beyond 2012
NJ02040202120100-01	Woodbury Creek (above Rt 45)	DDT	L	Beyond 2012
NJ02040202120100-01	Woodbury Creek (above Rt 45)	DDE	L	Beyond 2012
NJ02040301080050-01	Wrangel Brook (below Michaels Branch)	Mercury in Water Column	М	Beyond 2012
NJ02040301080050-01	Wrangel Brook (below Michaels Branch)	Oxygen, Dissolved	М	Beyond 2012
NJ02030104090070-01	Wreck Pond Brook (above Rt 35)	Phosphorus (Total)	М	Beyond 2012
NJ02030104090070-01	Wreck Pond Brook (above Rt 35)	pH	М	Beyond 2012
NJ02030104090080-01	Wreck Pond Brook (below Rt 35)	Phosphorus (Total)	М	Beyond 2012
NJ02040105050040-01	Yards Creek	Oxygen, Dissolved	М	Beyond 2012
NJ02030104070040-01	Yellow Brook (above Bucks Mill)	Cause Unknown	М	Beyond 2012
NJ02030104070060-01	Yellow Brook (below Bucks Mill)	Cause Unknown	М	Beyond 2012
NJ02040301180010-01	Yellow Dam Branch	Oxygen, Dissolved	М	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	Schedule
NJDELAWARE	Delaware River 1E	Chlordane	L	Beyond 2012
NJDELAWARE	Delaware River 1E	DDD	L	Beyond 2012
NJDELAWARE	Delaware River 1E	DDE	L	Beyond 2012
NJDELAWARE	Delaware River 1E	DDT	L	Beyond 2012
NJDELAWARE	Delaware River 1E	Mercury in Fish Tissue	L	Beyond 2012
NJDELAWARE	Delaware River 1E	pH	L	Beyond 2012
NJDELAWARE	Delaware River 1E	Polychlorinated	L	Beyond 2012
NJDELAWARE	Delaware River 2	Chlordane	М	Beyond 2012
NJDELAWARE	Delaware River 2	DDD	М	Beyond 2012
NJDELAWARE	Delaware River 2	DDE	М	Beyond 2012
NJDELAWARE	Delaware River 2	DDT	М	Beyond 2012
NJDELAWARE	Delaware River 2	Dieldrin	L	Beyond 2012
NJDELAWARE	Delaware River 2	Mercury in Fish Tissue	L	Beyond 2012
NJDELAWARE	Delaware River 2	Oxygen, Dissolved	L	Beyond 2012
NJDELAWARE	Delaware River 2	Turbidity	L	Beyond 2012
NJDELAWARE	Delaware River 3	Chlordane	М	Beyond 2012
NJDELAWARE	Delaware River 3	DDD	М	Beyond 2012
NJDELAWARE	Delaware River 3	DDE	М	Beyond 2012
NJDELAWARE	Delaware River 3	DDT	М	Beyond 2012
NJDELAWARE	Delaware River 3	Dieldrin	L	Beyond 2012
NJDELAWARE	Delaware River 3	Mercury in Fish Tissue	L	Beyond 2012
NJDELAWARE	Delaware River 4	Chlordane	М	Beyond 2012
NJDELAWARE	Delaware River 4	DDD	М	Beyond 2012
NJDELAWARE	Delaware River 4	DDE	М	Beyond 2012
NJDELAWARE	Delaware River 4	DDT	Μ	Beyond 2012
NJDELAWARE	Delaware River 4	Dieldrin	L	Beyond 2012
NJDELAWARE	Delaware River 4	Mercury in Fish Tissue	L	Beyond 2012
NJDELAWARE	Delaware River 5A	Chlordane in Fish Tissue	М	Beyond 2012
NJDELAWARE	Delaware River 5A	DDD	Μ	Beyond 2012
NJDELAWARE	Delaware River 5A	DDE	Μ	Beyond 2012
NJDELAWARE	Delaware River 5A	DDT	М	Beyond 2012
NJDELAWARE	Delaware River 5A	Dieldrin	L	Beyond 2012
NJDELAWARE	Delaware River 5A	Mercury in Fish Tissue	Н	2012
NJDELAWARE	Delaware River 5A	Oxygen, Dissolved	L	Beyond 2012
NJDELAWARE	Delaware River 5B	Chlordane	М	Beyond 2012
NJDELAWARE	Delaware River 5B	DDD	M	Beyond 2012
NJDELAWARE	Delaware River 5B	DDE	М	Beyond 2012
NJDELAWARE	Delaware River 5B	DDT	M	Beyond 2012
NJDELAWARE	Delaware River 5B	Dieldrin	L	Beyond 2012
NJDELAWARE	Delaware River 5B	Mercury in Fish Tissue	H	2012
NJDELAWARE	Delaware River 5B	Oxygen, Dissolved	L	Beyond 2012
NJDELAWARE	Delaware River 1C	Chlordane in Fish Tissue	M	Beyond 2012
NJDELAWARE	Delaware River 1C	DDD	M	Beyond 2012
NJDELAWARE	Delaware River 1C	DDE	M	Beyond 2012
NJDELAWARE	Delaware River 1C	DDT	М	Beyond 2012
NJDELAWARE	Delaware River 1C	Mercury in Fish Tissue	L	Beyond 2012

Assessment Unit	Assessment Unit Name	Parameter	Ranking	Schedule
NJDELAWARE	Delaware River 1C	PCB in Fish Tissue	L	Beyond 2012
NJDELAWARE	Delaware River 5C	Chlordane	М	Beyond 2012
NJDELAWARE	Delaware River 5C	DDD	М	Beyond 2012
NJDELAWARE	Delaware River 5C	DDE	М	Beyond 2012
NJDELAWARE	Delaware River 5C	DDT	М	Beyond 2012
NJDELAWARE	Delaware River 5C	Dieldrin	L	Beyond 2012
NJDELAWARE	Delaware River 5C	Mercury in Fish Tissue	Н	2012
NJDELAWARE	Delaware River 5C	Oxygen, Dissolved	L	Beyond 2012
NJDELAWARE	Delaware Bay Zone 6 ( New	Chlordane in Fish Tissue	L	Beyond 2012
NJDELAWARE	Delaware Bay Zone 6 ( New	DDD	L	Beyond 2012
NJDELAWARE	Delaware Bay Zone 6 ( New	DDE	L	Beyond 2012
NJDELAWARE	Delaware Bay Zone 6 ( New	DDT	L	Beyond 2012
NJDELAWARE	Delaware Bay Zone 6 ( New	Dieldrin	L	Beyond 2012
NJDELAWARE	Delaware Bay Zone 6 ( New	Mercury in Fish Tissue	L	Beyond 2012
NJDELAWARE	Delaware River 1D	Chlordane in Fish Tissue	М	Beyond 2012
NJDELAWARE	Delaware River 1D	DDD	L	Beyond 2012
NJDELAWARE	Delaware River 1D	DDE	L	Beyond 2012
NJDELAWARE	Delaware River 1D	DDT	L	Beyond 2012
NJDELAWARE	Delaware River 1D	Mercury in Fish Tissue	L	Beyond 2012
NJDELAWARE	Delaware River 1D	PCB in Fish Tissue	L	Beyond 2012

#### Agency Responses to Public Comments on the Draft 2010 303(d) List of Water Quality Limited Waters (303(d) List)

#### **Commenter:** USEPA Region 2

#### **Public Participation**

1. **Comment:** The response-to-comment section of this public notice states that five sets of comments received on the May 2009 public notice of the Methods Document were addressed. Please identify where these comments were responded to or addressed. United States Environmental Protection Agency (USEPA) Region 2 provided comments which were not addressed in the subsequently revised methods document.

**Response:** All comments received on the draft and the reproposed draft 2010 Integrated Water Quality Monitoring and Assessment Methods (Methods Document), including those submitted by USEPA Region 2, were addressed in the reproposed 2010 Methods Document and are located in Appendix B of the final 2010 Methods Document, entitled: "Comments and Agency Responses on the Revised Draft 2010 Water Quality Monitoring and Assessment Methods (Methods Document)".

2. Comment: A commenter asked that the public be given the opportunity to review and comment on the new biological indices which are part of the methods. The New Jersey Department of Environmental Protection (Department) responded that this would not be possible because these methods will always change based on new science. The Department's response appears inconsistent with the requirements at N.J.A.C. 7:15-6.2(e) which states, "The Department shall publish a notice in the New Jersey Register and on its website to provide the public with the opportunity to provide comment on revisions to the Integrated Water Quality Monitoring and Assessment Methods Document prior to applying the revised assessment methods in developing the next List of Water Quality Limited Segments in (f) below." If the biological indices and related methods change prior to the next listing cycle, then the entire the new methods would be public noticed. USEPA agrees that additional detail on the assessment of biological data is warranted, especially given the increased use of biological data by the Department.

**Response:** The Department's response to Comment #65 in Appendix B of the final 2010 Methods Document states, "These metrics are detailed in the Methods Document which, when revised, is subject to public review and comment pursuant to N.J.A.C. 7:15-6.2. This provides the public and USEPA with an opportunity to evaluate these metrics and how they are employed." The Department followed this process in developing the new biological indices mentioned by the commenter. These new biological metrics were published for public review and comment in the draft 2008 Methods Document (see 39 N.J.R. 2548(a)) before they were finalized (see (40 N.J.R. 4835(c)) and subsequently used by the Department to develop the final 2008 and draft 2010 303(d) Lists.

#### Use of Biological Data for Categorizing New Jersey Waters

3. Comment: The Department adopted a new data-driven definition for "exceptional ecological significance" on June 16, 2008 (see 40 N.J.R, 3630(b)) which requires the use of biological data. A water may be identified as displaying "exceptional ecological significance" if it is "supporting an exceptional aquatic community as demonstrated by a nonimpaired benthic macroinvertebrate community as measured by the Department's Rapid Bioassessment Protocol" and at least two additional factors which may include "excellent fish community as measured by the Fish Index of Biotic Integrity or optimal habitat as measured by the Department's Stream Habitat Assessment." Exceptional ecological significance is subsequently used to define Category 1 waters and Outstanding National Resource Waters which include Freshwater (FW)1 waters and Pinelands (PL) waters. There is an inconsistency in the definition of "exceptional ecological significance." The language referring to impervious surface provides two contradicting conditions for Hydrologic Unit Code (HUC) 14s equal to five square miles. Please correct this error.

**Response:** This comment is beyond the scope of 303(d) List.

#### **2010 Revised HUC 14 Boundaries**

4. Comment: The Methods Document, Section 1.2, states: "The Department revised New Jersey's hydrologic unit code 14 (HUC 14) subwatershed boundaries resulting in a total of 969 HUC 14 subwatersheds in New Jersey... New Jersey's assessment units for the 2010 Integrated Report are based on the updated HUC 14 boundaries, excluding HUCs containing international and interstate waters, for a total of 960 assessment units in New Jersey." Please identify the names and IDs for the nine HUC 14s missing from the 2010 Integrated List and Report and explain why they are not included.

**Response:** There are no "missing HUC 14s"; the Department excluded intrastate waters from the New Jersey assessment units for the 2010 Integrated Report, which is why the number of assessment units totals 960 rather than 969. These Delaware River assessment units are identified along with their assessment unit names in the table below.

NJDELAWARE RIVER 14	Delaware River 1E
NJDELAWARE RIVER 15	Delaware River 2
NJDELAWARE RIVER 16	Delaware River 3
NJDELAWARE RIVER 17	Delaware River 4
NJDELAWARE RIVER 18	Delaware River 5A
NJDELAWARE RIVER 19	Delaware River 5B
NJDELAWARE RIVER 2	Delaware River 1C
NJDELAWARE RIVER 20	Delaware River 5C
NJDELAWARE RIVER 8	Delaware River 1D

5. Comment: New Jersey Geological Survey (NJGS) Technical Memorandum 09-2 is referenced as a way to understand the recent changes in the HUC 14 boundary dataset. It is no longer found at http://www.state.nj.us/dep/njgs/pricelst/tmemo/tm09-2. Please provide an updated URL for this document.

**Response:** The current URL for this document is: <u>http://www.state.nj.us/dep/njgs/pricelst/tmemo/tm09-2.pdf</u>. The link has been corrected in the final 2010 Methods Document.

6. Comment: The NJGS report provides the boundary changes. Please identify any monitoring station changes which may have occurred as a result of these boundary changes.

**Response:** The Assessment Unit (AU) identification numbers and the corresponding monitoring station identification numbers are provided in a table at the end of this document for those stations that were affected by the HUC 14 boundary changes.

#### Assessment Units With More Than One Waterbody Type

7. **Comment:** AUs with more than one waterbody classification are not being assessed per the Methods Document, which states that the more stringent criterion will be applied to the entire HUC for the assessment decision.

**Response:** AUs with more than one waterbody classification were assessed by the Department in accordance with the final 2010 Methods Document, which states "Where the assessment unit contains more than one classification and there is no data for the higher classification, then data from the station located in the lower classification will be compared to the SWQS for higher classification. If the station meets the SWQS for higher classification, the data will be used to assess both classifications. However, if the station located in the lower classification, an assessment can not be made ..." and the higher use is assessed as not "insufficient information" (see Section 5.0, "Assessment Units With More Than One Stream Classification").

- 8. Comment: Please explain the HUC 14 assessment process for both 303(d) listing and designated use attainment decisions when the following conditions apply:
  - The HUC contains both freshwater and saline water.
  - The HUC contains streams and lakes.
  - The HUC contains non-trout, trout maintenance, and trout production stream classifications.
  - In the above situations, there are data available for total phosphorus, temperature, toxics, dissolved oxygen, turbidity, pH, or ammonia.

**Response:** If there are more than one criteria applicable to an AU due to multiple classifications, a specific site is assessed based on to the appropriate criteria of the classification applicable to that site. There are several possible decisions based upon

availability of data for sites in the higher or lower classifications. If there are data for the higher classification and it indicates full support of the use in question, the entire AU will be in support of the use in both the higher and lower classification. However, when there are no data for the higher classification, the Department does not assume that the higher use is supported based on support of the lower use (having data for the lower use). Therefore, when data is available only for the lower use, the data from the station located in the lower classification will be compared to the criteria for the higher classification. Under this scenario, the assessment outcomes are as follows:

- a. If the station meets the criteria for the *higher classification*, the entire AU will be assessed as fully supporting the higher *and* lower designated uses;
- b. If the station meets the lower use but not the higher use, the lower use is assessed as fully supporting and the higher use is assessed as "insufficient information".

Note: Lakes are treated like any other monitoring location within an assessment unit (AU); however, the applicable total phosphorus (TP) criterion is more restrictive for lakes than for streams. Since (as stated previously) data are assessed based on the water quality criterion applicable to the monitoring location, if the lake data exceed the TP criterion for lakes, the entire AU is assessed as not supporting the aquatic life use and TP is listed on the 303(d) List as the cause. Conversely, if the lake data comply with the TP criterion for lakes but the stream data exceed the TP criterion for streams, the entire AU would still be assessed as not supporting the aquatic life use and TP would be listed on the 303(d) List. Lake TP levels will not be inferred based on in-stream levels and vise versa; however, an exceedance of the applicable criterion in either waterbody will lead to a 303(d) listing.

**9. Comment:** Figure 5b is missing from the discussion of monitoring station representation on p. 18.

**Response:** The reference to Figure 5b was erroneous and has been deleted from the final 2010 Methods Document.

10. Comment: A new method is presented as a way to determine if TP is or is not impairing the aquatic life use in FW wadeable streams. The method is not consistent with the Surface Water Quality Standards (SWQS) applicable to FW waters at N.J.A.C. 7:9B-1.5(g)(2) and N.J.A.C. 7:9B-1.14(d)(5) and also is not consistent with New Jersey's current approach to assessing HUC 14 areas. The new method does not include a demonstration that TP is not a limiting nutrient.

**Response:** The new nutrient impact assessment method is consistent with the SWQS as amended on December 21, 2009 (see 41 N.J.R. 4735(a)).

11. Comment: The new method targets the aquatic life use and is not protective of the drinking water and recreation uses. The method only evaluates the aquatic life use and leaves unknown the attainment status of the other applicable designated uses for TP. Therefore, it cannot be used for 303(d) delisting purposes.

**Response:** The existing numeric TP criteria were established based on the eutrophication impacts (i.e., impacts on aquatic life uses). As indicated in the Department's Nutrient Criteria Enhancement Plan (April 2009), recreational and drinking water uses are also potentially affected by excessive nutrients; however, the threshold for "excessive" nutrient impacts on recreational and drinking water supply uses can be subjective and may be related more to personal preference than science. As stated in the Nutrient Criteria Enhancement Plan, the Department plans to address aquatic life use impairments first and expects to refine the criteria and/or assessment methods for the drinking water and recreational uses, as well as other waterbody types, in the future.

**12. Comment:** The new method does not assess pH, which is an essential component of the narrative criteria. Other than listing for exceeding pH criteria, it does not specifically incorporate pH.

**Response:** Diurnal fluctuations in pH could indicate photosynthetic activity due to nutrient enrichment; however, these effects could be dampened by the buffering capacity of the stream. The Department concluded that on a statewide basis, evaluating diurnal fluctuations in pH was not necessary for assessing whether TP causes impairment of aquatic life in freshwater wadeable streams. The Department still assesses pH based on the existing SWQS criteria and, where exceedances are documented, places pH on the 303(d) list. Such pH listings would be evaluated through the ensuing total maximum daily load (TMDL) process to determine if the exceedances were due to excessive photosynthetic activity.

13. Comment: The new method does not address the need to protect downstream uses. The federal regulations at 40 CFR Part 131.10(b) require that, "In designating uses of a water body and the appropriate criteria for those uses, the state shall take into consideration the water quality standards of downstream waters and shall ensure that its water quality standards of downstream waters and maintenance of the water quality standards of downstream waters."

**Reponse:** This comment is beyond the scope of 303(d) List; however, it will be addressed by the Department through the USEPA Region 2 approval process for the SWQS amendments adopted by the Department in January 2011 (see 43 N.J.R. 174(b)).

14. Comment: This new assessment method is not consistent with New Jersey's current approach to assessing HUC 14 areas. The numeric criterion for FW lakes must be met; therefore, this new method could not be used for assessing any HUC 14 areas containing lakes.

**Response:** As stated in response to Comment #10, the new nutrient impact assessment method is consistent with the SWQS as amended on December 21, 2009 (see 41 N.J.R. 4735(a)). (Also see item c. of the response to Comment #8.)

**15. Comment:** The new nutrient assessment method sets numeric translators without providing the scientific justification for these potential numbers.

**Response:** The new method employs a set of four indicators: health of benthic macroinvertebrate community, dissolved oxygen (DO) concentrations, periphyton Chlorophyll *a*, and diurnal DO swing. The Department has been using benthic macroinvertebrate indices as translators for aquatic life use since 1994. The DO thresholds reflect promulgated SWQS criteria, and the periphyton Chlorophyll *a* threshold was recommended by USEPA itself (see USEPA, 2000: *Nutrient Criteria Technical Manual; Rivers and Streams*, United States Environmental Protection Agency, Office of Water, Office of Science and Technology, July 2000, EPA-822-B-00-002). The diurnal DO swing of 3 mg/l is used to distinguish low DO caused by photosynthetic activity from other causes such as sediment oxygen demand. The 3 mg/l swing was based on a consensus decision by an interagency committee of water quality experts and documented in the Technical Manual for Phosphorus Evaluation for NJPDES Discharge to Surface Water (DSW) permits and is explained in the 2010 Methods Document.

**16. Comment:** The new method may not be scientifically justifiable since Chlorophyll *a* is not the appropriate measure for macrophytes.

**Response:** Periphyton Chlorophyll *a* is the appropriate response indicator for nutrient over-enrichment of freshwater wadeable streams.

17. Comment: The new method does not provide for an alternate numeric criterion for systems that may respond to TP concentrations above the current criteria. For example, a specific stream may not show impairment at concentrations of TP above the 0.1 mg/L standard up to concentrations of 0.18 mg/L. However, that same stream may start to show adverse responses when the in-stream concentrations reach 0.18 mg/L.

**Response:** The nutrient method is designed to identify where aquatic life use impairment in freshwater wadeable streams is caused by nutrients, specifically TP. This method will enable the Department to list waters as impaired for phosphorus, where the levels of phosphorus are below the numeric criteria but the narrative criteria is not met. There are circumstances where the TP concentration exceeds the adopted numeric criteria but the waterbody does not display the adverse conditions identified in the adopted narrative nutrient criteria, in which case the Department may adopt a site-specific phosphorus criterion in the SWQS at N.J.A.C. 7:9B-1.14(g).

**18. Comment:** The new method focuses on response indicators which already indicate impairment and would no longer evaluate the causal indicator quality of TP. It is unclear how it would be possible to protect the current uses from deteriorating per New Jersey's SWQS antidegradation provisions.

**Response:** This comment is beyond the scope of the 303(d) List.

**19. Comment:** The new method does not explain how to identify a water threatened by TP.

**Response:** The 2010 Final Methods Document explains how threatened waters are identified. However, this approach can not be applied to the nutrient assessment method. The Department will develop a method for assessing waters threatened by nutrients for the 2012 Integrated Report and will publish it for review and comment in the draft 2012 Methods Document.

## Using a Weight of Evidence Approach

**20. Comment:** The Methods Document states that New Jersey uses a "weight-of-evidence" approach. USEPA applies the principle of "independent applicability". An exceedance in any one parameter associated with a designated use must be recorded as an impairment on the 303(d) list and as non-attainment of the designated use.

**Response:** The impact of nutrients is dependent on a several factors such as light intensity, flow, and re-aeration rates which can mitigate or exacerbate the effects. The Department believes that a "weight-of-evidence" approach represents the most effective method to assess nutrient impacts. Simply applying a numeric criterion without evaluating the instream impacts may result in over-regulation in locations where nutrients have little, if any, adverse impact.

**21. Comment:** The Methods Document, Section 6.3, states: "The Department will utilize the human health criteria for SE/SC waters which are based on 'fish consumption only' for all assessment units." Is the Department saying that it will compare the toxics human health criteria for saline waters to monitoring data taken from fresh waters? Please explain.

**Response:** The Department has adopted human health (HH) criteria for toxics in freshwaters and in saline waters. The HH criteria for toxics in freshwaters are based on both drinking water and fish consumption exposures. The HH criteria for toxics in saline waters are based on fish consumption only. The Department has selected a subset of the HH criteria for saline estuarine (SE) waters to evaluate fish consumption use in both freshwaters and saline waters. Where HH criteria for toxics in SE/SC waters are exceeded, the fish consumption use is assessed as not supported for the entire AU. However, most fish consumption assessments are based on fish tissue data rather than water quality data.

**22. Comment:** How are the freshwater human health criteria for toxics assessed for the fish consumption use? If chemical monitoring data are available, they must be evaluated against the applicable New Jersey SWQS.

**Response:** As explained in response to Comment #21, the human health criteria for toxics in freshwater are not used to assess the fish consumption use. Where the Department has chemical monitoring data from a station located on a freshwater stream/lake, the data is compared to the freshwater human health criteria to assess the

drinking water use; fish tissue data are compared to the human health criteria for toxics in SE/SC criteria to assess the fish consumption use.

#### Parameters and Their Associated Designated Uses

**23. Comment**: Appendix A of the Methods Document assigns the designated uses applicable to specific chemical and physical parameters. The New Jersey TP criteria are protective of three designated uses: drinking water, recreation, and aquatic life. Please change Appendix A to show that total phosphorus also applies to the drinking water and recreation designated uses.

**Response:** Appendix A correctly shows that TP criteria are applicable only to the aquatic life use, which is consistent with the Department's application of the surface water quality criteria for TP pursuant to the SWQS rules at N.J.A.C. 7:9B.

24. Comment: Appendix A omits showing that the fish consumption use is associated with more than 70 additional toxics with human health criteria. Please correct Appendix A for this omission.

**Response:** Contaminants listed under fish consumption in Appendix A are based upon results published in USEPA's National Lake Fish Tissue Study available at <u>http://water.epa.gov/scitech/swguidance/fishshellfish/techguidance/study/index.cfm</u>.

**25. Comment:** Fish tissue data should be added to the parameters in Appendix A.

**Response:** Appendix A of the final 2010 Methods Document has been revised to include "fish tissue data" and "fish consumption advisories" as parameters associated with the fish consumption use.

## Assessment Of Natural Conditions

**26.** Comment: Please explain how air deposition of anthropogenic contaminants into waterways is considered in the assessment of natural causes.

**Response:** Air deposition is not mentioned specifically in the 2010 Methods Document; however, the Methods Document states on page 8 that, "The concept of "natural causes" is applied when the Department can document that there is an impairment of the use ... but there are no anthropogenic sources or causes. Data that do not meet applicable SWQS criteria potentially due to natural conditions will be carefully evaluated and any excursions attributed to natural conditions will be explained and supported in the Integrated Report." The only recent document that mentions air deposition in relation to water quality impairment is the New Jersey Statewide Mercury TMDL.

## **Censored Data**

27. Comment: On page 10, the method for using censored data is provided. USEPA would like to know if any other approaches such as substitution, regression on order statistics, or maximum likelihood were evaluated? Why not use a non-parametric method? Is there a reference for or guidance that can be cited for the 50% threshold that is described in the method? Based on this method, is it correct to say that even if there were no censored values (0 is less than 50 percent of the dataset), a median would always be calculated and used? Would it be better to say, "When censored values represent 25 (or whatever lower threshold is decided) to 50 percent of the dataset..."?

**Response:** The alternative methods specified in the comment were not used. The Department uses the median, which is a nonparametric method. The methodology was developed in consultation with the U.S. Geological Survey (USGS).

## Assessment of Threatened Waters

**28. Comment**: This method on p. 8 states that "generally, at least ten years of seasonally (four times per year) data" are needed to conduct a threatened waters assessment. Yet the methods also state that only the most recent five-years worth of data are used in the assessment exercise. How will the assessment expert know that 10 years of data for a specific location may be available to be looked at? What are the short- and long-term statistical trends that will be used? How many stations are there in the Department's "series of long-term monitoring locations?"

**Response:** The most recent five years' worth of readily available data from all monitoring stations is used to assess waters for designated use attainment. In addition to that assessment, the Department uses USGS water quality trends analyses to assess waters where long term water quality data is available to determine if any waters are threatened.

The Department, in cooperation with USGS, presently maintains a network of some 70 long term monitoring stations used, among other things, to support long term trend analysis. Data from these stations are used by USGS to conduct short and long term statistical analysis. If the data from any of these stations show declining water quality trends indicating that applicable SWQS criteria may be exceeded within two years, then the entire AU where that station is located is assessed as threatened and placed on the 303(d) List. No such findings have been made to date. The most recent trend analysis conducted by USGS is available on their Web site at: <u>http://pubs.usgs.gov/sir/2010/5088/</u> and is summarized in the final 2010 Integrated Report.

**29.** Comment: Wouldn't it also be valid to report an AU as threatened if just a consistent decline in water quality is observed over a shorter time frame, perhaps a consistent decline over the five years of data that are reviewed as standard practice?

**Response:** Water quality data rarely display such uniformity. Because of seasonality and variations in flow, most water quality parameters display oscillating patterns that obscure even dramatic changes in pollutant loading over short periods of time (i.e., five years or less of data). Water quality trends are most often performed using methods that statistically factor out flow and seasonality to better track changes in instream loading over time.

**30. Comment:** The biological assessment method does not provide an approach for identifying threatened waters. It is stated that biological assessment looks only at the most recent year's results in general or may consider the previous year's results for final assessment. This does not follow the Department's method of using five years worth of data. A threatened water analysis could be formed if more than two years of biological data were reviewed.

**Response:** "Threatened waters" are, by definition, waters that currently meet water quality standards but are likely to exceed standards by the time the next 303(d) List is generated. New Jersey does not have any promulgated biological criteria; therefore, biological data cannot be used to assess threatened waters. However, the Department will be developing a method to assess waters threatened using biological data for the 2012 Integrated Report. The new method would be published for public review and comment in the draft 2012 Methods Document.

#### **Statistically-Based Data In Assessments**

**31. Comment:** USEPA would like to know if New Jersey will be reporting the attainment results of the Department statistically-based lake survey in the spreadsheet format that was included in the 2010 Integrated Report guidance memo. How will statistical survey results be used? Please note that monitoring station data from the Department's statistically-based survey data as well as the National Aquatic Resource Survey data should be used for waterbody-specific assessments.

**Response:** The results of the Department's statistically designed, probabilistic monitoring are presented in Section 3.3. of the final 2010 Integrated Report in a format consistent with USEPA's May 5, 2009 Guidance Memo entitled, "Information Concerning 2010 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions"; however, these tables do not present the confidence limits of the estimates. The confidence limits will be calculated by USEPA's Office of Research and Development when all five panels are completed and the data is sent to USEPA for final analysis. Current results are available in ADB but are regarded by USEPA as preliminary. Data from National Aquatic Resource Surveys were used where available. National Lake data was also used. National River and Stream data are still undergoing quality assurance review by USEPA and are not yet available for use by states. In addition to probabilistic reporting, this data is also assessed as lake data for use assessment purposes (see the final 2010 Methods Document, Section 5, "Assessing Lake Data").

## Assessing NJ Waters Of The Mainstem Delaware River And Its NJ Tributaries

**32.** Comment: The Department states that they are using the Delaware River Basin Commission's (DRBC's) 305(b) report to identify impaired waters. Please discuss any instances where DRBC's assessment results for New Jersey waters are not consistent with New Jersey's SWQS and yet these may have been used.

**Response:** As indicated earlier, the Department used DRBC's Integrated Assessment to generate the 303(d) List for intrastate, Delaware River waters. The Department did not use the DRBC assessment for any New Jersey waters. New Jersey waters were assessed solely by the Department based on compliance with the applicable New Jersey SWQS.

#### Data from the Interstate Environmental Commission

**33. Comment:** Were data from the Interstate Environmental Commission (IEC) used for development of the 2010 303(d) list and integrated report?

**Response:** IEC data was used for the 2010 303(d) List; however, the Department did not use every IEC data set from every year. The IEC data that was used showed applicable pathogen criteria being met which would support delisting, but we did not delist due to pending TMDL action.

## Draft 303(d) List With Priority Ranking

**34.** Comment: Please explain why, on the draft 303(d) list, there are several instances of the impairment "cause unknown" being listed even though there is at least one other listed pollutant impairing the aquatic life use for the assessment unit.

**Response:** It was not the Department's intent to list both "cause unknown" and a pollutant as causes for not supporting the aquatic life use in the same AU. The Department found that the USEPA Assessment Database (ADB) database did not process input data for delisting "cause unknown" in a consistent manner when a pollutant was later determined to be the cause, which resulted in unintended double listings. Both the final 2010 303(d) List and the ADB database have been corrected to remove "cause unknown" as a cause wherever a pollutant was also listed as the cause of aquatic life use non-support.

**35. Comment:** Please note that there are at least 19 AUs where each one has at least two listings for mercury which were assessed using different methods. USEPA considers these double listings and asks that mercury be listed only once for any one AU.

**Response:** The Department chose to list contaminants in fish tissue separately from contaminants in the water column on the 303(d) List to distinguish the source of the mercury exceedance, i.e. is it found in the water column or in fish tissue, or both. Such information ultimately supports TMDL development. USEPA also designed its ADB database to identify these different types of contaminants as different pollutant causes.

The description for "mercury" will be replaced in the final 303(d) list with "mercury in fish", "mercury in water column" or both.

**36. Comment:** The 30 segments of the Delaware River placed on New Jersey's draft 2010 303(d) list were not given a priority ranking for TMDL development. The note at the bottom of the page says: "Priority ranking of Delaware River waters must be developed jointly between the Department and DRBC." Please provide any additional information regarding the ranking or scheduling of these waters for TMDL development.

**Response:** The rankings were added to the final 2010 303(d) List.

## **Draft 2010 Overview of Water Quality Conditions Document**

**37. Comment:** Please explain how all required elements for reporting under Clean Water Act Section 305(b) will be submitted to USEPA.

**Response:** The final 2010 Integrated Water Quality Monitoring and Assessment Report (Integrated Report), including required elements for reporting under Section 305(b) of the federal Clean Water Act, will be submitted to USEPA Region 2 after the public participation process required under Section 303(d) of the Act has concluded, which we estimate will be late Spring or early Summer 2011.

## Draft 2010 Two-Year TMDL Schedule

**38. Comment:** In New Jersey's Performance Partnership Agreement with USEPA, it states: "New Jersey agreed to identify the Raritan River Phosphorus TMDLs for establishment and submittal in FY'11. The Department has also agreed to identify the NY-NJ Harbor TMDLs, for pathogens, nutrients and toxics, as a priority for completion during FY'11 and/or 12." Please make sure to include these segments as high priority in the 2010 listing cycle.

**Response:** New Jersey reserves the "high" priority ranking for 303(d) Listings that are expected to yield a TMDL within the two years. While New Jersey has committed to moving forward with the water quality studies needed to address pathogen, nutrient, and toxics exceedances in the NY/NJ Harbor, the complex water quality issues remaining to be resolved make it unlikely that TMDLs will be completed by 2012. As a result, the "medium" priority afforded in the ranking remains appropriate.

## **Draft 2010 Delisting Document**

**39.** Comment: For waters delisted for the parameter "cause unknown," please identify if the biological data now indicate a non-impaired status or if this cause is removed because a pollutant affecting aquatic life has been identified for the AU on the 303(d) list.

**Response:** In cases where biological data now indicate no impairment, the reason for delisting is shown as: "Applicable WQS attained; reason for removal unspecified." In

cases where chemical data now indicate that a pollutant is the cause of impairment, the reason for the delisting is shown as: "Applicable WQS attained; original basis for listing was incorrect."

In the later case, the Department recognizes that SWQS have not been attained; however, in an effort to track waters that have been restored, it appears that fields containing other reasons for delisting have been blocked in USEPA's ADB database. This has limited our ability to accurately report the reason for delisting where the previous listing was incorrect or no longer accurate but water quality impairment remains. The Department has brought this matter to the attention of USEPA's technical consultants.

All the AUs identified in ADB as delisted for "cause unknown" where the reason for the delisting is shown as: "Applicable WQS attained; original basis for listing was incorrect" are still impaired for a chemical pollutant(s). Once USEPA has corrected the problem, the Department will be able to assign the appropriate code in ADB, which is code 2: "flaws in original listing" (water quality still impaired).

- **40. Comment:** The following waterbodies are identified in the approved Pequest TMDL and were previously listed on the New Jersey 2008 303 (d) list as:
  - Pequest River (Furnace Bk to Cemetery Road 02040105090030-01)
  - Pequest River (Cemetery Road to Drag Strip 02040105090020-01)
  - Pequest River (Drag Strip to below Bear Swamp 02040105090010-01)
  - Pequest River (below Bear Swamp to Trout Brook 02040105070060-01)

On page 32 of New Jersey's 303(d) List, three assessment units are shown as:

				TMDL
Assessment Unit	Assessment Unit Name	Parameter	Ranking	Schedule
	Pequest R (below Bear			
NJ02040105070060-01	Swamp to Trout Bk)	Phosphorus (Total)	*	*
	Pequest R (Drag Strip			
NJ02040105090010-01	below Bear Swamp)	Phosphorus (Total)	*	*
	Pequest R (Furnace Bk to			
NJ02040105090030-01	Cemetary Road)	Phosphorus (Total)	*	*

There is no note at the bottom of page 32 explaining the asterisk. These three waterbodies should be delisted for TMDL completed. Also, Pequest River (Cemetery Road to Drag Strip 02040105090020-01) was also approved in that TMDL and should be included with these three assessment units. Update ADB with TMDL code and delist phosphorus.

**Response:** The three AUs shown in the table above will be delisted from the final 2010 303(d) List, along with NJ02040105090020-01 Pequest River (Cemetery Road to Drag Strip). Both ADB and the final 2010 Delisting Document have been revised to show that these four AUs were delisted because the Pequest TMDL was adopted. The delisting

code for total phosphorus at Pequest R (Cemetary Road to Drag Strip): NJ02040105090020-01 was changed from "applicable WQS attained; reason for recovery unspecified" to "TMDL approved or established by USEPA (4A)".

**41. Comment:** Please provide additional information regarding the scope of the TMDLs supporting these draft delistings.

**Response:** All the information requested in the comments is already available to USEPA via its ADB and ATTAINS databases. ADB will only process a delisting supported by a TMDL if the Department submits the applicable USEPA TMDL ID number.

**42. Comment:** Please reference the TMDL document or amendment letter that includes these assessment units based on New Jersey's Statewide Mercury TMDL.

**Response:** As indicated in the draft 2010 Delisting Document, the first five AUs in the table above were delisted based upon meeting the new assessment threshold of 0.18 ppm (ug/g) of mercury in tissue (see Section 6.3 of the Final 2010 Methods Document, page 23). The remaining three AUs were delisted based upon the Statewide Mercury TMDL (EPA ID number 37909). The statewide mercury TMDL that was established by the Department and approved by USEPA Region 2 September 25, 2009, and is available on the Department's Web site at <a href="http://www.nj.gov/dep/watershedmgt/DOCS/TMDL/tmdl_mercury_huc14s.pdf">http://www.nj.gov/dep/watershedmgt/DOCS/TMDL/tmdl_mercury_huc14s.pdf</a>.

**43. Comment**: USEPA cannot find any TMDL documents that have been approved in New Jersey with the cause being Escherichia coli or E. Coli. Please identify the amendment letter or TMDL document that shows that a TMDL was approved or established by USEPA for the waters named below.

Cause	AU Name
Escherichia coli	Whippany R (Wash. Valley Rd To 74d 33m)
Escherichia coli	Passaic R Lwr (Geoffle Bk To Pump Stn)
Escherichia coli	Saddle River (Rt 4 To Rt 17)
Escherichia coli	Saddle River (Hohokus To Ridgewood Gage)
Escherichia coli	Branchport Creek
Escherichia coli	Long Branch Direct Atlantic Drainage
Escherichia coli	Middle Brook
Escherichia coli	Musconetcong R (Waterloo To/Incl Wills Bk)
Escherichia coli	Musconetcong R (Waterloo Area)
Escherichia coli	Little Shabakunk Creek
Escherichia coli	Assunpink Creek (Below Shipetaukin Ck)

Escherichia coli	Ong Run / Jacks Run
Escherichia coli	Rancocas Ck Nb (Incl Mirror Lk-Gauntsbk)
Escherichia coli	Rancocas Ck Sw Branch (Above Medford Br)
Escherichia coli	Edwards Run
Escherichia coli	Salem Canal

Cohansey River (Above Beals Mill)
Cohansey R (Incl Handspond - Beals Mill)
Cohansey R (Incl Cornwellrun - Beeberun)
Indian Branch (Scotland Run)
Maurice River (Union Lake To Sherman Ave)
Mill Creek (Lower)
Buckshutem Creek (Above Rt 555)
Menantico Creek (Below Rt 552)
Manapaqua Brook
Forked River Nb (Above Old Rr Grade)
Mullica River (Batstor To Pleasantmills)
Landing Creek (Above Rt 563)
Mullica R. (Bastor To Nescochague Lake)
Squankum Branch (Gehr)

**Response:** The Department, following USEPA recommendations, promulgated criteria for E. coli and Enterococcus in 2006. The Department had already completed a number of TMDLs for fecal coliform to address "pathogen" listings on New Jersey's 303(d) list. The Department made a decision not to list E. coli in waters already addressed by an adopted TMDL for fecal coliform. However, the Department had indicated that these waters would continue to be assessed as not supporting the recreational use until data indicated that the new indicator – E. coli - met the SWQS. E. coli entries that appear in the 2010 delisting document should not have been listed on the 303(d) list or delisted. Any waters found to exceed the applicable E. coli or Enterococcus criteria in waters *not* covered by an adopted TMDL for fecal coliform will be placed on the 303(d) List.

#### Agency-initiated Changes to the Draft 2010 303(d) List

As explained above, changes were made to the Draft 2010 303(d) List in response to comments received during the public comment period. Additional changes were made as part of the USEPA "reconciliation" process, which requires a detailed tracking and accounting of any differences between the 2010 303(d) List and the 2008 303(d) List. These changes were based on a variety

of reasons including: clarification of scope of TMDL approvals; availability of additional data; verification of station location, stream classification and/or applicable criteria; duplicate listings and/or changes in nomenclature.

For example, the Draft 303(d) List contained AUs that were listed for both "mercury" and "mercury in water column" or "mercury in fish tissue". The Department re-evaluated all mercury listings to confirm the type of mercury data that was used to identify the use impairment. The listing parameter was then changed, along with the associated use impairment, to correct the type of mercury contamination causing use non-support or to remove duplicate listings. Where there was an exceedance of the human health criterion in fresh water, "mercury in water column" was listed as the cause of both drinking water and fish consumption use non-support. Where the drinking water use was not applicable, "mercury in fish tissue" was listed as the cause of fish consumption use non-support. Similar action was taken to address duplicate listings for Chlordane and PCBs.

Similarly, "Cause Unknown" was removed from the Draft 303(d) List in all AUs where a chemical pollutant was also listed as a cause for Aquatic Life Use non-support, since "Cause Unknown" is listed only when chemical data are unavailable or show no chemical exceedances of applicable criteria.

The following is an explanation of the changes made to the Draft 2010 303(d) List that resulted in additional delistings for good cause. Additional information about other changes to the 2010 303(d) List is available upon request.

**Delisted for Good Cause:** The following AU/parameter combinations were removed from the Draft 2010 303(d) List because a reassessment of the readily available data indicated that the applicable water quality standards were attained. The Delaware River and Bay AUs were delisted based on the results of water quality assessments conducted by the Delaware River Basin Commission, which is responsible for assessing these intra-state waters (see Response to Comment #32). These AU/parameter combinations and the corresponding delisting reason are now included on the Revised Final 2010 Delisted Waters, Appendix C of the Final 2010 Integrated Report. Additional changes were made to the draft 303(d) List for Delaware River and Bay AUs to reflect changes in AU names and boundaries established by the DRBC (see Response to Comment #4).

Assessment Unit	Assessment Unit Name	Parameter	<b>Delisting Reason</b>
NJ02030104930020-01	Atl Coast (Shark R to	Enterococcus	Applicable WQS
11302030104930020-01	Manasquan)	Enterococcus	Attained
NJ02040105150030-01	Musconetcong R (Wills Bk to	Nitrates	Applicable WQS
11302040103130030-01	LkHopatcong)	initrates	Attained
NJ02040105150030-01	Musconetcong R (Wills Bk to	Phosphorus (Total)	Applicable WQS
NJ02040103130030-01	LkHopatcong)	Phosphorus (Total)	Attained
NJ02040104090030-01	Shimers Brook	Dhoomhomic (Total)	Applicable WQS
11302040104090030-01	Similers Brook	Phosphorus (Total)	Attained
NJ02020007010070-01	Wallkill R(Martins Rd to	Phosphorus (Total)	Applicable WQS
11302020007010070-01	Hamburg SW Bdy)	r nosphorus (Total)	Attained

		1	
NJDELAWARE RIVER 14	Delaware River 1E	Arsenic	Applicable WQS attained
NJDELAWARE RIVER 14	Delaware River 1E	Lead	Applicable WQS attained
NJDELAWARE RIVER 15	Delaware River 2	Lead	Applicable WQS attained
NJDELAWARE RIVER 15	Delaware River 2	Temperature	Applicable WQS attained
NJDELAWARE RIVER 15	Delaware River 2	PCB in Fish Tissue	TMDL approved or established by EPA
NJDELAWARE RIVER 16	Delaware River 3	Arsenic	Applicable WQS attained
NJDELAWARE RIVER 16	Delaware River 3	Cadmium	Applicable WQS attained
NJDELAWARE RIVER 16	Delaware River 3	Mercury	Applicable WQS attained
NJDELAWARE RIVER 16	Delaware River 3	Polychlorinated biphenyls	TMDL approved or established by EPA
NJDELAWARE RIVER 17	Delaware River 4	PCB in Fish Tissue	TMDL approved or established by EPA
NJDELAWARE RIVER 17	Delaware River 4	Copper	Applicable WQS attained
NJDELAWARE RIVER 17	Delaware River 4	Temperature	Applicable WQS attained
NJDELAWARE RIVER 18	Delaware River 5A	PCB in Fish Tissue	TMDL approved or established by EPA
NJDELAWARE RIVER 18	Delaware River 5A	Temperature	Applicable WQS attained
NJDELAWARE RIVER 19	Delaware River 5B	Polychlorinated biphenyls	TMDL approved or established by EPA
NJDELAWARE RIVER 19	Delaware River 5B	Temperature	Applicable WQS attained
NJDELAWARE RIVER 2	Delaware River 1C	Arsenic	Applicable WQS attained
NJDELAWARE RIVER 2	Delaware River 1C	Chromium (total)	Applicable WQS attained
NJDELAWARE RIVER 2	Delaware River 1C	Copper	Applicable WQS attained
NJDELAWARE RIVER 20	Delaware River 5C	Total Coliform	TMDL approved or established by EPA
NJDELAWARE RIVER 20	Delaware River 5C	Polychlorinated biphenyls	TMDL approved or established by EPA

NJDELAWARE RIVER 20	Delaware River 5C	Temperature	Applicable WQS attained
NJDELAWARE RIVER 6	Delaware Bay Zone 6 ( New Jersey portion)	Total Coliform	TMDL approved or established by EPA
NJDELAWARE RIVER 6	Delaware Bay Zone 6 ( New Jersey portion)	Oxygen, Dissolved	Applicable WQS attained
NJDELAWARE RIVER 6	Delaware Bay Zone 6 ( New Jersey portion)	Enterococcus	TMDL approved or established by EPA
NJDELAWARE RIVER 6	Delaware Bay Zone 6 ( New Jersey portion)	PCB in Fish Tissue	TMDL approved or established by EPA
NJDELAWARE RIVER 8	Delaware River 1D	Arsenic	Applicable WQS attained
NJDELAWARE RIVER 8	Delaware River 1D	Copper	Applicable WQS attained
NJDELAWARE RIVER 8	Delaware River 1D	Mercury in Water Column	Applicable WQS attained
NJDELAWARE RIVER 8	Delaware River 1D	Chromium (total)	Applicable WQS attained

# Crosswalk Between Monitoring Stations and Revised Assessment Units

<b>Fixed Station ID</b>	2010 AU ID #	2008 AU ID #
01367700	02020007010080-01	02020007010040-01
2-WAL-1	02020007010080-01	02020007010040-01
AN0298	02020007010080-01	02020007010040-01
FIBI049	02020007010080-01	02020007010040-01
Wallkill B	02020007010080-01	02020007010040-01
Location B	02030101170030-01	02030101170010-01
N3B-E	02030101170030-01	02030101170010-01
N3	02030101170030-01	02030101170010-01
N3B	02030101170030-01	02030101170010-01
N3B-W	02030101170030-01	02030101170010-01
Location C	02030101170030-01	02030101170010-01
NJW168 1	02030101170030-01	02030101170010-01
Passaic-29L	02030101170030-01	02030101170010-01
Passaic-29U	02030101170030-01	02030101170010-01
Passaic-31U	02030101170030-01	02030101170010-01
Passai-31L	02030101170030-01	02030101170010-01
NJ01-0014	02030101170030-01	02030101170010-01
Passaic-30U	02030101170030-01	02030101170010-01
Passaic-30L	02030101170030-01	02030101170010-01
Passaic-32U	02030101170030-01	02030101170010-01
Passaic-32L	02030101170030-01	02030101170010-01

UH014	02030101170030-01	02030101170010-01
AN0227	02030103010100-01	02030103010070-01
DeadRiver 4	02030103010100-01	02030103010070-01
AN0231C	02030103010190-01	02030103010160-01
DSR 61L	02030103020050-01	02030103020040-01
PVWC290	02030103020050-01	02030103020040-01
RRTMDL-RockR2	02030103030170-01	02030103030160-01
AN0265	02030103050080-01	02030103050070-01
01387000	02030103070070-01	02030103070050-01
01384495	02030103070080-01	02030103070050-01
4-PAS-3, 4-SITE-6	02030103120110-01	02030103120100-01
01389500	02030103120110-01	02030103120100-01
AN0274	02030103120110-01	02030103120100-01
PVSC2	02030103120110-01	02030103120100-01
Passaic-11	02030103120110-01	02030103120100-01
PRTMDL-PA9	02030103120110-01	02030103120100-01
PA9	02030103120110-01	02030103120100-01
PVSC1	02030103120110-01	02030103120100-01
Passaic-10	02030103120110-01	02030103120100-01
Passaic-12	02030103120110-01	02030103120100-01
01389800	02030103120110-01	02030103120100-01
01389630	02030103120110-01	02030103120100-01
1	02030103120110-01	02030103120100-01
01390518	02030103140080-01	02030103140050-01
01390510	02030103140080-01	02030103140050-01
AN0282	02030103140080-01	02030103140050-01
FIBI090	02030103140080-01	02030103140050-01
SR001	02030103140080-01	02030103140050-01
H161	02030103180030-01	02030103180050-01
01-HR	02030103180030-01	02030103180050-01
NB227	02030104010020-01	02030104010020-02
NB2	02030104010020-01	02030104010020-02
NB216	02030104010020-01	02030104010020-02
NB217	02030104010020-01	02030104010020-02
NB226	02030104010020-01	02030104010020-02
NB206	02030104010020-01	02030104010020-02
NB201	02030104010020-01	02030104010020-02
NB212	02030104010020-01	02030104010020-02
NB222	02030104010020-01	02030104010020-02
NB231	02030104010020-01	02030104010020-02
NB1	02030104010020-01	02030104010020-02
NB223	02030104010020-01	02030104010020-02
NB3	02030104010020-01	02030103150050-01
NJ01-0012	02030104010020-01	02030104010020-02

Passaic B1	02030104010020-01	02030104010020-02
Passaic B2U	02030104010020-01	02030104010020-02
Passaic K1L	02030104010020-01	02030104010020-02
NJ02-0206	02030104010020-01	02030104010020-02
NJ00-0009	02030104010020-01	02030104010020-02
Passaic-15	02030104010020-01	02030104010020-02
Location E	02030104010030-01	02030104010030-02
UH019	02030104010030-01	02030104010030-02
UH219	02030104010030-01	02030104010030-02
NJ01-0010	02030104010030-01	02030104010030-02
NJ03-0207	02030104010030-01	02030104010030-02
UH022	02030104010030-01	02030104010030-02
UH208	02030104010030-01	02030104010030-02
7-ELI-2	02030104020030-01	02030104020030-02
01393690	02030104030010-01	02030104030010-02
7-MOR-1	02030104030010-01	02030104030010-02
RAH 1	02030104030010-01	02030104050120-01
1020	02030104070120-01	02030104070110-01
1020B	02030104070120-01	02030104070110-01
CCMPMC0050	02030104070120-01	02030104070110-01
CCMPMC0051	02030104070120-01	02030104070110-01
NJ03-0247	02030104070120-01	02030104070110-01
NJ01-0060	02030104070120-01	02030104070110-01
100000160	02030104070120-01	02030104070110-01
76	02030104090090-01	02030104090060-01
77	02030104090090-01	02030104090060-01
12-MA-1, 12-MA-2,	02030104100030-01	02030104100050-01
12-MA-3		
CCMPMC0044	02030104910020-01	02030104060050-01
CCMPMC0046	02030104910020-01	02030104060060-01
CCMPMC0052	02030104910020-01	02030104060060-01
918	02030104910030-01	02030104910020-01
908C	02030104910030-01	02030104910020-01
29A	02030104910030-01	02030104910020-01
DSR 14M	02030104910030-01	02030104910020-01
RB216	02030104910030-01	02030104910020-01
NJ01-0002	02030104910030-01	02030104910020-01
NJ00-0007	02030104910030-01	02030104910020-01
RB024	02030104910030-01	02030104910020-01
NJ02-0205	02030104910030-01	02030104910020-01
RB210	02030104910030-01	02030104910020-01
RB027	02030104910030-01	02030104910020-01
RB203	02030104910030-01	02030104910020-01
L7012537152	02030104910030-01	02030104910020-01

L6992337027	02030104910030-01	02030104910020-01
A7A	02030104910030-01	02030104910020-01
JC03	02030104920010-01	02030104920010-02
NYB20	02030104920010-01	02030104920010-02
A11A		
	02030104920020-01	02030104920020-02
A13A	02030104920020-01	02030104920020-02
JC14E	02030104920020-01	02030104920020-02
JC14G	02030104920020-01	02030104920020-02
CCMPMC1019	02030104920020-01	02030104080030-01
CCMPMC1023	02030104920020-01	02030104080030-01
CCMPMC1039	02030104920020-01	02030104080030-01
CCMPMC1020	02030104920020-01	02030104080030-01
L6955336382	02030104920020-01	02030104920020-02
L6951836180	02030104920020-01	02030104920020-02
NYB21	02030104920030-01	n/a
A17A2	02030104930010-01	02030104930010-02
A18A2	02030104930010-01	02030104930010-02
A19A	02030104930010-01	02030104930010-02
A20B	02030104930010-01	02030104930010-02
JC27G	02030104930010-01	02030104930010-02
JC27E	02030104930010-01	02030104930010-02
CCMPMC1047	02030104930010-01	02030104090020-01
CCMPMC1041	02030104930010-01	02030104090030-01
CCMPMC1043	02030104930010-01	02030104090030-01
CCMPMC1024	02030104930010-01	02030104090060-01
CCMPMC1065	02030104930010-01	02030104090060-01
CCMPMC1051	02030104930010-01	02030104090060-01
CCMPMC1053	02030104930010-01	02030104090060-01
CCMPMC1027	02030104930010-01	02030104090060-01
CCMPMC1054	02030104930010-01	02030104090060-01
L6937035464	02030104930010-01	02030104930010-02
CCMPMC1052	02030104930010-01	n/a
A21A	02030104930020-01	02030104930020-02
A22B	02030104930020-01	02030104930020-02
A24A	02030104930020-01	02030104930020-02
CCMPMC1062	02030104930020-01	02030104100100-01
CCMPMC1055	02030104930020-01	02030104090080-01
CCMPMC1055	02030104930020-01	02030104090080-01
CCMPMC1026	02030104930020-01	02030104090080-01
CCMPMC1050	02030104930020-01	02030104090080-01
CCMPMC1069	02030104930020-01	02030104090080-01
CCMPMC1009	02030104930020-01	02030104090080-01
CCMPMC1058 CCMPMC1059	02030104930020-01	02030104090080-01
CCMPMC1071	02030104930020-01	02030104090080-01

DSR 16M	02030104930020-01	02030104930020-02
JC27	02030104930020-01	02030104930020-02
L6947035395	02030104930020-01	02030104930020-02
L6936535272	02030104930020-01	02030104930020-02
01397400	02030105020100-01	02030105040010-01
AN0329	02030105020100-01	02030105040010-01
AN0337	02030105030070-01	02030105030060-01
AN0336	02030105030070-01	02030105030060-01
EWQ0337	02030105030070-01	02030105030060-01
FIBI087	02030105030070-01	02030105030060-01
NR2	02030105030070-01	02030105030060-01
SBWA10	02030105030070-01	02030105030060-01
Site 10 Rainbow Hill	02030105030070-01	02030105030060-01
Road		
01398060	02030105030070-01	02030105030060-01
01398065	02030105030070-01	02030105030060-01
01399780	02030105050070-01	02030105050110-01
AN0370	02030105050070-01	02030105050110-01
LR4	02030105050070-01	02030105050110-01
LR5	02030105050070-01	02030105050110-01
01399700	02030105050090-01	02030105050110-01
8-RO-1	02030105050090-01	02030105050110-01
AN0369	02030105050090-01	02030105050110-01
EWQ0369	02030105050090-01	02030105050110-01
RC16	02030105050090-01	02030105050110-01
RC1	02030105050090-01	02030105050110-01
RC1DS	02030105050090-01	02030105050110-01
01399720	02030105050090-01	02030105050110-01
AN0360	02030105050130-01	02030105050070-01
LR3	02030105050130-01	02030105050070-01
01400560	02030105100030-01	02030105100020-01
M6	02030105110140-01	02030105110110-01
AN0420	02030105120180-01	02030105120140-01
FIBI072	02030105120180-01	02030105120140-01
01403190	02030105120180-01	02030105120140-01
01443500	02040105050020-01	02040105050050-01
AN0025	02040105050020-01	02040105050050-01
01455801	02040105150110-01	02040105150070-01
MSA6	02040105150110-01	02040105150070-01
01457500	02040105160080-01	02040105140070-01
DRBCNJ0023	02040105170020-01	02040105170010-01
01461000	02040105200070-01	02040105200030-01
01464020	02040105240060-01	02040105240050-01
01463500	02040105240060-01	02040105240050-01

01464000	02040105240060-01	02040105240050-01
11-AS-3	02040105240060-01	02040105240050-01
AN0118	02040105240060-01	02040105240050-01
AN0116	02040105240060-01	02040105240050-01
DRBCNJ1338	02040105240060-01	02040105240050-01
DSR 33R	02040105240060-01	02040105240050-01
01463881	02040105240060-01	02040105240050-01
01463882	02040105240060-01	02040105240050-01
01463700	02040105240060-01	02040105240050-01
AN0124	02040201050020-01	02040201050040-01
MB-117	02040201050020-01	02040201050040-01
01464576	02040201090040-01	02040201090030-01
NNONEWLI	02040202020040-01	02040202040010-01
NJW020 OUTLET	02040202030060-01	02040202030050-01
NJW020 3	02040202030060-01	02040202030050-01
NJW020 2	02040202030060-01	02040202030050-01
NJW020 1	02040202030060-01	02040202030050-01
NJW020 Center	02040202030060-01	02040202030050-01
AN0179	02040202100010-01	02040202100020-01
01467066	02040202100010-01	02040202100020-01
DSR 25R	02040202100060-01	02040202100050-01
01467191	02040202110050-01	02040202110060-01
18-CO-1	02040202110050-01	02040202110060-01
Cooper	02040202110050-01	02040202110060-01
NJW047 OUTLET	02040202110050-01	02040202110060-01
NJ 5	02040202110050-01	02040202110060-01
01467190	02040202110050-01	02040202110060-01
01477510	02040202160030-01	02040202160050-01
3827	02040204000010-01	02040204910010-02
3874B	02040204000010-01	02040204910030-02
3849B	02040204000010-01	02040204910020-02
3800	02040204000010-01	02040204910030-02
3826A	02040204000010-01	02040204910010-01
CCMPCC1198	02040204000010-01	02040204910010-01
CCMPCC1199	02040204000010-01	02040204910010-01
NJ00-0061	02040204000010-01	02040204910010-01
NJ02-0249	02040204000010-01	02040204910010-01
NJ02-0251	02040204000010-01	02040204910010-02
NJ03-0080	02040204000010-01	02040204910010-02
NJ01-0080	02040204000010-01	02040204910010-02
NJ03-0248	02040204000010-01	02040204910010-01
NJ01-0062	02040204000010-01	02040204910010-01
57000038A		
5700005011	02040204000010-01	02040204910010-01

SHELL ROCK	02040204000010-01	02040204910030-01
570000220B	02040204000010-01	02040204910030-01
NJ00-0065	02040204000010-01	02040204910020-02
NJ02-0253	02040204000010-01	02040204910030-02
570000299B	02040204000010-01	02040204910030-02
5700003255	02040204000010-01	02040204910030-02
4100	02040204000010-01	n/a
3845G	02040204000010-01	n/a
NJ00-0081	02040204000010-01	n/a
NJ02-0081	02040204000010-01	n/a
5700003653	02040204000010-01	n/a
AN0691	02040206030010-01	02040206030030-01
01482580	02040206030080-01	02040206030060-01
01413065	02040206070030-01	02040206070040-01
DSR 64L	02040206080050-01	02040206090030-01
NJW120 1	02040206080050-01	02040206090030-01
NJW120 2	02040206080050-01	02040206090030-01
NJW120 center	02040206080050-01	02040206090030-01
NJW120 3	02040206080050-01	02040206090030-01
NJW04459-120-1	02040206080050-01	02040206090030-01
NJW04459-120-2	02040206080050-01	02040206090030-01
NJW04459-120-3	02040206080050-01	02040206090030-01
01412250	02040206100040-01	02040206100050-01
AN0753	02040206160040-01	02040206160030-01
AN0758	02040206180010-01	02040206180020-01
3895E	02040206910010-01	02040204910010-01
CCMPCC1141	02040206910010-01	02040204910010-01
CCMPCC1142	02040206910010-01	02040204910010-01
CCMPCC1146	02040206910010-01	02040204910010-01
CCMPCC1201	02040206910010-01	02040204910010-01
CCMPCC1202	02040206910010-01	02040204910010-01
CCMPCC1203	02040206910010-01	02040204910010-01
CCMPCC1204	02040206910010-01	02040204910010-01
CCMPCC1200	02040206910010-01	02040204910010-01
CCMPCC1145	02040206910010-01	02040204910010-01
CCMPCC1144	02040206910010-01	02040204910010-01
CCMPCC1143	02040206910010-01	02040204910010-01
CCMPCC1137	02040206910010-01	02040204910010-01
CCMPCC1148	02040206910010-01	02040204910010-01
CCMPCC1174	02040206910010-01	02040204910010-01
NJ01-0064	02040206910010-01	02040204910010-01
5700001270	02040206910010-01	02040204910010-01
CCMPCC1147	02040206910010-01	02040204910010-01
3888I	02040206910010-01	02040200230000-01
30001	02040200910020-01	02040204910020-01

NJ02-0255	02040206910020-01	02040204910010-01
NJ00-0067	02040206910020-01	02040204910020-01
570000172I	02040206910020-01	02040204910020-01
3888	02040206910030-01 02040204910010	
DSR 7M	02040206910030-01	02040204910020-02
NJ03-0252	02040206910030-01	02040204910020-02
NJ01-0066	02040206910030-01	02040204910020-02
5700001727	02040206910030-01	02040204910010-02
NJ03-0254	02040206910030-01	02040204910020-02
3847B	02040206910040-01	02040204910020-01
3840A	02040206910040-01	02040204910020-01
3845P	02040206910040-01	02040204910020-02
3847D	02040206910040-01	02040204910020-01
3847C	02040206910040-01	02040204910020-01
NJ01-0068	02040206910040-01	02040204910020-01
NJ00-0089	02040206910040-01	02040204910020-01
3848	02040206910040-01	02040204910020-01
3847A	02040206910040-01	02040204910020-01
NJ03-0258	02040206910040-01	02040204910020-01
NJ01-0072	02040206910040-01	02040204910020-01
3847	02040206910040-01	02040204910020-01
3848A	02040206910040-01	02040204910020-01
57000209B	02040206910040-01	02040204910020-01
NJ00-0063	02040206910040-01	02040204910020-02
4101B	02040206910050-01	02040204910030-01
3801B	02040206910050-01	02040204910030-01
3803A	02040206910050-01	02040204910030-01
NJ02-0259	02040206910050-01	02040204910030-01
NJ01-0082	02040206910050-01	02040204910030-01
NJ00-0071	02040206910050-01	02040204910030-01
NJ01-0070	02040206910050-01	02040204910030-01
NJ00-0091	02040206910050-01	02040204910030-01
NJ00-0069	02040206910050-01	02040204910030-01
NJ02-0257	02040206910050-01	02040204910030-01
NJ03-0256	02040206910050-01	02040204910030-01
5700003766	02040206910050-01	02040204910030-01
635600002B	02040206910050-01	02040204910030-01
570000323A	02040206910050-01	02040204910030-01
ARNOLDS	02040206910060-01	02040204910040-01
NJW077 OUTLET 1	02040301050010-01	02040301050020-01
01408300	02040301060070-01	02040301060060-01
AN0523	02040301060070-01	02040301060060-01
DSR 41R	02040301080090-01	02040301080060-01
1636A	02040301100040-01	02040301100030-01

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$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	CCMPCC1169	02040302940030-01	02030902940030-01
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A107A         02040302940050-01         02040302940050-02           A110A         02040302940050-01         02040302940050-02           L7102027374         02040302940050-01         02040302940050-02           01438500         n/a         Delaware River 1           DSR 29R         n/a         Delaware River 1           DSR 30R         n/a         Delaware River 5           01444800         n/a         Delaware River 6           DSR 34R         n/a         Delaware River 9           01447000         n/a         Delaware River 9           DSR 35R         n/a         Delaware River 10           332068         n/a         Delaware River 15           DSR 32R         n/a         Delaware River 15           01477050         n/a         Delaware River 17           332046         n/a         Delaware River 18           DSR 3M         n/a         Delaware River 19           DSR 8M         n/a         Delaware River 120	C106A1	02040302940050-01	02040302940050-02
A110A         02040302940050-01         02040302940050-02           L7102027374         02040302940050-01         02040302940050-02           01438500         n/a         Delaware River 1           DSR 29R         n/a         Delaware River 1           DSR 30R         n/a         Delaware River 5           01444800         n/a         Delaware River 6           DSR 34R         n/a         Delaware River 9           01447000         n/a         Delaware River 9           DSR 35R         n/a         Delaware River 10           332068         n/a         Delaware River 15           DSR 32R         n/a         Delaware River 15           01477050         n/a         Delaware River 17           332046         n/a         Delaware River 18           DSR 3M         n/a         Delaware River 120	JC96	02040302940050-01	02040302940050-02
L710202737402040302940050-0102040302940050-0201438500n/aDelaware River 1DSR 29Rn/aDelaware River 1DSR 30Rn/aDelaware River 501444800n/aDelaware River 6DSR 34Rn/aDelaware River 901447000n/aDelaware River 901447000n/aDelaware River 9DSR 35Rn/aDelaware River 10332068n/aDelaware River 15DSR 32Rn/aDelaware River 1501477050n/aDelaware River 17332046n/aDelaware River 18DSR 3Mn/aDelaware River 19DSR 8Mn/aDelaware River 20	A107A	02040302940050-01	02040302940050-02
01438500n/aDelaware River 1DSR 29Rn/aDelaware River 1DSR 30Rn/aDelaware River 501444800n/aDelaware River 6DSR 34Rn/aDelaware River 901447000n/aDelaware River 901447000n/aDelaware River 9DSR 35Rn/aDelaware River 10332068n/aDelaware River 15DSR 32Rn/aDelaware River 1501477050n/aDelaware River 17332046n/aDelaware River 18DSR 3Mn/aDelaware River 19DSR 8Mn/aDelaware River 20	A110A	02040302940050-01	02040302940050-02
DSR 29Rn/aDelaware River 1DSR 30Rn/aDelaware River 501444800n/aDelaware River 6DSR 34Rn/aDelaware River 901447000n/aDelaware River 9DSR 35Rn/aDelaware River 10332068n/aDelaware River 15DSR 32Rn/aDelaware River 1501477050n/aDelaware River 17332046n/aDelaware River 18DSR 3Mn/aDelaware River 19DSR 8Mn/aDelaware River 20	L7102027374	02040302940050-01	02040302940050-02
DSR 30Rn/aDelaware River 501444800n/aDelaware River 6DSR 34Rn/aDelaware River 901447000n/aDelaware River 9DSR 35Rn/aDelaware River 10332068n/aDelaware River 15DSR 32Rn/aDelaware River 1501477050n/aDelaware River 17332046n/aDelaware River 18DSR 3Mn/aDelaware River 19DSR 8Mn/aDelaware River 20	01438500	n/a	Delaware River 1
01444800n/aDelaware River 6DSR 34Rn/aDelaware River 901447000n/aDelaware River 9DSR 35Rn/aDelaware River 10332068n/aDelaware River 15DSR 32Rn/aDelaware River 1501477050n/aDelaware River 17332046n/aDelaware River 18DSR 3Mn/aDelaware River 19DSR 8Mn/aDelaware River 20	DSR 29R	n/a	Delaware River 1
DSR 34Rn/aDelaware River 901447000n/aDelaware River 9DSR 35Rn/aDelaware River 10332068n/aDelaware River 15DSR 32Rn/aDelaware River 1501477050n/aDelaware River 17332046n/aDelaware River 18DSR 3Mn/aDelaware River 19DSR 8Mn/aDelaware River 20	DSR 30R	n/a	Delaware River 5
01447000n/aDelaware River 9DSR 35Rn/aDelaware River 10332068n/aDelaware River 15DSR 32Rn/aDelaware River 1501477050n/aDelaware River 17332046n/aDelaware River 18DSR 3Mn/aDelaware River 19DSR 8Mn/aDelaware River 20	01444800	n/a	Delaware River 6
DSR 35Rn/aDelaware River 10332068n/aDelaware River 15DSR 32Rn/aDelaware River 1501477050n/aDelaware River 17332046n/aDelaware River 18DSR 3Mn/aDelaware River 19DSR 8Mn/aDelaware River 20	DSR 34R	n/a	Delaware River 9
332068n/aDelaware River 15DSR 32Rn/aDelaware River 1501477050n/aDelaware River 17332046n/aDelaware River 18DSR 3Mn/aDelaware River 19DSR 8Mn/aDelaware River 20	01447000	n/a	Delaware River 9
DSR 32Rn/aDelaware River 1501477050n/aDelaware River 17332046n/aDelaware River 18DSR 3Mn/aDelaware River 19DSR 8Mn/aDelaware River 20	DSR 35R	n/a	Delaware River 10
01477050n/aDelaware River 17332046n/aDelaware River 18DSR 3Mn/aDelaware River 19DSR 8Mn/aDelaware River 20	332068	n/a	Delaware River 15
332046n/aDelaware River 18DSR 3Mn/aDelaware River 19DSR 8Mn/aDelaware River 20	DSR 32R	n/a	Delaware River 15
DSR 3Mn/aDelaware River 19DSR 8Mn/aDelaware River 20	01477050	n/a	Delaware River 17
DSR 8M n/a Delaware River 20	332046	n/a	Delaware River 18
	DSR 3M	n/a	Delaware River 19
01482800 n/a Delaware River 20	DSR 8M	n/a	Delaware River 20
	01482800	n/a	Delaware River 20

Assessment Unit	AU Name	Cause	Reason for Removal
NJ02040202120060-01	Almonesson Creek	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Arthur Kill waterfront (below	Mercury in Water	
NJ02030104050120-01	Grasselli)	Column	TMDL approved or established by EPA (4A)
	Assiscunk Creek (below Neck		Applicable WQS attained; reason for
NJ02040201100060-01	Rd)	Cause Unknown	recovery unspecified
	Assunpink Creek (below		
NJ02040105240060-01	Shipetaukin Ck)	Escherichia coli	TMDL approved or established by EPA (4A)
	Atl Coast (Shark R to		Applicable WQS attained; original basis for
NJ02030104930020-01	Manasquan)	Enterococcus	listing was incorrect
	Barnegat Bay Cntrl (Rt 37-		
NJ02040301100030-01	Brngt Inlet)	Enterococcus	TMDL approved or established by EPA (4A)
	Barnegat Bay Cntrl (Toms R-		
NJ02040301100040-01	Cedar Crk)	Enterococcus	TMDL approved or established by EPA (4A)
	Barnegat Bay North (above Rt		
NJ02040301050050-01	37 bridge)	Enterococcus	TMDL approved or established by EPA (4A)
NJ02040301200050-01	Bass River EB	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Batsto R (Batsto gage to Quaker		Applicable WQS attained; reason for
NJ02040301150080-01	Bridge)	Escherichia coli	recovery unspecified
	Batsto R (Batsto gage to Quaker		
NJ02040301150080-01	Bridge)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Bear Brook (below Trenton		
NJ02030105100130-01	Road)	Mercury	TMDL approved or established by EPA (4A)
			Applicable WQS attained; reason for
NJ02040105080010-01	Bear Brook (Sussex/Warren Co)	Escherichia coli	recovery unspecified
			Applicable WQS attained; reason for
NJ02040105080020-01	Bear Creek	Cause Unknown	recovery unspecified

Assessment Unit	AU Name	Cause	Reason for Removal
NJ02040301200010-01	Beaver Branch (Wading River)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Beaver Brook (above Hope		Applicable WQS attained; reason for
NJ02040105100030-01	Village)	Cause Unknown	recovery unspecified
NJ02030103030110-01	Beaver Brook (Morris County)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Big Flat Brook (above Forked		Applicable WQS attained; according to new
NJ02040104140010-01	Brook)	Mercury in Fish Tissue	assessment method
	Big T Ck SB(incl Bull Run to		
NJ02040202120040-01	LakelandRd)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Big Timber Creek NB (above		
NJ02040202120010-01	Laurel Rd)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Big Timber Creek NB (below		
NJ02040202120020-01	Laurel Rd)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Big Timber Creek SB (above		
NJ02040202120030-01	Lakeland Rd)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Big Timber Creek SB (below		
NJ02040202120050-01	Bull Run)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Black Brook (Great Swamp		
NJ02030103010060-01	NWR)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
NJ02030103020070-01	Black Brook (Hanover)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Bound Brook (below fork at 74d		
NJ02030105120100-01	25m 15s)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NIO2020104000020 01	Dronobnort Croch	Entonococci	TMDL opproved on established by EDA (4A)
NJ02030104080030-01	Branchport Creek	Enterococcus	TMDL approved or established by EPA (4A)
NJ02030104080030-01	Branchport Creek	Escherichia coli	TMDL approved or established by EPA (4A)

Assessment Unit	AU Name	Cause	Reason for Removal
	Bucks Cove Run / Cranberry		
NJ02040202030050-01	Branch	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Buckshutem Creek (above Rt		
NJ02040206170040-01	555)	Escherichia coli	TMDL approved or established by EPA (4A)
	Buckshutem Creek (below Rt		Applicable WQS attained; reason for
NJ02040206170050-01	555)	Escherichia coli	recovery unspecified
NJ02030103010140-01	Canoe Brook	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Canton Drain (above Maskell		
NJ02040206070030-01	Mill)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Cedar Creek (GS Parkway to		
NJ02040301090050-01	74d16m38s)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02040202130030-01		Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Clinton Reservior/Mossmans		
NJ02030103050040-01	Brook	Mercury	TMDL approved or established by EPA (4A)
NU02040104000020 01		N 6	
NJ02040104090020-01	Clove Brook (Delaware R)	Mercury	TMDL approved or established by EPA (4A)
NU0204020C000100_01	Calendary D. (halans Caragerial)	Manager in Figh Times	Applicable WQS attained; according to new
NJ02040206090100-01	Cohansey R (below Greenwich)	Mercury in Fish Tissue	
NU0004000000000000000000000000000000000	Cohansey R (incl Beebe Run to	F 1 · 1 · 1·	Applicable WQS attained; reason for
NJ02040206080040-01	HandsPond)	Escherichia coli	recovery unspecified
NI02040206080050 01	Cohansey R (incl CornwellRun -	Eachariahia aali	TMDI approved or established by EDA (4A)
NJ02040206080050-01	BeebeRun)	Escherichia coli	TMDL approved or established by EPA (4A)
NJ02040206080050-01	Cohansey R (incl CornwellRun - BeebeRun)	Moroury in Fish Tissue	TMDL approved or established by EPA (4A)
NJU2040200080030-01	,	Mercury in Fish Tissue	TWDL approved of established by EPA (4A)
NI02040206080020 01	Cohansey R (incl HandsPond -	Eacharichia aali	TMDL approved or established by EDA (4A)
NJ02040206080020-01	Beals Mill)	Escherichia coli	TMDL approved or established by EPA (4A)

Assessment Unit	AU Name	Cause	Reason for Removal
	Cohansey R (Rocaps Run to		
NJ02040206090030-01	Cornwell Run)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Cohansey River (above Beals		
NJ02040206080010-01	Mill)	Escherichia coli	TMDL approved or established by EPA (4A)
	Collings Lakes trib (Hospitality		
NJ02040302040050-01	Branch)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Cooper R (Wallworth gage to		
NJ02040202110040-01	Evesham Rd)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Cooper River (above Evesham		
NJ02040202110030-01	Road)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Cooper River (Rt 130 to		Applicable WQS attained; according to new
NJ02040202110050-01	Wallworth gage)	Mercury in Fish Tissue	assessment method
	Cooper River NB(below		
NJ02040202110020-01	Springdale Road)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Cranberry Lake / Jefferson Lake		
NJ02040105150060-01	& tribs	Mercury	TMDL approved or established by EPA (4A)
	Crook Horn Creek (above		
NJ02040302080010-01	Devils Island)	Total Coliform	TMDL approved or established by EPA (4A)
	Crosswicks Ck(below Doctors		Applicable WQS attained; according to new
NJ02040201070020-01	Creek)	Mercury in Fish Tissue	assessment method
	Davenport Branch (above		
NJ02040301080030-01	Pinewald Road)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Dead River (below Harrisons		
NJ02030103010100-01	Brook)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
NJ02030104090030-01	Deal Lake	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Dennis Creek (below Jakes		
NJ02040206220040-01	Landing Rd)	Total Coliform	TMDL approved or established by EPA (4A)

Assessment Unit	AU Name	Cause	Reason for Removal
	Dennis Creek (Jakes Landing		
NJ02040206220030-01	Rd to Rt 47)	Total Coliform	TMDL approved or established by EPA (4A)
NJ02040301130070-01	Dinner Point Creek & tribs	Total Coliform	TMDL approved or established by EPA (4A)
NJ02040301060050-01	Dove Mill Branch (Toms River)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02030105160030-01	Duhernal Lake / Iresick Brook	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02040206210060-01	East Creek	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02040206210060-01	East Creek	Total Coliform	TMDL approved or established by EPA (4A)
NJ02040202130050-01	Edwards Run	Escherichia coli	TMDL approved or established by EPA (4A)
	Flat Brook (below Tillman	~ ~ ~ ~	Applicable WQS attained; reason for
NJ02040104150020-01	Brook)	Cause Unknown	recovery unspecified
NJ02040104150020-01	Flat Brook (below Tillman Brook)	Escherichia coli	Applicable WQS attained; reason for recovery unspecified
1002010101150020 01	Forked River NB(above old RR		
NJ02040301110010-01	grade)	Escherichia coli	TMDL approved or established by EPA (4A)
	Friendship Ck (below/incl Burrs		
NJ02040202050050-01	Mill Bk)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	GEHR (AC Expressway to New		
NJ02040302030020-01	Freedom Rd)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	GEHR (Broad Lane road to AC		
NJ02040302030040-01	Expressway)	Escherichia coli	TMDL approved or established by EPA (4A)
	GEHR (Lake Lenape to Mare		
NJ02040302040130-01	Run)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)

Assessment Unit	AU Name	Cause	Reason for Removal
	Great Brook (below Green		
NJ02030103010050-01	Village Rd)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Great Egg Harbor R (GEH Bay		
NJ02040302050140-01	to Gibson Crk)	Total Coliform	TMDL approved or established by EPA (4A)
	Great Egg Harbor R (GEH Bay		
NJ02040302050130-01	to Miry Run)	Total Coliform	TMDL approved or established by EPA (4A)
	Great Swamp Branch (below Rt		
NJ02040301160130-01	206)	Escherichia coli	TMDL approved or established by EPA (4A)
	Green Ck (Norburys Landng to		Applicable WQS attained; original basis for
NJ02040206230040-01	Pierces Pt)	Total Dissolved Solids	
	Hackensack R (Amtrak bridge		Applicable WQS attained; according to new
NJ02030103180090-01	to Rt 3)	Mercury in Fish Tissue	assessment method
NJ02030103010090-01	Harrisons Brook	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Highland Lake/Wawayanda		
NJ02020007040040-01	Lake	Mercury	TMDL approved or established by EPA (4A)
NJ02040206130030-01	Indian Branch (Scotland Run)	Escherichia coli	TMDL approved or established by EPA (4A)
NJ02040200130030-01	Jacobs Creek (below/incl		Applicable WQS attained; reason for
NJ02040105210070-01	Woolsey Brook)	Cause Unknown	recovery unspecified
11302040103210070-01	Jacobs Creek (below/incl		Applicable WQS attained; reason for
NJ02040105210070-01	Woolsey Brook)	рH	recovery unspecified
11302040103210070-01		Mercury in Water	
NJ02030104010020-01	Kill Van Kull West	Column	TMDL approved or established by EPA (4A)
1.00203010 1010020 01			(4A)
NJ02040105150020-01	Lake Hopatcong	Mercury	TMDL approved or established by EPA (4A)
	-		
NJ02040301170100-01	Landing Creek (above Rt 563)	Escherichia coli	TMDL approved or established by EPA (4A)

Assessment Unit	AU Name	Cause	Reason for Removal
	Lawrence Bk (Church Lane to		
NJ02030105130050-01	Deans Pond)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Lawrence Bk (Milltown to		
NJ02030105130060-01	Church Lane)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	LDRV tribs (Assiscunk Ck to		
NJ02040201090030-01	Blacks Ck)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Little Flat Brook (Beerskill and		
NJ02040104130010-01	above)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02040105240050-01	Little Shabakunk Creek	Escherichia coli	TMDL approved or established by EPA (4A)
			Applicable WQS attained; original basis for
NJ02040105200010-01	Lockatong Ck (above Rt 12)	Temperature, water	listing was incorrect
			Applicable WQS attained; original basis for
NJ02040105200010-01	Lockatong Ck (above Rt 12)	Turbidity	listing was incorrect
	Long Branch direct Atlantic		
NJ02030104080050-01	drainage	Enterococcus	TMDL approved or established by EPA (4A)
	Long Branch direct Atlantic		
NJ02030104080050-01	drainage	Escherichia coli	TMDL approved or established by EPA (4A)
			Applicable WQS attained; reason for
NJ02040105120010-01	Lopatcong Creek (above Rt 57)	Cause Unknown	recovery unspecified
	Manalapan Bk(incl LkManlpn		
NJ02030105140020-01	to 40d16m15s)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Manalapan Bk(incl LkManlpn		
NJ02030105140020-01	to 40d16m15s)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Manalapan Brook (above 40d		
NJ02030105140010-01	16m 15s)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Manalapan Brook (below Lake		
NJ02030105140030-01	Manalapan)	Mercury	TMDL approved or established by EPA (4A)

Assessment Unit	AU Name	Cause	Reason for Removal
NJ02040301070080-01	Manapaqua Brook	Escherichia coli	TMDL approved or established by EPA (4A)
		Mercury in Water	
NJ02040301070080-01	Manapaqua Brook	Column	TMDL approved or established by EPA (4A)
	Manasquan R (gage to West		
NJ02030104100050-01	Farms Rd)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Manasquan River (below Rt 70		
NJ02030104100100-01	bridge)	Enterococcus	TMDL approved or established by EPA (4A)
	Maple Run/Mill Br(Zion Rd to		Applicable WQS attained; reason for
NJ02040302060020-01	Cardiff rd)	Cause Unknown	recovery unspecified
	Matawan Creek (above Ravine		
NJ02030104060020-01	Drive)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Matawan Creek (below Ravine		Applicable WQS attained; according to new
NJ02030104060030-01	Drive)	Mercury in Fish Tissue	assessment method
	Matawan Creek (below Ravine		Applicable WQS attained; reason for
NJ02030104060030-01	Drive)	Phosphorus (Total)	recovery unspecified
	Maurice River (below Leesburg)		
NJ02040206200050-01	to EastPt	Enterococcus	TMDL approved or established by EPA (4A)
	Maurice River(Union Lake to		
NJ02040206160030-01	Sherman Ave)	Escherichia coli	TMDL approved or established by EPA (4A)
	MauriceR(BlkwtrBr to/incl		
NJ02040206140010-01	WillowGroveLk)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Menantico Creek (below Rt		
NJ02040206180050-01	552)	Escherichia coli	TMDL approved or established by EPA (4A)
	Menantico Creek (below Rt		
NJ02040206180050-01	552)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
			Applicable WQS attained; according to new
NJ02040105140040-01	Merrill Creek	Mercury in Fish Tissue	assessment method

Assessment Unit	AU Name	Cause	Reason for Removal
	Metedeconk R (Beaverdam Ck		
NJ02040301040020-01	to confl)	Enterococcus	TMDL approved or established by EPA (4A)
	Metedeconk R SB (Rt 9 to		
NJ02040301030040-01	Bennetts Pond)	Mercury	TMDL approved or established by EPA (4A)
NJ02030105120180-01	Middle Brook	Escherichia coli	TMDL approved or established by EPA (4A)
NJ02030105120180-01	Middle Brook	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02040302050120-01	Middle River / Peters Creek	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02040301140020-01	Mill Branch (below GS Parkway)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02040301130030-01	Mill Ck (below GS Parkway)/Manahawkin Ck	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02040206160040-01	Mill Creek (lower)	Escherichia coli	TMDL approved or established by EPA (4A)
NJ02040302080030-01	Mill Creek / Sunks Ck / Big Elder Creek	Total Coliform	TMDL approved or established by EPA (4A)
NJ02030105110110-01	Millstone R (BlackwellsMills to BedenBk)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02030105110020-01	Millstone R (HeathcoteBk to Harrison St)	Mercury	TMDL approved or established by EPA (4A)
NJ02030105110140-01	Millstone R(AmwellRd to BlackwellsMills)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02030105110170-01	Millstone River (below Amwell Rd)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02040105150090-01	Mine Brook (Morris Co)	Cause Unknown	Applicable WQS attained; reason for recovery unspecified

Assessment Unit	AU Name	Cause	Reason for Removal
			Applicable WQS attained; reason for
NJ02040105210040-01	Moore Creek	Cause Unknown	recovery unspecified
NJ02040105090040-01	Mountain Lake Brook	Mercury	TMDL approved or established by EPA (4A)
	Muddy Run (above/incl Elmer		Applicable WQS attained; reason for
NJ02040206150010-01	Lake)	Cause Unknown	recovery unspecified
	Muddy Run (incl ParvinLk to		
NJ02040206150050-01	Palatine Lk)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Mullica R (Pleasant Mills to		
NJ02040301160150-01	39d40m30s)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Mullica R. (BatstoR to		
NJ02040301170140-01	Nescochague Lake)	Escherichia coli	TMDL approved or established by EPA (4A)
	Mullica River (39d40m30s to Rt		
NJ02040301160140-01	206)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Mullica River (BatstoR to		
NJ02040301170040-01	PleasantMills)	Escherichia coli	TMDL approved or established by EPA (4A)
	Mullica River (Lower Bank Rd		
NJ02040301170080-01	to Rt 563)	Escherichia coli	TMDL approved or established by EPA (4A)
	Mullica River (Rt 206 to		
NJ02040301160030-01	Jackson Road)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Musconetcong R (Rt 31 to		Applicable WQS attained; reason for
NJ02040105160030-01	Changewater)	Cause Unknown	recovery unspecified
	Musconetcong R (Wills Bk to		Applicable WQS attained; original basis for
nj02040105150030-01	LkHopatcong)	Nitrates	listing was incorrect
	Musconetcong R (Wills Bk to		Applicable WQS attained; original basis for
nj02040105150030-01	LkHopatcong)	Phosphorus (Total)	listing was incorrect
NJ02040105150110-01	Musconetcong R(Waterloo area)	Escherichia coli	TMDL approved or established by EPA (4A)

Assessment Unit	AU Name	Cause	Reason for Removal
	Musconetcong R(Waterloo		
NJ02040105150070-01	to/incl WillsBk)	Escherichia coli	TMDL approved or established by EPA (4A)
	Nantuxent Creek (above		
NJ02040206100060-01	Newport Landing)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Navesink R (below Rt		Applicable WQS attained; according to new
NJ02030104070110-01	35)/LowerShrewsbury	Mercury in Fish Tissue	assessment method
	Newton Creek (LDRV-Kaighn		Applicable WQS attained; according to new
NJ02040202120090-01	Ave to LT Ck)	Mercury in Fish Tissue	assessment method
NJ02030104070090-01	Nut Swamp Brook	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02040202020020-01	Ong Dun / Jooks Dun	Escherichia coli	TMDL approved or established by EPA (4A)
INJ02040202020020-01	Ong Run / Jacks Run Oswego R (Andrews Rd to Sim		TWDL approved of established by EFA (4A)
NJ02040301180060-01	Place Resv)	Maraury in Figh Tiggua	TMDL approved or established by EPA (4A)
INJU2040301180000-01	Oswego River (below Andrews	Mercury III FISH TISSue	TMDL approved of established by EFA (4A)
NJ02040301180070-01	Road)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
		1.101001.9	Applicable WQS attained; according to new
NJ02030103180040-01	Overpeck Creek	Mercury in Fish Tissue	••••••
		•	
NJ02030103050020-01	Pacock Brook	Mercury	TMDL approved or established by EPA (4A)
	Passaic R Lwr (Fair Lawn Ave		
NJ02030103120070-01	to Goffle)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Passaic R Lwr (Goeffle Bk to		
NJ02030103120110-01	Pump stn)	Escherichia coli	TMDL approved or established by EPA (4A)
	Passaic R Lwr (Goeffle Bk to		
NJ02030103120110-01	Pump stn)	Oxygen, Dissolved	TMDL approved or established by EPA (4A)
	Passaic R Lwr (Goeffle Bk to		
NJ02030103120110-01	Pump stn)	Phosphorus (Total)	TMDL approved or established by EPA (4A)

Assessment Unit	AU Name	Cause	Reason for Removal
	Passaic R Lwr (Goffle Bk to		
NJ02030103120100-01	Pompton R)	Escherichia coli	TMDL approved or established by EPA (4A)
	Passaic R Lwr (Goffle Bk to		
NJ02030103120100-01	Pompton R)	Oxygen, Dissolved	TMDL approved or established by EPA (4A)
	Passaic R Lwr (Saddle R to		
NJ02030103120090-01	Dundee Dam)	Oxygen, Dissolved	TMDL approved or established by EPA (4A)
	Passaic R Lwr (Saddle R to		
NJ02030103120090-01	Dundee Dam)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Passaic R Lwr (Second R to		Applicable WQS attained; according to new
NJ02030103150030-01	Saddle R)	Mercury in Fish Tissue	assessment method
	Passaic R Upr (40d 45m to		
NJ02030103010130-01	Snyder Ave)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Passaic R Upr (above Osborn		
NJ02030103010010-01	Mills)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Passaic R Upr (Dead R to		
NJ02030103010070-01	Osborn Mills)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Passaic R Upr (Pompton R to		
NJ02030103040010-01	Pine Bk)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Passaic R Upr (Rockaway to		
NJ02030103010170-01	Hanover RR)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Peckman River (below CG Res		
NJ02030103120020-01	trib)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Pennsauken Ck NB (incl		
NJ02040202100020-01	StrwbrdgLk-NJTPK)	Mercury	TMDL approved or established by EPA (4A)
	Pequannock R (above OakRidge		Applicable WQS attained; reason for
NJ02030103050030-01	Res outlet)	Cause Unknown	recovery unspecified
	Pequannock R (above OakRidge		
NJ02030103050030-01	Res outlet)	Mercury	TMDL approved or established by EPA (4A)

Assessment Unit	AU Name	Cause	Reason for Removal
	Pequannock R (below Macopin		
NJ02030103050080-01	gage)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Pequannock R(Macopin gage to		
NJ02030103050060-01	Charl'brg)	Mercury	TMDL approved or established by EPA (4A)
	Pequest R (below Bear Swamp		
NJ02040105070060-01	to Trout Bk)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Pequest R (Cemetary Road to		
NJ02040105090020-01	Drag Strip)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Pequest R (Drag Stripbelow		
NJ02040105090010-01	Bear Swamp)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Pequest R (Furnace Bk to		
NJ02040105090030-01	Cemetary Road)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Pohatcong Ck (Springtown to		
NJ02040105140060-01	Merrill Ck)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02030103110020-01	Pompton River	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02030103110020-01	Pompton River	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Prescott Brook / Round Valley		
NJ02030105020090-01	Reservior	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NU02020102010020_01	Primrose Brook	Dheartherma (Tetal)	TMDL approved on established by EDA (4A)
NJ02030103010020-01		Phosphorus (Total)	TMDL approved or established by EPA (4A)
NU02040202150020 01	Raccoon Ck (Rt 45 to/incl	Manaumy in Fish Tissue	TMDI approved on established by EDA (4A)
NJ02040202150020-01	Clems Run)	Niercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02040202150040-01	Raccoon Ck (Russell Mill Rd to Rt 45)	Monouny in Eich Tierre	TMDI approved or established by EDA (4A)
1NJUZU4UZUZ13UU4U-U1	Rt 45)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NU02040202150020 01	Decese Clr SD	Causa University	Applicable WQS attained; reason for
NJ02040202150030-01	Raccoon Ck SB	Cause Unknown	recovery unspecified

Assessment Unit	AU Name	Cause	Reason for Removal
	Rancocas Ck NB (incl Mirror		
NJ02040202020030-01	Lk-GauntsBk)	Escherichia coli	TMDL approved or established by EPA (4A)
	Rancocas Ck SB (BobbysRun to		
NJ02040202050090-01	Vincentown)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Rancocas Ck SB (Vincentown-		
NJ02040202050080-01	FriendshipCk)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Rancocas Ck SW Branch (above		
NJ02040202060080-01	Medford br)	Escherichia coli	TMDL approved or established by EPA (4A)
	Rancocas Creek SB(above		
NJ02040202050060-01	Friendship Ck)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
			Applicable WQS attained; according to new
NJ02030104910010-01	Raritan Bay (west of Thorns Ck)	Mercury in Fish Tissue	assessment method
	Raritan R Lwr (Millstone to Rt		
NJ02030105080030-01	206)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Raritan R Lwr (Rt 206 to NB /		
NJ02030105080020-01	SB)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Raritan R Lwr(I-287 Piscatway-		
NJ02030105120140-01	Millstone)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Raritan R SB(Califon br to Long		
NJ02030105010060-01	Valley)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Raritan R SB(LongValley br to		
NJ02030105010050-01	74d44m15s)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Raritan R SB(NB to Pleasant		
NJ02030105040040-01	Run)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Raritan R SB(Pleasant Run-		
NJ02030105040010-01	Three Bridges)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Raritan R SB(Three Bridges-		
NJ02030105020100-01	Prescott Bk)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)

Assessment Unit	AU Name	Cause	Reason for Removal
	Raritan River SB(74d 44m 15s		
NJ02030105010040-01	to Rt 46)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
			Applicable WQS attained; according to new
NJ02030105010030-01	Raritan River SB(above Rt 46)	Mercury in Fish Tissue	assessment method
	Ridgeway Br (below Hope		
NJ02040301070040-01	Chapel Rd)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Ridgeway Br (Hope Chapel Rd		
NJ02040301070030-01	to HarrisBr)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02030103070080-01	Ringwood Creek	Mercury	TMDL approved or established by EPA (4A)
	Rockaway R (74d 33m 30s to		
NJ02030103030070-01	Stephens Bk)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Rockaway R (above Longwood		
NJ02030103030030-01	Lake outlet)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Rockaway R (BM 534 brdg to		Applicable WQS attained; reason for
NJ02030103030090-01	74d 33m 30s)	Cause Unknown	recovery unspecified
	Rockaway R (BM 534 brdg to		
NJ02030103030090-01	74d 33m 30s)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Rockaway R (Boonton dam to		
NJ02030103030150-01	Stony Brook)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Rockaway R (Passaic R to		
NJ02030103030170-01	Boonton dam)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Rockaway R (Stephens Bk to		
NJ02030103030040-01	Longwood Lk)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Rockaway R (Stony Brook to		
NJ02030103030140-01	BM 534 brdg)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Saddle River (Hohokus to		
NJ02030103140080-01	Ridgewood gage)	Escherichia coli	TMDL approved or established by EPA (4A)

AU Name	Cause	Reason for Removal
Saddle River (Rt 4 to Rt 17)	Escherichia coli	TMDL approved or established by EPA (4A)
	Escherichia coli	TMDL approved or established by EPA (4A)
Salem River (above Woodstown		
gage)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
Salem River (above Woodstown		
gage)	1 ( )	TMDL approved or established by EPA (4A)
		Applicable WQS attained; according to new
,	Mercury in Fish Tissue	assessment method
Savages Run (above East Creek		
Pond)	Mercury	TMDL approved or established by EPA (4A)
	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
Scotland Run (below Delsea		
Drive)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
`	<b>T</b>	
Mill gage)	Enterococcus	TMDL approved or established by EPA (4A)
		Applicable WQS attained; original basis for
Shimers Brook	Phosphorus (Total)	listing was incorrect
Sluice Creek	Total Coliform	TMDL approved or established by EPA (4A)
South Fork of Bound Brook	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
		Applicable WQS attained; original basis for
	Phosphorus (Total)	listing was incorrect
	Saddle River (Rt 4 to Rt 17) Salem Canal Salem River (above Woodstown gage) Salem River (above Woodstown gage) Sandy Hook Bay (east of Thorns Ck) Savages Run (above East Creek Pond) Scotland Run (above Fries Mill) Scotland Run (below Delsea	Saddle River (Rt 4 to Rt 17)Escherichia coliSalem CanalEscherichia coliSalem River (above Woodstown gage)Mercury in Fish TissueSalem River (above Woodstown gage)Phosphorus (Total)Sandy Hook Bay (east of Thorns Ck)Mercury in Fish TissueSavages Run (above East Creek Pond)MercuryScotland Run (above Fries Mill)Mercury in Fish TissueScotland Run (below Delsea Drive)Mercury in Fish TissueShannae BrookMercury in Fish TissueShark River (below Remsen Mill gage)EnterococcusShimers BrookPhosphorus (Total)Sluice CreekTotal ColiformSouth Fork of Bound Brook South Run (Jumping Brook toMercury in Fish Tissue

Assessment Unit	AU Name	Cause	Reason for Removal
			Applicable WQS attained; reason for
NJ02040105040050-01	Sparta Junction tribs	Cause Unknown	recovery unspecified
	Spruce Run Reservior /		
NJ02030105020040-01	Willoughby Brook	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02040302030050-01	Squankum Branch (GEHR)	Escherichia coli	TMDL approved or established by EPA (4A)
	Stony Bk(Province Line Rd to		
NJ02030105090050-01	74d46m dam)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02040105030020-01	Swartswood Lake and tribs	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Swimming River Reservior /		
NJ02030104070070-01	Slope Bk	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02030103170040-01	Tenakill Brook	Phosphorus (Total)	TMDL approved or established by EPA (4A)
NJ02040301080090-01	Toms R Lwr (below Rt 166)	Enterococcus	TMDL approved or established by EPA (4A)
NJ02040105030030-01	Trout Brook	Mercury	TMDL approved or established by EPA (4A)
NJ02040105070050-01	Trout Brook/Lake Tranquility	Cause Unknown	Applicable WQS attained; reason for recovery unspecified
	Troy Brook (above Reynolds		
NJ02030103020080-01	Ave)	Mercury	TMDL approved or established by EPA (4A)
	Troy Brook (below Reynolds		
NJ02030103020090-01	Ave)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
NJ02040301140030-01	Tuckerton Creek (below Mill Branch)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Union Branch (below Blacks Br		
NJ02040301070090-01	74d22m05s)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)

Assessment Unit	AU Name	Cause	Reason for Removal
	Upper NY Bay / Kill Van Kull		
NJ02030104010030-01	(74d07m30s)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
NJ02030104060050-01	Waackaack Creek	Enterococcus	TMDL approved or established by EPA (4A)
	Wading River WB (Jenkins Rd		
NJ02040301190050-01	to Rt 563)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Wallkill R(Franklin Pond to		
NJ02020007010080-01	Ogdensburg)	Arsenic	TMDL approved or established by EPA (4A)
	Wallkill R(Hamburg SW Bdy to		
NJ02020007010040-01	Ogdensburg)	Arsenic	TMDL approved or established by EPA (4A)
	Wallkill R(Martins Rd to		Applicable WQS attained; reason for
NJ02020007010070-01	Hamburg SW Bdy)	Phosphorus (Total)	recovery unspecified
	Wallkill R/Lake Mohawk(above		Applicable WQS attained; reason for
NJ02020007010010-01	Sparta Sta)	Cause Unknown	recovery unspecified
	Wanaque R/Greenwood		Applicable WQS attained; reason for
NJ02030103070030-01	Lk(aboveMonks gage)	Cause Unknown	recovery unspecified
	Wanaque R/Greenwood		
NJ02030103070030-01	Lk(aboveMonks gage)	Mercury	TMDL approved or established by EPA (4A)
	Wanaque Reservior (below		
NJ02030103070050-01	Monks gage)	Mercury	TMDL approved or established by EPA (4A)
	West Ck (below PaperMillRd)		
NJ02040206210040-01	to MooresBch	Total Coliform	TMDL approved or established by EPA (4A)
	Westecunk Creek (above GS		
NJ02040301130050-01	Parkway)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Westecunk Creek (below GS		
NJ02040301130060-01	Parkway)	Total Coliform	TMDL approved or established by EPA (4A)
	Whippany R (Malapardis to Lk		
NJ02030103020050-01	Pocahontas)	Phosphorus (Total)	TMDL approved or established by EPA (4A)

Assessment Unit	AU Name	Cause	Reason for Removal
	Whippany R (Rockaway R to		
NJ02030103020100-01	Malapardis Bk)	Phosphorus (Total)	TMDL approved or established by EPA (4A)
	Whippany R (Wash. Valley Rd		
NJ02030103020020-01	to 74d 33m)	Escherichia coli	TMDL approved or established by EPA (4A)
	Whippany R(Lk Pocahontas to		
NJ02030103020040-01	Wash Val Rd)	Mercury	TMDL approved or established by EPA (4A)
NJ02040202120100-01	Woodbury Creek (above Rt 45)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
	Wrangel Brook (below Michaels		Applicable WQS attained; reason for
NJ02040301080050-01	Branch)	Cause Unknown	recovery unspecified
	Wreck Pond Brook (below Rt		
NJ02030104090080-01	35)	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)
			Applicable WQS attained; reason for
NJ02040105050040-01	Yards Creek	Cause Unknown	recovery unspecified
NJ02040105050040-01	Yards Creek	Mercury in Fish Tissue	TMDL approved or established by EPA (4A)

Assessment Unit	AU Name	Cause	Reason for Removal
	Delaware Bay Zone 6		TMDL approved or established by
NJDELAWARE RIVER 6	•	Enterococcus	EPA (4A)
			Applicable WQS attained;
	Delaware Bay Zone 6		according to new assessment
NJDELAWARE RIVER 6	(New Jersey portion)	Oxygen, Dissolved	method
	Delaware Bay Zone 6		TMDL approved or established by
NJDELAWARE RIVER 6	(New Jersey portion)	PCB in Fish Tissue	EPA (4A)
	Delaware Bay Zone 6		TMDL approved or established by
NJDELAWARE RIVER 6	(New Jersey portion)	Total Coliform	EPA (4A)
			Applicable WQS attained;
			according to new assessment
NJDELAWARE RIVER 2	Delaware River 1C	Arsenic	method
			Applicable WQS attained;
			according to new assessment
NJDELAWARE RIVER 2	Delaware River 1C	Chromium (total)	method
			Applicable WQS attained;
			according to new assessment
NJDELAWARE RIVER 2	Delaware River 1C	Copper	method
			Applicable WQS attained;
			according to new assessment
NJDELAWARE RIVER 8	Delaware River 1D	Arsenic	method
			Applicable WQS attained;
			according to new assessment
NJDELAWARE RIVER 8	Delaware River 1D	Chromium (total)	method
			Applicable WQS attained;
			according to new assessment
NJDELAWARE RIVER 8	Delaware River 1D	Copper	method
			Applicable WQS attained;
		Mercury in Water	according to new assessment
NJDELAWARE RIVER 8	Delaware River 1D	Column	method
			Applicable WQS attained;
			according to new assessment
NJDELAWARE RIVER 14	Delaware River 1E	Arsenic	method
			Applicable WQS attained;
			according to new assessment
NJDELAWARE RIVER 14	Delaware River 1E	Lead	method
			Applicable WQS attained;
			according to new assessment
NJDELAWARE RIVER 15	Delaware River 2	Lead	method
			TMDL approved or established by
NJDELAWARE RIVER 15	Delaware River 2	PCB in Fish Tissue	EPA (4A)

			Applicable WQS attained; original
NJDELAWARE RIVER 15	Delaware River 2	Temperature, water	basis for listing was incorrect
			Applicable WQS attained;
			according to new assessment
NJDELAWARE RIVER 16	Delaware River 3	Arsenic	method
			Applicable WQS attained;
			according to new assessment
NJDELAWARE RIVER 16	Delaware River 3	Cadmium	method
			Applicable WQS attained;
			according to new assessment
NJDELAWARE RIVER 16	Delaware River 3	Mercury	method
		Polychlorinated	TMDL approved or established by
NJDELAWARE RIVER 16	Delaware River 3	biphenyls	EPA (4A)
			Applicable WQS attained;
			according to new assessment
NJDELAWARE RIVER 17	Delaware River 4	Copper	method
			TMDL approved or established by
NJDELAWARE RIVER 17	Delaware River 4	PCB in Fish Tissue	EPA (4A)
			Applicable WQS attained;
			according to new assessment
NJDELAWARE RIVER 17	Delaware River 4	Temperature, water	method
			TMDL approved or established by
NJDELAWARE RIVER 18	Delaware River 5A	PCB in Fish Tissue	EPA (4A)
			Applicable WQS attained; original
NJDELAWARE RIVER 18	Delaware River 5A	Temperature, water	basis for listing was incorrect
		Polychlorinated	TMDL approved or established by
NJDELAWARE RIVER 19	Delaware River 5B	biphenyls	EPA (4A)
			Applicable WQS attained; original
NJDELAWARE RIVER 19	Delaware River 5B	Temperature, water	basis for listing was incorrect
		Polychlorinated	TMDL approved or established by
NJDELAWARE RIVER 20	Delaware River 5C	biphenyls	EPA (4A)
			Applicable WQS attained; original
NJDELAWARE RIVER 20	Delaware River 5C	Temperature, water	basis for listing was incorrect
			TMDL approved or established by
NJDELAWARE RIVER 20	Delaware River 5C	Total Coliform	EPA (4A)

Assessment Unit	Assessment Unit Name	Parameter
NJ02030105020050-01	Beaver Brook (Clinton)	pH
NJ02030105020050-01	Beaver Brook (Clinton)	Phosphorus (Total)
NJ02030105030030-01	Headquarters trib (Third Neshanic River)	Oxygen, Dissolved
NJ02030105110010-01	Heathcote Brook	Total Suspended Solids (TSS)
NJ02030105050020-01	Lamington R (Hillside Rd to Rt 10)	Phosphorus (Total)
NJ02030105050070-01	Lamington R(HallsBrRd-HerzogBrk)	pH
NJ02030105050070-01	Lamington R(HallsBrRd-HerzogBrk)	Phosphorus (Total)
NJ02030105150060-01	Matchaponix Brook (below Pine Brook)	Phosphorus (Total)
NJ02030105100020-01	Millstone R (Applegarth road to Rt 33)	Phosphorus (Total)
NJ02030105100020-01	Millstone R (Applegarth road to Rt 33)	Total Suspended Solids (TSS)
NJ02030105110110-01	Millstone R (BlackwellsMills to BedenBk)	Phosphorus (Total)
NJ02030105100060-01	Millstone R (Cranbury Bk to Rocky Bk)	Phosphorus (Total)
NJ02030105100030-01	Millstone R (RockyBk to Applegarth road)	Phosphorus (Total)
NJ02030105110140-01	Millstone R(AmwellRd to BlackwellsMills)	Phosphorus (Total)
NJ02030105100010-01	Millstone River (above Rt 33)	Phosphorus (Total)
NJ02030105100010-01	Millstone River (above Rt 33)	Total Suspended Solids (TSS)
NJ02030105110170-01	Millstone River (below Amwell Rd)	Phosphorus (Total)
NJ02030105030070-01	Neshanic River (below Black Brk)	Phosphorus (Total)
NJ02030105030070-01	Neshanic River (below Black Brk)	pH
NJ02030105030070-01	Neshanic River (below FNR / SNR confl)	
		Oxygen, Dissolved Phosphorus (Total)
NJ02030105030060-01	Neshanic River (below FNR / SNR confl)	
NJ02030105030060-01	Neshanic River (below FNR / SNR confl)	pH
NJ02030105110100-01	Pike Run (below Cruser Brook)	Phosphorus (Total)
NJ02030105080030-01	Raritan R Lwr (Millstone to Rt 206)	Total Suspended Solids (TSS)
NJ02030105080020-01	Raritan R Lwr (Rt 206 to NB / SB)	Phosphorus (Total)
NJ02030105070030-01	Raritan R NB (below Rt 28)	Total Suspended Solids (TSS)
NJ02030105070030-01	Raritan R NB (below Rt 28)	Phosphorus (Total)
NJ02030105040040-01	Raritan R SB(NB to Pleasant Run)	Total Suspended Solids (TSS)
NJ02030105040040-01	Raritan R SB(NB to Pleasant Run)	Phosphorus (Total)
NJ02030105040040-01	Raritan R SB(NB to Pleasant Run)	pH
NJ02030105040010-01	Raritan R SB(Pleasant Run-Three Bridges)	Phosphorus (Total)
NJ02030105020080-01	Raritan R SB(Prescott Bk to River Rd)	Total Suspended Solids (TSS)
NJ02030105020070-01	Raritan R SB(River Rd to Spruce Run)	Total Suspended Solids (TSS)
NJ02030105020070-01	Raritan R SB(River Rd to Spruce Run)	Phosphorus (Total)
NJ02030105020070-01	Raritan R SB(River Rd to Spruce Run)	pH
NJ02030105020100-01	Raritan R SB(Three Bridges-Prescott Bk)	Phosphorus (Total)
NJ02030105020100-01	Raritan R SB(Three Bridges-Prescott Bk)	Total Suspended Solids (TSS)
NJ02030105050090-01	Rockaway Ck (below McCrea Mills)	Phosphorus (Total)
NJ02030105050100-01	Rockaway Ck SB	Phosphorus (Total)
NJ02030105050100-01	Rockaway Ck SB	Total Suspended Solids (TSS)
NJ02030105100050-01	Rocky Brook (below Monmouth Co line)	Phosphorus (Total)
NJ02030105110120-01	Sixmile Run (above Middlebush Rd)	Phosphorus (Total)
NJ02030105110130-01	Sixmile Run (below Middlebush Rd)	Phosphorus (Total)
NJ02030105090070-01	Stony Bk (Harrison St to Rt 206)	Phosphorus (Total)
NJ02030105090060-01	Stony Bk (Rt 206 to Province Line Rd)	Phosphorus (Total)
NJ02030105090050-01	Stony Bk(Province Line Rd to 74d46m dam)	Phosphorus (Total)
NJ02030105030040-01	Third Neshanic River	Oxygen, Dissolved
NJ02030105150010-01	Weamaconk Creek	Phosphorus (Total)

Entity	Entity Type	Data Used for 2010 List?	If not, why not?	Waterbody Name	Monitoring Description	Monitoring dates	Parameters
Atlantic County Health Department	county government	yes	n/a	Atlantic County ocean and back bays	beach monitoring	2004-2008	pathogens
Brick Township MUA	wastewater facility	no	no approved QAPP for this data set	Metedeconk river	ambient monitoring	I UUX to precent	biological, conventional chemical/physical
Camden County SCD	county government	no	data not submitted in usable format	Mantua Creek, Bethel Mill Pond	ambient monitoring	October 07-november 08	conventional chemical/physical
Camden County SCD	county government		no approved QAPP for this data set; data not submitted in useable format	Raccoon Creek	pathogen monitoring	June 4, 11, 18, 25; July 2, 2008	pathogens
Cape May County MUA	county UA	no	no data submitted	Atlantic Ocean	Ocean Outfall Monitoring	n/a	n/a
Cape May County Health Department	county government	yes	n/a	Cape May County Ocean and back bays	beach monitoring	2004-2008	pathogens
Center for Biological Diversity	other (non-profit)	no	no data submitted	Atlantic Ocean	A compendium of studies on the acidification of ocean waters due to carbon dioxide pollution	n/9	biological, conventional chemical/physical
Crosswicks/USGS	USGS	yes	n/a	Crosswicks Creek	duirnal DO	**	dissolved oxygen
DRBC (non-tidal tribs)	regional government	yes	n/a	Delaware Rive non-tidal tributaries	ambient monitoring	2004-2008	conventional chemical/physical
DRBC (tidal tribs)	interstate agency	yes	n/a	Delaware River tidal tributaries	ambient monitoring	2004-2009	conventional chemical/physical
DRBC/Crafts Creek and Spring Hill Brook Watershed Association	volunteer	yes	n/a	crafts creek, spring hill brook	biological monitoring	2008	macroinvertebrates
Edison Wetlands Association	consultant	no	data not submitted electronically and no approved QAPP for this data set	Raritan River	metals	4/1/2006	conventional chemical/physical

Entity	Diurnal?	Data Repository*	Address	Contact Person	Phone Number	URL
Atlantic County Health Department		STORET	Stillwater Building, 201 South Shore Road, Northfield, NJ 08225		609- 645-7000	http://www.aclink.org/PublicHealth/Environmental/env_topics.asp?ID=2
Brick Township MUA		n/a	1551 Highway 88 West, Brick Twp. NJ 08724	Robert A. Karl	732-458-7725	
Camden County SCD		n/a	423 Commerce Lane, W. Berlin, NJ 08091	Craig McGee	856-767-6299	
Camden County SCD		n/a	423 Commerce Lane, W. Berlin, NJ 08091	Craig McGee	856-767-6299	
Cape May County MUA		n/a	1645 Ferry Ave., Camden, NJ 08104	Kevin Thomas	609-465-1311	
Cape May County Health Department		STORET	4 Moore Road Cape May Court House, NJ 08210		609- 465-1187	http://www.capemaycountygov.net/cit-e- access/webpage.cfm?TID=5&TPID=532
Center for Biological Diversity		n/a	1095 Market Street, Suite 511, San Francisco, CA 94103	Miyoko Sakasshita, Ocean Program Attorney	415-436-9682 x 308	
Crosswicks/USGS	yes	NWIS	USGS, 810 Bear Tavern Rd., Suite 206, West Trenton, NJ 08628		609-771-3900	http://nj.usgs.gov/
DRBC (non-tidal tribs)		DEP Database	DRBC, 25 State Police Drive, West Trenton, NJ 08628		609-883-9500	http://www.state.nj.us/drbc/
DRBC (tidal tribs)		STORET	DRBC, 25 State Police Drive, West Trenton, NJ 08628		609-883-9500	http://www.state.nj.us/drbc/
DRBC/Crafts Creek and Spring Hill Brook Watershed Association		STORET	DRBC, 25 State Police Drive, West Trenton, NJ 08628		609-883-9500	http://www.state.nj.us/drbc/
Edison Wetlands Association		n/a	Triple C Ranch & Nature Center, P.O. Box 1208, South Plainfield, NJ 07080		732-321-1300	

Entity	Entity Type	Data Used for 2010 List?	If not, why not?	Waterbody Name	Monitoring Description	Monitoring dates	Parameters
Evesham MUA	wastewater facility	yes	n/a	Rancocas Creek - Evesham	Nutrient Impact Study	2004-2005	TP, DO, pH, Chlor. A
Great Swamp Watershed Association	volunteer	yes	n/a	Loantaka Brook; Great Brook and 4 tributaries to GS Natl Wildlife Refuge	biological monitoring	2004-2008	macroinvertebrates
Hammonton	wastewater facility	yes	n/a	Hammonton Creek	Nutrient Impact Study	2005-2006	TP, DO, pH, Chlor. A
HoHoKus/USGS	federal government	yes	n/a	Saddle River	TMDL Study	**	various
Interstate Environmental Commission	interstate agency	yes	n/a	Hudson River by Alpine (1 station)	pathogen monitoring	2006-2008	Enterococcus and Total Coliform
Interstate Environmental Commission	interstate agency	no	data not available	Shared waters of NY & NJ (2004)	ambient monitoring	2004	pathogens
Interstate Environmental Commission	interstate agency	no	data not available	Shared waters of NY & NJ	ambient monitoring	2005	pathogens
Interstate Environmental Commission	interstate agency	no	data not available	New York/New Jersey Harbor	pathogen monitoring	2006-2008	pathogens
Lake Hopatcong Commission/Princeton Hydro	state commission	no	no approved QAPP for this data set	Lake Hopatcong	Lake Hopatcong baseline tributary monitoring program	2006	conventional chemical/physical
Lake Hopatcong Commission/Princeton Hydro	state commission	no	QAPP approved for student training exercise; not to assess impairment.	Lake Hopatcong	ambient monitoring	2008	conventional chemical/physical
Lake Hopatcong Commission/Princeton Hydro	state commission	no	no approved QAPP for this data set	Lake Musconetcong	Development of TMDL restoration plan	2003	various
Lake Musconetcong Regional Planning Board/Princeton Hydro/	regional government	no	no approved QAPP for this data set	Lake Musconetcong	Lake Musconetcong Bathymetric Survey for dredging plan	2008	

Entity	Diurnal?	Data Repository*	Address	Contact Person	Phone Number	URL
Evesham MUA		DEP Database	984 Tuckerton Road, Marlton, NJ 08054		opw	http://www.eveshammua.com/index.php
Great Swamp Watershed Association		STORET	568 Tempe Wick Road, Morristown, NJ 07960; PO Box 300, New Vernon, NJ 07976	Kelley A. Curran	973-538-3500 x16	www.greatswamp.org
Hammonton		DEP Database	Town of Hammonton, 100 Central Avenue, Hammonton, NJ 08037		609-567-4300	http://www.townofhammonton.org/Home.aspx
HoHoKus/USGS		NWIS	USGS-NJ, 810 Bear Tavern Rd., Suite 206, West Trenton, NJ 08628		609-771-3900	http://nj.usgs.gov/
Interstate Environmental Commission		STORET	311 West 43rd St., Suite 201, New York, NY 10036	Peter Sattler	212- 581-5719	http://iec-nynjct.org/
Interstate Environmental Commission		n/a	311 West 43rd St., Suite 201, New York, NY 10036	Peter Sattler	212- 581-5719	http://iec-nynjct.org/
Interstate Environmental Commission		n/a	311 West 43rd St., Suite 201, New York, NY 10036	Peter Sattler	212- 581-5719	http://iec-nynjct.org/
Interstate Environmental Commission		n/a	311 West 43rd St., Suite 201, New York, NY 10036	Peter Sattler	212- 581-5719	http://iec-nynjct.org/
Lake Hopatcong Commission/Princeton Hydro		n/a	117 Lakeside Blvd., Landing, New Jersey 07850-1120/Princeton Hydro, LLC, 1108 Old York Road, Suite 1, P.O. Box 720, Ringoes, New Jersey 08551		908- 237-5660	
Lake Hopatcong Commission/Princeton Hydro		n/a	Princeton Hydro, LLC, 1108 Old York Road, Suite 1, P.O. Box 720, Ringoes, New Jersey 08551		908- 237-5660	
Lake Hopatcong Commission/Princeton Hydro		n/a	Princeton Hydro, LLC, 1108 Old York Road, Suite 1, P.O. Box 720, Ringoes, New Jersey 08551		908- 237-5660	
Lake Musconetcong Regional Planning Board/Princeton Hydro/		n/a	Princeton Hydro, LLC, 1108 Old York Road, Suite 1, P.O. Box 720, Ringoes, New Jersey 08551		908- 237-5660	

Entity	Entity Type	Data Used for 2010 List?	If not, why not?	Waterbody Name	Monitoring Description	Monitoring dates	Parameters
Lawrence Brook Watershed/Omni Environmental LLC	wastewater facility	yes	n/a	Lawrence Brook, Ireland Brook, Weston Mill Pond, Farrington Lake	priority stream segment study	7/2004-11/2004	conventional chemical/physical
Long Hill Twp/OMNI	wastewater facility	no	data not available in electronic format	Passaic River	Long Hill Twp STP Metals Translator and Antidegradation study	6/2007-9/2007	metals
Medford Twp	wastewater facility	yes	n/a	Rancocas Creek	Nutrient Impact Study	2008	TP, DO, pH, Chlor. A
Monmouth County Health Department	county government	no	no data submitted	Monmouth cty streams	ambient monitoring	1/1/2007-12/31/2008	conventional chemical/physical
Monmouth County Health Department	county government	yes	n/a	Ocean /bay beaches	beach monitoring	2004-2008	pathogens
Monmouth County Health Department	county government	no	no approved QAPP for this data set	various	ambient monitoring	2008-2009	biological and conventional chemical/physical
Monmouth County Health Department	county government	no	no approved QAPP for this data set	various	ambient monitoring	2004-2006	biological and conventional chemical/physical
Morris Lake STP/Aqua Survey Inc	wastewater facility	no	Project used biological assessment methods not approved by the Department.	Morris Lake	Biological assessment of Morris Lake and Glenn Lake		macroinvertebrates
Mount Holly Township/OMNI Environmental LLC	wastewater facility	yes	n/a	Rancocas Creek - Mt Holly	Nutrient Impact Study	Kevin is checking to verify that this data was used	TP, DO, pH, Chlor. A
Musconetcong S.A./ Najarian Ass.	wastewater facility	yes	n/a	Upper Musconetcong River	Nutrient Impact Study	2004	TP, DO, pH, Chlor. A
New Jersey Harbor Dischargers Group	wastewater facility	yes	n/a	Hackensack River, NJ portion of Hudson River, Passaic River, Rahway River, Elizabeth River, Raritan River, Newark Bay, Upper New York Harbor, Raritan Bay, and Arthur Kill	ambient monitoring	2004-2006	Sanitary/chemistry

Entity	Diurnal?	Data Repository*	Address	Contact Person	Phone Number	URL
Lawrence Brook Watershed/Omni Environmental LLC		DEP Database	Omni Environmental LLC, Research Park 321 Wall Street Princeton, New Jersey 08540-1515		609-924-8821	http://omnienvironmental.com/
Long Hill Twp/OMNI		n/a	OMNI environmental, Research park, 321 Wall St., Princeton NJ 08540	Jim Cosgrove	609-924-8821	
Medford Twp		DEP Database	17 North Main Street, Medford, NJ 08055		609-654-2608	http://medfordtownship.com/
Monmouth County Health Department		n/a	3435 Hwy. 9 Freehold, NJ 07728	Ann Marie Fournier	732-431-7456	http://visitmonmouth.com/404.htm
Monmouth County Health Department		STORET	Monmouth County Health Department	Ann Marie Fournier	732-431-7456	http://visitmonmouth.com/404.htm
Monmouth County Health Department		n/a	3435 Hwy. 9, Freehold, NJ 07728	Ann Marie Fournier	732-431-7456	http://visitmonmouth.com/404.htm
Monmouth County Health Department		n/a	3435 Hwy. 9, Freehold, NJ 07728	Ann Marie Fournier	732-431-7456	http://visitmonmouth.com/404.htm
Morris Lake STP/Aqua Survey Inc		n/a	Aqua Survey, Inc., 469 Point Breeze Rd, Flemington NJ 08822	Thomas Dolee	908-788-8700	
Mount Holly Township/OMNI Environmental LLC		DEP Database	Omni Environmental LLC, Research Park 321 Wall Street Princeton, New Jersey 08540-1515		609-924-8821	http://omnienvironmental.com/
Musconetcong S.A./ Najarian Ass.		DEP Database	Najarian Associates, Industrial Way West, Eatontown, NJ 07724	Howard Litwack	732-389-0220	http://najarian.com/
New Jersey Harbor Dischargers Group		STORET	Passaic Valley Sewerage Commissioners, 600 Wilson Avenue, Newark, New Jersey 07105	Bridget M. McKenna, Mick DeGrave	(973) 817-5976	http://pvsc.com/

Entity	Entity Type	Data Used for 2010 List?	If not, why not?	Waterbody Name	Monitoring Description	Monitoring dates	Parameters
New Jersey Meadowlands Commission	state commission	no	no approved QAPP for this data set	Hackensack River	ambient monitoring	1/2006-12/2008	conventional chemical/physical
New Jersey Water Supply Authority (NJWSA)	purveyor	yes	n/a	Lockatong & Wickeckeoke Creeks	Lockatong and Wickecheoke Creek Watershed Restoration and Protection Plan	2006-2007	Sanitary/chemistry
NJDEP BFBM	state	yes	n/a	Raccoon Creek	TMDL Study	2008	conventional chemical/physical
NJDEP BFBM	state	yes	n/a	Raccoon Creek	TMDL Study	2008	macroinvertebrates
NJDEP Office of Science	state	yes	n/a	statewide	biological monitoring	2007	fish tissue
NJDEP Volunteer Monitoring Program	state government	yes	n/a	Musconetcong	biological monitoring	7/15/08-12/31/08	macroinvertebrates
Ocean County Health Department	county government	yes	n/a	Ocean County ocean and back bays	beach monitoring	2004-2008	pathogens
OMNI Environmental LLC	consultant	yes	n/a	Rancocas Creek	TMDL Study	5/2004-9/2005	conventional chemical/physical
OMNI Environmental LLC	consultant	yes	n/a	Raritan River	TMDL and Nutrient Impact Studies	8/13/82-8/31/5	conventional chemical/physical; also Chlor.a
OMNI Environmental LLC	consultant	yes	n/a	Rockaway River	priority stream segment study	2005	conventional chemical/physical

Appendix E

Entity	Diurnal?	Data Repository*	Address	Contact Person	Phone Number	URL
New Jersey <del>Meadowlands</del> Commission	yes	n/a	Meadowlands Environmental Research Institute, New Jersey Meadowlands Commission, 1 DeKorte Park Plaza, Lyndhurst, NJ 07071	Edward Konsevick	201-460-4646	
New Jersey Water Supply Authority (NJWSA)		DEP Database	74 E. Main Street, Sommerville, NJ 08876	Todd Kratzer	908-685-0315 X30	<u>http://www.njwsa.org/</u>
NJDEP BFBM		STORET	Mail Code 35-01, P.O. Box 420, 35 Arctic Parkway, Trenton, NJ 08625- 0427		609-292-0427	http://www.state.nj.us/dep/wms/bfbm/
NJDEP BFBM		DEP	Mail Code 35-01, P.O. Box 420, 35 Arctic Parkway, Trenton, NJ 08625- 0427		609-292-0427	http://www.state.nj.us/dep/wms/bfbm/
NJDEP Office of Science		DEP	Mail code 428-01, P.O. Box 420, 428 East State St., 1st floor Trenton, NJ 08625		609-984-6070	http://www.nj.gov/dep/dsr/
NJDEP Volunteer Monitoring Program		STORET	PO Box 420 (Mail Code 401-04I), 401 East State Street, 4th floor, Trenton, New Jersey 08625-0420	Katherine Axt	609-771-1753	http://www.state.nj.us/dep/wms/bwqsa/vm/
Ocean County Health Department		STORET	Ocean County Health Department 175 Sunset Ave. Toms River, NJ 08754		732- 341-9700 or 1-800 342-9738	http://ochd.org/
OMNI Environmental LLC		DEP Database	Omni Environmental LLC, Research Park 321 Wall Street Princeton, New Jersey 08540-1515		609-924-8821	http://omnienvironmental.com/
OMNI Environmental LLC		DEP Database	Omni Environmental LLC, Research Park 321 Wall Street Princeton, New Jersey 08540-1515		609-924-8821	http://omnienvironmental.com/
OMNI Environmental LLC		DEP Database	Omni Environmental LLC, Research Park 321 Wall Street Princeton, New Jersey 08540-1515		609-924-8821	http://omnienvironmental.com/

Entity	Entity Type	Data Used for 2010 List?	If not, why not?	Waterbody Name	Monitoring Description	Monitoring dates	Parameters
OMNI Environmental LLC	consultant	no	data not submitted in useable format	So Branch Pennsauken Creek	Pennsauken Creek TMDL Study	2004	conventional chemical/physical and diurnal DO
OMNI Environmental LLC	consultant	yes	n/a	Passaic River	TMDL Study	6/2003-11/2003	conventional chemical/physical
Pequannock River Coalition	volunteer	yes	n/a	Pequannock River and others	continuous monitoring	2005-2008	temperature
Phillipsburg, Town of STP/Hydroqual	wastewater facility	yes	n/a	Lopatcong Creek	Nutrient Impact Study	8/19/05-9/27/05	TP, DO, pH, Chlor. a
Pinelands Commission	state commission	no	no approved QAPP for this data set	Rancocas Creek, Egg harbor River, Barnegat Bay, Mullica river watersheds	ambient monitoring		conventional chemical/physical
Pompeston Creek Watershed Association (bacterial)	volunteer	yes	n/a	Upper East & West Branches of the Pompeston Cr.	pathogen monitoring	2004-2008	pathogens
Pompeston Creek Watershed Association (chemical)	volunteer	yes	n/a	Pompeston Creek, PM002 (700 ft below New Albany Rd, Moorestown) and PM003 (above bridge over Lakeview Cemetery Lake, Cinnaminson)	ambient monitoring	1/07-12/08	conventional chemical/physical
Rutgers Cooperative Extension Service	academic	yes	n/a	Musquapsink Brook	Musquapsink Brook Watershed Restoration Plan	Summer 2007	Sanitary/chemistry
Rutgers Cooperative Extension Service	academic	yes	n/a	Tenakill Brook, Cresskill Brook, Demarest Brook	Tenakill Brook Watershed Restoration and Protection Plan	Summer 2007	Sanitary/chemistry
Rutgers Cooperative Extension Service	academic	yes	n/a	11	Upper Salem River Watershed Restoration Plan	2007	Sanitary/chemistry

Entity	Diurnal?	Data Repository*	Address	Contact Person	Phone Number	URL
OMNI Environmental LLC	yes	n/a	Omni Environmental LLC, Research Park 321 Wall Street Princeton, New Jersey 08540-1515		609-924-8821	
OMNI Environmental LLC		DEP Database	Omni Environmental LLC, Research Park 321 Wall Street Princeton, New Jersey 08540-1515		609-924-8821	http://omnienvironmental.com/
Pequannock River Coalition		DEP Database	PO Box 392, Newfoundland, NJ 07435	Ross Kushner	973-492-3212	www.pequannockriver.org
Phillipsburg, Town of STP/Hydroqual		IDEP Database	Hydro Qual Inc, 1200 Mac Arthur Blvd., Mahwah, NJ 07430	Pat Kehrberger	201-529-5151	http://www.hydroqual.com
Pinelands Commission		n/a	PO Box 7, New Lisbon, NJ 08064	Robert Zampella	609- 894-7300	
Pompeston Creek Watershed Association (bacterial)		INTORET	P.O. Box 2883 Cinnaminson, NJ 08077	Debbie Lord	856-630-0663	www.pompestoncreek.org
Pompeston Creek Watershed Association (chemical)		INTORET	P.O. Box 2883 Cinnaminson, NJ 08077	Debbie Lord	856-235-9204	www.pompestoncreek.org
Rutgers Cooperative Extension Service		STORET	14 College Farm Road, New Brunswick, NJ 08901-8551	Robert Miskewitz, Ph.D.	732-932-9800x6130	http://www.water.rutgers.edu/Projects/Musquapsink/Musq uapsink.htm
Rutgers Cooperative Extension Service		STORET	14 College Farm Road, New Brunswick, NJ 08901-8551	Robert Miskewitz, Ph.D.	732-932-9800x6130	http://www.water.rutgers.edu/Projects/Tenakill/Tenakill.ht m
Rutgers Cooperative Extension Service		STORET	14 College Farm Road, New Brunswick, NJ 08901-8551	Katie Giacalone	732-932-9800x6130	http://www.water.rutgers.edu/Projects/UpperSalem/Upper Salem.htm

Entity	Entity Type	Data Used for 2010 List?	If not, why not?	Waterbody Name	Monitoring Description	Monitoring dates	Parameters
Rutgers Environmental Law Clinic	other (non-profit)	no	no data submitted	Barnegat Bay	A compendium of BBEP studies	n/a	n/a
Somerset Regional Valley Sewerage Authority (SRVSA)/ Stony Brook Regional Sewerage Authority (SBRSA)/ Montgomery Twp/Hopewell Twp/OMNI Environmental LLC	wastewater facility	yes	n/a	Raritan/Millstone	Nutrient Impact Study	2003	TP, DO, pH, Chlor. A
South Branch Watershed Association	volunteer	yes	n/a	South Branch Raritan River	biological monitoring	June 2006-October 2008	macroinvertebrates
Stony Brook-Milllstone Watershed Association (SBMWA)	volunteer	no	data did not meet QA requirements	Stony Bk Millstone R watershed: Duck Pond Run and Heathcote Brook	biological	May2005-Aug 2006	macroinvertebrates
Stony Brook-MillIstone Watershed Association (SBMWA)	volunteer		pathogen monitoring was designed to identify sources of fecal impairment to focus implementation of the TMDL; not to assess impairment.	Stony Bk Millstone R watershed: Duck Pond Run and Heathcote Brook	pathogen monitoring - source trackdown	May2005-Aug 2006	pathogens
Upper Raritan Watershed Association	volunteer	yes		Peapack Brook, north Branch Raritan, Rockaway Creek, and respective subwatersheds	biological monitoring	June 15-30, 2004-2007 2008	macroinvertebrates
USEPA	federal government	no	data not available in electronic format	New York Bight	New York Bight helicopter monitoring data for Summer 2008	7/29/2008	nutrients and DO
USEPA	federal government	no	data not readily available	NJ waters coastal	ambient monitoring		Sanitary/chemistry

Entity	Diurnal?	Data Repository*	Address	Contact Person	Phone Number	URL
Rutgers Environmental Law Clinic		n/a	123 Washington Street, Newark, NJ 07102	Julia Le Mense	973-353-5695	
Somerset Regional Valley Sewerage Authority (SRVSA)/ Stony Brook Regional Sewerage Authority (SBRSA)/ Montgomery Twp/Hopewell Twp/OMNI Environmental LLC	yes	DEP Database	Omni Environmental LLC, Research Park 321 Wall Street Princeton, New Jersey 08540-1515	Lisa Evrard	609-924-8821 609-924 8831(Fax)	http://omnienvironmental.com/
South Branch Watershed Association		STORET	Lechner House, 41 Liliac Dr., Flemington, NJ 08822	Nicole Rahman	908-782-0422	www.sbwa.org
Stony Brook-Milllstone Watershed Association (SBMWA)		n/a	31 Titus Mill Rd., Pennington, NJ 08534	Peggy Savage	609-737-3735	
Stony Brook-Milllstone Watershed Association (SBMWA)		n/a	31 Titus Mill Rd., Pennington, NJ 08534	Peggy Savage	609-737-3735	
Upper Raritan Watershed Association		STORET	PO Box 273, Gladstone, NJ 07934	Lauren Theis	908-234-1852	http://www.urwa.org/index.html
USEPA		n/a	2890 Woodbridge Ave, Edison, NJ 08837			
USEPA		n/a	2890 Woodbridge Ave, Edison, NJ 08837			

Entity	Entity Type	Data Used for 2010 List?	If not, why not?	Waterbody Name	Monitoring Description	Monitoring dates	Parameters
USEPA	federal government	no	data not readily available	Statewide streams, rivers, and lakes	biological monitoring	2003 to present	macroinvertebrates
USEPA Region 2	federal government	yes	n/a	statewide	ambient monitoring	2007-2008	conventional chemical/physical, metals
USEPA Region 2	federal government	no	no approved QAPP for this data set	statewide	NY/NJ Trends Assessment		conventional chemical/physical
USEPA Region 2	federal government	no	no approved QAPP for this data set	Statewide lakes	Lake Bioassessment Study - Fish Component	2002-2006	conventional chemical/physical
USGS	federal government	yes	n/a	statewide	ambient monitoring	**	conventional chemical/physical
USGS	federal government	yes	n/a	Walkill River Watershed, Inner and Outer Coastal Plain,	metals	**	arsenic and water column mercury
Walkill River Watershed Management Group/Sussex County MUA	volunteer	no	data not submitted in usable format	Clove Acres Lake, Clove Brook	Clove Acres Lake/Clove Brook Watershed	2007	macroinvertebrates
Walkill River Watershed Management Group/Sussex County MUA	volunteer	no	data not submitted in usable format	Papakating Creek	Papakating Creek Watershed Restoration Plan	2008	macroinvertebrates
Wallkill River Watershed Management Group/Sussex County MUA	volunteer	no	data not submitted in usable format	Walkill River	Walkill River expanded monitoring	2008	biological, conventional chemical/physical

Entity	Diurnal?	Data Repository*	Address	Contact Person	Phone Number	URL
USEPA		n/a	2890 Woodbridge Ave, Edison, NJ 08837	Jim Kurtenbach	732-321-6695	
USEPA Region 2		STORET	Monitoring and Assessment Branch, Division of Environmental Science and Assessment, 290 Broadway, New York, New York 10007-1866	Darvene A. Adams	732-321-6700	http://www.epa.gov/region2/monitor/index.html
USEPA Region 2		n/a	2890 Woodbridge Ave, Edison, NJ 08837			
USEPA Region 2		n/a	2890 Woodbridge Ave, Edison, NJ 08837			
USGS		NWIS	USGS, 810 Bear Tavern Rd., Suite 206, West Trenton, NJ 08628		609-771-3900	http://nj.usgs.gov/
USGS		NWIS	USGS, 810 Bear Tavern Rd., Suite 206, West Trenton, NJ 08628		609-771-3900	http://nj.usgs.gov/
Walkill River Watershed Management Group/Sussex County MUA		n/a	SCMUA, 34 South Rte 94, Lafayette. NJ 07848	Ernest Hofer, P.E.	973-579-6998 X 111	
Walkill River Watershed Management Group/Sussex County MUA		n/a	SCMUA, 34 South Rte 94, Lafayette. NJ 07848	Ernest Hofer, P.E.	973-579-6998 X 111	
Wallkill River Watershed Management Group/Sussex County MUA		n/a	SCMUA, 34 South Rte 94, Lafayette. NJ 07848	Ernest Hofer	973-579-6998 X 111	

Entity	Entity Type	Data Used for 2010 List?	If not, why not?	Waterbody Name	Monitoring Description	Monitoring dates	Parameters
Wallkill River Watershed Management Group/Sussex County MUA	volunteer	no	data not submitted in usable format	Paulins Kill Waterbody ( headwaters to bales ville)	Paulins Kill (headwaters to Balesville): physical/chemical and biological	2007-2008	biological, conventional chemical/physical
Warren County MUA/HydroQual, Inc.	wastewater facility	yes	n/a	Pequest River	Nutrient Impact Study	5/4/2004-9/14/2004	TP, DO, pH, Chlor. A
Warren Twp SA/ Hydroqual, Inc (Dead River Study)	wastewater facility	yes	n/a	Dead River	TMDL Study	8/3/2004-9/22/2004	diurnal DO, temp, Chl a, NH3, NH4, nitrite, TP, turbidity, TSS, BOD, Fe, conductivity,
Washington Boro STP/OMNI Environmental LLC	wastewater facility	yes	n/a	Pohatcong Creek	Nutrient Impact Study	2008	TP, DO, pH, Chlor. A
Washington Boro STP/OMNI Environmental LLC (metals)	wastewater facility	yes	n/a	Pohatcong Creek	Metals translator Study	June 2005-May 2006	metals
Washington Twp MUA	wastewater facility	yes	n/a	Upper South Branch Raritan River	Nutrient Impact Study	2008-2010	TP, DO, pH, Chlor. A
Western Monmouth Utilities Authority	wastewater facility	yes	n/a	Matchaponix Brook, Pine Brook	Nutrient Impact Study	2008-2010	TP, DO, pH, Chlor. A

**All USGS data collected for various studies was extracted together from the NWIS database for the entire reporting period (2004-2008)

*Some data sets available in STORET may also be stored in the NJDEP WQDE or VM data systems.

Entity	Diurnal?	Data Repository*	Address	Contact Person	Phone Number	URL
Wallkill River Watershed Management Group/Sussex County MUA		n/a	SCMUA, 34 South Rte 94, Lafayette. NJ 07848	Ernest Hofer, P.E.	973-579-6998 X 111	
Warren County MUA/HydroQual, Inc.		DEP Database	HydroQual, Inc., 1200 MacArthur Blvd., Mahwah, NJ 07430	Pat Kehrberger	201-529-5151	http://www.hydroqual.com
Warren Twp SA/ Hydroqual, Inc (Dead River Study)		DEP Database	HydroQual, Inc., 1200 MacArthur Blvd, Mahwah, NJ 07340	Pat Kehrberger	201-529-5151	http://www.hydroqual.com/
Washington Boro STP/OMNI Environmental LLC		DEP Database	OMNI Environmental LLC, Research park, 321 Wall St., Princeton NJ 08540	Ray Ferrara, Ph.D.	609-924-8821	http://omnienvironmental.com/
Washington Boro STP/OMNI Environmental LLC (metals)		DEP Database	OMNI environmental, Research park, 321 Wall St., Princeton NJ 08540	Ray Ferrara, Ph.D.	609-924-8821	http://omnienvironmental.com/
Washington Twp MUA		DEP Database	152 Whitman Drive, Turnersville, NJ 08012		856-227-7788	http://www.wtmua.com/
Western Monmouth Utilities Authority		DEP Database	103 Pension Road, Manalapan, NJ 07726		732-446-9300	http://www.wmua.manalapan.nj.us/

**All USGS data collected

*Some data sets available i

# Appendix F: Final 2010 Integrated Water Quality Monitoring and Assessment Methods





# **2010 Integrated Water Quality Monitoring and Assessment Methods**

This document was prepared pursuant to Section 303(d) of the Federal Clean Water Act

Chris Christie, Governor Bob Martin, Commissioner

Final

September 2010

State of New Jersey Chris Christie, Governor NJ Department of Environmental Protection Bob Martin, Commissioner

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### 1.0 Introduction

#### 1.1 Background

Since 2001, the United States Environmental Protection Agency (USEPA) has recommended that states integrate their Water Quality Inventory Report (required under Section 305(b) of the federal Clean Water Act (Act)) with their List of Water Quality Limited Segments (required under Section 303(d) of the Act). New Jersey submitted its first Integrated Water Quality Monitoring and Assessment Report (Integrated Report) in 2002. The New Jersey Department of Environmental Protection's (Department) 2010 Integrated Report will continue to follow the integrated format to provide an effective tool for maintaining high quality waters where designated uses are attained, and improving the quality of waters that do not attain their designated uses.

The Integrated Report includes an "Integrated List" that combines the reporting requirements of Sections 305(b) and 303(d) of the Act. The Integrated List is the only part of the Integrated Report that is subject to regulatory requirements, which include public participation and submission to USEPA for approval and adoption. The Integrated List identifies the status of all applicable designated uses for every assessment unit by labeling the results of each designated use assessment as one of the five sublists (see Section 7.1 for complete sublist descriptions). Sublists 1 through 5 satisfy the assessment and reporting requirements of Section 305(b), while Sublist 5 is also used to specifically satisfy Section 303(d).

Section 303(d) requires states to produce a list of waters that are not meeting surface water quality standards (SWQS) despite the implementation of technology-based effluent limits and thus require the development of total maximum daily loads (TMDLs). This list is referred to as the "List of Water Quality Limited Segments" or the "303(d) List". The Department will be submitting the 2010 Integrated List to USEPA Region 2 via its Assessment Database (ADB). However, since the public will be afforded the opportunity to review and comment on the Integrated List, the Department will also generate an Integrated List Table that organizes assessment results by assessment unit, designated use, and sublist. The Department will also generate a separate List of Water Quality Limited Segments (303(d) List) that includes all assessment units identified as Sublist 5 (i.e., not attaining one or more designated uses), the specific pollutants not meeting SWQS in each assessment unit, and the relative rank of the assessment unit/parameter combination for TMDL development.

USEPA Guidance recommends placing the assessment results into one of five specific categories. The Department has chosen to use the term "sublist" rather than "category" when referring to the Integrated List, to avoid confusion between Category 1 of the Integrated List and Category One Waters designated under New Jersey's SWQS at N.J.A.C. 7:9B. Prior to developing an Integrated List, states are required to publish, for USEPA and public review, the methods used to collect, analyze, and interpret data, and place assessment units on their respective sublists. This Methods Document serves that function by providing an objective and scientifically sound assessment methodology, including:

- A description of the data the Department will use to assess attainment of the designated uses;
- The quality assurance aspects of the data;
- A detailed description of the methods used to evaluate designated use attainment;
- The rationale for the placement of assessment units on one of the five sublists.

Some use assessments are based on indicators or translators of water quality data or conditions, rather than comparing raw water quality data to numeric criteria. The methods for assessing use attainment based on these indicators or translators are explained in the Methods Document. These include: the assessment of recreational uses based on beach closure data; the assessment of the general aquatic life use based on indices of biological impairment (see Section 4.3), translators of the SWQS narrative nutrient policies (see Section 4.4); assessment of the fish consumption use based on fish tissue thresholds used for fish consumption advisories (see Section 6.3); and assessment of the shellfish harvest for consumption use based on shellfish classifications (see Section 6.4).

The Delaware River Basin Commission assesses water quality data for the Delaware River mainstem, Estuary, and Bay. Their assessment results are reported in sub-tables of New Jersey's Integrated List of Waters and Section 303(d) List of Water Quality Limited Waters, except for assessment of shellfish waters in the New Jersey portion of the Delaware Bay, which is assessed by the Department and reported in the main tables of the 2010 Integrated List and 303(d) List. DRBC's 2010 Delaware River And Bay Integrated List Water Quality Assessment Report and corresponding methods available are DRBC's Web site on at: http://www.state.nj.us/drbc/10IntegratedList/.

#### **1.2** Summary of Major Changes from the 2008 Methods Document

**Assessment Units:** The Department revised New Jersey's hydrologic unit code 14 (HUC 14) subwatershed boundaries resulting in a total of 969 HUC 14 subwatersheds in New Jersey.(see NJGS Technical Memorandum TM09-2, Revision to New Jersey's HUC 14s, 2009, with a available Department's correlation to HUC 12s, on the Web site at http://www.state.nj.us/dep/njgs/pricelst/tmemo/tm09-2). New Jersey's assessment units for the 2010 Integrated Report are based on the updated HUC 14 boundaries, excluding HUCs containing international and interstate waters, for a total of 960 assessment units in New Jersey In addition, as indicated above, New Jersey will incorporate DRBC's assessment for 15 AUs for the river, estuary, and bay as a separate table.

**Fish Consumption Use Assessment and 303(d) Listing:** The Department has modified the fish consumption use assessment method to reflect the direct assessment of concentrations of bioaccumlating toxic parameters in fish tissue. For all bioaccumlating toxic parameters except mercury, the assessment threshold for use attainment is the concentration considered safe for unlimited fish consumption by infants, children, pregnant women, nursing mothers, and women of childbearing age (i.e., the "high risk" population). For mercury, the use attainment threshold is based upon the concentration established in the Department's statewide mercury TMDL, which is designed to protect high risk populations but will still result in a consumption advisory of one meal a week. The fish consumption use assessment methods now also include evaluation of compliance with human health criteria for water column toxic pollutants expected to

bioaccumulate in fish tissue. Details of the new fish consumption use assessment method for mercury and other toxics are provided in Section 6.3.

Nutrients: The Department will use a new assessment method to evaluate nutrient impairment of wadeable freshwaters based on response indicators using a "weight of evidence" approach that will determine whether phosphorus causes non-attainment of the aquatic life use. This method will be applied where biological and continuous monitoring data collected during the same summer season are available. Where sufficient data is not available to apply the new method, the Department will assess nutrient impairment based on compliance with the existing numeric SWQS criteria for phosphorus. Freshwaters previously assessed as not attaining the aquatic life use based on exceedances of the numeric phosphorus criteria will be delisted only if it can be demonstrated that the narrative nutrient criteria has been met. Details of the new assessment methodology are found in Section 4.4. The Department will continue to refine and expand the nutrient impact assessment method to include other types of waterbodies and other response indicators, as explained in the New Jersey Nutrient Criteria Enhancement Plan (NJDEP, 2009) available Department's on the Web site at http://www.state.nj.us/dep/wms/bwqsa/Nutrient_Criteria_Enhancement_Plan.Final.pdf.

**Temperature:** The seasonal average temperature criteria have been replaced with acute and chronic criteria to better protect the State's cold and warm water fisheries (see 41 NJR 4735(a)). The Department will evaluate continuous monitoring data with recordings taken anywhere between once per hour to every 15 minutes for weeks at a time against these new shorter term criteria (see Section 4.1, Temperature under Continuous Monitoring).

### 2.0 Overview of the Assessment Process

The Department is required to use all existing and readily available data to assess water quality for the Integrated List. With data originating from a host of different entities with different monitoring and analytical capabilities, the Department must ensure that the data used for assessment purposes is reliable and of good quality. The Department must also determine how to use the diverse types of data it generates and receives in a consistent manner to ensure an accurate evaluation of water quality on a station level, which will then be used to determine designated use attainment at the assessment unit level. The overall assessment process used by the Department, beginning with the collection of raw data, through the assessment of designated uses, to the development of the Integrated List, is comprised of five steps, each of which is explained in detail in Chapters 3 through 7. Below is a brief summary of each chapter/step in the assessment process.

#### **Chapter 3: Use and Interpretation of Data**

Chapter 3 outlines the requirements regarding quality assurance and quality control, monitoring design, age of data, accurate sampling location information, data documentation, and use of electronic data management that are taken into consideration when deciding if data are readily available and appropriate for use in generating the Integrated List. Chapter 3 also discusses the relevant policies established in the SWQS and how they relate to data interpretation.

#### **Chapter 4: Evaluation of Data at the Station Level**

Chapter 4 explains the many issues affecting the interpretation of chemical, physical, pathogenic, and biological data that the Department must take into consideration, such as sample size, frequency, magnitude, duration, outliers, and censored data. Chapter 4 describes the procedures used to evaluate chemical parameters and determine if an individual parameter complies with the applicable SWQS (including policies and narrative criteria) at each station. This chapter also describes how the Department evaluates pathogenic and biological indicators to assess water quality impairment at a station level. Chapter 4 also includes a new method for assessing nutrient impacts on water quality.

#### Chapter 5: Evaluating Data from Multiple Stations within an Assessment Unit

Chapter 5 defines the scale ("assessment unit") used by the Department to assess designated uses and explains the process used to identify all sampling stations associated with each assessment unit. Chapter 5 also explains the additional evaluations and policies that are applied when data for the same parameter is combined from different stations within an assessment unit, including assessment units with more than one stream classification or waterbody type, relative weight of datum, *de minimus* data results, contradictory data sets, macroinvertebrate metrics, modeling results, and shellfish classification data.

#### **Chapter 6: Designated Use Assessment Methods**

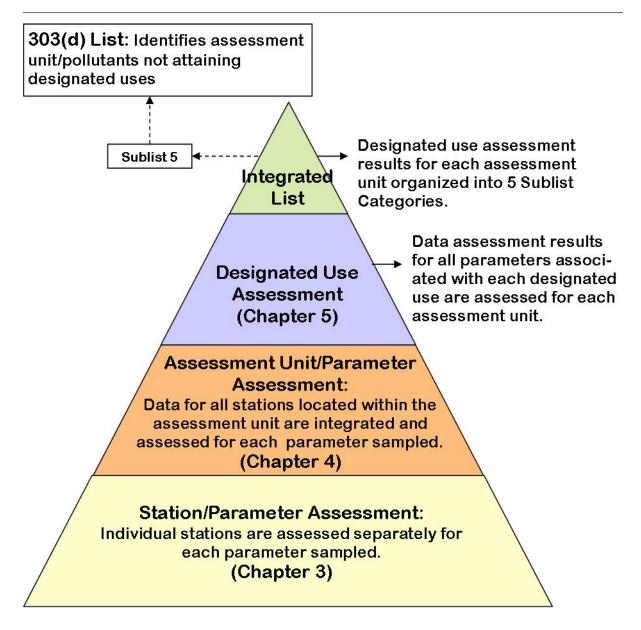
Chapter 6 identifies the uses designated for each SWQS classification, the type of data necessary to assess each use, and the minimum suite of parameters needed to assess attainment of each use. Chapter 6 also discusses the process used to assess attainment based on data sampled from multiple locations and/or for multiple parameters, the parameters associated with each designated use (Appendix A), and the minimum suite of parameters needed to determine that each designated use is attained. (Table 6.0).

## **Chapter 7: Integrated Listing Guidance**

Chapter 7 explains how assessment results for each assessment unit/designated use combination are depicted on the Integrated List and assigned to the appropriate sublist, taking into consideration the status of TMDLs. For each assessment unit/designated use identified as Sublist 5, the Department will identify the pollutant(s) causing the non-attainment of a designated use and place the assessment unit/pollutant combinations on the 303(d) List along with the assessment unit name and its priority ranking for TMDL development. Figure 2 on the following page illustrates the relationship between the different levels of data assessment explained in Chapters 4, 5, and 6 and used to generate the Integrated List.

#### Chapters 8, 9, and 10: Prioritizing, Monitoring, and Public Participation.

Chapter 8 describes the methods used to rank and prioritize waterbodies for TMDL development pursuant to the requirements of the federal Clean Water Act. Chapter 9 describes the State's approach to obtaining additional data to assess compliance with SWQS in all assessment units, and to support TMDL development. Chapter 10 outlines the public participation requirements and process, both regulatory and non-regulatory, employed in the development and finalization of the Integrated List. Among other things, Chapter 10 describes the data solicitation and the public notification processes.



#### Figure 2: Overview of the Water Quality Assessment Process

# 3.0 Use and Interpretation of Data

The Department reviews all existing and readily available data. With data originating from many diverse entities, the Department must ensure that the data used for assessment purposes is reliable and of good quality. The Department must also determine how to use the diverse types of data in a consistent manner to ensure an accurate assessment of the water quality in each assessment unit. This process is outlined below. The Integrated Report will include a list all the sources of data received and identify which sources were used, as well as provide an explanation for any data not used, to develop the Integrated List.

## 3.1 Data Quality

**Data Age:** The Department will use the most recent five years of readily available data to characterize current conditions. Past assessments are considered valid until new data show that conditions have changed. Data received in response to the Department's solicitation that are more than five years old may be used on a case-by-case basis if they enhance the Department's ability to assess current conditions. Older data may also be used in conjunction with newer data to demonstrate water quality trends where appropriate analytical methods are used and results can easily be compared with more recent data. The Department may apply less weight to data less than five years old if newer data was collected or analyzed using scientific methods that are more precise and/or more accurate.

**Electronic Data Management:** The Department is migrating to a new water quality data exchange system (WQDE) for the submission of all water quality monitoring data. Only data submitted via WQDE will be considered "readily available" for use in developing the Integrated Report due to the significant effort needed to computerize and analyze data submitted in different formats. The Department has requested that monitoring organizations seeking to have their data used for the 2010 Integrated Report submit data via WQDE; however, due to difficulties encountered in launching WQDE, the Department accepted data in other formats on a limited basis. Additional information about WQDE and instructions for data submittal are available on the Department's Web site at <a href="http://www.state.nj.us/dep/wms/WQDE%20fact%20sheet.pdf">http://www.state.nj.us/dep/wms/WQDE%20fact%20sheet.pdf</a>.

**Locational Data:** Accurate locational data are required to ensure comparison to appropriate SWQS, as well as confirming that sampling stations are located outside of regulatory mixing zones. Digital spatial data in the form of a Geographical Information System (GIS) shape file or Global Positioning System (GPS) coordinates, or latitude/longitude information, must be provided for all monitoring station locations, which must be accurate to within 200 feet. Only sampling stations that are spatially referenced will be used to develop the Integrated List.

**Quality Assurance:** The Department maintains a strong commitment to the collection and use of high quality data to support environmental decisions and regulatory programs. All data and information used to develop the Integrated Report must comply with the Department's Quality Assurance Guidelines, the Department's field sampling procedures, and be analyzed by a certified laboratory. Department policy mandates that all environmental data collection activities performed (or for use) by the Department comply with and be accompanied by an approved Quality Assurance Project Plan (QAPP). QAPPs describe the procedures used to collect and

analyze samples and review and verify the results to assure high quality data. QAPPs must be approved by the Department, DRBC, USEPA, or USGS. The QAPP must be approved <u>prior to</u> <u>the start of any sampling</u>. The USEPA's QAPP guidance document is available at <u>http://www.epa.gov/region02/qa/qa_documents/air_h20_qapp04.pdf</u>. The Department also provides guidance for developing QAPPs for volunteer monitoring data which is available at: <u>http://www.state.nj.us/dep/wms/bwqsa/vm/quality_assurance.html</u>. Additional information about the Department's QAPP process is available on the Department's Web site at <u>http://www.nj.gov/dep/oqa/</u>. Entities responsible for generating the data are responsible for compiling the data, completing a detailed quality assurance review, and addressing questions regarding the data set.

The sampling protocol for data used in the Integrated Report must also comply with the procedures in the Department's Field Sampling Procedures Manual (NJDEP, 2005) or follow equivalent field procedures as determined by the Department's Office of Quality Assurance. The Department's Manual includes approved procedures for sample collection, field quality assurance, sample holding times, and other data considerations and is available for download from the Department's Web site at <a href="http://www.state.nj.us/dep/srp/guidance/fspm/">http://www.state.nj.us/dep/srp/guidance/fspm/</a>). Samples must be analyzed at a laboratory certified by the Department's Office of Quality Assurance, or a federal laboratory (e.g., the USGS National Water Quality Laboratory in Denver) using analytical methods or their equivalents, as certified by the Department pursuant to N.J.A.C. 7:18, USEPA, or USGS.

#### **3.2 Criteria and Policies**

Since water quality data are assessed for compliance with the Surface Water Quality Standards (SWQS), the SWQS provide the foundation for the Integrated List. The SWQS establish surface water classifications, the designated uses associated with the surface water classifications, and the criteria and policies established to protect, maintain, and restore the designated uses.

**Antidegradation Policy:** The SWQS contain an antidegradation policy that applies to all surface waters of the State. Antidegradation is a requirement under the federal Clean Water Act designed to prevent or limit future degradation of the nation's waters. Under this policy, existing uses shall be maintained and protected. Designated uses shall be maintained or, as soon as technically and economically feasible, be attained wherever these uses are not precluded by natural conditions. No irreversible changes may be made to existing water quality that would impair or preclude attainment of the designated use(s) of a waterway. No changes shall be allowed in waters that constitute an outstanding national or state resource or in waters that may affect these Outstanding National Resource Waters. The Department applies the antidegradation policy in tandem with the classification of the receiving waterbody in making decisions about proposed new or expanded discharges to surface waters, including stormwater permits, as well as certain land use permits. Additional information about the SWQS antidegradation policy is available on the Department's Web site at http://www.state.nj.us/dep/wms/bwqsa/swqs.htm.

**Assessment of Threatened Waters:** Lists of Water Quality Limited Waters (303(d) Lists) are required to include all "threatened and impaired" waters. "Threatened waters" are waters that currently meet water quality standards, but are likely to exceed standards by the time the next

303(d) List is generated. Assessing threatened waters requires sufficient existing and readily available data and information on adverse declining trends to predict future water quality. This means a dataset must sufficiently robust to support the evaluation of short-and long-term statistical trends; generally, at least ten years of seasonally (four times per year) data. Currently the Department maintains a series of long-term monitoring locations, which support statistical trends assessments developed by the USGS. Assessments to determine if waters are threatened will be conducted by the Department wherever sufficient data and trends assessments are available to make such predictions.

**Narrative Water Quality Criteria:** Narrative water quality criteria are non-numeric descriptions of the conditions necessary for a waterbody to attain its designated uses. To implement narrative data, which is qualitative in nature, the Department has identified assessment approaches, also known as "translators", to quantitatively interpret narrative criteria. New Jersey's SWQS contain narrative criteria for toxics, nutrients, and natural conditions.

Toxics: The SWQS contain two narrative criteria for toxic substances:

- 1. None, either alone or in combination with other substances, in such concentrations as to affect humans or be detrimental to the natural aquatic biota, produce undesirable aquatic life, or which would render the waters unsuitable for the desired use; and
- 2. Toxic substances shall not be present in concentrations that cause acute or chronic toxicity to aquatic biota, or bioaccumulate within the organism to concentrations that exert a toxic effect on that organism or render it unfit for human consumption.

The Department uses several translators to assess compliance with the narrative toxic criteria. These translators include: fish tissue concentrations used for consumption advisories (see Section 6.3, Fish Consumption Use Assessment); shellfish closure data (see Section 6.4, Shellfish Use Designated Use Assessment); source water information (see Section 6.5, Drinking Water Supply Use Assessment) with regard to human health.

<u>Nutrients</u>: The SWQS include narrative nutrient criteria that apply to all freshwaters of the State, in addition to the applicable numeric criteria for phosphorus. The narrative nutrient criteria prohibit nutrient concentrations that cause objectionable algal densities, nuisance aquatic vegetation, or render waters unsuitable for designated uses. Section 4.4 details the interpretation of this narrative criterion.

**Natural Conditions:** The SWQS at N.J.A.C 7:9B-1.5(c) state, "Natural water quality shall be used in place of the promulgated water quality criteria of N.J.A.C. 7:9B-1.14 for all water quality characteristics that do not meet the promulgated water quality criteria as a result of natural causes." The concept of "natural causes" is applied when the Department can document that there is an impairment of the use (e.g., biological impairment causing non-attainment of the aquatic life use) but there are no anthropogenic sources or causes. Data that do not meet applicable SWQS criteria potentially due to natural conditions will be carefully evaluated and any excursions attributed to natural conditions will be explained and supported in the Integrated Report.

**Numeric Water Quality Criteria:** The surface water quality criteria established for each of the different surface water classifications in the SWQS are numeric estimates of constituent concentrations, including toxic pollutants that are protective of the designated uses. Numeric surface water quality criteria have been established for conventional parameters (e.g., dissolved oxygen, pH, temperature), toxics (e.g., metals, organics, unionized ammonia), and sanitary quality (e.g., pathogens). Additional information about numeric water quality criteria is available on the Department's Web site at <a href="http://www.state.nj.us/dep/wms/bwqsa/swqs.htm">http://www.state.nj.us/dep/wms/bwqsa/swqs.htm</a>.

# 4.0 Evaluation of Data at the Station Level

## 4.1 Evaluation of Physical and Chemical Data

The Department assesses physical and chemical data for which criteria have been established in the SWQS. Once the data is reviewed and deemed appropriate for use in generating the Integrated List (see Chapter 3), the data for each parameter sampled at a specific monitoring station are evaluated for compliance with the SWQS. Any samples that do not comply with the applicable numeric SWQS criteria are considered excursions and are reviewed to determine if the excursion is within the margin of error of the analytical method or can be attributed to natural conditions, transient events, or flow conditions that do not represent design flows. An excursion may be attributed to "natural conditions" where the Department can document an impairment without any anthropogenic sources or causes (see Section 3.2). "Transient events" are water quality conditions that occur at very low frequencies, over very brief timeframes, and as such neither impair the designated use of the waterbody nor, if captured by the data, represent overall water quality conditions. For regulatory purposes, water quality criteria apply only where stream flow is maintained at or above the "design flow" specified for the applicable numeric SWQS criteria, which is usually the MA7CD10 (see N.J.A.C. 7:9B-1.5(c)). Flow conditions are evaluated for all excursions to determine if the data were collected under appropriate flow conditions. Any data that are collected when stream flows are below design flows are not assessed. Excursions that can be attributed to any of these conditions are not assessed as exceedances of the SWOS criteria. Excursions attributed to any of these conditions will be explained and supported in the Integrated Report. Excursions that cannot be attributed to one of these factors are further evaluated at the assessment unit level to determine if they collectively constitute an exceedance of the SWQS criteria.

**Analytical Precision and Accuracy:** The Department will take into consideration the precision and accuracy of the analytical method used to measure the data when an ambient measurement is compared to a numeric SWQS criterion. Analytical precision and accuracy are determined by the methods used to sample, analyze, and report the data. The <u>precision</u> of the analytical method is determined by the margin of error expressed for the method used. The margin of error defines the range of values that are considered to represent valid results for a specific analytical method or instrument. For example, if the surface water quality criterion is 1.0 and the margin of error for the instrument is "(+) or (-) 0.2," a reported value of 1.1 would not be considered an exceedance. Unlike precision, which is a function of the analytical method used, the <u>accuracy</u> of the data is determined by the number of decimal places used to express the surface water quality criterion. For example, when a parameter is measured in a concentration

whose value is reported to three decimal places but the applicable criterion is represented by (i.e. accurate to) only two decimal places, the parameter concentration will be rounded to two decimal places to determine compliance with the criterion.

**Continuous Monitoring:** More and more frequently, instruments such as Datasondes are being deployed to continuously monitor the water. The parameters most commonly measured in this fashion are water temperature, dissolved oxygen (DO), pH, salinity and conductivity. The protocol for comparing continuous monitoring data, collected over a minimum of three days, to the SWQS criteria is as follows:

<u>Dissolved Oxygen:</u> The SWQS criteria for DO are expressed as either a minimum, "not less than...at any time" concentration or as a 24-hour average concentration (see "Duration (Exposure Periods)", below). An excursion of the minimum criteria occurs when the lowest concentration over a 24-hour period is below the DO criterion for at least a one-hour duration. Two such excursions at the same location during two or more 24-hour periods constitute an exceedance of the criterion. An excursion of the 24-hour average criterion occurs when the average concentration of all measurements recorded within a 24-hour period is below the criterion. Two such excursions occurring at the same location constitutes an exceedance of the criterion of all protocols employing continuous monitored DO data in the context of assessing nutrient impacts.

<u>pH</u>: When evaluating continuously recorded pH data, as with DO, an exceedance occurs when the pH criterion is not met for a duration equivalent to one hour or more during a 24-hour period.

<u>Temperature</u>: When evaluating continuous monitoring data for compliance with the new temperature criteria, the acute, one-hour maximum criterion will be compared to the maximum temperature recorded within a one-hour duration. Excursions above the acute criterion recorded on two separate days over the period of review (up to five years) are considered an exceedance of the temperature criterion.

**Computations Using Censored Data:** Censored data are reported values that are less than the minimum reporting level of an analytical procedure. These data are usually labeled with a "<" symbol followed by the reporting limit in the data report received from the laboratory. Non-parametric methods must be used to evaluate the central tendency of datasets containing censored values. When censored values represent less than 50 percent of the dataset, the Department will calculate a *median* value for the dataset and compare that median to the applicable criterion. When censored values exceed 50 percent of the data, the Department will consider the dataset insufficient to determine if the criterion has been exceeded.

**Duration (Exposure Periods):** The SWQS includes criteria-specific exposure periods (durations) that range from one hour to 70 years. In assessing compliance with the SWQS, the Department takes into consideration the specific duration applicable to the criterion for the parameter being assessed. For example, chronic aquatic life criteria require a four-day exposure period; therefore, data collected under flow conditions that last less than four days (as is generally the case for high flow conditions) are not considered valid for assessment of chronic aquatic life criteria but such data may be used to assess acute aquatic life criteria, which do not

have such duration constraints. For human health carcinogen criteria, which are based on a 70year exposure rate, the Department calculates a long-term average of all data available for the most recent five-year period for comparison to the applicable criterion.

**Frequency of Exceedance:** The Department has determined that a minimum of two exceedances of a numeric SWQS criterion are necessary to confirm noncompliance with the criterion. The Department has determined that a second exceedance is necessary to ensure that the first exceedance was not a transient condition. When the minimum exceedance is met but the dataset is very large (more than 30 data points), the Department will consider the relative frequency and magnitude of the exceedances within the dataset and use Best Professional Judgment to determine if they represent non-attainment of the designated use. The Department will provide an explanation of any assessment which concludes that the use is attained because of relatively low magnitude or frequency of exceedances in a very large dataset.

**Metals:** SWQS criteria for metals include human health (HH), acute aquatic life (AQLa), and chronic aquatic life (AQLc). HH criteria are based on the total recoverable (TR) form of the metal to protect human health from all forms of the metals. To the extent available, total recoverable (TR) and dissolved fraction (DF) data will be compared to the TR and DF criterion, respectively. When only TR data are available, in addition to comparing the TR concentration to the TR criterion, the Department will also compare the TR concentrations to the DF criterion. If the TR concentrations are below the DF criterion, the Department assumes the DF criterion is also met. TR concentrations above the DF criterion will trigger additional sampling for DF.

**Minimum Number of Samples:** Unless described differently for a particular parameter, the minimum data set consists of eight samples. The Department believes that two years of data collected quarterly are adequate and represents the minimum dataset necessary for an adequate assessment. These recommendations are intended to ensure that existing water quality conditions are accurately portrayed by the data and that the results do not reflect transitional conditions. The Department will consider a data set which does not meet this minimum requirement on a case-by-case basis to determine if the data adequately characterizes the water quality conditions. Summer-only sampling for nutrients, pathogenic quality, and temperature may be acceptable since summer generally represents the critical condition for these parameters. If the Department determines that the data set adequately represents water quality conditions and there are at least two exceedances of the Surface Water Quality Standards, this limited data set will be used to determine that a use is not attained (see Chapter 6, Use Assessment Methods).

**Outliers:** Any datum that is identified as an outlier based on an accepted statistical methodology (such as ASTM E178) is not considered a valid result and is not assessed.

## 4.2 Pathogenic Indicators

Waters classified as PL, FW, SE1, and SC are assessed for primary contact ("<u>in</u> the water") recreation; waters classified as SE2 and SE3 are assessed for secondary contact ("on the water") recreation. This approach is consistent with amendments to the New Jersey Surface Water Quality Standards at N.J.A.C. 7:9B-1.12(a), (b), (c), (d), and (g)), adopted on December 21,

2009. These amendments deleted secondary contact recreation from the designated uses of FW1, PL, FW2, SE1, and SC waters (see 21 N.J.R. 4735(a)).

Assessment for recreation compares the geometric mean (geomean) of the water quality data for pathogenic indicators to the appropriate SWQS criterion. At least five samples collected over a 30-day period are required to calculate the geomean; however, other sampling frequencies may be acceptable provided that the frequency supports the statistical method for calculating a seasonal geomean.

In addition to assessing primary contact recreation in all PL, FW, SE1, and SC waters using geomean, a second assessment is conducted for "designated bathing beaches". "Designated bathing beaches" include beaches that are heavily used for primary contact recreation such as swimming, bathing, and surfing during the recreational season pursuant to the New Jersey State Sanitary Code, N.J.A.C. 8:26. Designated bathing beaches are assessed as attaining primary contact recreation if there are no beach closures lasting seven or more consecutive days in a given year, or the average number of beach closures is less than two per year over a five-year period. Beach closure procedures are established at N.J.A.C. 8:26-8.8, which is available on the U.S. Department of Health and Senior Service's Web site at http://www.state.nj.us/health/eoh/phss/recbathing.pdf.

Designated bathing beaches are sampled weekly. If the sample indicates an exceedance of the single sample maximum (SSM), the beach is resampled. If this follow-up sample also exceeds the SSM, the beach is closed. In assessing designated bathing beaches, the Department will review the beach closure data to confirm that the closures were due to water quality issues. Short term beach closures of less than a week generally signify occasional excursions of the pathogen criterion. If these short term closures occur chronically over several (five or more) years the beach is assessed as impaired. One beach closure lasting seven or more consecutive days in a given year, or an average of two or more beach closures (of any duration) per year over a five-year period, is also assessed as an impairment. Recreational use assessment methods are explained in detail in Section 6.2.

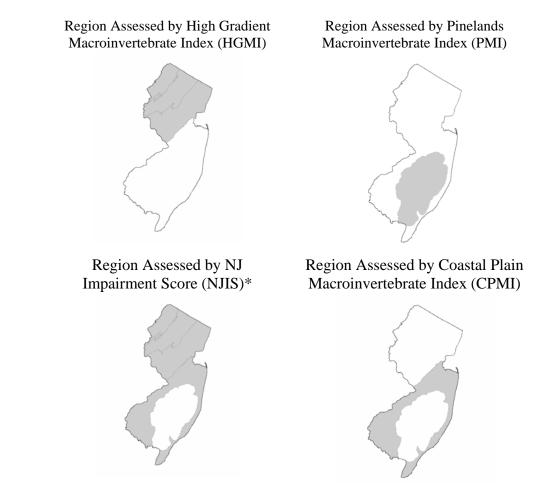
## 4.3 Biological Data

The Department has developed biological indicators (benthic macroinvertebrates and fin fish) to evaluate aquatic life use attainment.

**Benthic Macroinvertebrate Data:** The Department uses three biological indices based upon genus level taxonomy to evaluate biological conditions in freshwater streams. The three indices were developed for different physiographic regions of the State: the High Gradient Macroinvertebrate Index (HGMI), which applies to the streams of northern ecoregions (Highlands, Ridge and Valley, and Piedmont); the Coastal Plain Macroinvertebrate Index (CPMI), which applies to the Coastal Plain (excluding waters considered Pinelands waters); and the Pinelands Macroinvertebrate Index (PMI), which applies to PL waters contained within the jurisdictional boundary of the Pinelands as well as FW2 waters within five kilometers of the Pinelands Area boundary (see Figure 4.3). For the PMI, scores in the fair category are assessed as impaired if the waters are classified as PL but are assessed as not impaired if the waters are classified as FW2. This is because the PMI was developed specifically to reflect the unique conditions of nondegradation PL waters.

The Department will also accept macroinvertebrate data collected under New Jersey's Rapid Bioassessment Protocol (RBP) and evaluated using the family level New Jersey Impairment Score (NJIS) system in non-Pinelands waters, if they are submitted by other entities. Assessments based upon family level taxonomy use three condition categories: not impaired, moderately impaired, and severely impaired. Where assessment results based upon the newly developed, genus level metrics (HGMI and CPMI) are available, these results will override those based upon family level metrics when assessing aquatic life use attainment for the entire assessment unit.

#### Figure 4.3: Spatial Extent of Application for Each of the Benthic Macroinvertebrate Indices Applied in New Jersey



*NJIS is no longer used by the Department but may be used by other entities

**Fin Fish Data - Fish Index of Biotic Integrity (FIBI):** Fin fish population data are assessed using the Fish Index of Biotic Integrity (FIBI). A more detailed description of the FIBI program, including sampling procedures, is available on the Department's Web site at <u>http://www.state.nj.us/dep/wms/bfbm/fishibi.html</u>. The current FIBI metric applies to high

gradient streams above the fall line (Highlands, Ridge and Valley, and Piedmont physiographic provinces). This metric has four assessment result categories: excellent, good, fair, and poor. Scores in the "excellent", "good", and "fair" categories indicate that biology is not impaired while scores in the "poor" category indicates that the biology is impaired (see Table 4.3).

Macroinvertebrate Index for High Gradient Streams (HGMI Metric) (Highlands, Ridge and Valley, Piedmont Physiographic Provinces)		
Category	Metric Score	Assessment
Excellent	63 - 100	Not Impaired
Good	42 - < 63	Not Impaired
Fair	21 - < 42	Impaired
Poor	< 21	Impaired

#### Table 4.3: Descriptive and Regulatory Thresholds for Biological Metrics*

Macroinvertebrate Index for Low Gradient (CPMI Metric) Coastal Plain (Non Pinelands) Streams

Category	Metric Score	Assessment
Excellent	22 - 30	Not Impaired
Good	12 - 20	Not Impaired
Fair	10 - 6	Impaired
Poor	< 6	Impaired

#### Macroinvertebrate Index for Pinelands Waters (PMI Metric)

Category	Metric Score	Assessment Result
Excellent	63 - 100	Not Impaired
Good	56 - < 63	Not Impaired
Fair	34 - < 56	PL waters: Impaired
		FW2 Waters: Not Impaired
Poor	< 34	Impaired

New Jersey Macroinvertebrate Index (NJIS)

Category	Metric Score	Assessment Result
Not Impaired	24 - 30	Not Impaired
Moderately Impaired	9 - 21	Impaired
Severely Impaired	0 - 6	Impaired

#### Fish Index of Biotic Integrity (FIBI) (Highlands, Ridge and Valley, Piedmont Physiographic Provinces)

Category	Metric Score	Assessment Result
Excellent	45 - 50	Not Impaired
Good	37 - 44	Not Impaired
Fair	29 - 36	Not Impaired
Poor	10 - 28	Impaired

*Source: Standard Operating Procedures Ambient Biological Monitoring Using Benthic Macroinvertebrates Field, Lab, Assessment Methods (NJDEP, 2007), available on the

Department's Web site http://www.state.nj.us/dep/wms/bfbm/download/AMNET_SOP.pdf.

at

**Regional Monitoring and Assessment Program (REMAP) Assessments:** A Benthic Index of Biotic Integrity was developed for the New York/New Jersey Harbor based on USEPA Region 2's REMAP protocol and data reflecting benthic invertebrate communities. The results are used to assess the waters of Raritan Bay, the Arthur Kill, and the Kill van Kull. This index was developed by scoring each of five metrics as 5, 3, or 1. Overall index scores less than 3 are considered biologically impaired while scores greater than 3 are considered not impaired. Additional information about this metric is available on the USEPA Web site at http://www.epa.gov/emap/remap/html/docs/nynjsedapp1.pdf.

## Additional Considerations When Evaluating Biological Data

- In general, biological assessments will be based on the most recent results. However, the Department will take into consideration the results from the previous years' samples in making a final assessment decision.
- Disturbed or impaired biota can result from drought conditions that result in reduced base flow. If biological communities are impaired due to drought-induced, low flow conditions, the impairment will be attributed to natural conditions and the data will not be considered valid for assessment purposes (see "Natural Conditions" in Section 3.2).
- The Department has developed multiple biological indices based upon both fish and benthic macroinvertebrates that represent several tropic levels and each assessing significantly different spatial and temporal scales. Where multiple indices are employed on a waterbody, if one indicates impairment, the aquatic life use will be listed as impaired.

## 4.4 Assessment of Nutrient Impacts

The Surface Water Quality Standards include both narrative nutrient policies and numeric phosphorus criteria for freshwater lakes and streams. The Department has selected appropriate response indicators to evaluate compliance with the narrative nutrient policies in freshwater wadeable streams and, where the policy is not met, to determine if phosphorus is a cause of aquatic life use non-attainment (see Section 6.1, "Aquatic Life Designated use Assessment Method). The relationship has long been established between excess nutrients and the potential for depressed dissolved oxygen (DO) levels, broad swings in DO (resulting from high rates of daytime photosynthesis coupled with nighttime respiration), excess levels of algal growth (measured as chlorophyll a) and changes to the aquatic ecosystem. The Department believes that these cause/response relationships are better indicators of adverse nutrient impacts on the aquatic ecosystem than an assessment of the in-stream concentration of total phosphorus alone.

Where benthic macroinvertebrate indices indicate impairment (see Section 4.3), the assessment unit will be assessed as not attaining the general aquatic life use. The purpose of the nutrient impact assessment is to determine whether phosphorus is a cause of non-attainment. Continuous DO monitoring data, collected within the same season and year as the biological data, is required to evaluate whether the DO criteria is exceeded and to determine if robust daytime photosynthesis is occurring at the site (see Section 4.1, "continuous monitoring ... dissolved oxygen"). The Department has determined that diurnal fluctuations in DO concentration in excess of 3 mg/l are a strong indication that photosynthetic activity is due to nutrient overenrichment (see Section 4.1, "Continuous Monitoring - Dissolved oxygen"). Where benthic macroinvertebrate indices indicate impairment, and the DO criteria are exceeded, and the diurnal DO fluctuation is more than 3mg/l, the Department will conclude that phosphorus is a cause of non-attainment of the general aquatic life use and will list phosphorus and the assessment unit on the 2010 303(d) List of Water Quality Limited Waters. Conversely, where biology is not impaired, the DO criteria are not exceeded, and there is no significant DO fluctuation, the Department will determine that the narrative nutrient criteria have been met and will not place phosphorus on the 2010 303(d) List for that assessment unit even if the in-stream concentrations of total phosphorus exceed the numeric phosphorus criteria for FW streams.

The Department recognizes that there may be situations where the nutrient impact assessment is **inconclusive** because of site-specific factors (see Table 4.4). For example, where biology is impaired and there is a DO swing above 3 mg/l but the DO criteria are not exceeded, the Department will review periphyton chlorophyll a data to determine if phosphorus is a cause of the impairment. If the seasonal average chlorophyll a concentration from a minimum of three sampling events exceeds 150 mg/sq. meter, the Department will conclude that phosphorus is a cause of the aquatic life use non-attainment and will place phosphorus and that assessment unit on the 2010 303(d) List of Water Quality Limited Waters. This periphyton chlorophyll a threshold is based upon a consensus in the scientific literature that at this level and above algal growth has reached nuisance levels. These chlorophyll a measurements are required only when the nutrient impact assessment is inconclusive regarding whether phosphorus is a cause of general aquatic life use non-attainment.

Where sufficient data is not available to apply the nutrient impact assessment method, the cause assessment will be based on compliance with the applicable numeric SWQS criteria for phosphorus. Freshwaters previously assessed as not attaining the general aquatic life use based solely on exceedance of the numeric phosphorus criteria will be reassessed using the new nutrient impact assessment method and will be delisted for phosphorus if it can be demonstrated that the narrative nutrient criteria are met.

Results of Biological Assessment	Dissolved Oxygen	<b>Results of Nutrient Impact Assessment</b>
Benthic	No exceedances of criteria;	Phosphorus not a cause;
Macroinvertebrate	Swing is at or below 3 mg/l	(Place "Cause Unknown" on 303(d) List)
Indices indicate	No exceedances of criteria;	Inconclusive regarding phosphorus;
impairment;	Swing is above 3 mg/l	Evaluate chlorophyll <i>a</i> and reassess
therefore, the general	Exceedances of criteria;	Phosphorus not a cause;
aquatic life use is not	Swing is at or below 3 mg/l	(Place DO on 303(d) List)
attained	Exceedances of criteria;	Phosphorus is confirmed as the cause
	Swing is above 3 mg/l	(Place/retain phosphorus on 303(d) List)

Table 4.4: Nutrient Impact Assessment Outcomes*

*This assessment method does not apply to other waterbody types. For lakes, the Department will continue to evaluate compliance with the numeric phosphorus criteria.

# 5.0 Evaluating Data from Multiple Stations within an Assessment Unit

While the initial data evaluation is conducted at the station level, use assessments are conducted for entire assessment units, each of which may contain data from multiple stations and multiple waterbody types. All data from one or more monitoring stations located within a given assessment unit are extrapolated to represent all waters within that assessment unit's boundaries. Exceedances of applicable SWQS or biological indices identified at the parameter/station level are further evaluated collectively for each parameter sampled at all monitoring stations within the assessment unit. Where stations within an assessment unit yield different assessment results, the assessment decision is based on the worst case. Where there are numerous beach or shellfish harvest closures within an assessment unit, the spatial coverage of these impairments are evaluated in assessing attainment of the recreation and shellfish consumption uses for the respective assessment units.

Assessment Units: New Jersey's assessment units are delineated based on 14-digit Hydrologic Unit Code (HUC) boundaries. HUCs are geographic areas representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by USGS in cooperation with the National Resources Conservation Service (NRCS). The HUC system starts with the largest possible drainage area and progressively smaller subdivisions of that drainage area are then delineated and numbered in a nested fashion. In 2009, the Department revised the HUC 14 boundaries to be more consistent with the new federal HUC 12 boundaries, which are based on 1:24,000 base maps for elevation control and a new 1:2,400 hydrography coverage. This boundary refinement process resulted in a total of 969 HUC 14 subwatersheds in New Jersey. A coverage containing discrete polygons for each of New Jersey's 969 HUC 14 subwatersheds is available for download and interactive applications on the Department's Geographic Information System (GIS) and other on-line tools available on the Department's Web site at www.nj.gov/dep/gis/ and www.nj.gov/dep/gis/newmapping.htm. The Department's report explaining the changes to the HUC 14 boundaries (NJGS Technical Memorandum (TM09-2) entitled, "Revision to New Jersey's HUC 14s, 2009, with a correlation to HUC 12s", is available for download from the Department's Web site at http://www.state.nj.us/dep/njgs/pricelst/tmemo/tm09-2. New Jersey's assessment units for the 2010 Integrated Report are based on the updated HUC 14 boundaries, excluding HUCs containing international and interstate waters, which totals 960 assessment units in New Jersey New Jersey assessment units now range in size from 0.7 to 42 square miles, with an average size of 8.7 square miles.

The Delaware River Basin Commission assesses water quality data for the Delaware River mainstem, Estuary, and Bay. Their assessment results are reported in sub-tables of New Jersey's Integrated List of Waters and Section 303(d) List of Water Quality Limited Waters, except for assessment of shellfish waters in the New Jersey portion of the Delaware Bay, which is assessed by the Department and reported in the main tables of the 2010 Integrated List and 303(d) List. DRBC's 2010 Delaware River And Bay Integrated List Water Quality Assessment Report and corresponding methods are available DRBC's Web site on at: http://www.state.nj.us/drbc/10IntegratedList/.

**Station Representation:** The Department will evaluate station locations on a case-by-case basis to determine if the data from these stations should be used in assessing the adjacent assessment unit (AU). For example, it is common for monitoring sites to be placed at the terminus of one assessment unit as it flows into an adjacent assessment unit. When a monitoring site falls within 200 feet of a given assessment unit boundary, the assessment based upon that site is applied to both the assessment unit containing the site and to the adjacent assessment unit (Fig 5b). This assignment is made provided that there are no significant tributaries, impoundments, or other hydrological alterations that could impact water quality between the monitoring site and the neighboring assessment unit. If there are no applicable monitoring stations for an assessment unit, the unit will be identified as not assessed (Sublist 3).

**Assessment Units With More Than One Stream Classification:** Data will be compared to the SWQS for the stream classification where the station is located. Assessment units may contain both FW and SE waters, or a combination of Trout Production, Trout Maintenance, and Non-Trout waters. Where the assessment unit contains more than one classification and there is no data for the higher classification, then data from the station located in the lower classification will be compared to the SWQS for higher classification. If the station meets the SWQS for higher classification, the data will be used to assess both classifications. However, if the station located in the lower classification does not meet the SWQS for the higher classification, an assessment can not be made.

**Assessing Lake Data**: Lakes are assessed based upon *in-lake* chemistry data collected just below the *surface* (generally at a one-meter depth if the lake is sufficiently deep). Lakes can have multiple in-lake sampling locations, depending on their size. Each sampling location within a lake is considered a "subsample". Lake subsamples that do not comply with the applicable numeric SWQS criteria are considered excursions and are reviewed to determine if the excursion is within the margin of error of the analytical method or can be attributed to natural conditions or transient events. Excursions occurring at multiple locations or subsamples within a lake on the same date are considered a "single excursion". Two or more excursions occurring within a lake on separate dates constitute an exceedance.

**Continuous Monitoring and Grab Sampling:** Grab samples collected quarterly may not capture the most critical time period; therefore, they may not reflect the worst case scenario for use attainment. Thus, the Department will give more weight to continuous monitoring data, provided that the continuous monitoring data is available for at least a single season.

**De minimus:** When evaluation of data at a station level identifies portions of an assessment unit as impaired but, upon further evaluation, these stations represent minute portions of the total area of the assessment unit, the Department will regard the assessed area as *de minimus* rather than impaired. The concept of *de minimus* is applied to numerous situations when evaluating assessment units. Examples of situations where a *de minimus* determination would be applied are as follows:

<u>Recreational use assessments</u>: Where an assessment unit contains one or more impaired bathing beaches but the spatial extent of the impaired bathing beaches is a minute portion of the assessment unit, the impairment would be considered *de minimus* and would not be considered in

assessing recreational use attainment for the entire assessment unit. When determining the spatial extent, a designated bathing beach represents the area within 1,500 feet from the shoreline in the saline coastal (SC) waters, and the area within 200 feet from the shoreline in saline estuarine (SE1) waters. In these instances, where the Department uses Best Professional Judgment and determines that the impairment is *de minimus*, the individual impaired bathing beaches will be identified in the Integrated Report for follow up sanitary surveys required by the DHSS.

<u>Shellfish harvest for consumption use assessments:</u> Assessment units overlie but do not follow shellfish classification boundaries. As a result, an assessment unit may include several different shellfish classifications. In most instances, the use assessment will be based on the most restrictive classification found within the assessment unit. In the few instances where only a very small portion of the acreage within the assessment unit is has some degree of restriction, the use assessment will be based on assessment of the larger area. Any *de minimus* areas that are restricted but are not subject to administrative closures (i.e., the restriction is due to poor water quality) will be identified in the Integrated Report.

**Evaluating Contradictory Data Sets:** Weighing data is necessary when evaluating numerous data sets that have different data collection and analysis methods, or have temporal or spatial sampling variability. These decisions will apply in the following situations: newer data will override older data; larger data collection sets might override or be combined with nominal data sets; and higher quality data will override data sets of lower quality based on sampling protocol, equipment, training and experience of samplers, quality control program, and lab and analytical procedures.

Assigning relative "weight" to data is necessary when evaluating numerous data sets that have different data collection and analysis methods, or temporal or spatial sampling variability. When data sets yield contradictory or ambiguous assessment results, a "weight of evidence" approach will be used to evaluate the different data sets in relation to one another. The Department will take into account the data sets' age, robustness, and accuracy. In large data sets, the magnitude and frequency of the exceedances are evaluated. Other factors, such as changes in pollutant concentration over time and other water quality trends, may also influence the weight of a given data set.

**Modeling and Sampling Results:** Water quality models are used to predict changes in water quality over time under different flow, weather, and temporal conditions. The Department may use the results obtained through a model to list or delist a waterbody, if the Department determines that the model adequately predicts water quality in the specific waterbody.

# 6.0 Designated Use Assessment Methods

The SWQS identify specific designated uses for the waters of the State according to their waterbody classifications. Designated uses include:

- aquatic life (general and trout);
- recreation (primary and secondary contact);
- fish consumption;

- shellfish harvest for consumption;
- drinking water supply;
- industrial water supply; and
- agricultural water supply.

The Department uses both numeric and narrative criteria and policies to protect designated uses. Numeric criteria are estimates of constituent concentrations that are protective of the designated uses. Narrative criteria and policies are non-numeric descriptions of conditions to be attained, maintained, or avoided. The Department has identified assessment approaches, also known as "translators", to quantitatively interpret narrative criteria/policies, which are qualitative in nature. This section outlines the assessment methodologies for designated use attainment that include the utilization of both numeric and narrative criteria and involves the integration of data for multiple parameters at multiple stations for each assessment unit.

Appendix A of the Methods Document identifies the parameters associated with each designated use. The Department assesses designated use attainment by evaluating compliance of the associated parameters with the applicable SWQS criteria. However, data for every parameter associated with a particular designated use is not required to assess the use. The Department uses a conservative approach regarding use assessments that requires more extensive data for a finding that a use is attained than for a finding that a use is not attained. Specifically, an assessment unit will be assessed as attaining the designated use only if data for the minimum suite of parameters are available and the data indicate that there are no impairments or exceedances, in which case, the assessment unit will be assessent unit will be identified as having insufficient information with which to assess the designated use (Sublist 3), even if there are no exceedances or impairments within that data set. If data for any one parameter associated with a designated use (Appendix A parameters) indicate any impairment or exceedance, the assessment unit will be assessed as not_attaining the designated use (Sublist 4 or 5), even if data are not available for the entire suite of parameters.

Designated Use	Minimum Suite of Parameters
General Aquatic Life	Macroinvertebrate Indices or fish IBI
Aquatic Life - Trout	Biological data and Temperature and DO
Recreation	Primary Contact: Beach closure data
	• Secondary Contact: Fecal coliform (in SE2 and SE3
	waters)
Shellfish Harvest for	Shellfish Classifications
Consumption	
Drinking Water Supply	Nitrate and TDS
Agricultural Water Supply	TDS
Industrial Water Supply	TSS <u>and</u> pH
Fish Consumption	Fish tissue data

## 6.1 Aquatic Life Use Assessment Method

The aquatic life use is assessed by evaluating impairment of biotic communities using metrics developed for benthic macroinvertebrate data, in conjunction with fin fish IBI (Index of Biotic Integrity) data, supplemented with a broad suite of biologically-relevant physical/chemical data (e.g., dissolved oxygen, temperature, toxic pollutants). The biological assessment integrates a full suite of environmental conditions over many months (for macroinvertebrates) to many years (for fish-based indicators). The Department may use biologically-relevant chemical water quality data, such as dissolved oxygen (DO), to indirectly assess the health of the biota, even though chemical water quality data provide only a "snapshot" in time rather than the longer-term assessment supported by biological indicators. The associated physical/chemical parameters differ depending on the designated aquatic life use (i.e., the stream classification). For instance, both temperature and dissolved oxygen are required to assess the trout aquatic life use but only dissolved oxygen (DO) is required to assess the general aquatic life use in tidal waters (see Table 6.0). Table 6.1 summarizes the possible outcomes of the aquatic life use assessment based upon various combinations of data and results.

Results of Biological Assessment*	Results of Aquatic Life Use Assessment (General and Trout)
Biological Monitoring Data Available, No Chemical/Physical Data Available	
Biology is not impaired or threatened	Aquatic life use is attained (Sublist 1 or 2)
Biology is impaired or threatened	Aquatic life use is not attained; listed as "cause unknown" (Sublist 4 or 5).
Both Biological and Ch	emical/Physical Data Available
Biology is not impaired or threatened, there are no chemical exceedances, and water quality is not threatened	Aquatic life use is attained (Sublist 1 or 2)
Biology is impaired or threatened AND chemical/physical data show exceedances of aquatic life criteria or are threatened	Aquatic life use is not attained; parameter(s) exceeding criteria identified as the cause (Sublist 4 or 5). Note: The outcome of the nutrient impact assessment will determine which parameter is listed as the cause of use non-attainment, as illustrated in Table 4.4.
Biology is impaired or threatened BUT chemical/physical data show no exceedances of aquatic life criteria	Aquatic life use is not attained; listed as "cause unknown" (Sublist 4 or 5).
Biology is not impaired or threatened BUT chemical/ physical data show	Aquatic life use is not attained; parameter(s) exceeding criteria identified as the cause unless

exceedances of aquatic life criteria or	due to natural conditions (Sublist 4 or 5).
waters quality is threatened	
No Biological Data Available	e; Chemical/Physical Data Available
No exceedances of aquatic life criteria	Insufficient data to assess the aquatic life use
	(Sublist 3)
Exceedance of any aquatic life criterion	Aquatic life use is not attained (Sublist 4 or 5)
(including phosphorus)	

* The methods for assessing biological data are explained in Section 4.3, "Biological Data".

## 6.2 Recreational Use Assessment Method

The SWQS identify two levels of recreational use – primary contact and secondary contact. Primary contact recreation is defined as those water-related recreational activities that involve significant ingestion risks and includes, but is not limited to, wading, swimming, diving, surfing, and water skiing. Secondary contact recreation is defined as those water-related recreational activities where the probability of water ingestion is minimal and includes, but is not limited to, boating and fishing. SWQS criteria have been promulgated for primary contact recreation in SC, SE1, and FW2 waters. SWQS criteria have been promulgated for secondary contact recreation in SE2 and SE3 waters. Primary contact recreation in FW1 and PL waters is assessed using the SWQS criteria for FW2 waters because numeric criteria for recreational use have not been promulgated for FW1 or PL waters. Assessment units containing bathing beaches are assessed as not attaining the recreational use when beach closure data indicate impairment or when bacterial counts exceed the applicable SWQS criteria (expressed as a geometric mean). Table 6.2 summarizes the possible outcomes of the recreational use assessment based on the appropriate types of data.

<b>Table 6.2: Recreational</b>	Use Assessment Results
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Data Assessment Results	Use Assessment Results*
<ul><li>a) Beach closure data does not identify impairment (Primary Contact), or:</li><li>b) Applicable SWQS criteria are met</li></ul>	Use Is Attained
a) Beach closure data identifies impairment* (Primary Contact), or:	Use Is Not
b) Applicable SWQS criteria are <u>not</u> met	Attained

*Note: When bathing beaches represent a minute portion of the total area of the assessment unit, the Department will regard the assessed area as *de minimus* rather than impaired (see Section 5.1).

## 6.3 Fish Consumption Use Assessment Method

The Department has established thresholds for fish tissue concentrations for specific bioaccumulative toxic pollutants used to develop fish consumption advisories. The Department follows USEPA's "Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories – Volume 1, 2 and 3 (USEPA 2000b) for establishing fish tissue thresholds, which are listed in Table 6.3a. Thresholds for fish tissue-based toxics, except mercury, are intended to protect the high risk population, which includes infants, children, pregnant women, nursing

mothers and women of childbearing age. Where fish tissue concentrations are below the thresholds listed in Table 6.3a below, fish consumption is unrestricted. For mercury, the Department has selected 0.18 ug/g, which reflects a 1 meal per week consumption restriction for high risk populations consistent with the Department's Statewide Mercury TMDL established on September 10. 2009 (see the Department's web site at: http://www.nj.gov/dep/watershedmgt/tmdl.htm). The mercury threshold is based on the expected mercury concentration in fish tissue due to natural sources that can not be addressed by the It is likely that once all anthropogenic sources of mercury are eliminated, fish TMDL. consumption advisories will continue to be necessary to protect high risk populations.

In addition to tissue concentrations, the Department will also evaluate compliance with human health criteria for water column toxic pollutants expected to bioaccumulate in fish tissue, where water column data is available for the applicable parameters. The Department will utilize the human health criteria for SE/SC waters which are based on "fish consumption only" for all assessment units. The list of pollutants to be evaluated for fish consumption use are listed in Appendix A and are based upon USEPA's "National Study of Chemical Residues in Lake Fish Tissue" (USEPA, 2009).

<b>Bioaccumulative Toxic Parameter</b>	Tissue Concentration Threshold		
Mercury	0.18 ppm (ug/g)		
PCBs	8 ppb (ug/Kg)		
Chlordane	11.0 ppb (ug/Kg)		
Dioxin	0.19 pptr (ng/Kg)		
DDT and Metabolites (DDX)	86.0 ppb (ug/Kg)		

#### Table 6.3a: Thresholds For Fish Tissue-Based Toxics

#### Table 6.3b: Fish Consumption Use Assessment Results

Data Assessment Results	Use Assessment Result
a) All fish tissue concentrations are below the threshold, <u>AND</u>	Use is Attained
b) No exceedances of the SWQS SE/SC human health criteria for selected parameters in water column	
a) One or more parameters exceed the tissue threshold; <u>OR</u>	Use is Not Attained
b) One or more parameters exceed the SWQS SE/SC human health criteria for selected parameters in the water column	

## 6.4 Shellfish Harvest For Consumption Use Assessment Method

The shellfish harvest for consumption use is designated in all waters classified as SC and SE1. The shellfish sampling and assessment program is overseen by the federal Food and Drug

Administration (FDA) and administered through the National Shellfish Sanitation Program (NSSP) to ensure the safe harvest and sale of shellfish. The NSSP's guidance, entitled *National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish*, is available on the FDA's Web site at <u>http://www.fda.gov</u>. The Department's Bureau of Marine Water Monitoring determines shellfish classifications based on sampling data and assessment procedures in the NSSP manual. Waters are classified as approved ("unrestricted"), special restricted, special seasonal restricted, seasonally approved, or prohibited for harvest. The legal description of shellfish classification areas is updated annually in the Shellfish Growing Water Classification rules at N.J.A.C. 7:12. The Department's shellfish classification areas are included in the SWQS by reference at N.J.A.C. 7:9B-1.12.

For assessment purposes, prohibited, special restricted, and seasonal harvest areas are further separated into a) waters where shellfish harvest is prohibited due to poor water quality, and b) administrative closures based on the potential for contamination of the shellfish due to land use, resource availability, or sanitary surveys. Administrative closures are established in areas around potential pollution sources, such as sewage treatment plant outfalls and marinas, as a preventive measure to prevent the harvest of shellfish that could become contaminated by boat wastes and stormwater runoff. Where shellfish harvest is prohibited due an administrative closure, such prohibited areas will not be included in the overall assessment, since the classification does not reflect the actual water quality.

Only assessment units containing shellfish waters classified as unrestricted are assessed as attaining the shellfish harvest for consumption use. For assessment units that do not attain the shellfish harvest for consumption use, the pollutant causing the non-attainment will be identified as fecal or total coliform, as appropriate. Table 6.4 summarizes the possible outcomes of the use assessment for the shellfish harvest use.

NSSP Classification	Assessment Results*
Unrestricted	Use Is Attained
Prohibited, Special Restricted, or Seasonal classifications based on water quality	Use Is Not Attained

 Table 6.4: Shellfish Harvest for Consumption Use Assessment Results

*Note: Where assessment units contain more than one shellfish classification, the use assessment will be based on the most restrictive classification, except where only a *de minimus* portion is restricted, in which case the assessment will reflect the non-*de minimus* area (see Section 5.1, "De minimus"). This assessment method may exaggerate the extent of shellfish waters actually impaired; therefore, the official adopted Shellfish Classification maps should be referenced for the actual areas approved for shellfish harvest.

## 6.5 Drinking Water Supply Use Assessment Method

The drinking water supply use is defined as waters that are potable after conventional filtration treatment and disinfection, without additional treatment to remove other chemicals. All waters

classified as Freshwater (FW2) and Pinelands (PL) are designated as drinking water supply use. It is important to note that many waterbodies do not have drinking water intakes due to stream size and other considerations. Nitrate concentrations are the minimum data necessary to assess the drinking water use; however, other Appendix A parameters (i.e., arsenic, cadmium, chromium, copper, cyanide, lead, mercury, thallium, zinc, nitrate, TDS, chloride, radioactivity, and volatile organic compounds) will also be used to assess the drinking water use when sufficient data for these parameters is available.

In addition to ambient chemical water quality parameters, the Department uses monitoring data from treated or finished water supplies to determine compliance with the Safe Drinking Water Act's National Primary Drinking Water Regulations (NPDWRs, or primary standards) and water supply use restrictions. Pollutants monitored for the protection of human health under the primary standards include volatile organic compounds, semi-volatile organic compounds, inorganic constituents, salinity, radioactive constituents, and disinfection by-products. Use restrictions include closures, contamination-based drinking water supply advisories, better than conventional treatment requirements, and increased monitoring requirements due to confirmed detection of one or more pollutants.

The Department's Bureau of Safe Drinking Water summarizes safe drinking water violations annually. The drinking water use assessment method uses the data provided in these reports. Only violations that can be attributed to surface water sources are considered. Violations for copper and lead, which could be attributed to the collection system, are not used in assessing source water unless the violations occur in ambient waters. Table 6.5 summarizes the possible outcomes of the use assessment for the drinking water use. Since human health concerns associated with bioaccumulative constituents are generally addressed through consumption advisories, the Department will review exceedances of human health criteria for such constituents to determine which use is not being attained: the drinking water use, the fish consumption use, or both.

Safe Drinking Water Actions	Assessment Results
No closures, use restrictions, SWQS criteria are met and waters are not threatened*	Use is Attained
Closures are recorded or water quality standards are exceeded or threatened*	Use is Not Attained
Surface water quality is such that more than conventional treatment is required	Use is Not Attained
Contamination-based drinking water supply advisories are in effect	Use is Not Attained
Increased monitoring requirements are in effect due to confirmed detection of one or more pollutants	Use is Not Attained

Table 6.5: Drinking Water Supply	y Use Assessment Results
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*Note: Threatened is defined as chemical/physical data showing no exceedances of surface water quality criteria but degrading water quality trends indicate that criteria are likely to be exceeded within two years (see Section 3.2, "Assessing Threatened Waters").

#### 6.6 Industrial Water Supply Use Assessment Method

Industrial water supply use assessment is conducted for waters used for industrial processing or cooling. The Department will use total suspended solids (TSS) and pH, a measure of acidity, as indicators for assessing attainment of the industrial water supply use. A pH range of 5 to 9 will be used as a threshold for use attainment.

#### 6.7 Agricultural Water Supply Use Assessment Method

The agricultural water supply use includes water used for irrigation and livestock farming. Only waters classified as FW2 and PL are designated for this use. The Department will use total dissolved solids (TDS) as the indicator of agricultural use attainment because of its adverse and immediate detrimental effects on agricultural practices. Currently, the numeric TDS SWQS criterion of "no increase in background which would interfere with the designated or existing uses, or 500 mg/L, whichever is more stringent" was promulgated to protect the drinking water supply use and is not relevant to impacts related to agriculture. The Department used guidelines that had been established by the U.S. Department of Interior Natural Resources Conservation and other states (Follet and Soltanpour, 1999; Bauder, 1998) for evaluating whether water supplies can support common agricultural uses such as irrigation and raising livestock. These guidelines established acceptable levels for TDS in agricultural water supplies as at or below 2,000 mg/l (Follet and Soltanpour, 1999). This threshold will be used by the Department to assess attainment of the agricultural water supply use. Several other states have established criteria for agricultural uses and further research will be done to evaluate the feasibility of applying their criteria to assess attainment of the agricultural water supply use in New Jersey.

# 7.0 Integrated Listing Guidance

The 2006 Integrated Report Guidance (USEPA, 2005, supplemented by October 12, 2006 memo) recommends placing assessment results into one of five specific categories on the Integrated List. Based on this guidance and the Department's listing methodology (explained in Section 1.1), the five sublists used to identify an assessment unit on the Department's Integrated List are described below.

- Sublist 1: An assessment unit is attaining all applicable designated uses and no uses are threatened. (The Department does not include the fish consumption use for this sublist.)
- Sublist 2: The assessment unit is attaining the designated use but is not attaining another/other applicable designated use(s).
- Sublist 3: Insufficient data and information are available to determine if the designated use is attained.

- Sublist 4: One or more designated uses are not attained or are threatened but TMDL development is not required because (three sub-categories):
  - A. A TMDL has been completed for the parameter causing the nonattainment.
  - B. Other enforceable pollutant control measures are reasonably expected to result in the attainment of the designated use in the near future.
  - C. Non-attainment of the designated use is caused by something other than a pollutant.
- Sublist 5: One or more designated uses are not attained or are threatened by a pollutant(s), which requires development of a TMDL.

#### 7.1 Integrated Listing Methodology

As stated above, USEPA encourages states to use a five-category system for classifying the water quality status of each states' waters based on attainment of designated uses. Table 7.1 displays how the results of the designated use assessment results will be displayed on New Jersey's 2010 Integrated List of Waters (Integrated List).

Assessment Results	Integrated List
Full Attainment (all uses except fish consumption)	Sublist 1: All designated uses are assessed and attained, with the exception of fish consumption.
Designated Use Is Attained	Sublist 2: The designated use is attained but other designated uses within the assessment unit are either not assessed due to insufficient data or not attained.
Insufficient Data	Sublist 3: Insufficient data is available to determine if the designated use is attained.
Designated Use Is Not Attained (TMDL Not Required)	Sublist 4A: The designated use is not attained or is threatened and development of a TMDL is not required because a TMDL for the parameter responsible has already been approved by USEPA.
Designated Use Is Not Attained (TMDL Not Required)	Sublist 4B: The designated use is not attained or is threatened and development of a TMDL is not required because other enforceable pollutant control measures are reasonably expected to result in the attainment of the designated use in the near future.

#### Table 7.1: Assessment Results and Integrated List Outcomes

Assessment Results	Integrated List
Designated Use Is Not Attained (TMDL Not Required)	Sublist 4C: The designated use is not attained or is threatened and development of a TMDL is not required because the cause was attributed solely to pollution, not pollutant(s).
Designated Use Is Not Attained (TMDL Required)	Sublist 5: The designated use is not attained or is threatened by a pollutant and development of a TMDL is required.

## 7.2 Identifying Causes and Sources of Non-attainment (303(d) List)

The List of Water Quality Limited Segments (303(d) List) is comprised of assessment unit/pollutant combinations, of which the "pollutant" is the chemical parameter (i.e., "pollutant") causing non-attainment of the applicable designated use. A pollutant is considered to be the cause of use non-attainment if it is associated with the designated use (see Appendix A) and it exceeds the applicable SWQS criterion. If chemical data are unavailable or show no exceedance of applicable criteria, the cause will be identified on the 303(d) List as "cause unknown".

A source assessment is conducted for each pollutant identified on the 303(d) List as causing nonattainment. "Suspected" sources of pollutants causing impairment are identified using the Department's Geographic Information System (GIS). A more thorough investigative study will be conducted through the TMDL process to determine the specific sources, and relative contributions, of the pollutant(s) and nonpoint sources causing use non-attainment.

## 7.3 Delisting Assessment Unit/Pollutant Combinations

There are specific scenarios under which USEPA will allow states to remove an assessment unit/pollutant combination from the List of Water Quality Limited Segments (303(d) List), a process commonly referred to as "delisting". Appendix C of the 2010 Integrated Report will identify all assessment unit/pollutant combinations delisted from the 2008 303(d) List and the corresponding reason for each delisting action.

# 8.0 Method to Rank and Prioritize Assessment Units That Do Not Attain Designated Uses

Section 303(d) of the federal Clean Water Act requires states to rank and prioritize assessment units that require development of TMDLs (i.e., Sublist 5). The goal of priority ranking is to focus available resources on developing TMDLs in the most effective and efficient manner, while taking into account environmental, social, and political factors. Assessment units ranked as high (H) priority for TMDL development, based on the factors outlined below, are those the Department expects to complete within the next two years. Assessment units ranked as medium (M) priority are those the Department expects to complete in the near future, but not within the next two years. Assessment units ranked as low (L) priority are those the Department does not expect to complete in the immediate or near future. The Department will prioritize assessment units identified on the 303(d) List and schedule them for TMDL development based on the following factors:

- Importance of pollutants of concern (refer to Table 8.0);
- TMDL complexity;
- Status of parameter (actively produced or legacy pollutant);
- Additional data and information collection needs;
- Sources of pollutants;
- Severity of the actual or threatened exceedance/impairment;
- Spatial extent of the exceedance/impairment;
- Nature of the designated uses not being attained (i.e., recreational, economic, cultural, historic, and aesthetic importance);
- Efficiencies of grouping TMDLs by drainage basin or parameter;
- Efficiencies related to leveraging water quality studies triggered by NJPDES permit renewals;
- Status of TMDLs currently under development;
- Timing of TMDLs for shared waters;
- Status of watershed management activities (e.g., priority watershed selection or 319 grant activities);
- Status of other ongoing pollutant/pollution control actions that could result in water quality restoration (e.g., site remediation activities);
- Existence of endangered and sensitive aquatic species;
- Recreational, economic, cultural, historic and aesthetic importance; and
- Degree of public interest and support for addressing particular assessment units.

#### Table 8.0: Importance of Pollutants of Concern

Pollutant of Concern	Importance
Pathogen indicators, nitrate	Direct human health issues
Metals and Toxics	• Direct human health issues
	• Designated use impacts
Other conventional pollutants such as phosphorous, pH,	• Significant designated use
dissolved oxygen, temperature, total dissolved solids,	implications
total suspended solids, unionized ammonia	<ul> <li>Indirect human health issues</li> </ul>

## 9.0 Method for Developing the Monitoring and Assessment Plan

The Integrated Report guidance (USEPA, 2005) recommends that states include descriptions and schedules of additional monitoring needed to: 1) assess all designated uses in all assessment units, and 2) support development of TMDLs for all assessment unit/pollutant combinations identified as not attaining designated uses. New Jersey's 2010 Integrated Report will identify its future monitoring plans and needs in Appendix H: New Jersey's Water Monitoring and Assessment Strategy, as well as in Chapter 9 Next Steps: Preparing for 2012 and Beyond.

Chapter 9 of the 2010 Integrated Report summarizes the information gaps and steps the Department is taking to bridge data gaps and improve assessment methods.

The Department's goal for water monitoring and assessment is to ultimately have enough data to assess every designated use in every assessment unit and for assessment results to indicate that every assessment unit is in full attainment, i.e., attaining every applicable designated use (except fish consumption). It is important to recognize that monitoring and assessing each assessment unit will require significant effort and can only be accomplished over the long term. Several strategies will be key to accomplishing this goal including:

- Exchanging and using data and assessments from other programs within the Department and other entities (e.g., local government, volunteer monitoring groups);
- Expanding ongoing and planned monitoring and assessment to address data limitations for assessment units assigned to Sublist 3.

# **10.0 Public Participation**

The public is afforded the opportunity to participate in three key phases of development of the Integrated Report: 1) submission of data, 2) review of and comment on the proposed assessment methods; and 3) review of and comment on the proposed Integrated List and 303(d) List. Section 10.1 explains the Department's process for soliciting data for use in the Integrated Report. The Department also strives to continuously interact with other data collecting organizations and facilitate the exchange of data and information.

Section 10.2 explains the Department's process for announcing public availability of the draft Methods Document, draft Integrated List, and draft 303(d) List for review and comment prior to adoption of the final Methods Document and Lists. As explained in Chapter 1, the Integrated Report combines the reporting requirements of Sections 305(b) and 303(d) of the federal Clean Water Act. The Integrated List component of the Report, which categorizes the results of use assessments for all the State's assessment units into sublists (Sublists 1 through 5), satisfies the reporting requirements of Section 305(b) formerly addressed by the Statewide Water Quality Inventory Report. The 303(d) List component of the Report, which satisfies the reporting requirements of Section 303(d), includes the assessment units identified as not attaining one or more designated uses (Sublist 5), the pollutants causing non-attainment of those assessment units, and their priority ranking for TMDL development. The public participation requirements of these two components are different. The 303(d) requirements are considered regulatory requirements identified in this section regarding public participation, USEPA approval, and adoption apply only to the 303(d) List component of the Integrated Report.

The Department is required under 40 CFR 130.7(b)(6) to provide a description of the methodology used to develop the 303(d) List. This Methods Document lays out the framework for assessing data and categorizing assessment units into the five sublists of the Integrated List. The Department develops a draft Methods Document that is made available for public review and comment through public notification, as outlined below. After finalizing the Methods Document, the Department assesses the data in accordance with those methods and develops the

Integrated Report, which includes the draft Integrated List, draft 303(d) List, and two-year TMDL Schedule. A public notice is published in the New Jersey Register and newspapers of general circulation announcing that the Methods Document has been finalized and the draft Integrated List and draft 303(d) List are available for public review and comment. The Integrated List and 303(d) List are revised, as appropriate, after full consideration of comments received. The public participation procedures related to proposal and adoption of the Integrated List and final 303(d) List are outlined in Section 10.2 below.

## 10.1 Request for Data

The Department pursues several avenues for notifying the public of its intent to seek water quality-related data and information from external partners, including notices published in the New Jersey Register, public notices published in newspapers of general circulation, announcements published in Department-generated newsletters, and direct mailings and email to interested individuals and organizations. The time period for submitting data is specified in the public notice. The data solicitation notice for the 2010 Integrated Report established a data collection deadline of December 31, 2008 and a data submission deadline of May 1, 2009. A cut-off date for data submission is necessary to allow the data to be received, analyzed, and assessed for timely completion of the Integrated Report and submission of the Integrated List and 303(d) List by April 1 of even-numbered years. Data collected or submitted after the respective deadlines may be considered for subsequent 303(d) Lists and/or other water quality assessments conducted by the Department.

In determining which data are appropriate and readily available for assessment purposes, the Department will consider quality assurance/quality control, monitoring design, age of data, accurate sampling location information, data documentation, and use of electronic data management (see Chapter 3). The Department is migrating to a new water quality data exchange system (WQDE) for the submission of all water quality monitoring data. The Department has requested that monitoring organizations seeking to have their data used for the 2010 Integrated Report submit data via WODE due to the significant effort needed to computerize and analyze data submitted in different formats. Additional information about WQDE and instructions for submittal available Department's site data are on the Web at http://www.state.nj.us/dep/wms/WQDE%20fact%20sheet.pdf. Volunteer organizations may submit data through the Department's data management system for volunteer monitoring data (VM) at http://www.state.nj.us/dep/wms/bwqsa/vm/database.html. Instructions on registering as a data submitter for either system are available on the Department's Web site at www.njdeponline.com.

Data submitted via WQDE or VM must comply with the data submission and formatting requirements of the data system, including but not limited to submission of an approved quality assurance plan (with all required signatures) that was approved prior to data collection, and spatial coordinates for monitoring locations. Spatial coordinates can be identified through the use of the Department's free on-line tools: <u>DataMiner or GeoWeb/NJiMAP</u>, or through the use of geographic positioning system (GPS) units.

#### **10.2** Public Notification

**Public Notices:** The Department will publish a notice announcing the availability of the draft Methods Document for public review and requesting comments. The Department may revise the Methods Document based on public comment.

The Department will propose the 303(d) List of Water Quality Limited Segments as an amendment to the Statewide Water Quality Management Plan, provide an opportunity for public comment, and adopt the amendment in accordance with N.J.A.C. 7:15-6.4. A public notice announcing availability of the proposed 303(d) List for public review and comment shall be published in the New Jersey Register, on the Department's Web site, and in newspapers of general circulation throughout the State. Adjacent state, federal, and interstate agencies shall also be notified, as necessary. The public notice shall include the following:

- A description of the procedures for comment; and
- The name, address, and Web site of the Department office or agent from which the proposed document may be obtained and to which comments may be submitted.

The public notice for the draft 2010 303(d) List will also notify the public that the Department has finalized the 2010 Methods Document The final Methods Document, including agency responses to public comments, will be included as an Appendix to the 2010 Integrated Report.

**Comment Period:** The comment period shall be a minimum of 30 days.

**Public Hearings:** Within 30 days of publication of the public notice, interested persons may submit a written request to extend the comment period for an additional 30 days, or request a public hearing. If the Department determines that there are significant environmental issues or that there is a significant degree of public interest, the Department may hold a public hearing and/or extend the comment period. If granted, a notice announcing extension of the comment period and/or public hearing shall be published promptly on the Department's Web site.

**Final Action:** After the close of the public comment period for the Methods Document, the Department will address the comments and publish the final Methods Document on the Department's Web site along with the Response to Comments.

After the close of the public comment period for the List of Water Quality Limited Segments, the Department will address the public comments, make any necessary revisions, and prepare a final List of Water Quality Limited Segments. The Department will submit the final List of Water Quality Limited Segments to USEPA Region 2 in accordance with 40 CFR 130.7. Upon receipt of a response from USEPA Region 2, the Department may amend the final list based on their comments. The Department will adopt the List of Water Quality Limited Segments as an amendment to the Statewide Water Quality Management Plan by placing a notice in the New Jersey Register and on the Department's Web site. However, the Department may repropose the List of Water Quality Limited Segments, if the Department determines that revisions made in response to USEPA Region 2 comments result in substantive changes that should be subject to public review and comment.

**Availability of Final Documents:** The Integrated Report, which will include the Integrated List, monitoring needs and schedules, TMDL needs and schedules, and any other information usually included in the 305(b) Report, will be submitted to the USEPA Region 2 as required by Section 305(b) of the federal Clean Water Act. The Department will post the availability of the final Integrated Report and the 303(d) list on its Web site after receipt of approval from the USEPA.

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#### See also:

NJDEP, *Surface Water Quality Standards* N.J.A.C. 7:9B, proposals and adoptions, at <u>http://www.nj.gov/dep/wms/bwqsa/rule_archives.htm</u>.

Parameter	Aquatic Life (general and trout)	Recreation	Drinking Water Supply	Agricultural Water Supply	Industrial Water Supply	Shellfish Harvest for Consumption	Fish Consumption
Biological Community Data:	X						
Shellfish Closures						X	
Beach Closure Data		Х					
Dissolved Oxygen	X						
Enterococci (saline)		Х					
Fecal Coliform (saline)		X*				Х	
E. Coli (freshwater)		Х					
Total Coliform						X	
pH (Standard Units)	X		Х		Х		
Phosphorus, Total	X						
Solids, Suspended (TSS)	X				Х		
Salinity				Х			

* secondary only

Parameter	Aquatic Life (general and trout)	Recreation	Drinking Water Supply	Agricultural Water Supply	Industrial Water Supply	Shellfish Harvest for Consumption	Fish Consumption
Solids, Total Dissolved (TDS)			x	X	Х		
Sulfate			X				
Temperature	X						
Turbidity	X						
Ammonia, un-ionized	X						
Acenaphthene			X				
Acrolein			X				
Acrylonitrile			X				
Aldrin	X		X				
Anthracene			X				
Antimony			X				
Arsenic	Х		X				
Asbestos			X				
Barium			Х				
Benz(a)anthracene			X				
Benzene			X				
Benzidine			X				
3,4-Benzofluoranthene (Benzo(b)fluoranthene)			X				
Benzo(k)fluoranthene			Х				

Parameter	Aquatic Life (general and trout)	Recreation	Drinking Water Supply	Agricultural Water Supply	Industrial Water Supply	Shellfish Harvest for Consumption	Fish Consumption
Benzo(a)pyrene (BaP)			Х				
Beryllium			Х				
alpha-BHC (alpha-HCH)			Х				Х
beta-BHC (beta-HCH)			Х				Х
gamma-BHC (gamma-HCH/Lindane)	X		Х				Х
Bis(2-chloroethyl) ether			Х				
Bis(2-chloroisopropyl) ether			Х				
Bis(2-ethylhexyl) phthalate			Х				
Bromodichloromethane (Dichlorobromomethane)			X				
Bromoform			Х				
Butyl benzyl phthalate			Х				
Cadmium	X		Х				
Carbon tetrachloride			Х				
Chlordane	X		Х				Х
Chloride	X		Х				
Chlorine Produced Oxidants (CPO)	Х						
Chlorobenzene			Х				
Chloroform			Х				
2-Chloronaphthalene			Х				
2-Chlorophenol			Х				

Parameter	Aquatic Life (general and trout)	Recreation	Drinking Water Supply	Agricultural Water Supply	Industrial Water Supply	Shellfish Harvest for Consumption	Fish Consumption
Chlorpyrifos	X						
Chromium			Х				
Chromium+3	X						
Chromium+6	Х						
Chrysene			Х				
Copper	X		Х				
Cyanide (Total)	X		Х				
4,4'-DDD (p,p'-TDE)			Х				Х
4,4'-DDE			Х				Х
4,4'-DDT	X		Х				Х
Demeton	X						
Dibenz(a,h)anthracene			Х				
Dibromochloromethane (Chlorodibromomethane)			X				
Di-n-butyl phthalate			Х				
1,2-Dichlorobenzene			Х				
1,3-Dichlorobenzene			Х				
1,4-Dichlorobenzene			X				
3,3'-Dichlorobenzidine			X				
1,2-Dichloroethane			Х				
1,1-Dichloroethylene			Х				

Parameter	Aquatic Life (general and trout)	Recreation	Drinking Water Supply	Agricultural Water Supply	Industrial Water Supply	Shellfish Harvest for Consumption	Fish Consumption
trans-1,2-Dichloroethylene			Х				
2,4-Dichlorophenol			Х				
1,2-Dichloropropane			Х				
1,3-Dichloropropene (cis and trans)			Х				
Dieldrin	Х		Х				Х
Diethyl phthalate			X				
2,4-Dimethyl phenol			Х				
4,6-Dinitro-o-cresol			Х				
2,4-Dinitrophenol			X				
2,4-Dinitrotoluene			Х				
1,2-Diphenylhydrazine			Х				
Endosulfans (alpha and beta)	Х		X				
Endosulfan sulfate			Х				
Endrin	Х		X				
Endrin aldehyde			X				
Ethylbenzene			Х				
Fluoranthene			X				
Fluorene			Х				
Guthion	Х						
Heptachlor	Х		Х				Х
Heptachlor epoxide	Х		Х				Х
Hexachlorobenzene			Х				
Hexachlorobutadiene			Х				
Hexachlorocyclopentadiene			Х				

Parameter	Aquatic Life (general and trout)	Recreation	Drinking Water Supply	Agricultural Water Supply	Industrial Water Supply	Shellfish Harvest for Consumption	Fish Consumption
Hexachloroethane			Х				
Indeno(1,2,3-cd)pyrene			Х				
Isophorone			Х				
Lead	X		Х				
Malathion	X						
Manganese							Х
Mercury	X		Х				Х
Methoxychlor	X		Х				
Methyl bromide (bromomethane)			Х				
Methyl t-butyl ether (MTBE)			Х				
Methylene chloride			Х				
Mirex	X						
Nickel	X		Х				
Nitrate (as N)			Х				
Nitrobenzene			Х				
N-Nitrosodi-n-butylamine			Х				
N-Nitrosodiethylamine			Х				
N-Nitrosodimethylamine			Х				
N-Nitrosodiphenylamine			X				
N-Nitrosodi-n-propylamine (Di-n- propylnitrosamine)			X				
N-Nitrosopyrrolidine			Х				

Parameter	Aquatic Life (general and trout)	Recreation	Drinking Water Supply	Agricultural Water Supply	Industrial Water Supply	Shellfish Harvest for Consumption	Fish Consumption
Parathion	X						
Pentachlorobenzene			X				
Pentachlorophenol	X		X				
Phenol			X				
Phosphorous	X						
Polychlorinated biphenyls (PCBs)	X		X				Х
Pyrene			X				
Selenium	X		X				
Silver	X		X				
Sulfide-hydrogen sulfide (undissociated)	X						
1,2,4,5-Tetrachlorobenzene			X				
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)			X				Х
1,1,2,2-Tetrachloroethane			Х				
Tetrachloroethylene			Х				
Thallium			X				
Toluene			X				
Toxaphene	X		X				
1,2,4-Trichlorobenzene			X				
1,1,1-Trichloroethane			X				
1,1,2-Trichloroethane			X				

Parameter	Aquatic Life (general and trout)	Recreation	Drinking Water Supply	Agricultural Water Supply	Industrial Water Supply	Shellfish Harvest for Consumption	Fish Consumption
Trichloroethylene			Х				
2,4,5-Trichlorophenol			Х				
2,4,6-Trichlorophenol			Х				
Vinyl chloride			Х				
Zinc	X		Х				
Radioactivity			X				

# Appendix B

## Comments and Agency Responses on the Revised Draft 2010 Water Quality Monitoring and Assessment Methods (Methods Document)

### **Commenters:**

Thomas Amidon, OMNI Environmental, LLC Kelley Curran, Great Swamp Watershed Association Ellen Gulbinsky, Association of Environmental Authorities (AEA) Faith Zerbe, Delaware Riverkeeper Cindy Zipf, Clean Ocean Action (COA)

#### General Comments:

1. Comment: The changes to the Frequency of Exceedance section, as well as a few others, were not noted in the summary proposal. While the changes in this section appear to provide useful clarification, it is inappropriate and unacceptable that not all of the changes to the document were identified in the summary list of revisions. This undermines the trust and ability of citizens to comment on documents. (Zipf)

**Response:** The Department's public notice (see 41 NJR 4853(a)) seeking comment on the revised draft 2010 Integrated Water Quality Monitoring and Assessment Methods (Methods Document) included a list of chapters and sections that were significantly revised. As noted by the commenter, the Department revised other sections to ensure consistency with the significantly revised sections. However, the notice invited comment on the entire document, not just those modified in response to previously received comments.

**2.** Comment: More information is needed on management actions and the number of years a unit is on the 303(d) list and Sublist 4 and 5 on the Integrated List. (Zipf)

Response: The Department agrees that more information should be included in the Integrated Water Quality Monitoring and Assessment Report (Integrated Report) regarding water quality limited waters. The Department will continue to work with USEPA to implement existing national tools, e.g. USEPA's Assessment Database (ADB) and Assessment Total Maximum Daily Load (TMDL) Tracking and Implementation System (ATTAINS), and develop new tools and reporting formats for sharing water quality assessment information with the public. Additional information about ADB and ATTAINS is available on USEPA's Web site at http://www.epa.gov/waters/adb/ and http://www.epa.gov/waters/ir/.

**3.** Comment: The revised draft 2010 Methods Document is not acceptable as is and needs improvement before finalizing. (Zipf)

**Response:** The 2010 Methods Document has been significantly revised to address comments received, as explained in these responses, as well as agency-initiated changes. The final 2010

Methods Document provides a comprehensive description of the methods to be used by the Department for assessing water quality and use attainment in developing the 2010 Integrated List of Waters and the 2010 Section 303 (d) List of Water Quality Limited Waters, as part of the 2010 Integrated Report.

## Section 3.1

4. Comment: The change in the last sentence of this section from "may disregard data" to "may apply less weight to data less than five years old if newer data was collected or analyzed using scientific methods that are more precise" is an improvement. Please note that "and/or accurate" should be added to the end of this sentence, as new scientific methods may also provide more accurate data. (Zipf)

**Response:** The Department has revised this sentence as requested in the final 2010 Methods Document.

**5. Comment**: The Department has indicated that it will primarily rely on the most recent five years of information and that less weight will be given to older data when "newer data were collected or analyzed using scientific methods that are more precise." The commenter supports the use of the best available scientific information in rendering impairment determinations. Where data from better analytical methods indicate that impairment does not exist, such information constitutes "good cause" for not identifying the waters as impaired. (See, 40 C.F.R. 130.7(b)(6)(iv). (Gulbinsky)

**Response:** The Department appreciates the commenter's support.

6. Comment: Sources of external data that are submitted electronically should be considered by the Department even if it is not directly placed in the New Jersey data exchange system. For example, excel electronic databases should be considered "readily available" by the Department as well as other electronic menus that volunteer monitoring groups may use to house their data. (Zerbe)

**Response:** The Department receives thousands of water quality data points from multiple data sources, all of which must be evaluated for data quality, compiled on a station level to evaluate exceedances of water quality standards, and then compiled on an assessment unit basis to assess designated use attainment. Considering the volume of data received and the limited resources available for data review, the Department must streamline the water quality assessment process by using a uniform electronic format for data submittal. The Department can only consider data submitted in the specified electronic format (and which meets the specified data requirements) as "readily available" for this purpose.

To that end, the Department has developed the New Jersey Water Quality Data Exchange (WQDE) System. WQDE was created through a stakeholder process to address the needs of data submitters, data users, and data viewers. The Department also provided testing and training opportunities available to all parties who registered their intent to submit data for the 2010 Integrated Report. A similar system was created specifically for volunteer monitoring

(VM) data. Both systems are compatible with USEPA's Water Quality Exchange (WQX) system. The Department worked closely with data providers to enter their data into WQDE for the 2010 Integrated Report; however, since the WQDE system was just recently launched, we also accepted some data in Excel format. For the 2012 Integrated Report only data from USEPA's STORET database, USGS' NWIS database, WQX, or WQDE/VM will be considered "readily available" for use in developing future Integrated Reports. The Department continues to provide training and resources for data submittal by volunteers through the Volunteer Monitoring Program.

**7. Comment:** The commenter supports the change to require QAPP approval prior to sampling. (Zipf)

**Response:** The Department appreciates the commenter's support.

8. Comment: The Department's proposed policy that only data from outside groups that have a pre-approved (by the state) QAPP may be inconsistent with EPA guidance, which says states should screen all submitted data, and if any of it complies with the state's QAPP policy (especially in the way of the QA/QC) elements thereof, then the state should use it. With the limited data that are available, excluding data submitted with metadata or a QAPP that meets or exceeds the Department QA/QC objectives seems contradictory of the goal of assessment and could exclude perfectly good and rigorous datasets that meet the Tier D requirements. The commenter appreciates the Department's efforts to assist groups with QAPP pre-approval, specifically for Tier D data, but again, if data quality measures are met at the Tier D level without a pre-approved QAPP by the state the commenter feels the data should be used and not disqualified. (Zerbe)

**Response:** USEPA guidance requires that states consider all "data of a known quality" in assessing water quality. The Department requires the approval of a Quality Assurance Project Plan (QAPP) before monitoring begins to ensure that data are of an acceptable known quality. The Department's Volunteer Monitoring Program, in conjunction with the Department's Office of Quality Assurance, the Watershed Watch Network, and EPA Region 2, developed a multi-tiered (Tiers A through D) approach to quality assurance that tailors quality data quality requirements to the organization's data needs, data users, and intended data use. The quality assurance (QA) planning phase is designed to assure that the level of quality control required is commensurate with these factors. Data collected by an organization that has not successfully completed the QA planning phase (i.e., obtained Department approval of the QAPP) do not meet Tier D requirements, cannot be considered "Tier D data", and cannot be used by the Department for use assessment purposes.

**9. Comment**: The Department should accept data from groups who provide sampling locations with a stream or road crossing and "drive-to" directions, as coordinates can be developed remotely for these sites. Pennsylvania, for example, will use "drive-to" directions to plot sites on maps when volunteer groups are not able to provide latitude and longitude. (Zerbe)

**Response:** Spatial data are a necessary component of any water quality data set so that the Department can confirm and map the exact location of the data. The Department does not

have the resources to develop spatial coordinates for data submitted by external data sources (see Response to Comment #6); therefore, site coordinates must be submitted electronically as part of the data package. Spatial coordinates for monitoring locations, which are required in Quality Assurance Project Plans, can be identified through the use of the Department's free on-line tools: <u>DataMiner or GeoWeb/NJiMAP</u>, or through the use of geographic positioning system (GPS) units. The Department's Volunteer Monitoring Program has a number of GPS units available for loan to volunteers and also provides staff assistance with the use of these units, if needed, at monitoring locations. Driving directions or road crossings are useful information but are not an acceptable substitute for spatial coordinates.

**10. Comment**: The Department should replace "in accordance with the corresponding Quality Assurance Project Plan (QAPP)" (page 14), with "in accordance with an accepted statistical methodology (such as ASTM E178)," since many QAPPs do not include any definition for outlier determination. (Amidon)

**Response:** The Department agrees with this comment and has revised this sentence as requested in the final 2010 Methods Document.

**11. Comment**: DRBC should be added as an agency that can approve QAPPs (in addition to NJ, EPA, and other state agencies (like PADEP) and USGS). (Zerbe)

**Response**: The Department will accept QAPPs approved by DRBC; however, the Department will only use volunteer monitoring data if the QAPP has also been reviewed and approved by the Department's Volunteer Monitoring Program prior to data collection (see Response to Comment #8).

**12. Comment**: Section 3.1 under Data Age states "The Department will use the most recent five years of readily available data to characterize current conditions." This statement is neither clear nor sufficient. A sentence should be added to this section requiring specific dates in the report, such as "The Integrated Report must document the specific data collection dates for data used in the assessments." (Zipf)

**Response:** The sentence in question is sufficient since the Methods Document is intended to provide an explanation of the methods used to assess data for the Integrated Report. The Department specifies the data collection period for each Integrated Report in the data solicitation public notice published in the New Jersey Register. For the 2010 Integrated Report, the Department requested submission of data collected January 1, 2004 through December 31, 2008.

**13. Comment:** The evaluation of stream subsamples was removed from the revised draft Methods Document, and should be included in order to specify how to evaluate subsamples from the same location. Subsamples collected across a horizontal transect, or at several locations in close proximity to each other and at the same time, should be averaged together to compare with "not to exceed at any time" criteria, since horizontal transects often include small pools or backwater that are not reflective of the stream as a whole at that location. Vertical cross sections can be even more problematic because the deeper samples will be

influenced by sediment interactions and be even less reflective of stream conditions as a whole. Samples not less than one foot from the bottom or half the water column depth (whichever is less) could be averaged together; alternatively, samples near or above middepth could be selected for assessment purposes. (Amidon)

**Response**: The section on subsamples was removed because it was unnecessary. Typically, the Department receives a single value which could be based upon a composited sample collected along a stream transect. Monitoring and data analysis are addressed in the individual project plans and is beyond the scope of the Methods Document.

## Section 3.2

**14. Comment**: Where new guidance is being applied to interpret narrative criteria or to apply a numeric impairment metrics that have not undergone notice and comment rulemaking, the commenter would appreciate the Department's confirmation that alternative approaches may be considered as appropriate to ensure proper use protection and reasonable application of requirements. (Gulbinsky)

**Response:** The purpose of the Methods Document is to explain the methods to be used by the Department in assessing water quality and use attainment in developing the Integrated Report, including the Integrated List of Waters and the 303(d) List of Water Quality Limited Waters. The Department revises the Methods Document as needed to incorporate any new assessment methods that have been developed or criteria that have been promulgated and will be applied to the development of the corresponding Integrated Report. In accordance with N.J.A.C. 7:15-6, the public is provided with an opportunity to review and comment on the Department's assessment methods before these methods are finalized and used to assess water quality. As an example, the 2010 Draft Methods Document published for comment on April 20, 2009 included a new method to assess compliance with the existing nutrient policy for FW waters of the State pursuant to N.J.A.C. 7:9B-1.5(g). The draft Methods Document on December 21, 2009. The draft 2010 Methods Document was also revised to include a new a new fish consumption use assessment method based on newly available fish tissue concentration data.

**15. Comment**: The section on "Assessment of Threatened Waters" (page 10) is not specific enough to determine whether a particular dataset could be used to designate a waterbody as "threatened." Will a linear trend be calculated, and if so how strong does the correlation have to be for the Department to use it to extrapolate to the next listing cycle? If USGS trend assessments are utilized, the methodology should be described. The statistical test proposed and the degree of certainty (probability) should be described. (Amidon)

**Response:** The Department uses the U.S. Geological Survey methodology outlined in *Trends* in *Water Quality of New Jersey Streams, Water Years 1986-95*, Water Resources Investigations Report 98-4204 (available at <u>http://pubs.usgs.gov/wri/wri98-4204/</u>) to assess trends in chemical water quality.

**16. Comment**: The paragraph on Natural Conditions (page 11) should be expanded to specify those water quality criteria exceedances that are often naturally-occurring and will be evaluated carefully by the Department before designating a waterbody as impaired. These should include stream temperature excursions and low pH excursions, both of which often occur due to natural conditions. (Amidon)

**Response:** The Methods Document does not establish a set of parameters or conditions that are assumed to be naturally-occurring. Rather, the Methods Document explains the circumstances that the Department may further examine an excursion and determine, based on Best Professional Judgment, that the excursions represent "natural conditions". As indicated in the Aquatic Life use assessment, the Department will evaluate excursions of the DO, temperature, and pH criteria where the biological community is not impaired to determine whether this represents a "natural condition". This provision is general enough to allow the Department to evaluate other pollutants and also make a determination that the excursion is a natural condition for which there are no known man made sources.

**17. Comment:** Where arsenic is present in a water supply due to "natural conditions" the subsequent discharge of that material at equal or lower concentrations should not be considered an "anthropogenic source". The determination of whether a pollutant concentration occurring is "natural" should relate back to the source not the ultimate discharge point, particularly where these occur within the same watershed. (Gulbinsky)

**Response:** The Department is currently investigating sources of arsenic in New Jersey waters and to characterize the concentration of arsenic that would be considered naturally-occurring. As this information becomes available, it will be incorporated into the Integrated Report and arsenic will be delisted from the List of Water Quality Limited Segments (303(d) List) as appropriate.

18. Comment: The following sentence needs to be amended with the underlined: "Data that do not meet applicable SWQS criteria potentially due to natural conditions will be carefully evaluated and data attributed to natural conditions will be explained and supported in the <u>Integrated Report.</u>" It is important that exceptions for natural conditions be scientifically justified in order to prevent misuse or incorrect application of this type of exception for an impairment. (Zipf)

**Response:** The final 2010 Methods Document has been revised as requested by the commenter.

**19. Comment:** It is still unclear how the Department determines (or will determine) when low dissolved oxygen (DO) conditions in marine waters are due to excessive nutrient loadings such as nitrogen or due to "natural conditions". While the ocean benthic index under development will lead to a better understanding of the impacts of low DO on benthic life, how it will help clarify the cause of low DO conditions had not been explained. In addition, how long will the Department use lack of knowledge as an excuse to not act on this problem? (Zipf)

**Response:** The Department has not concluded that the low dissolved oxygen levels observed in New Jersey's ocean waters are due to natural conditions. As stated in the 2008 Integrated Report, "The reason for the benthic low DO cell is not known ..." (page 38). The Department is currently working to develop a benthic indicator for estuarine and ocean waters to improve the assessment of aquatic life use. The Department is working with USEPA and Rutgers University to develop a metric for the benthic community that accurately measures impairment of the aquatic life use for these waterbodies. Once this index has been developed, it will be incorporated into a revised Methods Document to be used in a future Integrated Report. At this time, the only benthic indicator available for estuarine and ocean waters is the Benthic Index of Biotic Integrity developed for the New York/New Jersey Harbor based on USEPA Region 2's REMAP protocol. This information was used in 2008. USEPA resampled but the results are not available to update these assessments at this time.

**20. Comment**: What are the "*other conditions*" the Department attributes to natural conditions that allow for exemptions of impairment? Human activities, such as development, land use changes, dam flow changes, and water withdrawal, can and have changed base-flow conditions as well as groundwater levels in New Jersey according to the USGS. Attributing human-caused, low flow conditions to natural conditions is not acceptable. Furthermore, ignoring the related impairments would be scientifically unjustified and invalid. How can drought-induced water impacts be differentiated from these human activity-related impairments and be "attributed to natural conditions" only?" (Zipf)

**Response:** The Department agrees with this comment and has revised the statement under Section 4.3, "Additional Considerations When Evaluating Biological Data" to read as follows in the final 2010 Methods Document: "Disturbed or impaired biota can result from drought conditions that result in reduced base flow. If biological communities are impaired due to drought-induced, low flow conditions, the impairment will be attributed to natural conditions and the data will not be considered valid for assessment purposes (see "Natural Conditions" in Section 3.2)."

**21. Comment**: The Department discusses that a number of "translators" are used to convert the narrative criteria into some type of numeric endpoints. If such values are applied as mandatory requirements (not just guidance subject to site-specific decision-making) such numeric values must be formally adopted as part of the SWQS. (Gulbinsky)

**Response:** As discussed in Sections 3.2 and 6.0, the Department has identified "translators" as "assessment approaches" - not mandatory endpoints - to quantitatively interpret the narrative criteria, which are qualitative in nature. These translators are used to assess designated uses such as aquatic life use based on indicators of use attainment when direct measurement of pollutant concentrations is not feasible or appropriate. These translators include biological metrics used to quantify biological indicators used to assess the aquatic life use or the fish tissue concentration thresholds used to assess the fish consumption use. The scientific basis for the benthic indicators, and other indicators of use attainment, is continually being refined and is subject to public review and comment when it is incorporated into a draft Methods Document that is published by the Department. In 2009 the Department adopted a new provision into the SWQS at N.J.A.C. 7:9B-1.5(c)9 to indicate that

the Integrated Water Quality Monitoring and Assessment Methods (Methods Document) developed pursuant to N.J.A.C. 7:15-6.2 are used to evaluate water quality data and identify waters where water quality does not meet the Surface Water Quality Standards at N.J.A.C. 7:9B as required by Section 303(d) and 305(b) of the Federal Clean Water Act. By specifying the numeric endpoints applicable to the development of the Integrated List in the Methods Document, the Department is able to update these endpoints as the science changes, ensuring that the most current scientific methods are used.

**22. Comment**: New Jersey seeks to use dissolved oxygen swings and chlorophyll *a* readings to help determine narrative criteria attainment. The Department states that automatic data loggers are necessary to document these swings. This is much more difficult and much more expensive to measure as automatic data loggers and installation of loggers can be costly to install. How many automatic data loggers does New Jersey use currently on our streams? During a time of limited resources, the Department should not be proposing more rigorous and expensive monitoring that ultimately weakens a straightforward numeric standard that allows for clear enforcement. (Zerbe)

**Response:** The Department has determined that response indicators such as dissolved oxygen (DO and other biological measurements are better indicators of adverse nutrient impacts on the aquatic ecosystem than an assessment of the in-stream concentration of total phosphorus alone. As indicated in the proposal to amend the SWQS published April 20, 2009 (see 41 N.J.R. 4587(a)), the effects of excessive nutrients are very waterbody specific. The best method for assessing DO impacts is continuous monitoring of DO levels over multiple 24-hour periods, since the most critical period is just prior to sunrise. The DO swing over a 24-hour period is also valuable information for assessing nutrient impacts, and to identify where DO change is due to photosynthetic activity. This can only be accomplished with continuous monitoring. For the 2010 Integrated Report, six dissolved oxygen continuous data loggers were employed at 18 stations in the Department's freshwater monitoring network. These are supplemented by continuous monitoring data at 145 additional stations provided by other monitoring entities (e.g., volunteers). The development of an assessment method that relies on continuous DO monitoring does not mean that the Department will no longer accept traditional discrete data taken during daylight hours.

**23. Comment:** A multifaceted assessment method that draws on several symptoms of eutrophication to determine the overall eutrophic condition for both state estuaries and ocean coastal waters is recommended. It is also recommended that NOAA's Assessment of Estuarine Trophic Status (ASSETs) be used as a basis for these assessments. While it may not be possible to test for all of the ASSETs symptoms such as seagrass loss that are specific to estuarine areas, chlorophyll levels and nuisance algal species which are already assessed by the Department could be included for assessments of ocean areas. (Zipf)

**Response:** Better indicators of nutrient impairment in coastal (tidal, estuarine, and marine) waters are needed, as stated in the 2008 Integrated Report. While the 2010 Methods Document includes a "multifaceted assessment method" for nutrient impairment of freshwater wadeable streams, it also states: "The Department will continue to refine and expand the nutrient impact assessment method to include other types of waterbodies and

other response indicators, as explained in the *New Jersey Nutrient Criteria Enhancement Plan* (NJDEP, 2009) available on the Department's Web site at <u>www.state.nj.us/dep/wms</u>. The Nutrient Criteria Enhancement Plan identifies several initiatives that are currently underway to provide the scientific information necessary to develop appropriate indicators and assessment methods for nutrient impairment of aquatic life uses in coastal waters. The status of these initiatives will be updated in the 2010 Integrated Report. The National Oceanic and Atmospheric Administration's (NOAA) Assessment of Estuarine Trophic Status could be used to assess overall conditions but could not be used to determine exceedances of New Jersey's adopted water quality criteria. For this reason, the Department is actively working with Rutgers University to develop ecological indicators appropriate for our estuarine waters (see Response to Comment #19).

**24. Comment**: The lack of assessment of impairments to marine waters must be recognized in the revised Methods Document and the Integrated Report. The commenter strongly recommends that the following be added to the end of the first paragraph of the section "Narrative Water Quality Criteria" that states, and if possible provide further updates: "As of January 2010, there are no narrative nutrient criteria for marine waters. In December 2009, the state proposed extending the nutrient criteria are in development with Rutgers and EPA. The Department recognizes that this 2010 report will not fully assess or identify nutrient-related impairments in marine waters, other than dissolved oxygen." This statement, or something very similar, must also be included in the 2010 Integrated Report. Otherwise, these waters appear to not be impaired for nutrients, when in fact they have not been assessed. (Zipf)

**Response:** This section of the Methods Document is intended to explain the general difference between numeric and narrative criteria for the purposes of water quality assessment. It is not intended to discuss how specific surface water quality criteria, or their implementation, may be changed in the future. The nutrient assessment methods included in the Final 2010 Methods Document are based on the criteria and scientific information available at the time of publication, which will be used to assess water quality for the 2010 Integrated Report. The 2010 Integrated Report will explain the basis and results of the water quality assessments including where there is insufficient information to adequately assess nutrient impacts. The Integrated Report will also discuss where improved methods are needed or under development to improve the assessment process in the future.

#### Section 4.1 Evaluation of Physical and Chemical Data

**25. Comment:** The distinction between excursion and exceedance is a useful one (page 11). Also, the commenter agrees with the requirement that individual excursions be reviewed and excluded if they are outside the margin of error for the analytical method or attributable to natural conditions, transient events, or flow conditions not representative of the design flow. (Amidon)

**Response:** The Department appreciates the commenter's support.

**26. Comment**: The deletion of the "Unusual Events" section and replacement with "*Transient events*" in the revised Section 4.1 is an improvement in that these events are now further refined, but more specific language and information is still needed. What is a "very brief timeframe"? Is a two month shellfish closure due to a sewer-line break considered a transient event? The commenter would argue that this would not be a transient event. In addition, events that are characterized as "Transient" must still be carefully considered and assessed to ensure that impacts are not major and do not have long-lasting effects. If and when a transient event is used to not list an impairment, then this decision needs to be explained and supported in the integrated report. (Zipf)

**Response:** The Department appreciates the commenter's support. A shellfish closure for any period of time caused by a known problem would not qualify as a transient event or result in placing the waterbody on the Section 303(d) List of Water Quality Limited Waters. Under the given scenario, the assessment unit would be assigned to Sublist 4B: "The designated use is not attained or is threatened and development of a TMDL is not required because other enforceable pollutant control measures are reasonably expected to result in the attainment of the designated use in the near future." Where a shellfish closure is implemented due to an unknown cause, the assessment unit would be assigned to Sublist 5 and placed on the Section 303(d) List for "Cause Unknown." As requested by the commenter, the Department has revised Section 4.1 of the final 2010 Methods Document to state, "Excursions attributed to any of these conditions will be explained and supported in the Integrated Report."

**27. Comment:** The "Analytical Precision and Accuracy" section is incorrect. It indicates a disturbing lack of understanding of precision and accuracy, and needs to be rewritten. Precision is correctly defined as "How reproducible a measurement is" where as accuracy is "How close a measurement is to the 'true value'." Both are affected by the analytical method used. Evidently, the section on significant figures in the previous Methods Document was deleted and incorrectly integrated into the accuracy description in this section. (Zipf)

**Response:** The section described "precision" and "accuracy" from a statistical perspective commonly used in laboratory quality assurance. The paragraph was originally drafted in consultation with chemists from the U.S. Geological Survey and is sound.

- **28. Comment**: The proposed protocol (page 12) for comparing continuous dissolved oxygen (DO) measurements to the SWQS criteria makes no mention of the recording interval used to determine that the DO is below the applicable minimum criterion for at least an hour. The commenter suggests adding a clarification that the DO must be below the applicable minimum criterion for at least two recording intervals and one hour to be considered an excursion. If the recording interval is one hour (as is often the case with NJDEP diurnal monitoring), then two consecutive recording intervals with DO less than the applicable minimum criterion would constitute an excursion. (Amidon)
- **29. Comment**: The Department should clarify that the temperature must be above the applicable criteria for at least two recording intervals and one hour to be considered an excursion. If an hourly recording interval is used (as is common for NJDEP diurnal monitoring), then the temperature threshold should have to be exceeded for two recording

intervals in order to be considered an excursion. Furthermore, the distinction between excursion and exceedance appears to have been left out of the paragraph on evaluating continuous temperature data. (Amidon)

**30. Comment**: The Department proposes to consider a single excursion (for one hour or more) to be an exceedance. The continuous pH methodology should be similar to the continuous DO methodology, where two excursions at the same location constitute an exceedance. Also, a clarification should be added stating that the pH must be outside the applicable criteria range for at least two recording intervals and one hour to be considered an excursion. If the recording interval is one hour (as is often the case with NJDEP diurnal monitoring), then two consecutive recording intervals with pH outside the applicable criteria range would constitute an excursion. (Amidon)

**Response to Comments 28 through 30:** Any number of recording intervals may be used to generate continuous monitoring data, which is why the Methods Document establishes the frequency and duration of time that non-compliance with the criteria must occur to be considered an exceedance, rather than a specific recording frequency. For all continuously monitored parameters, an exceedance occurs when continuous monitoring results include two excursions with a total duration of at least one hour each.

**31. Comment**: The Continuous Monitoring section for Dissolved Oxygen (DO) does not clarify the depth of the sampling instruments. Obviously, there is an important difference as to whether DO readings are from surface or bottom waters in non-shallow areas. Also, an autonomous glider system for assessing coastal waters has been mentioned in past integrated reports for future use in assessing DO. Will this indeed be used in the 2010 Integrated Report as planned? (Zipf)

**Response:** The Methods Document explains the Department's methods for assessing - not collecting - water quality data. Methods for collecting data are explained in individual Quality Assurance Project Plans (QAPPs), as explained in Section 3.1 under "Quality Assurance". An autonomous glider system was not used by the Department for collecting data in coastal waters; therefore, such data was not available for the 2010 Integrated Report.

- **32. Comment**: The practice of listing a stream as impaired when there are at least two exceedances of the minimum DO criterion is contrary to the NJWQC for DO that states that at no time should there be a reading below the minimum criteria. Furthermore, if DO is measured by field staff (and not automatic data loggers) the "just before dawn reading" when readings of DO are likely to be the lowest is usually not captured in the dataset due to staff constraints. One reading below the minimum DO criteria should equal an exceedance as a result particularly with the knowledge that DO is a critical need for aquatic life health. (Zerbe)
- **33. Comment:** For temperature data, the "not to exceed" temperature criteria should also be adhered to rather than the proposal to only count an exceedance or violation to criteria when there are at least two exceedances within a two-day period. The one-hour maximum for acute criteria should be adhered to and considered a violation when the maximum is recorded by a

grab sample (that may not reflect a one-hour timeframe). The Department should consider any single measurement above the maximum threshold at any given time as an exceedance of the acute temperature criterion, based on the nature of grab samples. (Zerbe)

**Response to Comments 32 and 33:** As explained in the Methods Document under "Frequency of Exceedance", the Department has determined that a minimum of two exceedances of a numeric SWQS criterion are necessary to confirm noncompliance with a given surface water quality criterion and to ensure that the first exceedance was not a transient condition, which could be the case when all but one datum at a given monitoring location comply with the applicable criterion.

While continuous temperature data are preferred by the Department as a more accurate measurement of the ambient water quality conditions, grab sample data will be assessed when continuous data are not available. Where such grab sample data contain measurements above the applicable criterion on at least two occasions (separate dates), the waters will be considered in exceedance of the applicable criterion and the corresponding assessment unit will be placed on the Section 303(d) List of Water Quality Limited Waters.

34. Comment: Volunteer monitoring groups regularly monitor water quality in local streams and report data, some of which is in the Tier D category, to the Department. The new methods facilitate a more rigorous assessment process for water quality evaluation and preparation of the Integrated List of Waters and 303(d) List. Although the revised draft Methods Document states that "Where sufficient data are not available to apply the new method, the Department will assess nutrient impairment based on compliance with the existing numeric SWQS criteria for phosphorus", it seems clear that the new criteria requiring continuous monitoring will eventually become the preferred standard. The commenter is concerned that their data will not satisfy the new criteria unless they are able to acquire, use and maintain continuous monitoring capabilities for DO (as well as temperature and possibly pH) measurements, and conduct additional sampling and analysis to measure chlorophyll a levels. Implementing these capabilities would be a major undertaking for volunteer monitoring groups like ours with limited financial and personnel resources. How will the proposed monitoring methods be implemented? Will the enhanced assessments using continuous monitoring and associated sampling for chlorophyll *a* determination be carried out principally by professional entities such as NJDEP, USGS, and specialist consultants? Or is it anticipated that volunteer monitoring groups will be able to carry out continuous monitoring and provide data relating to the new criteria at the Tier D level? (Curran)

**Response:** It is anticipated that the Department's Volunteer Monitoring Program will continue to assist volunteer monitoring groups with equipment, training, and additional resources as needed and available. The Department will also continue to use grab sample data from volunteers and other monitoring entities to assess water quality where continuous data are not available for parameters such as DO, temperature, and pH. However, the new assessment method for nutrient impairment of aquatic life uses can only be applied when continuous data are available.

**35. Comment:** The Department should not designate a stream as impaired unless a thermal alteration has been identified. This is consistent with the newly adopted SWQS, which specifically reference thermal alterations in the description of temperature criteria. A thermal alteration could be a thermal point source or a poor canopy cover in a small stream (larger streams are not greatly influenced by canopy cover). In the absence of either of these potential thermal alterations, the temperature exceedance should be considered naturally occurring. The idea that high stream temperatures might be caused by stormwater impacts defies reality. We have performed continuous temperature measurements at dozens of stream locations in New Jersey during storm events, and have yet to observe a temperature increase during a storm. (Amidon)

**Response:** The Department added a provision to the SWQS at N.J.A.C. 7:9B-1.5(c)8 and also removed the term "thermal alteration" to address the commenter's concern (See 41 N.J.R. 4735(a)). The Department recognizes that in addition to point and nonpoint sources, temperature increases may be due to natural conditions such as solar radiation, lack of stream canopy and flow conditions. For this reason, the Department does not apply the temperature criteria as an "end of pipe" effluent limitation for point source discharges. If the Department may require a NJPDES-permitted facility to conduct temperature monitoring upstream and downstream of their discharge. This additional sampling is necessary to determine whether the discharge from the facility increases the ambient stream temperature by more than the acceptable levels established at N.J.A.C. 7:9B-1.5(c)8. Therefore, the temperature criteria and policies take into account the ambient water quality.

**36. Comment**: For chronic aquatic life criteria which have a 4-day exposure period and where exceedances are captured in a time period that is less than 4-days, special attention needs to be made to capture this additional data on these streams to determine if NJWQC are being violated. The stream should not be penalized because of lack of data. Flows and modeling could also be used to extrapolate continued violations. (Zerbe)

**Response**: The SWQS include both acute and chronic water quality criteria to protect aquatic life uses. Section 4.1, "Duration (Exposure Periods)" states that "chronic aquatic life criteria require a four-day exposure period; therefore, data collected under flow conditions that last less than four days ... are not considered valid for assessment of chronic aquatic life criteria ..." This is consistent with the Surface Water Quality Standards at N.J.A.C. 7:9B-1.14(f)2, which state, "Chronic aquatic life protection criteria are determined with no exceedance at or above the MA7CD10 flow and expressed as four-day average." The Department will evaluate sample results that exceed the chronic criteria to determine if the conditions were likely to occur over four days. This provision does not affect the assessment of acute criteria.

**37. Comment**: This section appropriately recognizes that conditions lasting less than four days do not trigger chronic criteria but may be used for acute criteria assessment. Similarly, long-term averages, not individual readings, apply to assessment of 70-year exposure concerns (e.g., mercury). It is not apparent how the discussion regarding the number of exceedances (minimum of two) lines up with the duration discussion. For example, two of 30 samples exceeding a long-term objective should not constitute a violation of standards. (Gulbinsky)

**Response:** Exceedance of human health criteria is based on an assessment of the long-term average of the data collected. Unlike other parameters, if the average is exceeded, than the criteria is exceeded. Specifically, Section 4.1, "Duration (Exposure Periods)" states that, "[f]or human health carcinogen criteria, which are based on a 70-year exposure rate, the Department calculates a long-term average of all data available for the most recent five-year period for comparison to the applicable criterion." In the example provided, the criterion would be compared to the average of the thirty-two samples (assuming that they were collected over the most recent five-year period) to determine if there was an exceedance. The two datum with values above the criterion, alone, would not constitute an exceedance of the criterion.

**38. Comment**: Regarding the Computations Using Censored Data (page 13), the phrase "the central tendency of" should be inserted to form the following sentence: "Non-parametric methods must be used to evaluate *the central tendency of* datasets containing censored values." Presumably, this would not apply to assessment of the maximum value, which is the basis for most criteria. (Amidon)

**Response:** The Department agrees with the comment and has added the recommended phrase to the text of the Methods Document.

**39. Comment:** When only the minimum dataset of eight samples is available, one exceedance should be carefully examined and in certain cases may be sufficient to determine impairment or at least result in a higher sampling frequency and/or additional investigation. (Zipf)

**Response:** The Department requires a second confirmatory excursion before determining a parameter exceeds the applicable criterion to ensure that the excursion was not a transient event.

**40. Comment:** For large datasets, the Department should consider a minimum percent exceedance (e.g. 5 or 10%) rather than (or in addition to) relying on Best Professional Judgment. (Amidon)

**Response:** The Methods Document explains that, while the Department considers two excursions to constitute an exceedance, only two excursions out of a very large dataset may not accurately represent non-attainment of the designated use. Therefore, the Department may evaluate factors other than the number of exceedances (e.g., percent exceedance, magnitude of the exceedance and other water quality data) in assessing use attainment where the data set is very large. In such instances, the use assessment would be based on Best Professional Judgment and would be recorded and documented in the Integrated Report on a case-by-case basis. A minimum percent exceedance cannot be established as an assessment method unless the minimum percentage is promulgated as part of the applicable SWQS criteria.

**41. Comment:** It would appear reasonable to discuss the need to find at least monthly, if not seasonal, levels of TP above the numeric nutrient value. Plant growth and ecological

conditions do not respond to four-day exposures to this constituent. This would line up the TP objective with the growing season average periphyton level that is used to determine whether an impairment may be present. (Gulbinsky)

**Response:** The 2010 Methods Document includes a new assessment method to evaluate nutrient impairment of freshwaters using a "weight of evidence" approach to determine whether phosphorus causes non-attainment of the aquatic life use, where the response indicator data is available in the same summer season/year. The Department believes that this new assessment method provides a more accurate assessment of nutrient impairment of the aquatic life use than individual phosphorus values. Where sufficient data are not available to apply the new assessment method, the Department will assess nutrient impairment based on compliance with the existing numeric SWQS criteria for phosphorus and will list phosphorus as the cause of non-attainment where there is an exceedance of the numeric phosphorus criteria.

**42. Comment**: The Department should not eliminate "excursions" (or exceedances of the numeric water quality criteria) from the dataset based on "if noncompliance can be attributed to transient events, natural conditions, or flow conditions". If exceedances to water quality criteria occur during times of low flow and hot weather conditions for example, it is critical these exceedances are included in the dataset and considered a violation of the criteria as the exceedances effect the designated uses and health of aquatic life – as a result the stream can be listed as impaired and cleaned up appropriately. This action of not including these "excursions" in the dataset used to assess the stream for use attainment could be seen as a provision inconsistent with the numerous New Jersey Water Quality Criteria expressed as values and levels not to be surpassed, even for an instant, at any time. The Department should not eliminate these excursions from the dataset as such a practice is likely a violation of the intent of the Clean Water Act. (Zerbe)

**Response:** The Department does not exclude data from the assessment process. All excursions are evaluated to determine whether the event is due to transient or natural conditions. Should the evaluation determine that the events are due to transient or natural condition, the Department may decide not to identify the waterbody as impaired. These decisions are documented in the Integrated Report.

**43. Comment:** Assuming data points above the criterion-concentration but within the analytic margin of error (MOE) are not reliable or considered "excursions/outliers", while assuming data points below the criterion-concentration but within the MOE are reliable is inconsistent and not in the spirit of the Clean Water Act. Finally, requiring a minimum of two "exceedances/excursions" before a water quality criterion (WQC) for a non-toxic parameter allows a stream to be listed as impaired is not a good practice and not in spirit of the law. (Zerbe)

**Response:** The Department's policy regarding analytical precision and accuracy is consistent with sound scientific principles regarding the validity of data based on standard analysis, and reporting methods. When a value is within the margin of error of the analytical method – and the measurement overlies the criterion value – it cannot be determined that the

"excursion" represents an actual "violation" of the criterion or a limitation in the accuracy of the analytical method, in which case, there is not sufficient data (i.e., valid data) to determine that an exceedance of the SWQS criterion has, in fact, occurred.

The Department has established a policy of requiring a second confirmatory excursion before identifying a parameter to be in exceedance of the SWQS to insure that the excursion was not a transitory event.

## Sections 4.1 and 4.3

**44. Comment**: Section 4.1 under "Additional Considerations When Evaluating Biological Data" states, "Disturbed or impaired biota can result from extended drought or other conditions that result in reduced base flow. If biological communities are impaired due to drought-induced, low flow conditions, the impairment will be attributed to natural conditions and the data will not be considered valid for assessment purposes (see Section 3.2)." What are the "other conditions" the Department attributes to natural conditions that allow for exemptions of impairment? Human activities, such as development, land use changes, dam flow changes, and water withdrawal, can and have changed base-flow conditions as well as groundwater levels in New Jersey according to the USGS. Attributing human-caused, low flow conditions to natural conditions is not acceptable. Furthermore, ignoring the related impairments would be scientifically unjustified and invalid. How can drought-induced water impacts be differentiated from these human activity-related impairments and be "attributed to natural conditions" only?" (Zipf)

**Response:** Section 4.1 of the Final 2010 Methods Document has been revised to remove "extended" and "or other" from the sentence in question, since this section applies only to drought conditions. Low base flow alone does not automatically constitute drought conditions, as suggested by the commenter. Thus, the natural phenomenon of a drought is distinguished from other causes, such as surface water withdrawals, development, and other human activity, is determining that biological impairment is due to natural conditions.

#### Section 4.4 Assessment of Nutrient Impacts

**45.** Comment: The commenter appreciates the clarifications regarding how continuous monitoring results will be considered in making impairment determinations. The assessment regarding minimum DO appears to parallel USEPA's suggested approach on minimum criteria application. However, the 3 mg/l DO flux target deserves greater flexibility in its application as a characteristic of nutrient impairment. Although the commenter agrees that an elevated DO flux may be an indicator of plant growth, the degree of flux occurring is governed by a number of factors (such as water depth and re-aeration rate) such that plant growth levels producing a particular flux rate could vary widely. To the commenter's knowledge, there are no reliable scientific studies showing that aquatic life is impaired simply due to a total diurnal DO flux above 3 mg/l or the amount of plant growth associated with such a flux rate. For this reason, this "indicator" necessarily should be combined with other indicators before it is considered to provide proof of nutrient impairment. Moreover, this is certainly not an acute effect and should therefore allow for a longer averaging of

results if it is to be applied as an indicator. USEPA suggests that chronic DO conditions be applied on a 30-day average basis. Therefore, allowing only two individual DO flux occurrences greater than 3 mg/l before declaring a nutrient impairment seems inappropriate. Applying this indicator as some type of a growing season average would be a more appropriate approach. (Gulbinsky)

**Response:** There seems to be a misunderstanding by the commenter about the role of the DO flux in the nutrient assessment. The sole purpose of the DO flux is to rule out violations in dissolved oxygen criteria that are due to factors other than primary productivity, such as sediment oxygen demand; hence, the DO flux was never intended to be used alone and/or as the commenter stated "*showing that aquatic life is impaired simply due to a total diurnal DO flux above 3 mg/l*" without further evaluation of other response indicators.

**46.** Comment: The Department is proposing to use the 3 mg/l diurnal DO swing in the exact opposite manner than it was originally intended. The original Technical Manual for Phosphorus Evaluations (NJDEP, 2003) used a diurnal DO swing of 3 mg/l/d as a threshold below which it could be stated unequivocally that whatever impairment may exist in that waterbody cannot be due to excessive productivity (and therefore not caused by phosphorus). This is most clearly stated in the 2008 Technical Manual for Phosphorus Evaluations: the words "dissolved oxygen fluctuations of 3 mg/l or more" are followed by the parenthetical explanation, "indicative of photosynthetic activity" (page 13). In other words, if the diurnal DO swing is less than 3 mg/l, any DO criteria violations cannot be attributed to nutrient enrichment because there is too little photosynthetic activity. The Department is now proposing to use this threshold to mean the inverse, namely that a diurnal DO swing of 3 mg/l/d or more represents an "excessive" DO swing. Such an approach is definitely NOT supported by the diurnal data collected throughout New Jersey. There are many locations in New Jersey that occasionally exhibit diurnal DO variations much higher than 3 mg/l/d due to natural conditions. Furthermore (and more importantly), occasional diurnal variations in excess of 3 mg/l/d occur in streams that would be considered unimpacted by any other measure. It is one thing to apply a conservative swing of 3 mg/l as a value below which it can be said with certainty that a DO violation is not due to excessive productivity. It is quite another to select a diurnal DO flux that represents excessive productivity and is used to assess impairment. Such a value needs to be determined scientifically by evaluating all the diurnal data from NJ streams available to the Department, and comparing with other metrics of productivity. In the context now proposed, such a value takes on almost the same importance as a water quality criteria, and requires a strong technical basis. The Department has provided no such basis, and the use of a 3 mg/l/d swing in the manner proposed is not technically justified. (Amidon)

**Response:** The nutrient assessment method does not establish excessive DO swing as a water quality criterion or an independent indicator of impairment; it is considered only in combination with other factors that, collectively, may indicate impairment; which is similar to how it was used in the phosphorus evaluation study. The sole purpose of the DO swing remains, as it was in the phosphorus evaluation study, to rule out exceedances of DO criteria that are due to factors other than primary productivity, such as sediment oxygen demand;

hence, the DO swing was never intended to be used alone as an indicator or as a water quality criterion to assess the aquatic life use.

The Department agrees with the commenter that the description of the 3mg/l swing as "excessive" may be inaccurate; the final 2010 Methods Document has been revised to state that the 3mg/l threshold is used as an indicator of photosynthetic activity (see the discussion on Dissolved Oxygen in Section 4.1, "Continuous Monitoring" and Table 4.4: Nutrient Impact Assessment Outcomes).

**47. Comment:** The Department proposes to simply subtract the lowest recorded value from the highest recorded value in a 24-hour period to determine diurnal DO flux. This approach exaggerates the significance of the single highest and single lowest recorded DO values and, as a result, is not technically sound. Having evaluated data from hundreds of diurnal DO events, I offer several suggestions. First, specify that the 24-hour period be monitored during a dry-weather period, with no indications of increases in flow. Stormwater can cause DO to rise or fall precipitously, but this phenomenon has nothing to do with diurnal variations driven by photosynthesis and respiration. Second, specify that the nighttime low is to be subtracted from the daytime high, to avoid quantifying any anomalous fluctuations that have no relevance to photosynthesis and respiration. Third, the daytime peak and nighttime trough should be calculated as an hourly average (consisting of at least two recording intervals) should be calculated, and the daytime peak and nighttime trough should be taken from the hourly averages. This would avoid relying on single DO values that may not be representative of actual water quality. (Amidon)

**Response:** As indicated by the commenter, stormwater can cause dissolved oxygen levels to fluctuate. Therefore, the Department will review the diurnal monitoring results to ensure that diurnal dissolved oxygen swings decisions are not based on anomalous fluctuations due to factors other than photosynthesis and respiration. The Department has revised Section 4.4 to include a reference to Section 4.1, "Continuous Monitoring - Dissolved oxygen", which states: "When assessing *diurnal* DO flux, the Department will review the results from continuous monitoring performed during the growing season and calculate the difference between the highest and lowest measurements of DO concentration observed over a 24-hour period (i.e., using the highest and lowest hourly averages over 24 hours)" (emphasis added).

**48. Comment**: The second paragraph on page 18 states: "The Department believes that these cause/response relationships are better indicators of adverse nutrient impacts on the aquatic ecosystem than an assessment of the in-stream concentration of total phosphorus alone." The commenter certainly agrees with this statement. (Amidon)

**Response:** The Department appreciates the commenter's support.

**49. Comment**: Table 4.4 and the section text indicate that a benthic impairment that has a DO exceedance but does not have a DO swing present on site is, therefore, not caused by phosphate. However, it seems plausible, and even likely, that phosphate could support

phytoplankton and/or macroalgae photosynthesis at an upstream location. This organic matter could then be transported downstream where it could smother the benthos or decompose reducing DO levels and cause impairments. Yet, because of the lack of DO swing at the downstream site, this area would be incorrectly determined to be not caused by phosphate. (Zipf)

**Response:** In instances when benthic impairment is coupled with low DO but there is no excessive DO swing, DO will be listed as the cause of aquatic life use non-attainment on the Section 303(d) List. The resulting TMDL analysis will explore all possible contributors to the observed oxygen deficiency including local nutrient impacts, sediment oxygen demand, and possible impacts from upstream.

**50. Comment:** The commenter strongly recommends that the Department recognize and incorporate the results of the recent SAB review regarding EPA nutrient criteria development and impairment assessment methods into its own assessment methods. The purpose of the SAB review was to ensure methods employed to develop nutrient criteria and regulatory requirements are scientifically defensible. In general, the panel concluded that EPA's recommended approaches did not demonstrate cause and effect when seeking to relate nutrient levels to invertebrate impacts.

**Response:** USEPA's Science Advisory Board reviewed USEPA's recommendations for developing nutrient criteria and submitted their final report to USEPA on April 27, 2010. The Department's method for assessing nutrient impairment based on response indicators and a "weight of evidence" approach is consistent with the SAB's recommendations and is, thus, scientifically defensible. Under the Department's nutrient assessment method, biological impairment alone is not a sufficient basis for listing phosphorus as the cause of aquatic life use impairment unless the dissolved oxygen criteria is also exceeded and the dissolved oxygen levels show a diurnal swing greater 3 mg/l, which indicates photosynthetic activity.

**51. Comment:** The basic purpose of a nutrient assessment is to determine areas where water column nutrients are the "cause" of excessive plant growth. The suggested approach in Table 4.4 seems reasonable. (Gulbinsky)

**Response:** The Department appreciates the commenter's support.

**52. Comment:** Some of the Department's nutrient impairment assessment methods/indicators could inappropriately target nutrient concentrations as the cause of impairment when other factors (including natural variability) are at work. (Gulbinsky)

**Response:** The Department's nutrient assessment method evaluates the biological condition as well as the biological response, as measured by the dissolved oxygen concentrations and diurnal swing, to determine whether nutrients cause biological impairment. As described in Table 4-4, a waterbody is listed for phosphorus if the results of biological monitoring indicate impairment AND the dissolved oxygen criteria is exceeded AND a diurnal swing in dissolved oxygen greater than 3mg/l is observed. Where there is biological impairment and no exceedances of DO criteria and the DO swing is at or below 3 mg/l, phosphorus is <u>not</u> a cause of impairment (and "Cause Unknown" is placed on the 303(d) List). When there is biological impairment, no exceedances of DO criteria, and the DO swing is above 3 mg/l, the assessment is inconclusive regarding phosphorus and chlorophyll *a* needs to be assessed to determine if phosphorus is the cause of impairment. When there is biological impairment, the DO criteria are exceeded, and the DO swing is at or below 3 mg/l, phosphorus <u>not</u> a cause of impairment (DO is placed on the 303(d) List). When there is biological impairment, the DO criteria are exceeded, and the DO swing is above 3 mg/l, **Phosphorus is confirmed as the cause** and placed or retained on the 303(d) List).

**53.** Comment: Rooted plant growth is the cause of DO swings. In general, rooted plant growth is governed by the soil deposits in the stream. Controlling water column concentrations would not address this situation. (Gulbinsky)

**Response:** The nutrient assessment method does not evaluate rooted plants. Where the Department determines that phosphorus is the cause of aquatic life use non-attainment, the waterbody will be placed on the 303(d) list. This issue will be addressed through the TMDL process.

**54. Comment:** Individual periphyton readings could exceed the maximum targets suggested in the Department guidance while average conditions indicate that plant growth is not excessive. Numerous studies in other states show that maximum periphyton values can exceed 200 mg/m2 chlorophyll 'a' even when periphyton growth is quite low. Such transient maximum conditions should not be considered to demonstrate that waters are impaired, as nutrient impairment ecologically is a function of longer term conditions. In any event, an elevated transient high periphyton reading is a natural phenomenon that will not be controlled by TP reduction. (Gulbinsky)

**Response:** The nutrient assessment method stipulates that the average of a minimum of three periphyton chlorophyll *a* sampling events is used to determine whether phosphorus should be identified as a cause when a DO swing is present but the DO criteria is met. An individual periphyton reading would not be used to under this method.

**55. Comment:** A key factor controlling plant growth acknowledged by the SAB was tree canopy (light). In many situations, high periphyton growth will occur if canopy is removed, even where low TP levels are present. (See, Critical Evaluation of EPA Stream Nutrient Standard Initiatives, Hall et al. Bureau of National Affairs July 2009.) When assessing whether nutrient levels or habitat changes have caused increased periphyton growth, the Department should evaluate this factor. Tree canopy restoration in many situations, may be the more environmentally beneficial and appropriate remedial measure. Classifying such situations as a "nutrient impairment" will direct resources inappropriately. (Gulbinsky)

**Response:** The Department agrees that the impact of nutrients is highly dependent on waterbody specific factors; however, periphyton biomass alone will not be used to determine that phosphorus is a cause of aquatic life non-attainment. Periphyton biomass is evaluated when the benthic macroinvertebrate data indicate impairment and the dissolved oxygen criteria is met but the diurnal dissolved oxygen swing is greater than 3 mg/l, which is

indicative of photosynthetic activity. Canopy restoration may be successful for some waterbodies but others are too wide to benefit from this type of restoration activity alone.

**56. Comment:** The Department needs to present the data showing that invertebrate impairments are caused by a total DO flux greater than 3 mg/l to the public for review and, at a minimum, allow for a demonstration that DO flux is not the cause of invertebrate changes on a site-specific basis. (Gulbinsky)

**Response:** The Department makes no direct association between benthic macroinvertebrate impairment and DO swings. The DO swing indicates the presence of photosynthetic activity.

**57. Comment:** The Department indicated that a "weight-of-evidence" approach will be used in evaluating whether or not "phosphorus causes non-attainment of the aquatic life uses." The commenter agrees that an approach that considers a range of relevant scientific information is appropriate when evaluating narrative criteria compliance. EPA's SAB decision also addressed and supported this approach when assessing nutrient impacts. (Gulbinsky)

**Response:** The Department appreciates the commenter's support.

**58. Comment**: The concept of "de minimus" impacts also has relevance to nutrient impairment evaluations. In determining whether phosphorus is causing use impairment, the extent of elevated plant growth should be a factor. For example, if a several mile stream reach only had 100 yards with elevated plant growth, it would not appear to be reasonable to assert nutrients were preventing use attainment. Similarly, if a backwater area of a lake that flushes poorly had elevated algal growth but the remainder of the lake did not exhibit such conditions, it would not be reasonable to declare the lake to be impaired. Such an area should not be considered "representative" of the lake conditions. Finally, this concept should also be applied to infrequent exceedance of the maximum periphyton growth target level. If this target were exceeded only in a short reach and only rarely from the dataset collected, the condition should be considered "de minimus" and allow the waters to be considered in attainment. (Gulbinsky)

**Response:** The 2010 Methods Document does not limit the application of "*de minimus*" to specific types of assessments; recreational use assessment and shellfish harvest use assessment are provided explicitly as examples of how *de minimus* could be applied. However, the method for determining *de minimus* impairment is limited to application on an assessment unit scale, where an individual station that is impaired represents a minute portion of the total area of the assessment unit.

The nutrient assessment method uses biological monitoring (benthic macroinvertebrates and dissolved oxygen) primarily to determine whether phosphorus causes aquatic life use non-attainment. Where the assessment results are inconclusive, the Department evaluates the seasonal periphyton chlorophyll *a* concentration. A minimum of three events during the growing season is required to ensure that the value represents the overall condition, not just an unusual event (see Response to Comment #54).

**59.** Comment: If insufficient data are available for a particular site to apply the nutrient impact assessment methodology, then compliance with the instream phosphorus criterion (0.1 mg/L TP) will be used to assess the cause of aquatic life impairment. This is completely inconsistent with the nutrient impact assessment methodology, which is based on the reality that there will be circumstances where phosphorus is NOT the cause of aquatic life impairment despite being over 0.1 mg/L in concentration. Therefore, if insufficient data exist to apply the nutrient impact assessment methodology, the Department should list the cause of any aquatic life impairment as "Cause Unknown." (Amidon)

**Response:** The Department agrees with the commenter that there are circumstances where phosphorous levels in excess of the 0.1 mg/l will not impair the aquatic life use. However, where there are insufficient data to perform a nutrient impact assessment, the Department will continue to evaluate the numeric phosphorus criterion as per N.J.A.C. 7:9B-1.14(d) until such time as it can be demonstrated that phosphorus is not the cause of use impairment.

**60. Comment:** The Department should reevaluate freshwaters previously assessed as not attaining the general aquatic life use based solely on exceedance of the numeric phosphorus criteria in light of the proposed changes to both the SWQS and the assessment methodology. Given these significant changes, the Department should refrain from imposing phosphorus water quality-based effluent limitations (WQBELs) on dischargers to such waterbodies until this reevaluation is complete. (Amidon)

**Response:** The Methods Document states that the Department will re-evaluate freshwaters previously listed as impaired based upon exceedance of the numeric phosphorus criteria when sufficient data are available to implement the new nutrient assessment method. In addition, the Department will phosphorus as the cause of use non-attainment where the concentration of total phosphorus does <u>not</u> exceed the SWQS, where the results of the nutrient assessment indicate that phosphorus is the cause (see Response to Comment #52). The Department will continue to impose water quality based effluent limits for phosphorus in NJPDES permits for facilities that discharge to a waterbody listed for total phosphorus on the List of Water Quality Limited Waters (303(d) List).

**61. Comment:** It should be clearly stated that waters with macroinvertebrate data supporting the aquatic life use will not be designated as impaired by phosphorus, regardless of the instream concentration of phosphorus. Furthermore, waters with no biological data should not be designated as impaired based solely on a high instream concentration of phosphorus (this is rare anyway, since far more sites have biological data than chemical data). Such a situation should trigger biological monitoring, and the waterbody should be placed on Sub-List 3. (Amidon)

**Response:** The Department's nutrient assessment method for freshwater wadeable streams requires biological monitoring and continuous dissolved oxygen monitoring data. The Department recognizes that are locations where this type of data will not be available. Therefore, the Department has revised the final 2010 Methods Document to clarify that, when sufficient data are not available to apply the nutrient assessment method but phosphorus data are available, the Department will continue to list phosphorus as a cause of

aquatic life use non-attainment where the total phosphorus concentration exceeds 0.1mg/l in freshwater streams.

## Section 5.0 Modeling and Sampling Results

**62. Comment**: The first paragraph on page 21 ("Assessment Units with More Than One Stream Classification") addresses the situation where streams of more than one classification exist within an assessment unit, and the Department has sufficient data in streams of each classification. The language states that "where data is [should be 'are'] available for both higher and lower classification streams, the Department will use the more stringent criteria to assess designated use attainment for the assessment unit." This works fine as long as it is the stream with the more stringent criteria that shows exceedance of the criteria. However, suppose the FW2-TP waters in a particular assessment unit shows it is attaining all uses, but the FW2-NT waters in the same assessment unit shows impairment. The revised draft assessment methodology implies that the Department would designate such an assessment unit as "attaining all uses" based on the results in the FW2-TP waters. The commenter seriously doubts this is intended, but the language is misleading. (Amidon)

**Response:** The final 2010 Methods Document has been revised as follows:

Assessment Units With More Than One Stream Classification: Data will be compared to the SWQS for the stream classification where the station is located. Each station is evaluated against the applicable criteria. Where the assessment unit contains both higher and lower classification streams but there is no data for the higher classification stream segment, then data from the lower classification stream segment will be compared to the SWQS for higher classification. If the lower classification waters meet the higher classification's SWQS, the data will be used to assess both classifications.

**63. Comment:** It is unacceptable to delist a waterbody, or assessment unit, based on modeling results alone. While modeling is a useful tool for determining threatened status and increasing understanding of water quality dynamics, compliance with the SWQS criteria must be based on actual sampling data for listing and delisting purposes. Models cannot account for all environmental variability and should not be relied on exclusively for assessment purposes. However, if modeling data is the only option available, then it must be used only as a protective measure for a waterbody and not for a delisting. (Zipf)

**Response:** Water quality models are used to predicate water quality conditions based on ambient monitoring data. Models can be used to predict water quality conditions that would result under specific flow conditions that may only occur infrequently or when criteria have longer average period than typically sampled. As indicated in the Methods Document, the Department may use modeling results to list and delist if it is determined that the model adequately predicts water quality.

## Section 6.0 Assessment Methods and

**64. Comment:** According to Section 4.2, "Waters classified as PL, FW, SE1, and SC are assessed for primary contact ("in the water") SE2 and SE3 waters are assessed for secondary recreation ("on the water")" based on the December 2009 adoption of water quality standards. Therefore, Table 6 and Section 6.2 need to be also updated to reflect these changes. (Zipf)

**Response:** Table 6.0 has been revised in the Final 2010 Methods Document to indicate that the minimum suite of parameters for recreational use assessment is: "Primary Contact: Beach closure data; Secondary Contact: Fecal Coliform (in SE2 and SE3 waters)." Table 6.2 has not been revised because it accurately depicts the possible outcomes of the recreational use assessment; however, the following statement has been added to the Final 2010 Methods Document for further clarification: "Table 6.2 summarizes the possible outcomes of the recreational use assessment based on the appropriate types of data."

**65. Comment**: The Department has indicated that it plans on employing "three new biological indices based upon genus level taxonomy." The use of biological indicators to identify impaired waters is reasonable, but the public should get an opportunity to review and comment on those methods so it can be understood what factors influence the outcome of such analyses. It is widely understood that numerous, non-pollutant parameters may strongly influence the presence or absence of invertebrates. This was discussed broadly as part of the recent SAB review of EPA's suggested stressor response methods for relating nutrient levels to invertebrate indices and metrics.

A major uncertainty inherent in the Guidance is accounting for factors that influence biological responses to nutrient inputs. For criteria that meet EPA's stated goal of "protecting against environmental degradation by nutrients," the underlying causal models must be correct. Habitat condition is a crucial consideration in this regard (e.g., light [for example, canopy cover], hydrology, grazer abundance, velocity, sediment type) that is not adequately addressed in the Guidance. Thus, a major uncertainty inherent in the Guidance is accounting for factors that influence biological responses to nutrient inputs. Addressing this uncertainty requires adequately accounting for these factors in different types of water bodies. SAB Draft Report @ 37.

A recent California study confirmed the substantial role substrate and sedimentations plays in macroinvertebrate diversity. *Benthic Invertebrate Responses to Patch And Reach-scale Sediment Deposition and the Relation of Land Use and Roads to Sedimentation* by David Herbst, Scott Roberts, Bruce Medhurst, and Nick Hayden Sierra Nevada Aquatic Research Laboratory, University of California. The New Jersey assessment methods cover broad areas and different stream types and suburban/urban settings. The commenter trusts that these critical habitat differences that play a strong role in macroinvertebrate population diversity are being properly addressed in the new biological assessment methods. (Gulbinsky)

**Response:** The Department developed three macroinvertebrate metrics to address ecoregional differences inherent in the biota of the State, thereby enhancing the utility of the biological indicators. These benthic macroinvertebrate metrics are a direct indicator of aquatic life use. These metrics are based upon the best available information and, as such, are

subject to revisions as new information becomes available. These metrics are detailed in the Methods Document which, when revised, is subject to public review and comment pursuant to N.J.A.C. 7:15-6.2. This provides the public and USEPA with an opportunity to evaluate these metrics and how they are employed.

The Department agrees with the comment that habitat can confound biological assessments and subsequently has selected biologically relevant indicators of nutrient effects such as depressed DO levels, broad swings in DO levels, and/or excess amounts of algal growth, which occur and impair biota independent of habitat condition.

## Section 6.1

**66.** Comment: Table 6.1 on page 25 is inconsistent with Table 6.0 (page 24) and the language in Section 6.1 (page 24). Table 6.0 states that chemical data will only be used to assess General Aquatic Life use attainment if biological data are not available. This is supported by the first two sentences of Section 6.1 on page 24, which state that aquatic life use is assessed directly using biological data. However, the last row under the subheading "Both Biological and Chemical/Physical Data Available" in Table 6.1 (page 25) indicates that aquatic life use can be designated as NOT attained based on chemical data, even when biological data demonstrate that the aquatic life use is supported. This is particularly problematic since TP is listed as one of the supporting chemical parameters. This could be construed to mean that a site with macroinvertebrate data showing attainment of aquatic life use could nonetheless be designated as impaired for aquatic life use by phosphorus, based solely on phosphorus concentration data. Such would appear to also contradict the nutrient impact assessment methodology presented in Section 4.4. (Amidon)

**Response:** Table 6.0 of the final 2010 Methods Document has been revised to show, not just the data needed to conduct a use assessment, but the minimum data required to determine that the use is attained. This is consistent with the accompanying text, which explains that the Department uses a conservative approach that requires more data to support a finding that a designated use <u>is</u> attained than is needed to support a finding that a use <u>is not</u> attained. For example, waters will be assessed as not attaining a designated use if any of the available data show an exceedance of an associated parameter, even if the full suite of associated parameters is not available; however, waters will be assessed as attaining the designated use <u>only</u> if the full suite of associated parameters is available and shows no exceedance of any of those parameters. If the data show no exceedances but does not meet the minimum data requirements, the designated use will assessed as "insufficient information available".

In addition, Table 6.1 and Section 6.1 have been revised to clarify the outcomes of the different scenarios for aquatic life use assessment, as shown below.

- Where biology is impaired, sufficient data are available to assess nutrient impacts, and the nutrient assessment indicates that phosphorus is the cause of impairment, the aquatic life use will be assessed as not attained and phosphorus will listed as the cause.
- Where biology is impaired, sufficient data are available to assess nutrient impacts, and the nutrient assessment indicates that phosphorus is not the cause of impairment, the

aquatic life use will be assessed as not attained but phosphorus will not be listed as the cause even if in-stream concentrations of phosphorus exceed the numeric criterion. In such cases, the cause will be identified as dissolved oxygen, or other chemical/physical parameter, as applicable, or "cause unknown".

- In cases where biology is impaired and sufficient data are not available to assess nutrient impacts, the aquatic life use will be assessed based on the applicable numeric phosphorus criterion.
- For all other parameters associated with the aquatic life use assessment, any exceedance of the applicable criteria will be assessed as not attaining the designated use.

These revisions are consistent with the outcomes of the Nutrient Impact Assessment (see Table 4.4), which reflect that, phosphorus concentrations will not be used as an indicator of aquatic life use non-attainment in freshwater streams when response indicator data is available that more accurately indicates when phosphorus is the cause of aquatic life use non-attainment. Thus, phosphorus has been removed from the minimum suite of parameters for assessment of the general aquatic life use.

#### Section 6.2 Recreational Use Assessment Method

**67. Comment**: The proposed framework for analysis appears to reasonably implement the current standards. For planning purposes, it would be helpful for the Department to identify designated bathing beaches it believes are "heavily used" for contact recreation. The commenter presumes this would include the entire Jersey coast inland tidal waters that are used rather extensively for shipping and cargo transport (e.g., Arthur Kill and much of the New York Harbor area) and streams, in general, would not appear to fall within this definition. The Department's response to this observation would be appreciated. (Gulbinsky)

**Response:** The actual designation of bathing beaches is conducted by the New Jersey Department of Health and Senior Services, not the Department of Environmental Protection, pursuant to State Sanitary Code (N.J.A.C. 8:26), which defines the term "bathing beach" to mean "… the designated area of a natural or artificially constructed pond, lake, stream, river, bay, tidal waters, ocean or other body of fresh or salt water, which is used for bathing and swimming purposes together with buildings, equipment, and appurtenances, if any, and the land areas used in connection therewith. Therefore, by definition, all "designated bathing beaches" are considered "heavily used" for primary contact recreation, as stated in the 2010 Methods Document. Chapter IX of the State Sanitary Code, which governs public recreational bathing, is available on the Department of Health and Senior Services' Web site at <a href="http://www.state.nj.us/health/eoh/phss/recbathing.pdf">http://www.state.nj.us/health/eoh/phss/recbathing.pdf</a>, which is cited in Section 4.2 of the 2010 Methods Document under "Pathogenic Indicators".

Section 6.3 Fish Consumption Use Assessment Method

**68.** Comment: The Draft 2010 Guidance discusses the use of fish tissue concentrations in assessing compliance for certain parameters (e.g., mercury). The Draft 2010 Guidance @ 27 indicates that impairment designations will be made if either (1) a fish tissue level of concern is exceeded or (2) the applicable human health-based criteria are exceeded. This approach

has the potential to misdirect local resources. There are a host of EPA human health-based criteria that assume a degree of bioaccumulation is occurring. For example, disinfection byproducts and arsenic criteria applicable to fresh waters assume this route of exposure is occurring. Based upon the most recent study completed by EPA, it is not clear that the fish consumption route is a significant concern for the vast majority of pollutants in fresh waters (see *National Study on Chemical Residues in Lake Fish Tissue*). Where criteria are exceeded, but tissue levels are in the safe range, no actual use impairment exists. The commenter requests that the Department establish a mechanism to consider the actual fish tissue levels for a host of parameters as part of the 303(d) listing and TMDL process to avoid unnecessary regulation and pollutant reduction that could occur if EPA's fish tissue assumptions are misplaced. (Gulbinsky)

**Response:** The Department has modified the fish consumption use assessment method to be based on concentrations of bioaccumulating toxic parameters in fish tissue, where such data is available. The Department is required to do so as per the Surface Water Quality Standards in the State regulations. The specific constituents used to assess the fish consumption use are listed in Appendix A of the Methods Document and all of these constituents have strong biomagnification potential. The Department has established thresholds for these bioaccumulative toxic pollutants, based on USEPA guidance, to be used in the fish consumption use assessment and as a basis for fish advisories. Details of the new fish consumption use assessment method for mercury and other toxics are provided in Section 6.3.

**69. Comment:** The Department must require the Methods Document to specify that contaminants in fish tissue concentrations will be used to assess fish consumption use in the Integrated Report, and the report must include these assessments. The first sentence in this section is ambiguous as to what or even if the Department will assess fish consumption use for the report: "The Department may use fish tissue concentrations or water column concentrations for bioaccumulative toxic pollutants to assess the fish consumption use." This also appears to be inconsistent yet potentially redundant with the first sentence of the second paragraph: "The Department will also evaluate compliance with human health criteria for toxic pollutants expected to bioaccumulate in fish tissue."

What is the basis for using water column concentrations in place of assessing fish tissue bioaccumulation directly? Many of the contaminants that have been found to bioconcentrate and/or bioaccumulate in fish are only transient in the water column, but they are still present throughout the food web due to high concentrations in the sediments. It is therefore inappropriate and insufficient to use water column concentrations as a surrogate for fish tissue concentrations. (Zipf)

**Response:** The Department has revised Section 6.3 and expanded Table 6.3b to clarify the Fish Consumption Use assessment methods. The Department uses both fish tissue concentration (which supports fish consumption advisories) and water column data to assess the fish consumption use. The Department has established thresholds for fish tissue concentrations for specific bioaccumulative toxic pollutants used to develop fish consumption advisories. The Department will also assess the fish consumption use by

evaluating all applicable assessment units for compliance with the human health criteria developed for SE/SC waters. The human health criteria for these toxic parameters take into consideration bioaccumulation. The human health criteria that may be used to assess the fish consumption use are listed in Appendix A of the Methods Document. The fish consumption use is attained when all fish tissue concentrations are below the threshold <u>and there are no</u> exceedances of the SE/SC human health criteria in water column data. The use is not attained when exceedances are recorded for SE/SC human health criteria in the water column and/or when fish tissue concentrations exceed safe consumption thresholds.

**70. Comment:** The following sentence has been deleted: "*The data collection, risk assessment, and issuance of fish consumption advisories are overseen by the New Jersey Interagency Toxics in Biota Committee (ITBC), a joint effort between the Department and the DHSS. Through the ITBC, research projects are coordinated to monitor levels of contaminants in commercially and recreationally harvested fish, shellfish, and crustacean species." Is the Department no longer working with DHSS? Has New Jersey Interagency Toxics in Biota Committee been discontinued given that some pollutants thresholds have been established? Or will this committee continue to work on pollutants that may not have thresholds established for future assessments? (Zipf)* 

**Response:** The modified fish consumption use assessment method is based on the Department's assessment of fish tissue data, not on the issuance of fish consumption advisories; therefore, information about the fish advisory process is no longer relevant to the Methods Document. The Toxics in Biota Committee assisted with the development of the modified fish consumption method, which was published for public review and comment in December 2009.

71. Comment: The fish consumption use assessments must include polybrominated diphenyl ethers (PBDEs), flame retardants that persist and bioaccumulate similar to polychlorinated biphenyls (PCBs). The National Oceanic and Atmospheric Administration (NOAA) released a report this spring that identified the Hudson Raritan Estuary as containing the highest levels of PBDEs in the U.S. The report also indicates high levels at Long Branch and Shark River stations. NOAA has stated that flame retardants are a major concern to coastal ecosystems and that "Laboratory studies indicate that PBDEs may impair liver, thyroid, and neurobehavioral development, and the most sensitive populations are likely to be pregnant women, developing fetuses, and infants." PBDEs were also detected in all fish tissue samples from 18 different species from the Delaware River Basin and Estuary. The Department must work with the NJ Department of Health through the Interagency Toxics in Biota Committee to include PBDEs for fish consumption advisories. The Department must also account for PBDE contamination levels in shellfish for classifying shellfish harvest areas." If the Department is not able or cannot afford to test for flame retardants, can the Department at least warn people about the potential issue based on NOAA's Mussel Watch findings and better coordinate messaging with NOAA? (Zipf)

**Response:** The Department's Routine Monitoring for Toxics in Fish Program included analysis of polybrominated diphenyl ethers (PBDE) in a limited number of samples of fish from the coastal and some freshwaters of the State as well as the Delaware River/Estuary.

The Department plans to continue to conduct screening analysis as part of this program. Data for the Delaware Estuary were evaluated and presented in 2007 by the Delaware Department of Natural Resources and Environmental Control at the USEPA National Fish Forum (<u>www.epa.gov/waterscience/fish/forum/</u>). The results indicated that the PBDE concentrations were below risk levels. In addition, those samples with detectable levels of PBDEs typically contained other contaminants (i.e., PCBs) at levels elevated enough to warrant consumption advisories. The interagency Toxics in Biota Committee (TIBC) plans to develop a set of fish consumption advisory criteria for PBDEs based on the most recent data and information. PBDE data are available in the Routine Monitoring for Toxics in Fish Program final reports published on the Department's Web site at <u>www.state.nj.us/dep/dsr/njmainfish.htm</u>. The Department also performed a risk assessment for the Sandy Hook region, which contained the highest concentration of PBDE in mussels found in New Jersey waters¹. These concentrations were found to be well below the levels of human concern.

## Section 6.5 Drinking Water Supply Use Assessment Method

**72. Comment:** The revised draft Methods Document correctly notes (page 28) that "it is important to note that many waterbodies do not have drinking water intakes due to stream size and other considerations." However, this reality is not reflected in the actual assessment methodology. Drinking water supply use assessment should only be performed on streams that are currently used or could potentially be used as a drinking water source. Designating streams with no possibility of being used as a water supply (due to size limitations, for instance) as being impaired for water supply use due to nitrate may result in the imposition of stringent WQBELs. Such WQBELs for nitrate will require expensive and unnecessary denitrification on dischargers to waters that are too small to be used for potable sources. This is an enormous cost issue at a time when utilities are under the same fiscal pressures as the Department is facing. (Amidon)

**Response:** The Department is required to routinely assess whether all waters of the State are attaining their designated uses. All New Jersey streams classified as FW2 are designated for the drinking water use. Water quality based effluent limitations are developed and imposed into New Jersey Pollutant Discharge Elimination System (NJPDES) permits to ensure that the designated uses are protected. As long as the stream classification and use designation remain unchanged, the Department will assess attainment of the drinking water use in FW2 waters using the parameters associated with the drinking water use, as identified in Appendix 1, and will develop appropriate effluent limitations to ensure that this use is protected.

Section 7.3 Delisting Assessment Unit/Pollutant Combinations

**73. Comment:** Insufficient information is not a valid reason for moving an assessment unit off Sublist 5. A delisting must be supported by data and explained. (Zipf)

¹ National Oceanic and Atmospheric Administration (NOAA) National Status & Trends - Mussel Watch Program: An Assessment of Polybrominated Diphenyl Ethers (PBDEs) in Sediments and Bivalves of the U.S. Coastal Zone (2008). Viewed at <u>http://ccma.nos.noaa.gov/about/coast/nsandt/pdf/PBDEreport/states/PBDENewJersey.pdf</u> on July 16, 2010

**Response:** All listings and delistings must be supported by scientifically valid data and the reason for any delistings must be explained in the Integrated Report. The 2010 Methods Document correctly explains that, where there is no valid data to support a finding that the SWQS have been exceeded or the use is impaired, there is no scientific basis for placing the assessment unit/pollutant combination on the Section 303(d) List of Water Quality Limited Waters (303(d) List). If the assessment unit/pollutant combination was identified on a previous 303(d) List but the reasons for the original listing are no longer considered valid, and there is no readily available data on which to base a new assessment, the assessment unit will be reassigned from Sublist 5 to Sublist 3 and the assessment unit/pollutant combination will be delisted from the previous 303(d) List.

## Beyond the Scope of the Methods Document

**74. Comment**: The Department has indicated that nitrate and TDS values are a focus of water supply attainment decisions. The Department states that "It is important to note that many waterbodies do not have drinking water intakes due to stream size and other considerations." The purpose of the current rule approach is to avoid the need for more than conventional treatment of surface water supplies.

The commenter has long been concerned that the application of drinking water standards to surface waters at the point of discharge, regardless of actual usage, could lead to extraordinary municipal expenditures unrelated to actual public health needs. Nitrate is a common constituent discharged from most municipal facilities and it can degrade rapidly in the environment. Even where an intake exists, the level of nitrate entering the intake may be well below the applicable SWQS due to attenuation and degradation occurring after discharge. Moreover, water intakes are often pumped to reservoirs where they are mixed with other supplies and, therefore, do not require additional, non-conventional treatment prior to distribution. Nonetheless, facilities located on small streams that cannot serve as a water supply and those on larger streams that are diluted/dissipated prior to intake, are being forced into expensive and energy intensive denitrification. Such denitrification is not a substitute for additional treatment by the water purveyor as originally intended by the rule.

The commenter requests that the Department classify such administratively-derived water supply impairments as a minor threat subject to further evaluation and site-specific WQS development. Data from the finished water supply may be used to confirm whether an actual public health concern exists. In those situations where nitrate levels in finished water would exceed the applicable standards, such locations could be identified as high priority TMDLs. If, however, the supply is not and will not exceed drinking water standards, the wastewater facility should not be required to install additional treatment. (Gulbinsky)

**Response:** This comment pertains to the applicability of water quality based effluent limitations imposed in NJPDES permits and is beyond the scope of the Methods Document.

**75. Comment:** Commenter supports the proposed amendments to the Surface Water Quality Standards Nutrient Policies that extend the narrative water quality criteria to marine waters. (Zipf)

**Response:** This pertains to the Surface Water Quality Standards and is beyond the scope of the Methods document; however, the Department appreciates the commenter's support of the proposed amendments.

- **76. Comment**: The scientific community recognizes that nutrients flow downstream and ultimately into our bays and oceans. These nutrients accumulate in the sediments and continue to affect downstream aquatic life. Sending the problem downstream by weakening the nutrient standard will only exacerbate problems in the bay and ocean that are already taxed by so much pollution. Furthermore, new science, such as that published this past winter further strengthens the need for stronger nutrient limits as it relates to global warming and significant effects of nitrous oxide emissions by aquatic macrofauna from excess sediments in our river bottoms, bays and lakes through out-gassing. Therefore, allowing more pollution to enter larger basins is not protective. New Jersey's existing numeric criteria are based on sound scientific data that leads to protective criteria that is easily applied, enforced, and determined. New Jersey has been a leader when it comes to setting stringent numeric criteria and the Department should not backslide. (Zerbe)
- **77. Comment**: Strong numeric standards for streams help drive the improvements in technology that are necessary for dischargers to adhere to particularly based on projected population growth. The proposed changes to narrative criteria are an exit ramp strategy for polluters and will backslide New Jersey who had been an environmental leader in providing scientifically based numeric standards for phosphorus since 2004. (Zerbe)
- **78. Comment:** In regards to chlorophyll *a*, "if the seasonal average chlorophyll *a* concentration from a minimum of three sampling events exceeds 150 mg/sq meter, the Department will conclude that phosphorus is a cause of the aquatic life use non attainment...". The Department is developing more complex monitoring needs to implement the narrative nutrient criteria rather than simply adhering to the numeric and more protective limit of 0.1 mg/L of phosphorus for streams or 0.05 mg/L for lakes. (Zerbe)
- **79. Comment:** At a time when resources are thin, are these site-specific translators really an effective way of enforcing needed pollution controls or will this be a burden on the taxpayers while ultimately weakening standards and allowing polluters to pollute more? (Zerbe)
- **80. Comment**: Nitrogen loading is a problem in the Delaware Bay watershed and SWQS to look at only phosphorus (and not nitrogen) does not provide adequate monitoring tools that could be available to better assess conditions of our streams. Numeric standards for nitrogen should be developed. USEPA's ecoregion approach provides numeric criterion for total nitrogen that could be used. (Zerbe)

Response to Comments 76 through 80: These comments pertain to the Surface Water Quality Standards and are beyond the scope of the Methods Document. The Methods Document does not propose new nutrient standards; it explains the methods the Department will use to assess attainment of surface water quality standards, and applicable designated uses, based on the standards and criteria that are currently in effect.

## Appendix G NJ's Water Monitoring and Assessment Strategy (2005-2014)

(The Table of Contents and Executive Summary are provided as Appendix H. The complete document can be found on the Department's website at <u>www.state.nj.us/dep/wms/longtermstrategyreport.pdf.</u> For further information on this document, contact Water Monitoring and Standards at 609-292-1623)

# NEW JERSEY WATER MONITORING & ASSESSMENT STRATEGY

## (2005 - 2014)



Water Monitoring and Standards Program NJ Department of Environmental Protection

Bradley M. Campbell, Commissioner



September 2004

## NEW JERSEY WATER MONITORING & ASSESSMENT STRATEGY

### NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

#### WATER MONITORING AND STANDARDS PROGRAM

Leslie McGeorge, Administrator Al Korndoerfer, Chief, Freshwater & Biological Monitoring Bob Connell, Chief, Marine Water Monitoring Debra Hammond, Chief, Water Quality Standards and Assessment

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In March 2003, EPA issued national Guidance which identified the key elements for developing a state Water Quality Monitoring and Assessment Strategy to ensure compliance with Clean Water Act requirements. All states are now required, for receipt of 106 grant funds, to develop a comprehensive, 10 year long-term water monitoring strategy.

As the Guidance details, the monitoring program strategy is to cover all waters of the state (streams, rivers, lakes, reservoirs, estuaries, coastal areas, wetlands and ground water). For each waterbody type, the strategy must include discussions of 9 basic elements: 1. Monitoring objectives, 2. Monitoring design, 3. Core & supplemental water quality indicators, 4. Quality assurance, 5. Data management, 6. Data analysis/assessment, 7. Reporting, 8. Programmatic evaluation, and 9. General support and infrastructure planning.

In development of this strategy for New Jersey, the New Jersey Department of Environmental Protection (NJDEP) has performed an assessment of its ambient water monitoring programs based on the Department's water information needs, the EPA Guidance, and the results of the 1999 EPA audit of New Jersey's (NJ) water programs. The resulting document contains long-term strategies for ambient water monitoring and assessment programs that are in various stages of development – from the existing, well established stream monitoring program to the wetlands monitoring program, which is presently in a research and development stage.

The Strategy document is organized by waterbody type (e.g., rivers and streams, lakes and reservoirs). Within each monitoring area, current ambient monitoring programs are described and each of the 9 elements are discussed, the gaps are identified, as well as the resource and technical support needs to fill these gaps. For programs that cross waterbody types (e.g., Toxics in Fish & Shellfish), a separate program description is included. In developing each of the monitoring program strategies, NJDEP considered the 5 overall assessment-related questions, as well as the Core Indicators contained in the EPA guidance document. Key enhancements and/or opportunities for program efficiencies are also highlighted. Because this document is intended to serve as a 10 year plan for NJ's water monitoring and assessment programs, NJDEP has chosen to present its timelines for addressing these gaps in two 5-year intervals (2005-2009 and 2010-2014) so as to highlight short-term vs. long-term plans and needs. As such, all of the implementation plans, particularly the enhancements, are dependent upon availability of resources and needed technical support. An overall summary table of the key gaps and resource/technical support needs is contained in Appendix 3 of the document.

The main elements of the existing New Jersey water monitoring program include:

For freshwater, New Jersey's program includes quarterly sampling of a 115-station ambient stream network. This stream monitoring is a cooperative program between NJDEP and the United States Geological Survbey (USGS). In 2000, a supplemental ambient network for conventional parameters was initiated to provide monitoring at approximately 90 additional ambient sites. The chemical/physical networks monitor conventional parameters, metals, bacteria, pesticides, volatile organic compounds (VOC's) and sediments. Strategic directions identified for these networks include additions of toxic parameters to the supplemental network sites, continuous temperature monitoring at selected sites, and research to evaluate analytical methods for network use that can achieve lower detection limits for arsenic and mercury. The most significant enhancement, the addition of toxic parameters to supplemental monitoring locations, is being addressed in FY2005.

In 1992, NJDEP reactivated its Ambient Biomonitoring Network (AMNET). The network established sampling stations in every sub-watershed, and has a total of 820 sites. The status of benthic macroinvertebrate communities is evaluated using EPA's Rapid Bioassessment Protocol (RBP). Each of the five major drainage basins is sampled, on a rotational basis, every 5 years. Visual observation, stream habitat assessments and limited physical/chemical data are also collected. In 2000, a second biological monitoring network was initiated and validated for the northern portion of the state, the Fish Index of Biotic Integrity (FIBI). Using EPA's protocol, the biological health of streams is assessed using fish assemblage information. Primary strategic directions for these areas include the need for technical support in calibration of NJ's impairment scores, source identification monitoring for biologically impaired waters, and development of a fish index of biotic integrity sampling in the southern coastal plain section of the state.

In 2004, NJDEP initiated a renewed ambient lake monitoring network designed to provide the water quality data necessary to assess the ecological health of the State's lentic water resources. This program involves the testing of randomly selected lakes from the state's approximately 1100 named lakes. The water quality measurements conducted at each randomly selected lake include parameters such as dissolved oxygen, pH, nutrients, and chlorophyll a. Such testing will assist New Jersey in determining lake water quality, as needed to meet its Clean Water Act requirements and its Total Maximum Daily Load (TMDL)-related water quality assessment obligations. Currently, the lakes program focuses on the status of lake water quality in the state. The primary strategic enhancement identified would be to develop trends monitoring and assessment capability, preferably through a volunteer lakes monitoring program.

For marine waters, NJDEP conducts water quality monitoring to classify approximately 700,000 acres of marine and estuarine shellfish waters. As part of the National Shellfish Sanitation Program (NSSP), NJDEP collects approximately 15,000 ambient water samples per year from a network of more than 2,500 monitoring stations throughout the State's coastal waters. These stations are sampled between five (5) and twelve (12) times per year. The resulting data are analyzed for compliance with federal standards for shellfish sanitation. Waters not in compliance are closed to shellfish harvest. As part of the NSSP, NJDEP also conducts coastal phytoplankton monitoring every summer in New Jersey's bay and near-shore ocean waters. Key strategic directions for NSSP monitoring include enhancement of limited testing of toxics in shellfish tissue and addressing the need for capacity expansion for microbial source trackdown. This laboratory expansion is being addressed in FY2005.

NJDEP also monitors the condition of the State's coastal waters by measuring basic water quality (dissolved oxygen, nutrients and water clarity) at 260 locations on a quarterly basis. EPA provides assistance with this monitoring and with phytoplankton monitoring in the summer months, as well as support for NSSP sampling throughout the year. NJDEP and EPA Region 2 are jointly evaluating the potential use of aircraft remote sensing to significantly enhance phytoplankton monitoring. EPA's National Coastal Assessment (NCA) research program is performed in partnership with NJDEP and includes measurements of sediment chemistry, sediment toxicity and the benthic community annually at about 50 locations in New Jersey's estuarine waters. Strategic enhancements include transitioning the EPA NCA research program into a state monitoring for dissolved oxygen in the state's coastal waters. The state has submitted a grant proposal to NOAA in FY2005 to develop a component of an Integrated Ocean Observing System which, if funded, would assist in addressing the need for continuous DO monitoring. NJDEP is also considering data generated by its outside partners in the NY/NJ Harbor (NJ Harbor Dischargers Group) and in the Delaware (Delaware River Basin Commission – DRBC) watershed as a possible means to address geographical gaps in the State's coastal water monitoring.

For ground water, New Jersey has developed and now maintains a cooperative network (NJDEP & USGS) consisting of 150 wells screened at the water table that are sampled 30 per year on a 5-year cycle. The goals of the network are to determine the status and trends of shallow ground-water quality as a function of land use

related to non-point source pollution in New Jersey. Parameters measured include conventionals (pH, turbidity, temperature, DO), nutrients, VOCs, radioactivity, and pesticides. The primary strategic enhancement for this monitoring program would be the integration of all sources of ground water data – the network (described above) as well as data collected as a result of the Private Well Testing Act and site remediation-related data.

In addition to the water monitoring networks described above, NJDEP also conducts targeted physical, chemical and biological water monitoring for needs such as further evaluation of waters previously listed as impaired on NJ's Impaired Waterbodies List, TMDL development/implementation, and in response to environmental spills.

NJDEP has also identified key strategic directions for cross-cutting water monitoring programs, such as toxics in fish and shellfish, TMDL development, wetlands, and volunteer monitoring, as well as for water quality assessment and water quality data management. For water quality assessment and data management, these enhancements include integration of all available, high quality data (both DEP and non-department data) into the department's assessment database for use in preparation of the *Integrated Water Quality Monitoring and Assessment Report* as well as the addition of new external water monitoring data (e.g., volunteer monitoring) to STORET through development of a common data exchange element.

Details of evaluations and suggested directions for all programs are contained in the strategy document and a summary of key enhancements is contained in Appendix 3 of this document. Additional information on the water monitoring activities and networks, described in this strategy document, may also be found on NJDEP Water Monitoring and Standards website (http://www.nj.gov/dep/wmm/).



Dam below Batsto Lake, Hammonton, NJ

Appendix I New Jersey's Ambient Ground Water Quality Monitoring Network Appendix H New Jersey's Ambient Ground Water Quality Monitoring Network

### New Jersey's Ambient Ground Water Quality Monitoring Network

As a companion to its surface water monitoring program, New Jersey has developed and now maintains a cooperative ambient ground water quality monitoring network with the United States Geological Survey (USGS), consisting of 150 wells screened at the water table. Thirty wells (sampling sets 1-5) are sampled annually creating a five-year monitoring cycle. To date two full sampling cycles have been completed (and will be referred to as sampling cycle 1 and sampling cycle 2 in this report). The primary goals of the ambient ground water quality monitoring network (AGWQMN) is to characterize shallow ground water quality as a function of land use and to assess shallow ground water quality trends.

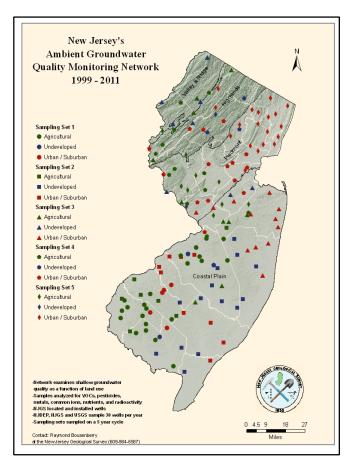


Figure 1: Location And Land Uses Associated With Ambient Network Wells

The water table is the first and most significantly impacted part of the ground water system. Network wells are screened or open just below the water table and therefore samples from them are generally expected to represent relatively young ground water. This is the ground water that interacts with and impacts surface water quality.

Wells sites were located using a stratified-random site selection process as outlined by Scott (1990). The final distribution of wells as a function of land use is 60 in agricultural areas, 60 in urban/suburban areas, and 30 in undeveloped land use areas (see Figure 1). Land use designations were determined using 1986 and 1995 land use coverage's, 1995 aerial photographs and site visits. Well sites were selected using land use designations and estimations of ground water flow directions based on the local geologic framework and site-specific topographic relationships. The 1986 and updated 1995 digital land use data categories were interpreted from 1986 and 1995 color infrared aerial photography. Parameters measured include conventional pollutants (pH, turbidity, temperature, DO), nutrients, metals, minerals, VOCs, radioactivity, and pesticides.

#### Geology:

The state of New Jersey can be separated in 4 geologically unique regions or Physiographic Provinces each with unique rock types, landforms and hydrogeological settings (see Figure 1). These geological variables affect natural ground water quality. From north to south the regions are:

1) The Valley and Ridge: mostly of a thick sequence of Paleozoic sedimentary rocks ranging in age from approximately 390 to 540 million years. Sedimentary rock types include dolomite, limestone, sandstone, shale (often metamorphosed to slate) and siltstone.

2) The New England Province (Highlands): ridges of more resistant Middle Proterozoic (~ 940 to 1600 Ma) metamorphosed igneous and sedimentary rocks. These rocks are in fault and unconformable contact with lenses and elongate belts of generally less resistant Paleozoic sedimentary rocks (like 1 above) comprise the valley floors.

3) The Piedmont: intersects and it mostly underlain by the Newark Basin, which is mainly comprised of lower Mesozoic aged (~230 to 190 Ma) red, gray and black (organic rich) shale and sandstone that are inter-layered with basic igneous intrusions.

4) The Coastal Plain (Southern New Jersey): a southeasterly dipping and thickening wedge of stratified unconsolidated sand, silt, clay and gravel sediments that vary in age from Cretaceous ~ 144-66 million years ago (Ma) to Tertiary (~ 1.6 Ma). Three glaciations have occurred within the last 2 million years. North of the maximum extent of the last glaciation (~ 20,000 years ago), the landscape is draped by unstratified and stratified unconsolidated glacial materials of various thicknesses.

#### **Ground Water Quality:**

Ground water is mainly recharged by precipitation that percolates downward through the unsaturated zone into the zone of saturation. Ground water quality is a reflection of: 1) the starting composition of precipitation; 2) the solubility and composition of the materials that the precipitation comes in contact with on the land surface, in the unsaturated zone and in the saturated zone; and 3) the duration of that contact. Natural

geologic materials impart a geochemical character to the water contacting it that is unique to those materials. Anthropogenic contaminants or pollutants in the form of dissolved gases, chemical constituents and possibly colloids and other particles can impact ground water quality.

Sources of ground water pollution can be separated into two general types: 1) point source pollution and 2) nonpoint source pollution. Point sources of pollution can be tracked back to a single identifiable source, such as a chemical spill, leaking underground storage tank or an infiltration lagoon. In the AGWQMN, efforts were made to select wells that are not impacted by pollutants from known point sources.

Nonpoint source pollution is from diffuse sources that do not have a single identifiable point of origin. This type of pollution can adversely affect the quality of water in the hydrologic cycle over large areas. For example, the release of emissions to the atmosphere from the burning of fossil fuels, such as sulfur that produces acid rain, can alter the quality of precipitation that can in turn have a regional impact on surface and ground water quality. In addition, once precipitation contacts the land surface it can be further altered by dissolving nonpoint source pollutants associated with agricultural and urban land use activities; thereby impacting water quality on a regional scale. Data summaries of samples collected and analyzed from the 150 AGWQMN wells between 1999 and 2008 are presented and discussed below. Samples from these wells were collected by the Department of Environmental Protection's (Department's) Bureau of Fresh Water and Biological Monitoring, New Jersey Geological Survey and USGS' New Jersey Water Science Center, and analyzed at the USGS National Water Quality Laboratories in Denver, Colorado. VOCs and pesticides were analyzed using USGS methods O-3127-94 (Rose and Schroeder, 1995) and O-4127-96 (Zaugg and others, 1995), respectively. Data for water years 1999 to 2008 are reported in their respective USGS Water Resources Data Reports for New Jersey (DeLuca and others, 2000 – 2009).

AGWQMN wells in undeveloped areas yield ground water with a more natural quality than those in agricultural and urban areas and therefore provide a reference for water quality that is little affected by man's activities. Shallow ground water chemistry in undeveloped areas in the Coastal Plain (southern New Jersey) is different from that in the northern portion of NJ that is underlain by bedrock (northern New Jersey). For example, the median pH and total dissolved concentration (TDS) is lower in southern than northern New Jersey (see Table 1). Minerals comprising the northern aquifers are generally more reactive than those in the south because they are more soluble. For example, many of the northern aquifers contain the soluble mineral calcite (CaCO₃) that imparts alkalinity to ground water upon dissolution. That reaction yields circum-neutral pH waters with Ca and bicarbonate as major ions. The quartz rich less-reactive sands in southern New Jersey are generally devoid of highly soluble minerals yielding little if any alkalinity and ground water is more dilute and acidic, similar to the rainwater that recharged it. Because the natural shallow ground water quality is clearly different in the Coastal Plain in southern New Jersey than in the Physiographic Provinces to the north, the data in this report are separated into northern and southern.

#### Water Quality Parameters:

The water quality parameters or constituents such as temperature, dissolved oxygen, pH, and total dissolved solid (TDS) concentration values yield information about the general character of shallow ground water as a function of geology and land use (Table 1). Lower pH and TDS values in the south reflect the difference in geologic makeup. In addition, it is generally cooler in northern New Jersey, which is reflected in the cooler shallow ground water temperatures relative to the south. The lower dissolved oxygen concentration in urban areas in both the north and south, may result from the large percentage of heat absorbing impervious surface area and resulting poorer exchange with atmospheric oxygen, and the higher surface temperature effects the density of air. Increased total dissolved solids concentrations in agricultural and urban areas are due to the road salt and agrochemical applications. Many wells in agricultural land use areas are also near roads and therefore their water quality can also be impacted by road salt.

Characteristic		Agricultural			Urban			Undeveloped	
or Constituent	Min.	Med.	Max.	Min.	Med.	Max.	Min.	Med.	Max.
			Northern	New	Jersey	Cycle	One		
Temp. °C	10.3	13.3	23	6.8	12.8	18.3	10	12	13.9
DO mg/L	0.2	4.3	11	0.2	2.9	6.9	0.6	4.2	6.7
pH	6.5	7.4	8.1	5.2	6.95	8.4	5.8	7	8.1
TDS mg/L	22	119	387	208	550	2200	167	269	938
			Northern	New	Jersey	Cycle	Two		
Temp. °C	9.9	13	15.9	9.1	13.9	23.4	9.2	11.7	14.2
DO mg/L	0.2	3.6	10.7	0	2.9	6.7	0.9	6.2	8
pH	6.1	7.3	7.9	5.2	6.9	7.7	5	7.05	8.5
TDS mg/L	129	242	1270	149	480	3530	23	106	549
			Southern	New	Jersey	Cycle	One		
Temp. °C	12	15.5	22.5	15.5	17.3	29	12	14.5	18
DO mg/L	< 0.3	5.4	10.5	< 0.2	2.1	8.8	< 0.2	4.6	9.3
pН	4	5	7.91	3.8	4.6	6.7	3.7	4.6	5.9
TDS mg/L	59	214	690	57	136.5	455	15	25.5	82
			Southern	New	Jersey	Cycle	Two		
Temp. °C	11.1	14.8	19.9	12.2	14.9	21.8	8.5	12.7	15.3
DO mg/L	0.2	3.5	11.2	0.2	3.1	9.1	0.4	5.1	9.1
pН	3.8	4.8	7.9	3.6	4.9	8.1	4.1	4.5	5.8
TDS mg/L	45	208	2040	40	221	2310	16	27	147

 Table 1: Ground Water Characteristics And Constituents

#### Trace elements

The trace elements (metals) shown consists of those that have at least one concentration that exceeded the New Jersey Ground Water Standard. Arsenic detection and concentrations in northern NJ are mostly natural in origin with the number of detections that exceed the NJ Ground Water Standard dropping between sampling cycles. The one well that exceed the arsenic standard in undeveloped land use during the second sampling cycle had concentration of  $3.4 \mu g/L$ , which is just above the NJ Ground Water Standard of  $3 \mu g/L$ . Iron and manganese detections and concentrations have a strong urban association and possibly a weak agricultural association. The reducing conditions found

in the agricultural and urban land use areas, indicated by the lower dissolved oxygen concentrations found in these land use areas, are conductive to iron and manganese mobility. The decrease in the frequency of detection of manganese exceeding the ground water standard in the undeveloped land use in northern New Jersey can be attributed to the increase in dissolved oxygen concentrations observed in the undeveloped land use areas. In urban and agricultural land use the pH levels remained fairly consistent between sampling cycles, and can not be used to explain the decrease in manganese concentrations. A decrease in the use of agrochemicals and/or lawn fertilizers could possibly explain the decrease in manganese concentrations that exceed the ground water standard. Iron concentrations remained consistent between sampling cycles.

In the coastal plain of New Jersey (southern NJ), iron and aluminum are most likely natural in origin. As observed in northern NJ manganese has an urban and agricultural land use association. Acidic and reducing ground water conditions will mobilize the iron, aluminum and manganese. The decrease in the number of wells with concentrations of iron and aluminum in urban land use area that exceeded the ground water standard could be attributed to the increase in dissolved oxygen concentrations observed in those wells. The decrease in iron and manganese concentrations between sampling cycles that exceed the standard in undeveloped and agricultural land use areas can not be attributed to a change in pH values which have remained consistent. The decrease could be attributed to natural fluctuation of concentrations, especially in those wells were the concentrations have been observed in sampling cycle 1 to be just below or above the standard. The increase in aluminum detections above the standard in agricultural land use in the second sampling cycle could be attributed to a drop in dissolved oxygen concentrations observed in these areas. The increase of manganese detections in urban land use could possibly be explained by an increase in lawn chemicals that could mobilize the manganese. One undeveloped well in the second round of sampling had an arsenic concentration that exceeded the ground water standard of 3µg/L. Its concentration was 3.3 µg/L, which is just above the standard, and may be attributed to a high degree of iron-oxide dissolution. During the second sampling cycle the same two urban wells from the first sampling cycle were observed to have arsenic concentrations that exceeded the ground water standard. However, their concentrations decreased from 112µg/L and 42µg/L to 108 µg/L and 21.9µg/L respectively. The ultimate source of this arsenic is unknown. Fertilizers, agrochemicals, and lawn care products could be the source or mobilization agent for the beryllium, cadmium, lead, and nickel observed in the coastal plain.

#### Nutrients

Nutrient concentrations are dominated by nitrate and the frequency and concentration by land use in both northern and southern New Jersey are: agricultural > urban > undeveloped (Figure 2). The use of nitrogen-based fertilizers in agricultural and urban areas and possibly septic system and sewer system leakage in urban areas are considered the major sources. Median concentrations remained the same in undeveloped land use areas, while urban land use showed a slight increase State wide between sampling cycles. In southern NJ agricultural land use median concentration showed an increase, while in northern NJ a decrease was observed in the median concentration. The number of wells that exceed the NJ Ground Water Standard for nitrite plus nitrate decreased between

sampling cycles. During the first sampling cycle no sample had an orthophosphate concentration greater than 0.2 mg/L, in the second sampling cycle the maximum orthophosphate concentration observed was 0.791 mg/L in an urban well located in northern NJ.

#### VOCs (35 compounds analyzed)

The data collected and analyzed for in sampling cycle 2 confirms the observations from sampling cycle 1, that the frequency of VOC detection is a function of land use in northern NJ. The greatest number of wells with VOC detections was in urban and agricultural land use areas (Figure 3). Between sampling cycles 1 and 2 in northern NJ, the frequency of detection decreased in urban and undeveloped land use areas, while agricultural land use remained constant at 3 wells. In southern NJ, agricultural and undeveloped land use showed a decrease in frequency of detection. It should be noted that 11 out 19 undeveloped wells in southern NJ had detections for chloroform (trichloromethane). If you remove the chloroform data, the frequency of detection in undeveloped land use areas drops dramatically. The presence of chloroform in the undeveloped wells can be attributed to atmospheric deposition, septic systems, leaking sewers and chlorinated drinking water being used to water lawns, gardens and to fill up swimming pools. In agricultural land use in southern NJ, the number of wells with VOC detections remained the same at 17 wells between sampling cycles. The variety of VOC compounds detected decreased between sampling cycles. Northern NJ had a decrease from 20 individual compounds in sampling cycle 1 to 10 compounds in sampling cycle 2. While in southern NJ, 16 individual compounds were detected in sampling cycle 2 as compared to 28 compounds in sampling cycle 1.

Methyl tertiary-butyl ether (MTBE), an additive in gasoline, showed a steep decline in the frequency of detection, especially in northern NJ (Figure 4). During the first round of sampling 50% of the urban wells, 14% of agricultural wells, and 9% of the wells in undeveloped land use had detections for MTBE. In sampling cycle 2 there were no detections for MTBE in urban and undeveloped land use. While in agricultural land use the frequency of detection dropped from 3 wells to 1 well. In southern NJ, urban and undeveloped land use both showed a decrease in the frequency of MTBE, while agricultural land use wells during sampling cycle 1 had a frequency of detection of 13% that increased to 15% in sampling cycle 2. This was an increase from 5 to 6 wells with MTBE detection. In the undeveloped wells the frequency decreased from 6% to 0% and in urban land use the frequency dropped from 43% to 30%. The decrease in detections of MTBE can be attributed to a ban on using MTBE in the State of New Jersey. Southern NJ has more detections of MTBE than northern NJ most likely due to atmospheric deposition, since the predominant wind patterns are from the north-west.

#### Pesticides

The frequency of pesticide detection State wide during the second sampling cycle was agricultural (71%) > urban (47%) > undeveloped (10% (5% when normalized to 60 wells)) (Figure 5). In southern NJ a decrease in the frequency of detection was observed while in northern NJ an increase was observed in all land uses between sampling cycles. The increase in northern NJ can be attributed to the changing of the pesticide compound

list. The new parameter list contains more metabolite compounds that were previously analyzed for. The concentration of pesticides is low in all land use categories in both sampling cycles and in all land uses. Atrazine, Deethylatrazine, Metolachlor, Prometon and Simazine were the most frequently detected compounds in both sampling cycles. They are all herbicides used to control grasses and broadleaf plants, except for Deethylatrazine which is the major metabolite of Atrazine. The variety of pesticides decreased in southern NJ between sampling cycles, but increased in northern NJ. This increase again can be attributed to the new pesticide parameter schedule.

#### Radionuclides

Gross alpha particle activity was analyzed within 48 hours after sample collection. This ensures that the radioactive decay of short-lived radium-224 (half-life of 3.64 days) is measured along with the other alpha emitters. The Federal and New Jersey drinking water standard of 15 pCi/L gross alpha particle activity still applies even though the shorter holding time results in increased activity if significant radium-224 is present. Generally, higher activity is found in southern versus northern New Jersey in all land use settings in sampling cycle 1 and cycle 2 (Figure 6). This is most likely due to the greater abundance of radium-224 in southern New Jersey and the low pH of the ground water, which would increase its mobility. In both the north and the south, and in both sampling cycles, the highest activity is associated with agricultural and urban land use areas. The application of agricultural and lawn chemical products can compete with naturally occurring radium for adsorption sites thereby mobilizing more of it than normal into the ground water system.

#### Conclusion

In both sampling cycles, in agricultural and urban land uses, total dissolved solids concentrations, as well as the concentration, frequency, and variety of major ions, trace elements, nutrients, volatile organic compounds, and pesticides are found at higher levels than in wells located in undeveloped areas. While nitrite plus nitrate median concentrations fluctuated slightly in urban and agricultural land uses between sampling cycles, the concentrations were still higher than those in undeveloped land use with the highest concentration and frequency of detection being in agricultural land use. The frequency of wells that exceed the nitrite plus nitrate NJ Ground Water Standard decreased between sampling cycles State wide. A decrease in the variety and frequency of pesticides was detected in southern NJ, while in northern NJ an increase in the variety and frequency of pesticides detected was observed. The increase in pesticide variety and frequency in northern NJ can be attributed to a switch in the pesticide schedule which includes more compounds and metabolites. Pesticide concentrations were relatively the same between sampling cycles. Atrazine, deethylatrazine, metolachlor, prometon, and simazine were the most frequently detected pesticides in both northern and southern NJ in both sampling cycles. The variety and frequency of VOCs detected in southern and northern NJ decreased between sampling periods, while the concentrations remained fairly consistent. MTBE (methyl tertiary-butyl ether) showed the steepest decline in the frequency of detection state wide. The increase in radioactivity in southern NJ agricultural and urban land uses, and agricultural land use in northern NJ between

sampling cycles is most likely due to the use of agrochemicals and lawn chemicals. While there seems to be some positive trends between sampling cycles, in both northern and southern NJ, two sampling points is not enough to state these observations are in fact trends.

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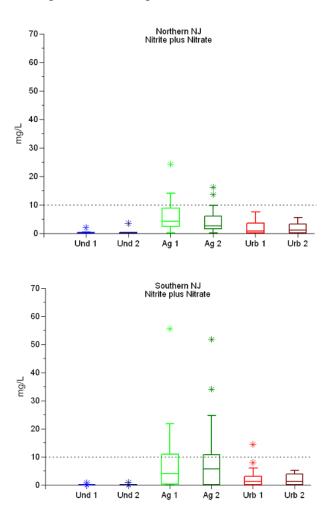
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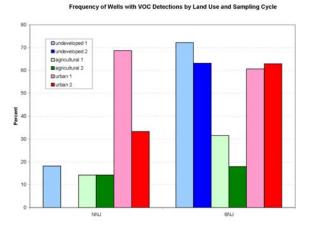
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Figures

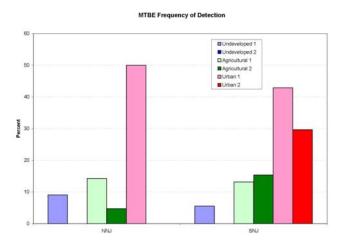




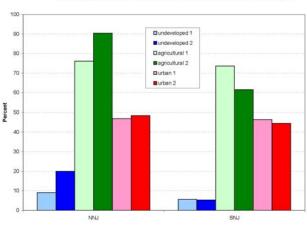


### Figure 3. Frequency of VOC Detections

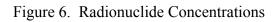
Figure 4. Frequency of MTBE Detection

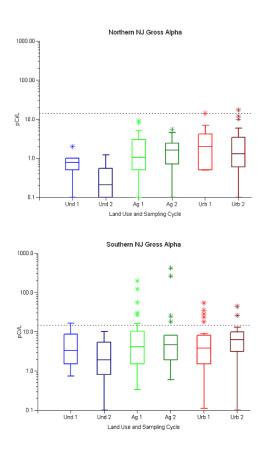


### Figure 5. Frequency of Pesticide Detections



Frequency of Wells with Pesticide Detections by Land Use and Sampling Cycle





## Appendix I: New Jersey Surface Water Quality Standards, N.J.A.C. 7:9B

An unofficial version of the Surface Water Quality Standards rules is located on the Department's website at <u>http://www.nj.gov/dep/rules/rules/njac7_9b.pdf</u>. The official version of the rules is available from LexisNexis ®, publisher of the *New Jersey Administrative Code* (N.J.A.C.), at <u>www.lexisnexis.com/bookstore</u>. Additional information about obtaining Department rules is available on the Department's Web site at <u>http://www.state.nj.us/dep/legal/get_rule.htm</u>.

Waterbody	Title	Pollutant	Status	Date
Atlantic Coastal Water Region	Total Maximum Daily Loads for Pathogens to Address 18 Lakes in the Atlantic Coastal Water Region	Pathogens	Adopted	October 19, 2009
Budd Lake, Randolph Lake, Ravine Lake, and Sunset Lake	Total Maximum Daily Loads for Pathogens to Address 4 Lakes in the Raritan Water Region	Pathogens	Adopted	October 19, 2009
Lower Delaware Water Region	Total Maximum Daily Loads for Pathogens to Address 17 Lakes in the Lower Delaware Water Region	Pathogens	Adopted	October 19, 2009
Northeast Water Region	Total Maximum Daily Loads for Pathogens to Address 25 Lakes in the Northeast Water Region	Pathogens	Adopted	October 19, 2009
Northwest Water Region	Total Maximum Daily Loads for Pathogens to Address 11 Lakes in the Northwest Water Region	Pathogens	Adopted	October 19, 2009
Passaic River Basin	Total Maximum Daily Load Report for the Non-Tidal Passaic River Basin Addressing Phosphorus Impairments	Phosphorus	Adopted	April 24, 2008
Pequest River	Total Maximum Daily Loads for Phosphorus to Address Four Impaired Assessment Units in the Pequest River Watershed	Phosphorus	Adopted	May 23, 2011
Ramapo River	Total Maximum Daily Load Report to Address Phosphorus Impairment in Pompton Lake and Ramapo River in the Northeast Water Region	Phosphorus	Adopted	April 24, 2008
Statewide	Total Maximum Daily Load for Mercury Impairments Based on Concentration in Fish Tissue Caused Mainly by Air Deposition to Address 122 HUC 14s Statewide	Mercury Impairments	Adopted	June 10, 2010

# Water Quality Projects Funded With Section 319(h) Grants 2004-2008

FY	RECIPIENT	PROJECT DESCRIPTION	<b>GRANT AMOUNT</b>
2004	Atlantic Highlands Environmental Commission	Many Mind Creek Regional Stormwater Management Plan	\$87,833.00
2004	Camden County SCD	Regional Stormwater Management Plan:Upper Mantua Creek	\$503,065.00
2004	Deal Lake Commission	Regional Stormwater Management Plan:Deal Lake Watershed	\$99,400.00
2004	East Amwell Township	Regional Stormwater Management Plan: Sourland Mountain	\$92,470.00
		Watershed	
2004	Middlesex Planning Department	Regional Stormwater Management Plan: Devils, Shallow, Cedar, and	\$286,200.00
		Cranbury Brooks Watershed	
	Readington Township	Regional Stormwater Management Plan:Pleasant Run Watershed	\$52,560.00
2004	Rutgers, The State University of NJ	Regional Stormwater Management Plan:Pompeston Creek	\$249,570.00
2004	West Milford Township	Lake Restoration Plan: Greenwood Lake	\$152,330.00
2004	West Milford Township	Posts Brook Regional Stormwater Management Plan	\$144,872.00
2005	Cumberland/Salem County SCD	Watershed Restoration Plan: Upper Salem River Watershed	\$316,925.00
2005	Lake Hopatcong Commission	NPS Implementation Measures to Reduce the Phosphorus and	\$844,500.00
		Sediment Loads Entering Lake Hopatcong	
2005	Mount Olive Township	Budd Lake Watershed Restoration, Protection, and Regional	\$393,994.00
		Stormwater Management Plan	
2005	New Jersey Water Supply Authority	Watershed Restoration and Protection Plan:Lockatong and	\$237,290.00
		Wickecheoke Creek Watersheds	
	Rockaway River Watershed Cabinet	Hurd Park Goose Management and Shoreline Restoration Project	\$201,000.00
	Rutgers, The State University	Watershed Restoration Plan: Upper Cohansey River Watershed	\$314,165.00
2005	Vernon Township Department of Health and	Black Creek Watershed Restoration, Protection, and Regional	\$385,674.00
	Human Services	Stormwater Management Plan	
	Wallkill River Watershed Management Group	Watershed Restoration Plan: Papakating Creek Watershed	\$168,850.00
	Wallkill River Watershed Management Group	Watershed Restoration Plan: Clove Acres Lake Watershed	\$138,050.00
	West Amwell Environmental Commission	Watershed Protection Plan: Alexauken Creek Watershed	\$239,300.00
2005	William Patterson University	Preakness Brook Restoration, Protection, and Regional Stormwater	\$408,586.00
		Management Plan	
	Burlington County Bridge Commission	Assiscunk Creek Headwater Restoration and Protection Plan	\$362,230.00
2006	Deal Lake Commission c/o Borough of	Regional Stormwater Management Plan for the Deal Lake Watershed	\$10,781.00
	Allenhurst	(Modification to RP04-082)	

# Water Quality Projects Funded With Section 319(h) Grants 2004-2008

FY	RECIPIENT	PROJECT DESCRIPTION	<b>GRANT AMOUNT</b>
2006	NJDEP Swartswood State Park	Swartswood State Park NPS Implementation Project	\$255,000.00
2006	East Amwell Township	Regional Stormwater Management Plan: Sourland Mountain	\$18,102.00
		Watershed (Modification to RP04-084)	
2006	Mt. Olive Township	Budd Lake Watershed Restoration, Protection, and Regional	\$35,000.00
		Stormwater Management Plan	
	New Jersey Institute of Technology	Neshanic River Watershed Restoration Plan	\$358,456.00
	New Jersey Institute of Technology	Neshanic River Watershed Restoration Plan	\$77,259.00
2006	New Jersey Water Supply Authority	Phase 1 NPS Implementation Project: D&R Canal	\$175,000.00
	New Jersey Water Supply Authority	Phase 2 NPS Implementation Project: D&R Canal	\$175,000.00
2006	Manasquan River Watershed Association	Mingamahone and Marsh Bog Brook Watershed Restoration and	\$178,500.00
		Protection Plan	
2006	North Jersey Resource Conservation and	Watershed Restoration and Protection Plan: Musconetcong Watershed	\$297,191.00
	Development Council, Inc.	- Hampton to Bloomsbury	
	Ocean County College	Bey Lea Municipal Golf Course BMP Implementation Project	\$290,490.00
2006	Ocean County College	Wetland Enhancement and Riparian Corridor Restoration at the Ocean	\$144,843.00
		County Vocational Technical School	
2006	Pequannock River Coalition	Demonstration Project to Support TMDL Implementation for the	\$24,500.00
		Pequannock River	
2006	Readington Township	Regional Stormwater Management Plan for the Pleasant Run	\$4,960.00
		Watershed (Modification to RP04-088)	
2006	Rutgers Cooperative Extension	Tenakill Brook Watershed Restoration Plan	\$303,200.00
	Rutgers Cooperative Extension	Musquapsink Brook Watershed Restoration Plan	\$317,955.00
	Union Township Environmental Commission	Watershed Protection Plan: Sidney Brook Watershed	\$237,362.00
2006	William Paterson University	Posts Brook Regional Stormwater Management Plan (Modification to	\$30,655.00
		RP05-086)	
2006	Vernon Township	Black Creek Watershed Restoration, Protection, and Regional	\$39,000.00
		Stormwater Management Plan	
	Camden County SCD	Cooper River Stormwater Basin Retrofit and Renovation	\$171,185.00
	City of Trenton	Restoration of Petty's Run Segment at Magic Marker	\$1,273,563.00
2007	Delaware Riverkeeper Network	Saddler's Woods Restoration Project Phase I	\$302,260.00

# Water Quality Projects Funded With Section 319(h) Grants 2004-2008

FY	RECIPIENT	PROJECT DESCRIPTION	GRANT AMOUNT
2007	Lake Musconetcong Regional Planning Board	Implementation of a Bathymetric Survey for Lake Musconetcong	\$96,360.00
2007	Monmouth County Planning Board	Ramanessin Brook Restoration Projects Phase I	\$300,000.00
2007	New Jersey Water Supply Authority	D&R Canal Watershed Implementation Project Phase I and II	\$72,450.00
2007	Rockaway Township	Installation of Stormwater BMPs: Beaver Brook Watershed	\$158,200.00
2007	West Milford Township	Stormwater Implementation Projects: Greenwood Lake	\$913,600.00
2008	Camden County SCD	De Cou Run Stream Restoration (Cooper River)	\$266,437.00
2008	Lake Musconetcong Regional Planning Board	Implementation of Weed Harvesting BMPs	\$45,000.00
2008	Monmouth County Planning Board	Ramanessin Brook Restoration Projects Phase II	\$1,083,900.00
2008	Pequannock River Coalition	Pequannock River Dam Removal Project	\$32,000.00
2008	Rutgers University	Implementation of the Troy Brook Watershed Plan	\$471,856.00
2008	Sussex County MUA	Paulins Kill Watershed Plan Phase II	\$537,776.00
2008	Ten Towns Great Swamp Watershed	Loantaka Brook/Kitchell Pond Watershed Plan Implementation	\$209,140.00
	Management Committee		
2008	Whippany River Watershed Action Committee	Whippany River Watershed Priority Implementation Projects	\$553,975.00

Fiscal Year Totals	Total Number Projects	Total Amount
FY 2004	9	\$1,668,300
FY 2005	11	\$3,648,334
FY 2006	20	\$3,335,484
FY 2007	8	\$3,287,618
FY 2008	9	\$4,113,684
Total Funded 2004-2008	57	\$16,053,420