

# Overview of Division of Water Monitoring and Standards



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New Jersey Department of Environmental Protection  
Division of Water Monitoring and Standards  
Bureau of Environmental Analysis, Restoration and Standards

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# WATER RESOURCE MANAGEMENT



<http://www.state.nj.us/dep/wms/>



STATE OF NEW JERSEY  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WATER MONITORING AND STANDARDS



- Division of Water Monitoring and Standards Home ▶
- Bureau of Environmental Analysis, Restoration & Standards ▶
- Bureau of Fresh Water & Biological Monitoring ▶
- Bureau of Marine Water Monitoring ▶
- AmeriCorps NJ Watershed Ambassadors**
- Barnegat Bay Initiative ▶
- Outreach ▶
- Events ▶
- NJ Water Monitoring Council**
- Related Links ▶

**Monitoring Data Reports Water Quality Trends ListSers**

The **Division of Water Monitoring and Standards** provides water quality information to assess and manage New Jersey's water resources. This information is critical to knowing whether NJ's waters are safe to swim in, aquatic life is healthy, fish and shellfish are safe to eat, and contributes information on whether water sources are safe to use for drinking water. Click on the [Mission Statement](#) below for additional information about the Division.

Click on any of the photos in the slideshow below to learn about many of the monitoring and analysis activities of the Division.



<p><b>River/Lake/Ground Water Monitoring</b></p>	<p><b>Beach/Bay/Ocean Monitoring</b></p>	<p><b>Water Quality Standards</b></p>	<p><b>Water Quality Assessment</b></p>	<p><b>TMDL's</b></p>	<p><b>Restoration</b></p>	<p><b>Citizen Science - Water</b></p>
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For information regarding water quality management planning and implementation issues, please visit the [Office of Water Resources Management Coordination's](#) website.

For information on water quality permitting-related issues, including wastewater, residuals and stormwater, please visit the [Division of Water Quality's](#) website.

For information on water supply, water allocation and drinking water-related issues, please visit the [Division of Water Supply and Geosciences](#) website.





# NJ Water Monitoring Council

Measuring What Counts for Clean & Plentiful Water

- Home
- Charter
- Members
- Technical Topics
- Meeting Information**
- Events
- Continuous Monitoring
- Related Links



Batsto Lake

The New Jersey Water Monitoring Council, established on October 24, 2003 as part of NJ's celebration of World Water Monitoring Day, 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 addresses the biological, chemical, physical and ecosystem aspects of water monitoring, including surface and ground waters, freshwater, estuarine, and marine environments in New Jersey.



DRBC



DEP



DEP



NJWSA



USGS

Contact Us:



# Division of Water Monitoring & Standards

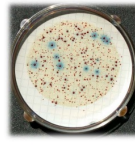
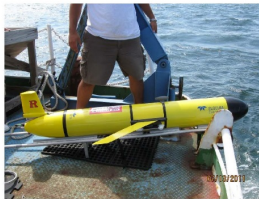
## FRESH WATER & BIOLOGICAL MONITORING

Rivers, Streams and Lakes, Physical/Chemical Monitoring, Biological Monitoring – Benthic Macroinvertebrates & Fish, Flow, Continuous Water Quality Monitoring, Stressor Identification, Ground Water Monitoring, Laboratory Identifications & Analyses



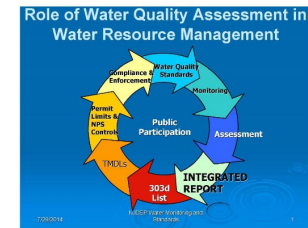
## MARINE WATER MONITORING

Coastal and Estuaries, Shellfish Classification, Beach Monitoring, Clean Shores, Remote Sensing for Algal Blooms & Phytoplankton, Real Time Water Quality Monitoring, Nonpoint Source Tracking, Laboratory Analyses



## ENV. ANALYSIS, RESTORATION & STANDARDS

Water Quality Assessment, Surface and Ground Water Quality Standards, TMDLs, Water Quality Restoration, Volunteer Monitoring, AmeriCorps Watershed Ambassadors



**What is a TMDL?**  
A Total Maximum Daily Load figures out the amount of pollutants a waterbody can handle.  
Modeling can appropriately determine sources.



**Why Do We Assess Water Quality?**

- Required under federal and state statutes:
  - Section 305(b) of Federal Clean Water Act
  - Section 305(d) of Federal Clean Water Act
  - Water Quality Planning Act (N.J.S.A. 59:24)
- Necessary to determine appropriate regulatory, preventive, and restorative actions:
  - Permits
  - Enforcement
  - Research
  - Funding (e.g., 319 grants for restoration)

July 28, 2014 Water Monitoring and Standards

**NEW JERSEY WATERSHED ASSESSMENT PROGRAM**  
An on-going, multi-agency, multi-disciplinary program to assess the health of New Jersey's watersheds and to develop and implement restoration and protection plans.

**Key New Jersey Watershed Assessment Program Objectives:**

- Assess the health of New Jersey's watersheds and identify areas of concern.
- Develop and implement restoration and protection plans for watersheds identified as areas of concern.
- Provide technical assistance to local municipalities and watershed groups.
- Coordinate with other state and federal agencies to address watershed issues.
- Engage the public in watershed assessment and restoration efforts.

**Watershed Assessment and Restoration Program:**

- Watershed Assessment: A multi-step process to evaluate the health of a watershed and identify areas of concern.
- Restoration and Protection: Developing and implementing plans to improve watershed health and protect water quality.



# Division of Water Monitoring & Standards

## Who we are and what we do

- **Freshwater & Biological Monitoring:**  
Monitors the freshwaters of the state; chemical and Physical, biological and fish tissue
- **Marine Water & Monitoring:**  
Monitors the marine waters of the state; compliance w/National Shellfish Sanitation Program
- **Environmental Analysis, Restoration & Standards:**  
Coastal beach monitoring, Clean Shores Program, Water Quality Management Planning AND.....



## Enviromental Stewardship

AmeriCorps NJ  
Watershed  
Ambassadors  
Program

Community  
Water  
Monitoring

Watershed  
Education and  
Urban Fishing

## Analysis

Water Quality  
Assessment

TMDLs  
Development

Watershed Based  
and Protection  
Plans

Beach  
Monitoring

## Restoration

Nonpoint  
Source (NPS)  
Pollution  
Management  
Program

Water Quality  
Restoration  
Grants for NPS  
Pollution

Clean Shores

## Standards

Surface Water  
Quality Standards

Ground Water  
Quality Standards

## Water Quality Management Planning

Water Quality  
Management  
Planning  
Program

# Bureau of Environmental Analysis, Restoration and Standards (BEARS)

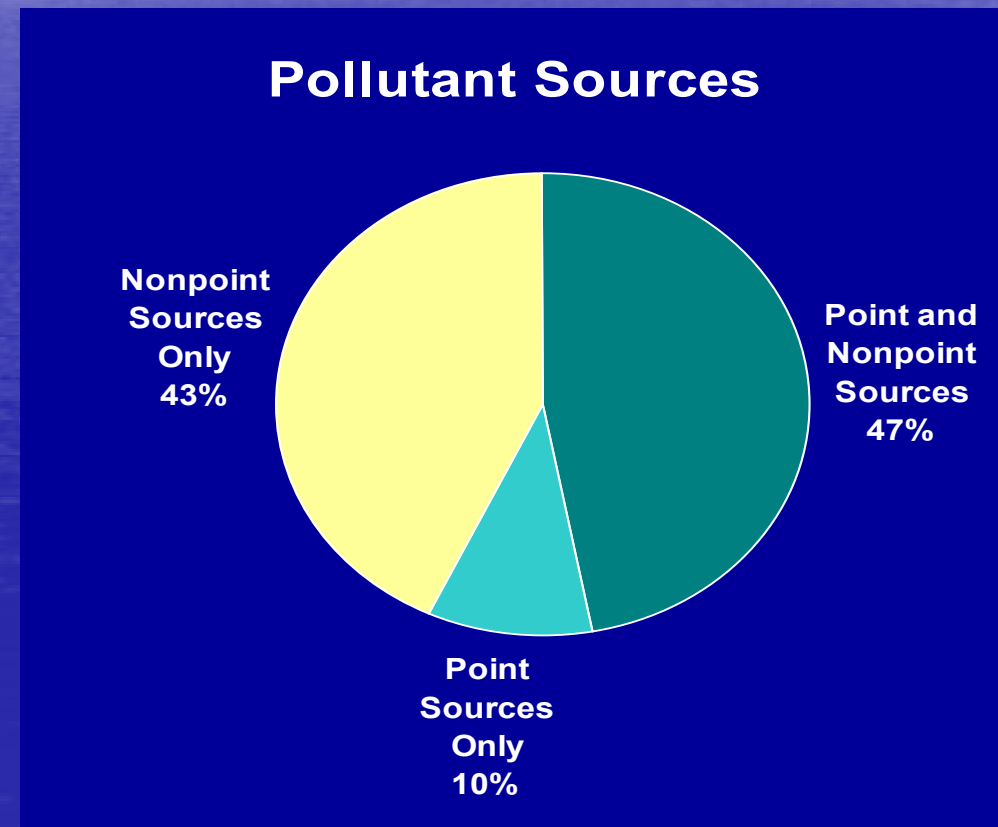
- NPS Restoration Grants
- Surface and Ground Water Quality Standards
- Water Quality Trends and Assessment
- Total Maximum Daily Loads (TMDLs)
- Barnegat Bay Strategy
- AmeriCorps/Community Water Monitoring
- Wastewater Management Planning
- Clean Shores and Beach Monitoring



# Why is NPS Pollution a Problem?

Nationally . . .

- 47% of problems are comprised of point & nonpoint sources
- 43% of problems are NPS sources only
- 10% of problems are point sources only





# Major Sources of NPS Pollution

- Agriculture
- Unrestricted livestock grazing
- Poor design of roads
- Forestry
- Hydromodification
- Urban runoff
- Abandoned mines
- Failing septic systems
- Construction activities
- Atmospheric deposition



# Harmful Algal Blooms (HABs)

- Monitoring Conducted by MWM and BFBM
- Subject of Request for Proposals:
  - HAB Request for Proposals #1
  - 2019 Water Quality Restoration Grants for Nonpoint Source Pollution RFP #2

# Funding Opportunities

- \$2.5 M in HAB/Lakes Management Grants - As an element of its nonpoint pollution grant funding, the New Jersey Department of Environmental Protection will issue a request for proposals for \$2.5 million in Lakes/HAB management matching grants, including for treatment and prevention projects. Grantees will be required to provide a 33% match to the State's investment resulting in a \$3.3 million investment in new projects to avoid/mitigate HABs.
- \$1 M in Watershed Planning Grants (\$3.5 M total) - The DEP will make up to \$1 million of Watershed Nonpoint Source Grant funding available for planning and projects that reduce the nonpoint source pollution, including nutrients, that contribute to HABs in surface waters. A match will not be required but will improve the project ranking.