

State Agency Opportunities & Constraints Analysis

RARITAN Somerset County



November 19, 2009
Office of Smart Growth
Department of Community Affairs
State of New Jersey



State of New Jersey
DEPARTMENT OF COMMUNITY AFFAIRS
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JON S. CORZINE
Governor

CHARLES A. RICHMAN
Acting Commissioner

November 19, 2009

The Honorable Jo-Ann Liptak
Mayor, Borough of Raritan
Municipal Building, 22 First Street
Raritan, NJ 08869-1809

RE: Borough of Raritan, Plan Endorsement Opportunities and Constraints Analysis

Mayor Liptak:

The Office of Smart Growth (OSG) and our State agency partners have reviewed the Municipal Self Assessment submitted by the Borough of Raritan in September 2009 and would like to commend the Borough for its active participation and dedication to the Plan Endorsement process. As such, please find enclosed the State Agency's Opportunities and Constraints Analysis.

The Opportunities and Constraints Analysis is intended to guide the Borough of Raritan's Community Visioning Process and to provide the Borough with preliminary consistency issues with the State Development and Redevelopment Plan and relevant State regulations. This document can be found on the OSG website at the following link: <http://www.nj.gov/dca/osg/plan/endorsement.shtml>.

If you intend to seek a waiver from any of the visioning requirements of Plan Endorsement, please send a separate letter that addresses the Visioning sessions that have been conducted in the municipality. For example, we need the dates, attendance and minutes from charrettes or workshops that were conducted. Without this information a waiver cannot be granted since the State Planning Commission feels that community input is critical to the municipalities' planning outcome.

The Office of Smart Growth and State Agencies remain committed to working with the Borough of Raritan and the other members of Somerset County Regional Center. Thank you for your continued interest in pursuing Plan Endorsement. Should you have any additional questions or concerns please feel free to contact Barry Ableman, Principal Planner for Borough of Raritan at (609) 292-3228 or via email at bableman@dca.state.nj.us.

Sincerely,

Donna Reñdeiro

Acting Executive Director, Office of Smart Growth

DR:ba

c: State Agency Partners (Via E-Mail)
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Barry Ableman, Principal Planner, OSG (Via E-Mail)
Borough of Raritan Plan Endorsement File



Table of Contents

Introduction.....	1
Background.....	1
Relation to the State Development and Redevelopment Plan (State Plan).....	1
About the Trend Analysis.....	2
Trend Analysis for Raritan.....	3
Raritan Residential Buildout Method.....	3
Raritan Commercial Buildout - Building Cover Method.....	4
Cross-Acceptance III	5
Conclusion.....	6
Critical Planning Issue.....	6
Historic Preservation Issues.....	6
Other Issues.....	6

On the cover: River Park at Raritan.

Introduction

In September 2009 the Borough of Raritan in Somerset County submitted their Municipal Self-Assessment Report to the New Jersey Office of Smart Growth (OSG). The report and related documents were completely accepted on September 24, 2009. As such, OSG and our partner State Agencies have preliminarily assessed local opportunities and constraints, as it relates to existing development, current zoning regulations, infrastructure and natural resources. This report provides for a comparison of information to the Municipal Self-Assessment Reports with the most up-to-date regional and statewide data to determine whether TREND growth is sustainable and viable based on the information provided. This information is intended to guide and direct the Community Visioning Process as to develop a vision with a twenty-year planning horizon. The vision shall provide for sustainable growth, recognize fiscal constraints, housing needs and protection of natural, historic and agricultural resources. Community visioning shall take into consideration the findings and conclusions of the Municipal Self-Assessment and the State Agencies' Opportunities and Constraints Analysis.

Background

The Borough of Raritan is part of the Somerset Regional Center (Somerville, Raritan Borough and a portion of Bridgewater Township). All of the municipalities passed resolutions directing the County Planning Board to coordinate the individual municipalities' Plan Endorsement efforts. Each of the three municipalities submitted initial planning documents along with the Somerset County Regional Center Master plan in the summer of 2007. All of the municipalities and staff from the Somerset County Board initiated the Plan Endorsement process by attending a pre-petition meeting with OSG and our partner State agencies on July 12, 2007. On December 11, 2007 the Borough of Raritan adopted a resolution authorizing the creation of their Plan Endorsement Advisory Committee (PEAC), in which five members were selected to guide the Plan Endorsement process on behalf of the Borough. As previously mentioned, the Borough submitted their Municipal Self Assessment Report to OSG for review on September 24, 2009. The Municipal Self Assessment Report was authorized by the Borough of Raritan via Resolution on April 28, 2009. Pursuant to the State Planning Rules, N.J.A.C. 5:85-7.10, this State Office of Smart Growth

Agency Opportunities and Constraints Analysis has been provided to the Borough on October 8, 2009.

Relation to the State Development and Redevelopment Plan (State Plan)

With 6,338 people recorded in the 2000 census or 3,138 people per square mile living within the 2.02 square mile community, the Borough of Raritan with its central business district and Raritan Train Station is a perfect example of how the State Plan defines centers. The Somerset County Regional Center consists of Somerville, Raritan Borough and part of Bridgewater Township was designated by the State Planning Commission on May 29, 1996. Currently the adopted State Policy Plan Map shows Raritan with its high density as a Planning Area 1 or Metropolitan Planning Area and a small portion of the borough as PA 5 or Environmentally Sensitive. The Preliminary State Plan Map similarly depicts the municipality as predominantly PA1 with Parkland along the Southern border with a small portion of PA5 adjacent to Nevius Street owned by the Duke Foundation.

When the Regional Center was designated, a sunset date of January 7, 2008 was established by the State Planning Commission. On that date the Regional Center expired. The Permit Extension Act of 2008 was enacted on September 6, 2008 as L. 2008, c. 78, and codified at N.J.S.A. 40:55D-136.1 et seq. The stated purpose of the Act is to "prevent the wholesale abandonment of approved projects and activities due to the present unfavorable economic conditions, by tolling the term of these approvals for a period of time, thereby preventing a waste of public and private resources." N.J.S.A. 40:55D-136.2m. The Act extends the "running of the period of approval" for a defined "extension period," beginning January 1, 2007 and continuing through July 1, 2010. N.J.S.A. 40:55D-136.3; N.J.S.A. 40:55D-136.4. In the case of the Somerset County Regional Center whose boundary has been slightly modified based on the Permit Extension Act, the center is extended through December 1, 2010 or until Plan Endorsement is received. Those seeking a full 10 year extension and wishing to make boundary modifications to their center during this extension period need to complete Plan Endorsement for the entire municipality.

Although no areas have been designated as Areas in Need of Redevelopment in the Borough at this time, they have begun to study ways to positively address

their economic development and growth in the Transit Village Study and the Riverfront Development Study. As planning continues throughout the Borough, they should remember that by encouraging mixed-use growth, development can positively affect the commercial and residential supply while minimizing the negative impacts of traffic. Implementing the goals of the Riverfront Development Study will also positively affect the community through the development of a gateway into Raritan that also positively supports the Raritan Greenway and the adjacent industrial zone.

The River Park at Raritan is a positive example of how redevelopment can transform a site, the former Woolen Mills facility with environmental concerns, into more than 200 luxury rental apartments and 12 affordable units. The property provides beautiful views of Duke Farms and is within ½ a mile walk to a major super-market and the Raritan Train station. It is not known how many residents are taking advantage of its proximity to these services, but it should be encouraged.

Similarly other proposals for residential development should be encouraged to integrate into the surrounding community. Willow Walk for example, if developed, should not be focused on Route 202. By focusing the development and its ingress and egress toward Raritan Avenue and extending Tillman Street will provide access to the train station and the rest of Raritan. The alternative will force people into their cars if they decide to leave their house. This will contribute to traffic concerns. Based on current its current M-3 (Industrial) zoning, the project would require a variance.

Another issue related to unfettered TREND development is traffic circulation and congestion. Raritan has a train station on the NJ Transit Raritan Valley Line; are an employment hub as the corporate headquarters of Ortho Clinical Diagnostics and a stable central business district. According to the New Jersey Department of Labor as of 2000 approximately 7,246 people work in Raritan. To ensure that circulation continues to move it is important to avoid singular use strip development which results in a cluttered, unappealing pattern of development that generates needless automotive trips along the state and county highways. To minimize traffic and potential automobile accidents, the development of walkable, mixed-use developments are encouraged. Communities similar to Raritan have also benefited greatly by developing shared parking

strategies that enable people to find adequate parking at different times of the day depending on their activity.

The Somerset County Regional Center of which Raritan is a part is an example of a community where mixed-use growth within the center is being realized. The Borough of Raritan is a 2.02 square mile municipality interlaced with state, county highways, and bordered by the Raritan River. The historic borough established in 1868 has less than 9.3% of unconstrained land that can be developed or 127 acres. Despite the national economic climate, there will be development pressure for the undeveloped land along with infill development to occur as was seen in the case of River Walk at Raritan.

About the Trend Analysis

The TREND Analysis performed by OSG was conducted based on the current zoning information that was provided in the Municipal Self-Assessment Report. OSG took into account known environmental constraints and impediments to development. These constraints included identified State Plan parkland, State Agriculture Development Committee (SADC)

Summary Table	
category	totals*
land consumption	
total acreage	1,360
currently developed or constrained	1,201
acres to be developed ¹	127
buildings	
current housing units (2000)	2,644
residential units to be developed	222
total residential at buildout	2,866
current commercial sq ft	0
commercial sq ft to be developed	2,903,417
commercial at buildout	N/A
people	
current residents (2000)	6,338
additional residents at buildout	547
total residents at buildout	6,885
current jobs	7,246
additional jobs at buildout	5,942
total jobs at buildout	13,188
* formulas total all commercial worksheets on the basis that only one would be selected and the other two would remain zero	
** per the NOTE above, the petitioner should make sure that they are not double-counting acreage for a mixed use zone	
¹ After a 20% take up of land for right of ways (i.e. roads)	

preserved farms, wetlands (with a 25 foot buffer), presence of Category 1 (C1) streams, existing developed land including infrastructure, and identified surface water. The net result from the TREND Analysis is intended to determine the amount of housing and commercial space that can potentially be built given current zoning regulations. However, for a small municipality that only has less than 130 acres of developable land remaining, it is essentially built out. Infill and redevelopment efforts will determine its future and thus the Trend Analysis projections should be considered subordinate to what will be possible from infill and redevelopment. At the same time, Somerset County is calculating buildout based on capacity for the county wastewater quality management plan.

Typically, the information provided in the Trend Analysis portion of this document will be utilized to inform the Community Visioning Process. It is meant to provide a vision of what the objective municipality may resemble at full buildout based on current land use and zoning regulations. This series of worksheets represents a basic methodology for the TREND Analysis. Based on mapping data and zoning regulations, OSG inserted relevant data transferred from the Borough's zoning language, into the Residential Buildout Method. The

average household size was identified as 2.48 persons per household (median) (U.S. Census Bureau (2000). American FactFinder: Borough of Raritan, N.J which is lower than the County average household size of 2.59.

Although current plans indicate that mixed-use development is encouraged in the core of the central business district area, unknowns exist regarding infill development. For example the vacant fast food restaurants and Super 8 Motel sites as well as the previously mentioned Willow Walk are prime targets for redevelopment and development. Without a clear vision the Borough runs the risk of reacting to proposals instead of guiding potential developers.

Trend Analysis for Raritan

Raritan Residential Buildout Method

The Residential Buildout Method assumes buildout of existing residential zones at the maximum density permitted by the Borough's current zoning schedule from June 26, 2004. Depending on future development pressure, the information provided in the Residential Buildout Method will come to fruition as existing zoning allows and provides for such

Residential Trend								
residential zone	total land in residential zone (acres)	total constrained land in residential zone (acres)	total developable land (acres)	total developable residential land (acres)	maximum residential density permitted (units per acre)	potential number of units	average household size (persons per unit)	number of total residents upon buildout
	a	b	c=a-b	d=c*0.8	e	f=d*e	g	h=f*g
B-1	2757	276	00	0.0	n/a	n/a	2.48	n/a
IRD-1	47.92	46.8	1.1	0.9	8.00	7	2.48	17
IRD-2	14.32	7.9	6.4	5.1	10.00	51	2.48	126
PDRD	20.86	17.8	3.1	2.4	11.62	28	2.48	70
R-1	39.18	22.1	17.1	13.7	1.74	24	2.48	59
R-2	131.40	127.6	3.8	3.1	3.63	11	2.48	27
R-3	266.49	258.7	7.8	6.3	16.00	100	2.48	248
R-4	160.77	160.6	0.1	0.1	11.62	n/a	2.48	n/a
R-5	8.79	8.8	0.0	0.0	0.00	n/a	2.48	n/a
total	717.28	677.9	39.4	31.5		222		547
			land consumption			buildings		people
NOTES	b: constrained lands include urbanized, conserved land, public ownership, conservation easements (deed restrictions), utility easements, or natural factors such as wetlands, floodplains & steep slopes)							
	d: 0.8 figure is based on 20% take up of land for right of ways (i.e. roads)							
	e: data based on current zoning							

development. The Residential Buildout Method estimates that current zoning will support at least 222 additional residential units on the 31.5 acres that can be developed. This does not include possible 2nd story residential conversions in the Central Business District zones or infill redevelopment, so the Residential Buildout Method is only telling part of the story.

Historically, the Borough has seen steady growth in its population growth from 1990 until the 2006 population estimate. During this period the population grew by 10.8% or 629 people. The Residential Buildout Method provides that current zoning can support an additional 547 residents in the additional residential units, based on the small amount of available land and average household size of 2.48 person's per unit according to 2000 U.S. Census data.

As was seen with River Walk at Raritan where a former industrial property was converted to residential use, significant growth beyond these projected numbers can happen if and when further infill development occurs. The Willow Walk proposal to create 422 housing units on properties that are currently zoned for industrial uses is another chance that 222 housing units is fewer than will be built in the next 20 years. The NJTPA estimates that by 2035 there will be more than 7,830 residents in Raritan. This will only occur through infill redevelopment.

According to the 2000 U.S. Census the home ownership rate in Raritan is 63.5% on par with statewide rate of 67.4%.

Regardless of the amount of amount of growth, when conducting Community Visioning, be conscious that providing access to affordable housing is a goal of the State Plan. The Borough of Raritan should incorporate a mix of affordable and market rate housing into future development plans.

Raritan Commercial Buildout - Building Cover Method

The Commercial Buildout - Building Cover Method assumes buildout of currently designated commercial zones at the maximum density of the permitted acreage coverage under current zoning regulations of Developable Land. Similar to Residential Model, built and constrained land is subtracted from the total land in the municipality. At present time, the Borough's zoning indicates at buildout the Borough's commercial floor space would increase by almost 3 million square feet. Approximately 85% of the additional space will be industrial and the rest will be some kind of office space. Once built and fully occupied, this space will house approximately 6,000 additional jobs which will increase the employment in the Borough by more than 37%. According to Blacks Guide, a publication that tracks office and industrial

Commercial Trend - Building Cover Method									
commercial zone	total land in commercial zone (acres)	total constrained land in commercial zone (acres)	total developable land (acres)	percentage of land allowed to be covered by building (%)	maximum amount of land to be covered by building (acres)	maximum number of stories allowed	maximum amount of floorspace (sq ft)	floorspace per job (sq ft)	number of jobs
	a	b	c=a-b	d	e=c*d/100	f	g=e*f*43560	h	i=g/h
RETAIL								1,000	
B-1	28	28	0	95	0	3	0	1,000	0
B-2	36	34	2	70	1	2	103,582	1,000	104
B-3	48	46	2	75	1	2.5	159,690	1,000	160
INDUSTRIAL								500	
M-1	81	74	8	60	5	2	81,768	500	163
M-2	34	34	0	60	0	2	0	500	0
M-3	312	218	94	50	47	6	2,469,771	500	4,939
OFFICE								333	
P-1	37	25	12	60	7	3	192,188	333	577
P-2	9	9	0	60	0	2	0	333	0
total	586	468	118		61		2,903,417		5,942
			land consumption				buildings		people
NOTES									
b: constrained lands include urbanized, conserved land, public ownership, conservation easements (deed restrictions), utility easements, or natural factors such as wetlands, floodplains & steep slopes)									
d, f: data based on current zoning									
g: Parking requirements w/in the Industrial and Office zones will necessitate the approximately 80% of the potential square footage									
h: data based on COAH standards from Appendix D of COAH's 3rd round rules									

properties that are available for lease, there is existing approximately 500,000 square feet of office and industrial space. This does not take into account the amount of square footage occupied Ortho Diagnostics.

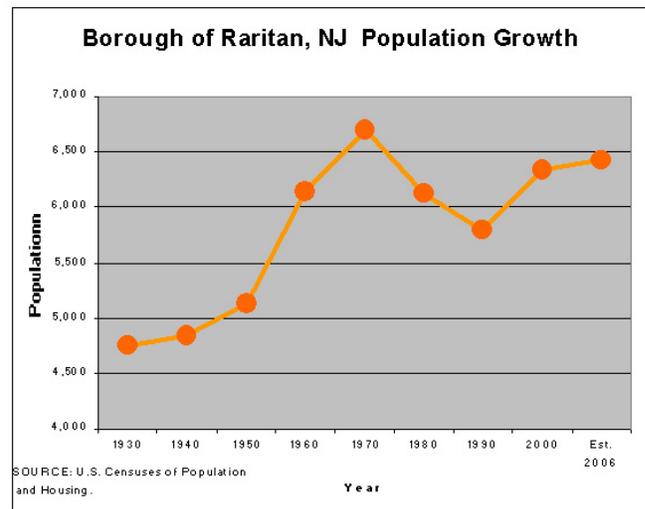
While a goal of creating jobs and fostering economic development within the state is a goal of the State Plan, this must be realized in areas which have the infrastructure to support such commercial development. Adding close to 3 million square feet of commercial space will certainly bring added tax revenue and economic development to the community, but there are also negative externalities to development like this. Traffic congestion is certainly one of the most severe results. While developing the vision for Raritan's future, it is important to remember to encourage center-based development where living and working come together in a concentrated location. By encouraging development in centers, communities can help minimize trip generation and protect the environs.

Mixed-use development provides the best opportunity to effectively address residential and commercial interests. Walkable communities help to minimize traffic congestion and the other negative externalities of single use development. At the same time Raritan's downtown will also be better served by encouraging 2nd and 3rd floor living. With more people living and working in the downtown and encouraging pedestrian traffic will transform the area into a 24 hour location instead of an 8 to 10 hour destination for day time employment and people dining downtown.

Commercial development will occur in the future, but recent proposals like the Willow Walk show that property owners are considering alternative building strategies for development. To ensure that the market alone does not determine Raritan's future, it illustrates the need to plan how the industrial zone should be reconsidered. A balance that supports Raritan's historic industrial past and downtown needs to be struck with the pressures to develop in an ad hoc manner. This can be achieved through the Borough's recently formed economic development committee and the Borough's vision for the next 20 years.

Cross-Acceptance III

On April 28, 2004, the New Jersey State Planning Commission approved the release of the Preliminary State Development and Redevelopment Plan (State Plan)



and the Preliminary State Plan Policy Map. This action launched the third round of Cross-acceptance. Cross-acceptance is a bottom-up approach to planning, designed to encourage consistency between municipal, county, regional, and state plans to create a meaningful, up-to-date and viable State Plan (N.J.S.A. 52:18A-202.b.).

This process is meant to ensure that all New Jersey residents and levels of government have the opportunity to participate and shape the goals, strategies and policies of the State Plan. Through Cross-acceptance, negotiating entities work with local governments and residents to compare their local master plans and initiatives with the State Plan and to identify potential changes that could be made to achieve a greater level of consistency with statewide planning policy. The Somerset County Planning Board, the Negotiating Entity for Somerset County municipalities did not make any requests to change Planning Area designations in the Borough of Raritan.

As a result of the July 2006 Environmental Update to the Preliminary State Plan Policy Map (SPPM), there were minor modifications made to the SPPM. The Environmental Update captured open space acquisitions that occurred since the previous SPPM was adopted by the SPC in 2001. All revisions to the SPPM still require State Planning Commission (SPC) approval, which should occur when the draft Final State Development and Redevelopment Plan (State Plan) is adopted in 2010.

The State Development and Redevelopment Plan Policy Map 2001 as well as the Preliminary Policy Map for the third round of Cross Acceptance has been enclosed for reference. Ultimately, the State Planning Commission will make the final determination on all amendments to the State Plan Policy Map.

Additional changes proposed beyond those indicated in the Preliminary State Plan Policy Map, such as the re-designation of the Somerset County Center, shall occur through the Plan Endorsement process.

Conclusion

The Borough of Raritan along with the other municipalities that comprise the Somerset County Regional Center are actively planning and taking important steps to realize its planning goals through Plan Endorsement. Continued discussion will need to address the following as well other points made in the separate chapters of this Opportunity and Constraints Report.

Critical Planning Issue

- As Raritan continues to plan its future and to avoid future variance requests that contradict local zoning, a determination should be made about how the community should respond to its changing industrial character. The lion share of land currently undeveloped, 94 acres, is zoned M3. Instead of reacting to these requests ad hoc, develop a long range economic growth plan that guides future development of industrial zoned properties as well as those in the downtown business district in a manner that supports the community's vision. This economic growth plan should be the basis for a new economic element in the master plan.

Historic Preservation Issues

The NJ State Historic Preservation Office (SHPO) has reviewed the historic preservation issues in the documents provided by Raritan Borough, and offers the following comments:

- Raritan Borough should adopt a historic preservation element to their master plan.
- In general the information on Native American habitation could, and should, be expanded. The construction of the Lyman Street Bridge resulted in the discovery and that of the Borough of Raritan Opportunities and Constraints Analysis Report NJ Department of Environmental Protection excavation of an archaeological site that changed the predictive model for the Raritan River drainage. It is the Lyman Street Prehistoric Archaeological site (28-So-127).

- There are many more historic sites in Raritan than those listed in the submitted document. In addition, the Borough should review the NJ Historical Commission's (NJ Department of State) grant program at <http://www.nj.gov/state/divisions/historical/grants/>.

Other Issues

- NJ Transit highlights the Mass Transit Tunnel project and associated network infrastructure improvements that will positively affect the Raritan Valley Line by making it a one-seat ride into midtown Manhattan.
- The Borough with its dense population may want to consider seeking Transit Village Designation.
- A meeting with OSG's Development Opportunities InterAgency Team may be useful to provide economic development guidance for specific projects.
- If the Borough intends to seek a waiver from any or the entire Community Visioning requirement for Plan Endorsement, a formal request that outlines the visioning efforts already performed. The outline should include dates and minutes of meetings that concerned community wide visioning. We understand that a great deal of planning has taken place, but the State Planning Commission is also interested in visioning for the entire community.

Zone District	Permitted Uses	Minimum Lot Size (interior)		Minimum Lot Size (corner)		Minimum Yard Requirements							Maximum Building Height Principal Building		Total Impervious Lot Coverage ⁶	Minimum Net Floor Area ⁴ Per Dwelling Unit (square feet)	
		Area (square feet)	Width (feet)	Area (square feet)	Width (feet)	Principal Building			Accessory Building				Stories	Feet			
						Front	Rear	One Side	Both Side	Ext. ¹	Front	Rear					Side
R-1	Single-family dwellings	25,000	125	25,000 ²	135	40	35	20	40	30	40	25	20	2 1/2	30	20%	1,500
	Churches	40,000	200	40,000	220	50	50	30	60	50	50	25	20	3	36	20%	—
	Agriculture-horticulture	3 acres	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—
R-2	Single-family dwellings	12,000	80	13,000	90	35	35	10	20	35	35	15	10	2 1/2	30	20%	1,200
	Churches	30,000	200	30,000	210	40	40	30	60	40	40	15	10	3	36	20%	—
R-3	Single-family dwellings	7,500	75	9,000	85	25	35	8	20	25	25	5	5	2 1/2	30	30%	1,000
	Churches	30,000	200	30,000	210	40	40	30	60	40	40	5	5	3	36	25%	—
R-4	Single-family dwellings	7,500	75	9,000	85	25	35	8	20	25	25	5	5	2 1/2	30	30%	1,000
	Two-family dwellings	7,500	75	9,000	85	25	35	8	20	25	25	5	5	2 1/2	30	30%	900
	Churches	30,000	200	30,000	210	40	40	30	60	40	40	5	10	3	36	25%	—
R-5 ⁶	See § 42-135.2 for permitted uses; § 42-157 for density and bulk requirements.																
IRD-1 ⁶	See § 42-156 for permitted uses; § 42-157 for density and bulk requirements.																
B-1	Commercial and retail	7,500	75	7,500	75	None	35	None	None	20	35	None	3	39	95%	—	
	Joint occupancy	10,000 ³	75	10,000 ³	75	None	35	None	None	20	35	None	3	39	95%	900	
B-2	Shopping centers	40,000	200	42,500	225	75	25	5	10	10	75	35	5	2	28	70%	—
B-3	Highway business districts	11,000	100	14,000	120	50	20	5	15	15	50	15	5	2	28	75%	—
	Motels	2 acres	150	2 acres	150	50	25	25	50	50	50	25	25	2 1/2	35	60%	—
M-1	Commercial/wholesale	40,000	150	44,000	175	—	—	—	—	—	—	—	—	—	—	—	—
	Industrial	40,000	150	44,000	175	35	15	10	20	20	35	15	10	2	28	60%	—
M-2	Industrial	80,000	300	85,000	200	50	35	50	100	100	50	20	30	2	30	60%	—
M-3	Industrial	20 acres	500	20 acres	500	200	100	150	300	300	200	100	100	12	150	50%	—
G-1	Governmental uses	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
P-1	Office building district	2 acres	200	2 acres	200	80	60	45	120	120	100	60	60	2	40	60%	—
P-2 ⁶	Office building district	40,000	150	40,000	150	30	50	45	120	120	30	20	30	3	50	60%	—

PACD.

See Section 42-142.1 for permitted uses, density and bulk requirements.

NOTES:

¹ Exterior side yard of corner lot.

² Thirty-five thousand (35,000) square feet required if lot is not serviced by public sewer or water.

³ Plus two thousand nine hundred (2,900) square feet for each dwelling unit in excess of three (3) units, not to exceed fifteen (15) dwelling units per gross acre.

⁴ Net livable floor area as defined in this ordinance.

⁵ [Amended 5-14-1991]

⁶ [Added 5-14-1991]



0 175 350 700
Feet
Scale: 1" = 350'

Symbol Legend:

- Streams
- Lakes
- Raritan Zoning
- Raritan Borough Parcels

Project Location Map



The following data has been used to create this document. School Depalma is not responsible for the accuracy or availability of the information provided. For further information regarding this data please contact the source agency.

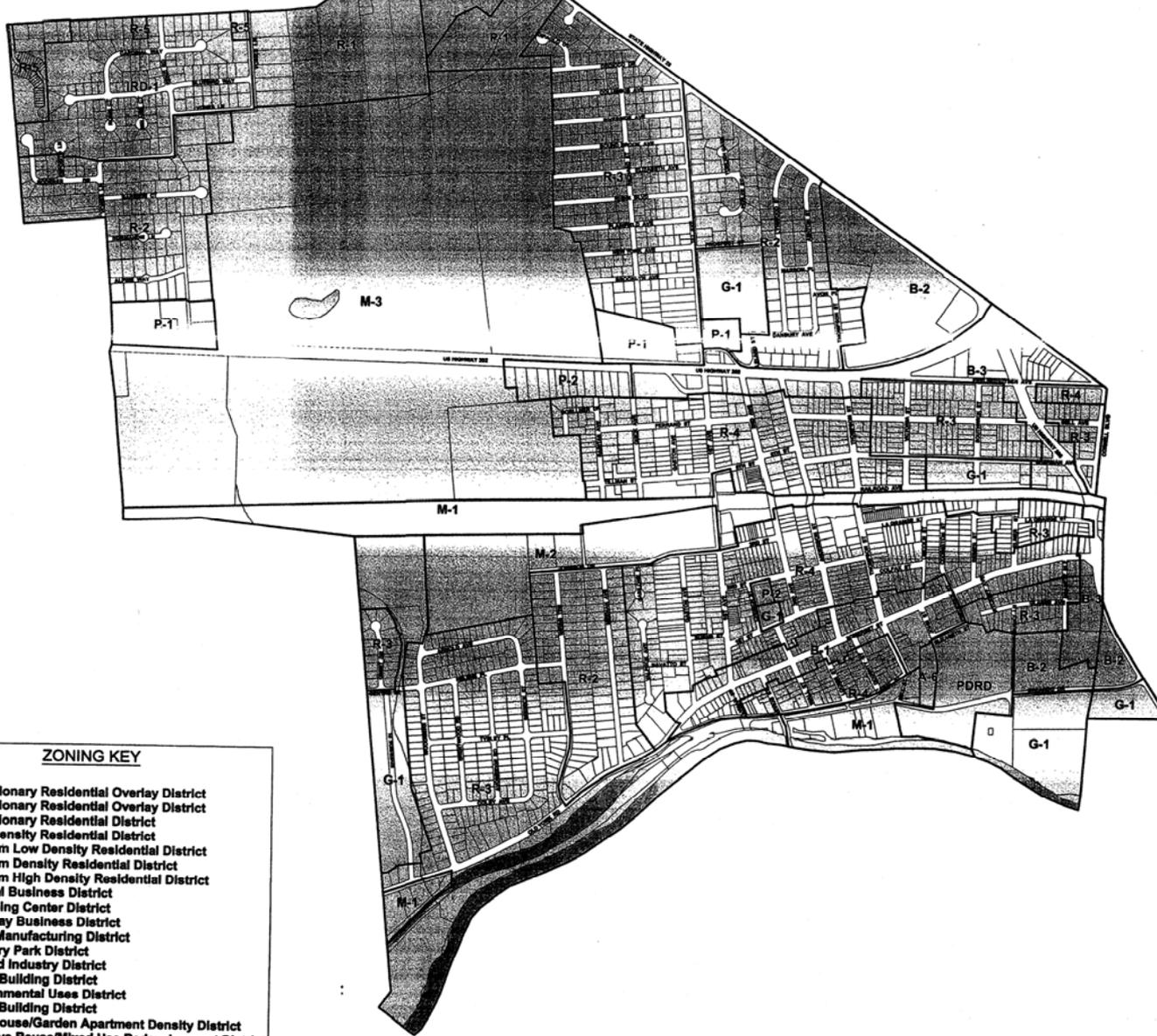
Date Type	Source	Relevant Time Period
Raritan Zoning	Somerset County	2004
Lakes	NJDEP	1995
Streams	NJDEP	1995

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Date Type	Source	Relevant Time Period
Raritan Parcels	Raritan Borough/Carolina	2004

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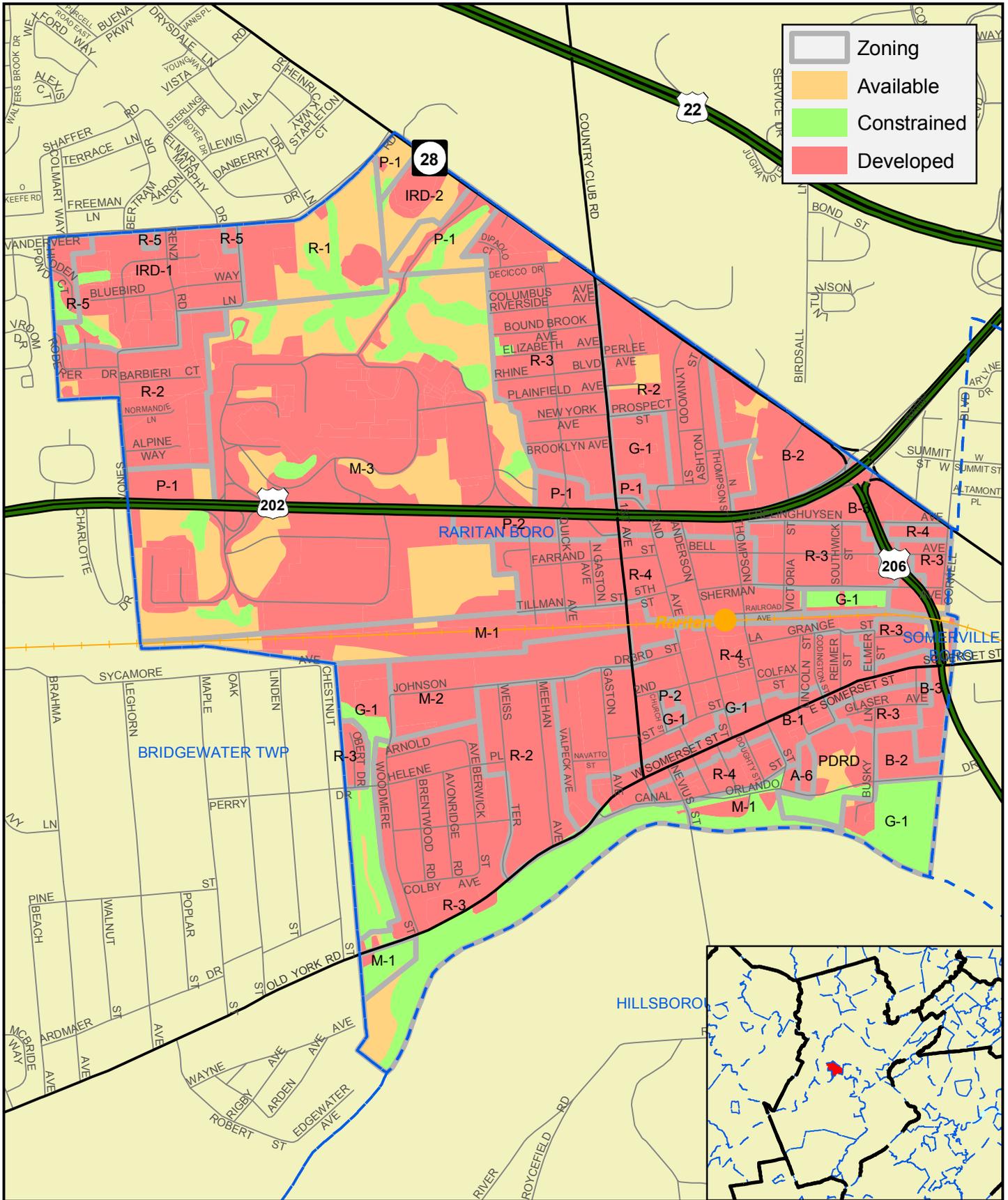
Prepared: A.J.K.	Date: 06/29/2004	Revised:	Date:
Job No.:	Task:	Path:	



ZONING KEY

- IRD-3 Inclusionary Residential Overlay District
- IRD-2 Inclusionary Residential Overlay District
- IRD-1 Inclusionary Residential District
- R-1 Low Density Residential District
- R-2 Medium Low Density Residential District
- R-3 Medium Density Residential District
- R-4 Medium High Density Residential District
- B-1 Central Business District
- B-2 Shopping Center District
- B-3 Highway Business District
- M-1 Light Manufacturing District
- M-2 Industry Park District
- M-3 Limited Industry District
- P-1 Office Building District
- G-1 Governmental Uses District
- P-2 Office Building District
- R-5 Townhouse/Garden Apartment Density District
- A-6 Adaptive Reuse/Mixed Use Redevelopment District

Section	Designation	Description
§ 42-132	R-1	Low-Density Residential District
§ 42-133	R-2	Medium-Low-Density Residential District
§ 42-134	R-3	Medium-Density Residential District
§ 42-135	R-4	Medium-High-Density Residential District
§ 42-135.1	IRD-1	Inclusionary Residential District [Added 5-16-1989]
§ 42-135.2	R-5	Townhouse/Garden Apartment Density District [Added 5-14-1991]
§ 42-135.3	R-1/IRD	Inclusionary Residential Overlay District [Added 6-15-1993]
§ 42-136	B-1	Central Business District
§ 42-137	B-2	Shopping Center District
§ 42-138	B-3	Highway Business District
§ 42-139	P-1	Office Building District
§ 42-139.1	P-2	Office Building District [Added 9-9-1986]



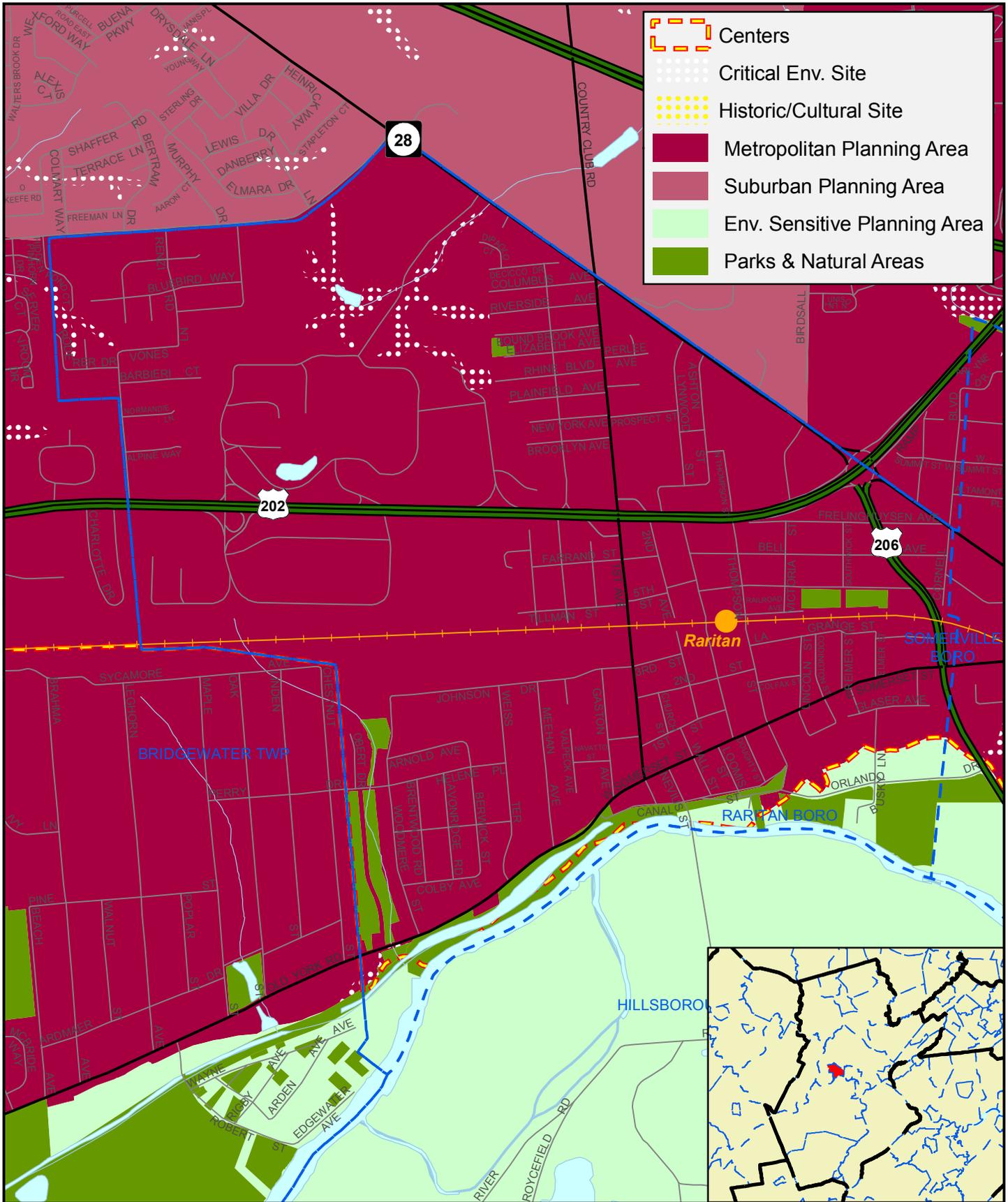
Raritan

OSG Land Analysis



1 inch = 1,490 feet





-  Centers
-  Critical Env. Site
-  Historic/Cultural Site
-  Metropolitan Planning Area
-  Suburban Planning Area
-  Env. Sensitive Planning Area
-  Parks & Natural Areas



Raritan

Preliminary Policy Map



1 inch = 1,490 feet



NJ Department of Environmental Protection



State Development & Redevelopment Plan Plan Endorsement Opportunities & Constraints Analysis

for:

Raritan Borough, Somerset County

October 28, 2009

This document constitutes the Department of Environmental Protection's component of the State Opportunity and Constraints Analysis conducted as part of the Plan Endorsement process. This document should serve as a baseline to inform the rest of the Plan Endorsement process. This document provides a general overview of the Department's regulatory and policy concerns within Raritan Borough. While all efforts have been made to address all major issues, the ever evolving nature of regulatory programs and natural conditions dictates that the information contained within this document will need to be updated on a regular basis. No portion of this document shall be interpreted as granting any specific regulatory or planning approvals by the Department. This document is to be used solely as guidance for municipal planning purposes.

Table of Contents

WATER & WASTEWATER ANALYSIS	4
Water Availability	4
Wastewater Treatment	6
ENVIRONMENTAL CONSTRAINTS ANALYSIS	8
Regulated Environmental Constraints	8
○ Total Maximum Daily Loads (TMDLs)	9
Environmental Constraints to Avoid	15
○ Threatened & Endangered Species Habitat	15
○ Natural Heritage Priority Sites	16
Environmental Constraints to Consider	17
○ Groundwater recharge areas	17
○ Well Head Protection Areas	17
○ Priority Species Habitat	18
CONTAMINATED AREAS CONSIDERATIONS	19
Known Contaminated Sites List	19
Known Contaminated Sites - Classification Exception Areas (CEA)	19
Landfills	20
Toxics Release Inventory	20
PRESERVED LANDS & HISTORIC RESOURCES	22
Preserved Lands	22
Historic Resources	23
PERMIT EXTENSION ACT	25
SUMMARY OF MAJOR ISSUES	27
REQUESTS FOR ASSISTANCE	30
MAPS	32
ADDITIONAL ATTACHMENTS	47
NJDEP OFFICE OF PLANNING AND SUSTAINABLE COMMUNITIES	48

Water & Wastewater Analysis

Sufficient water supply and the ability to treat wastewater are essential to any community. The following information on Water Availability and Wastewater Treatment should be used by the community to evaluate its ability to meet current and future demand for water and wastewater treatment. Using this information to plan for future development allows a municipality to estimate the number of people the current (and/or future systems) can sustain. It also provides a way for a municipality to determine where growth is most appropriate, taking into account where water can be treated and supplied.

Raritan Borough is located in Watershed Management Area 9. A Fact Sheet on WMA 9 is available at: <http://www.nj.gov/dep/watershedmgt/DOCS/WMAFactsheets/WMA09.pdf>.

Water Availability

The following information on Water Availability in Raritan Borough is based upon the best data readily available to DEP at the time of this analysis. This data should be used by Raritan Borough to inform its community vision and planning processes.

Raritan Borough is currently served by New Jersey American Water Company – Elizabethtown (NJAW), Raritan System, PWSID 2004002. NJAW is the largest user of surface water in the Lower Raritan, South and Lawrence Watershed Management Area (WMA 9). NJAW owns and operates a public community water supply system that serves a large portion of central New Jersey, including 48 municipalities within the counties of Hunterdon, Mercer, Middlesex, Somerset and Union. NJAW diverts a substantial amount of water from surface water intakes located within WMA 9 at the confluence of the Raritan and Millstone Rivers. NJAW has a monthly surplus of 887.413 MGM and 9,653.507 MGY of water based on their current water allocation permit and surplus deficit analysis performed by the Bureau of Water Allocation.

Raritan Borough is located within the hydrologic unit (HUC11) of the Raritan River Lower (Millstone to NB/SB) which is identified in the 2009 Draft New Jersey Water Supply Plan (NJWSP) as having a surplus - 9.6 - mgd of water available. The surplus within this particular HUC11 is mainly attributed to Somerset Raritan Valley Sewage Authority’s wastewater discharge into Cuckel’s Brook which is a tributary to the Raritan River. This information is applicable should there be a proposed water supply expansion/withdrawal within the watershed.

Purveyor Name	Current Population Served by Purveyor	Water Systems Surplus/Deficit (Most Limiting Function of System)	Surplus/Deficit 2010 (MGD)	Surplus/Deficit 2020 (MGD)
NJ American Water Company - Elizabethtown	609,325	37.54	33.29	28.36

NEW JERSEY AMERICAN WATER COMPANY - RARITAN SYSTEM

PWSID: 2004002
County: Union

Last Updated: 05/07/09

Water Supply Firm Capacity: 231.500 MGD

Available Water Supply Limits

	Allocation	Contract	Total
Monthly Limit	6,761.500 MGM	N/A MGM	6,761.500 MGM
Yearly Limit	65,022.500 MGY	N/A MGY	65,022.500 MGY

Water Demand

	Current Peak	Date	Committed Peak	Total Peak
Daily Demand	188.460 MGD	08/2006	2.054 MGD	190.514 MGD
Monthly Demand	5,842.250 MGM	08/2006	31.837 MGM	5,874.087 MGM
Yearly Demand	55,119.090 MGY	2007	249.903 MGY	55,368.993 MGY

Water Supply Deficit or Surplus

Firm Capacity	Water Allocation Permit
40.986 MGD	887.413 MGM
	9,653.507 MGY

Note that the available capacity identified above is available throughout the purveyor area and is not necessarily available to Raritan Borough.

The Deficit/Surplus tables for Public Water Systems may be found on the Department of Environmental Protection, Division of Water Supply website at <http://www.nj.gov/dep/watersupply/pws.htm>. For safe demand and firm capacity information not available on this web site please contact the Bureau of Water System and Well Permitting at 609-984-6831 or for water allocation information please contact the Bureau of Water Allocation at 609-292-2957.

Refer to [Firm Capacity and Water Allocation Analysis](#) document for a detailed description of the methodology used to calculate capacity limitations.

There is one Non-Community Water System serving specific uses in Raritan Borough. Ye Olde Yorke Inn is a public transient noncommunity water system, which is a system that serves at least 25 transient individuals for at least 60 days in any given calendar year.

PWSID	Water System Name	Population Served	Water System Type
1816300	YE OLDE YORKE INN	5	Noncommunity Transient
1816300	YE OLDE YORKE INN	50	Noncommunity Transient

Attachments:

- o Water Supply - Map

Wastewater Treatment

The following information on Wastewater Treatment in Raritan Borough is based upon the best data readily available to DEP at the time of this analysis. This data should be used by Raritan Borough Town to inform its community vision and planning processes.

There is one DEP-regulated wastewater facility serving Raritan Borough - Somerset Raritan Valley Sewage Authority (SRVSA). All of Raritan Borough is located within the currently adopted sewer service area, save some areas of open water. SRVSA (NJPDES permit number NJ0024864): The average of the 30-day average flow as reported to the Department in the Discharge Monitoring Reports for this facility in 2008 was 19.43 mgd; the NJPDES Permit Flow for this facility is 24.31 mgd. As such, the facility is operating at approximately eighty percent (80%) of its permitted flow.

Based on the assumption that a residential unit uses 300 gpd, the remaining flow for this facility could accommodate approximately 16,267 new residential units. Note that the SRVSA serves several communities in the area and not all of the remaining flow may be available to Raritan Borough.

Water Quality Management Plan - Sewer Service Area Mapping

The Department adopted amendments to the Water Quality Management Planning rules in 2007 identifying the conditions where extension of sewer service is not appropriate. N.J.A.C. 7:15-5.24 sets forth the general policy that large contiguous areas of environmentally sensitive resources, coastal planning areas where the extension of sewers would be inconsistent with New Jersey's Coastal Zone Management program, and special restricted areas that are prone to natural hazards such as flooding, wave action and erosion should not be included in sewer service areas. The limitations on the extension of sewer service in these areas is consistent with the Department's mandate to protect the ecological integrity and natural resources of New Jersey, including water, threatened and endangered species, wetlands and unique and rare assemblages of plants.

Centralized wastewater is inappropriate for these areas because it subsidizes and otherwise encourages development in and around these natural resources at a density that is inconsistent with their protection and the environmental protection mandate of the Department. The Department has determined that the appropriate wastewater management alternative for these areas is individual subsurface sewage disposal systems that discharge less than 2,000 gallons per day, typically thought of as septic systems. Therefore, though excluded from the extension of sewer service, these areas have a wastewater management alternative that will promote a density of development consistent with the conservation of these resources.

In establishing the criteria for delineating a sewer service area boundary in consideration of environmentally sensitive areas, the Department identifies environmentally sensitive areas that are not appropriate for sewer service area as any contiguous area of 25 or more acres that contains any or all of the following four features: threatened and endangered species habitats, Natural Heritage Priority Sites, Category One stream buffers, and wetlands. The Department determined that 25 acres was the appropriate size threshold based on a statewide GIS analysis showing that at least 90 percent of the environmentally sensitive features would be excluded from sewer service area, but that the threshold should be large enough to permit the reasonable application of zoning.

The Department is currently working with the County of Somerset in development of a county-wide Wastewater Management Plan based upon on the recent Water Quality Management Planning rule. Raritan Borough should continue to coordinate with the County to ensure consistency between municipal planning and the County WMP.

Attachments:

- Adopted Sewer Service Area- Map

Environmental Constraints Analysis

The following section identifies those environmental constraints that should be considered by Raritan Borough in its planning efforts. These environmental constraints are divided into 3 sections - Regulated Constraints, Constraints to Avoid, and Constraints to Consider.

Regulated Environmental Constraints

Wetlands, Category One Waters and Total Maximum Daily Loads (TMDL) are environmental constraints currently regulated by DEP. Raritan Borough should recognize these environmental constraints in its visioning and planning processes.

- Wetlands

Freshwater wetlands and transition areas (buffers) are regulated by the Freshwater Wetlands Protection Act rules (NJAC 7:7A). The Highlands rule (NJAC 7:38), which implements the Highlands Water Protection and Planning Act, prohibits nearly all disturbance within all wetlands within the Highlands Preservation Area.

Wetlands are commonly referred to as swamps, marshes, or bogs. However, many wetlands in New Jersey are forested and do not fit the classic picture of a swamp or marsh. Previously misunderstood as wastelands, wetlands are now recognized for their vital ecological and socioeconomic contributions. Wetlands contribute to the social, economic, and environmental health of our state in many ways:

- Wetlands protect drinking water by filtering out chemicals, pollutants, and sediments that would otherwise clog and contaminate our waters.
- Wetlands soak up runoff from heavy rains and snow melts, providing natural flood control.
- Wetlands release stored flood waters during droughts.
- Wetlands provide critical habitats for a major portion of the state's fish and wildlife, including endangered, commercial and recreational species.
- Wetlands provide high quality open space for recreation and tourism.

There are on-site activity limits on lands identified as wetlands. The NJ Freshwater Wetlands Protection Act requires DEP to regulate virtually all activities proposed in the wetland, including cutting of vegetation, dredging, excavation or removal of soil, drainage or disturbance of the water level, filling or discharge of any materials, driving of pilings, and placing of obstructions. The Department may also regulate activities within 150 feet of a wetland - called the transition area or buffer.

It should be noted that wetlands identified based on aerial photo interpretation are not appropriate for use in determining the true extent of wetlands on a specific site.

- Category One (C1) Waterbodies & Associated Buffers

Category One designations are established in the Surface Water Quality Standards (NJAC 7:9B) – specifically in the tables in N.J.A.C. 7:9B-1.15(c) through (g) - for purposes of

implementing the antidegradation policies set forth at N.J.A.C. 7:9b-1.5(d). These waters are designated to provide for their protection from measurable changes in water quality characteristics because of their clarity, color, scenic setting, other characteristics of aesthetic value, exceptional ecological significance (habitat, water quality, and biological functions), exceptional recreational significance, exceptional water supply significance, or exceptional fisheries resource(s).

The Stormwater Management rule (NJAC 7:8) is implemented through DEP Land Use and local regulation. The rule regulates development within 300 feet, and stormwater discharges within 150 feet, of Category One waterways and their tributaries, upstream within the same HUC14 subwatershed. The Stormwater rule establishes a 300-foot Special Water Resource Protection Area (SWRPA) along Category One (C1) waters and certain tributaries that applies only when a “major development” is proposed.

The Flood Hazard Area Control Act (FHACA) rule (N.J.A.C. 7:13) also establishes a 300-foot riparian zone along C1 waters and their upstream tributaries within the HUC-14. This FHACA rule applies to any activity that requires approval in the rule. The Riparian Zone under the FHACA rule is the land and vegetation both within a regulated waterbody and within either 50 feet, 150 feet or 300 feet from the top of bank of a regulated waterbody. Given the many important ecological functions that a healthy riparian zone provides, adequately preserving such areas is essential to protecting New Jersey's natural resources and water supply.

For the purposes of this analysis, the Department is providing generalized information and mapping of C1 waterbodies and associated buffers. This analysis should be used only as a general planning tool. Specific development proposals may be affected, consistent with the information provided above.

There are no Category One Waterbodies in Raritan Borough.

▪ Total Maximum Daily Loads (TMDLs)

In accordance with Section 303(d) of the Federal Clean Water Act (CWA) (33 U.S.C. 1315(B)), the State of New Jersey is required biennially to prepare and submit to the USEPA a report that identifies waters that do not meet or are not expected to meet SWQS after implementation of technology-based effluent limitations or other required controls. This report is commonly referred to as the 303(d) List. In accordance with Section 305(b) of the CWA, the State of New Jersey is also required biennially to prepare and submit to the USEPA a report addressing the overall water quality of the State's waters. This report is commonly referred to as the 305(b) Report or the Water Quality Inventory Report. The Integrated Water Quality Monitoring and Assessment Report combine these two assessments and assigns waterbodies to one of five sublists on the Integrated List of Waterbodies. Sublists 1 through 4 include waterbodies that are generally unimpaired (Sublist 1 and 2), have limited assessment or data availability (Sublist 3), or are impaired due to pollution rather than pollutants or have had a TMDL or other enforceable management measure approved by EPA (Sublist 4). Sublist 5 constitutes the traditional 303(d) list for waters impaired or threatened by one or more pollutants, for which a TMDL may be required.

Therefore, in accordance with Section 305(b) and 303(d) of the Federal Clean Water Act (CWA), the State of New Jersey, Department of Environmental Protection (Department) is required to assess the overall water quality of the State's waters and identify those waterbodies with a water quality impairment for which TMDLs may be necessary. A TMDL is developed to identify all the contributors of a pollutant of concern and the load reductions necessary to meet the Surface Water Quality Standards (SWQS) relative to that pollutant. The Department has developed over 400 TMDLs to date, several of which, as identified in the table below, encompass Raritan Borough.

The Department fulfills its assessment obligation under the CWA through the Integrated Water Quality Monitoring and Assessment Report, which includes the Integrated List of Waterbodies (303(d) list) and is issued biennially. The *Integrated List of Waterbodies* is adopted by the Department as an amendment to the Statewide Water Quality Management Plan, as part of the Department's continuing planning process pursuant to the Water Quality Planning Act at N.J.S.A.58:11A-7 and the Statewide Water Quality Management Planning rules at N.J.A.C. 7:15-6.4(a). The Department proposes and upon approval of the United States Environmental Protection Agency Region 2 subsequently adopts the TMDL to the appropriate WQMP(s).

Total Maximum Daily Loads

TMDL Name	Parameter	Percent Reduction	Document	EPA Approval Date
Peters Brook At Rt 28 at Somerville Site ID 01400395 HUC 14: 02030105080010	Fecal coliform	98%	TMDL for fecal coliform to address 48 streams in the Raritan Water Region	9/29/2003
Raritan R Lwr (Rt 206 N/B to SB) HUC 14 02030105080020	Fecal coliform	92%	TMDL for fecal coliform to address 48 streams in the Raritan Water Region	9/29/2003
Raritan R NB (below Rt 28) HUC 14: 02030105070030	Fecal coliform	92%	TMDL for fecal coliform to address 48 streams in the Raritan Water Region	9/29/2003

A TMDL represents the assimilative or carrying capacity of a waterbody, taking into consideration point and nonpoint sources of pollutants of concern, natural background, and surface water withdrawals. A TMDL quantifies the amount of a pollutant a water body can assimilate without violating a state's water quality standards and allocates that load capacity to known point and nonpoint sources in the form of waste load allocations (WLAs) for point sources, load allocations (LAs) for nonpoint sources, a margin of safety (MOS) and, as an option, a reserve capacity (RC). The TMDLs that encompasses Raritan Borough, Somerset County are nonpoint source driven for fecal coliform. The TMDL documents were all established as amendments to the Upper Raritan Water Quality Management Plan (WQMP). The Department's TMDL Reports may be downloaded from the Division of Watershed Management's web site at www.state.nj.us/dep/watershedmgt/tmdl.htm.

The Department recognizes that TMDLs alone are not sufficient to restore impaired stream segments. The TMDL establishes the required pollutant reduction targets while the implementation plan identifies some of the regulatory and non-regulatory tools to achieve the

reductions, matches management measures with sources, and suggests responsible entities for non-regulatory tools. This provides a basis for aligning available resources to assist with implementation activities. Projects proposed by the State, local government units and other stakeholders that would implement the measures identified within the impaired watershed are a priority for available State (for example, CBT) and federal (for example, 319(h)) funds. In addition, the Department's ongoing watershed management initiative will develop detailed watershed restoration plans for impaired stream segments in a priority order that will identify more specific measures to achieve the identified load reductions. Urban stormwater runoff was primarily identified in the TMDL document as the primary source of fecal NPS loading. Urban land use will be addressed primarily by stormwater regulation through the municipality's MS 4 permit.

Short-term and Long-term Management Strategies for Implementing Fecal TMDLs

Short term management measures include projects recently completed, underway or planned that are designed to address the targeted impairment. Whereas long term strategies include source trackdown as well as selection and implementation of specific management measures that will address the identified sources. The Department recognizes that TMDLs alone are not sufficient to restore impaired waterbodies. The TMDL establishes the required reduction target and provides the regulatory framework to effect these reductions. The TMDL implementation plan for the fecal TMDLs calls for goose management and proper maintenance of septic systems and identifies a series of implementation grants funded by the Department throughout the Watershed.

Long-Term Management Strategies

While short-term management measures will begin to reduce sources of fecal coliform in the Raritan Water Region, additional measures will be needed to verify and further reduce or eliminate these sources. Some of these measures may be implemented now, where resources are available and sources have already been identified as causing the fecal impairment. Both short-term and long-term management strategies that address fecal reduction related to these identified sources may be eligible for future Departmental funding.

Source Categories for Long-Term Management Strategies

1) Canada Geese

Geese are migratory birds that are protected by the Migratory Bird Treaty Act of 1918 and other Federal and State Laws. Resident Canada geese are those birds that do not migrate, but are protected by this and other legislation. The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS)-Wildlife Services program reports that the 1999 estimated population of non-migratory geese in New Jersey was 83,000. Geese and other pest waterfowl have been identified as one of several primary sources of pathogen loading to impaired water bodies in the Northeast Region. Geese may produce up to 1½ pounds of fecal matter a day.

Canada Goose Damage Management Plan

Because geese are free to move about and commonly graze and rest on large grassy areas associated with schools, parks, golf courses, corporate lawns and cemeteries, solutions are best developed and conducted at the community level through a community-based goose

damage management program. USDA's Wildlife Services program recommends that a community prepare a written Canada Goose Damage Management Plan that may include the following actions:

- Initiate a fact-finding and Communication Plan
- Enact and Enforce a No Feeding Ordinance
- Conduct Goose Damage Control Activities such as Habitat Modification
- Review and Update Land Use Policies
- Reduce or Eliminate Goose Reproduction (permit required)
- Hunt Geese to Reinforce Nonlethal Actions (permit required)

Procedures such as handling nests and eggs, capturing and relocating birds, and the hunting of birds require a depredation permit from either the USDA APHIS Wildlife Services or U.S. Fish and Wildlife Services. Procedures requiring permits should be a last resort after a community has exhausted the other listed measures. The Department's draft guide *Management of Canada Geese in Suburban Areas, March 2001*, which may be found at www.state.nj.us/dep/watershedmgt under publications, provides extensive guidance on how to modify habitat to serve as a deterrent to geese as well as other prevention techniques such as education through signage and ordinances.

2) Stormwater Detention Basins and Impoundments

Stormwater detention basins may act as sources of fecal coliform due to the accumulation of geese and pet waste in basins. Under certain conditions, coliform will increase in numbers in basins. As a result, significant quantities of fecal coliform can be discharged during storm events. Impoundments created by small dams across streams have been a measure commonly used for flood control by municipalities in New Jersey. In addition to flood control, the impoundments were often incorporated into public parks in order to provide recreational opportunities for residents. Many of the impoundments are surrounded by mowed turf areas, which in combination with open water serve as an ideal habitat for geese and an attraction for pet walking. Specific management measures to reduce fecal coliform inputs to these waterbodies include:

- Development of Stormwater Management Plan
- Establishment of Riparian Buffers and "no mow" zones
- No feed ordinances for all waterfowl and wildlife and signage
- Retrofit of detention/retention basins to achieve water quality control
- Conduct regularly scheduled stormwater basin cleanout and maintenance, storm sewer inlet cleanouts and street sweeping programs

3) Pet Waste

Specific management measures to reduce pet waste include:

- Adoption of pet waste disposal i.e. pooper scooper ordinances
- Signage in parks and other public recreation areas

- Provide plastic bags dispensers in public recreation areas

4) Malfunctioning and Older Improperly Sized Septic Systems; Illicit Connections of Domestic Sewage

Malfunctioning and older improperly sized septic systems contribute to fecal coliform loading in two ways: the system may fail hydraulically, where there is surface break out; or hydrogeologically, under conditions when soils are inadequate to filter pathogens. Specific management measures include the implementation of the NJPDES Municipal Stormwater Regulation Program, Sanitary Surveys, Septic System Management Programs and future sewer service area designations for service to domestic treatment works. Sanitary surveys are conducted in an effort to evaluate the water quality of natural surface waters and identify those components that affect water quality, including geographic factors and pollution sources. The focus of the sanitary survey is to identify nonpoint and stormwater source contribution of fecal coliform within the watershed. It is accomplished by sampling for various types of fecal indicators (fecal coliform, enterococcus, fecal streptococcus, *E. coli* and coliphage) during wet and dry weather conditions. Where potential problems with septic systems are identified, as described below, a trackdown study may be warranted. This could lead to an analysis of alternatives to address any identified inadequacies, such as rehabilitation of septic systems or connection to a sewage treatment system, as appropriate.

In 2006 the Department adopted changes to the SWQS to replace the fecal coliform criteria for those waters designated for primary contact recreation (FW2, SE1 and SC) with enterococcus (SE1 and SC waters) and *E. coli* as pathogen indicators (FW2 waters), respectively. The United States EPA recommends the use of *E. coli* and enterococcus as pathogen indicators for fresh waters and enterococcus for marine waters. Thus, the Department now monitors these parameters to determine if the specific designated use for recreation is being attained for the impaired waterbodies.

Future TMDLs for the Raritan River Basin

In 2010, the Department anticipates proposing TMDLs for phosphorus impairments in the Raritan River Basin. This will encompass impairments for nutrients and aquatic life that fall within the drainage of Raritan Borough. It is anticipated that the implementation plan for the Raritan River Basin TMDLs will require municipalities in the contributory drainage area of the TMDL to adopt a Fertilizer Application ordinance consistent with a model ordinance provided by the Department as an additional measure of the Municipal Stormwater Permit. The model ordinance can be viewed at www.state.nj.us/dep/watershedmgt/rules.htm under the section heading "Water Quality Management Planning Rule".

During a 2008 Earth Week event, the Commissioner signed a memorandum of understanding (MOU) with members of the lawn-care industry, who pledged to reduce the amount of phosphorus released by fertilizers in the Garden State by 50 percent by 2010. In signing the MOU, members of the Lawn Care Product Manufacturing Industry agreed to establish technical groups to work with the DEP and Rutgers University's Agricultural Experiment Station in developing a stewardship program to foster better public education and to review strategies to reduce the levels of phosphorus in fertilizers. The largest distributor of fertilizer in New Jersey has reported a 45% reduction in tons of P2O5 from 2006 to 2008 based on sales of their no and/or low phosphorus fertilizer. The Department is confident that the MOU endeavor along

with municipal adoption of the fertilizer ordinance will begin to address the urban stormwater contribution of nutrients to waterbodies in the state.

Attachments:

- SWQS – Map
- TMDLs – Map
- Flood Hazard Areas (FEMA-DFIRM) – Map

Environmental Constraints to Avoid

Threatened and Endangered Species Habitat and Natural Heritage Priority Sites are geographically-identified environmental constraints prioritized for protection by DEP's mandate to protect the ecological integrity and natural resources of New Jersey. DEP recommends avoidance of these areas, to the extent possible, in order to protect these ecosystems from degradation and destruction.

While Threatened and Endangered Species Habitat and Natural Heritage Priority Sites are not specifically regulated as such, the species and sites that are the basis for this information are considered in several DEP regulatory and planning programs - such as the Freshwater Wetlands Program, Water Quality Management Planning, and the Flood Hazard Area Control Act rule.

- **Threatened & Endangered Species Habitat**

The New Jersey Endangered Species Conservation Act was passed in 1973 and directed the New Jersey Department of Environmental Protection (DEP) to protect, manage and restore the state's endangered and threatened species. The DEP Endangered and Nongame Species Program (ENSP) has since become the voice for more than 400 species of wildlife in New Jersey, with success stories related to the Bald Eagle, the Peregrine Falcon, the Pine Barrens Tree frog, the Osprey, and others. There are currently 73 endangered and threatened wildlife species in New Jersey. Wildlife professionals within DEP's Endangered and Nongame Species Program oversee research, conservation and protection of rare wildlife species such as the bog turtle, great blue heron, piping plover, bobcat, and other animals that are struggling to survive here in New Jersey.

ENSP has developed the Landscape Project to identify and systemically map the habitat most critical for New Jersey's fish and wildlife populations. This tool is being used to gauge healthy ecosystems and help identify areas appropriate for protection while giving citizens and local government officials valuable scientific information about their municipalities. The Landscape Project ranks habitat patches by the status of the species present, as follows:

- **Rank 5** is assigned to patches containing one or more occurrences of at least one wildlife species listed as endangered or threatened on the Federal list of endangered and threatened species.
- **Rank 4** is assigned to patches with one or more occurrences of at least one State endangered species.
- **Rank 3** is assigned to patches containing one or more occurrences of at least one State threatened species.

Note that the Landscape Project has been updated relatively recently, and released in two versions. Version 2.1, the version that impacts Raritan Borough, was developed using the same protocols as Version 2.0, but updated with more recent species siting data. For additional information on the Landscape Project, see [New Jersey's Landscape Project](#).

There is Rank 4 habitat identified by the Landscape Project as Bald Eagle Foraging along the Raritan River in Raritan Borough. There are also significant areas of Rank 2 & 3 Forest habitat throughout, as well as Rank 4 Forest habitat in the southwestern corner of the Borough. Rank 2, 3 & 4 Forested and Emergent Wetlands are also located throughout the

Borough, with Rank 4 Forested Wetlands also in the southwestern corner of the Borough. Threatened and endangered species valuing these habitat patches include Red-headed Woodpecker and Bald Eagle. The attached *Threatened & Endangered Species Habitat map* shows the extent of habitat in Raritan Borough (including habitat for priority species – Rank 2 – that is discussed below in the ‘Environmental Constraints to Consider’ section).

- Natural Heritage Priority Sites

Through its Natural Heritage Database, the DEP Office of Natural Lands Management (ONLM) identifies critically important areas to conserve New Jersey’s biological diversity, with particular emphasis on rare plant species and ecological communities. The database provides detailed information on rare species and ecological communities to planners, developers, and conservation agencies for use in resource management, environmental impact assessment, and both public and private land protection efforts. Using the database, ONLM has identified 343 Natural Heritage Priority Sites (NHPS), representing some of the best remaining habitat for rare species and rare ecological communities in the state. In addition, each NHPS includes a Biodiversity Rank according to its significance for biological diversity using a scale developed by The Nature Conservancy, the network of Natural Heritage Programs and the New Jersey Natural Heritage Program. The global biodiversity significance ranks range from B1 to B5.

There are no Natural Heritage Priority Sites in Raritan Borough.

Attachments:

- Threatened, Endangered & Priority Species Habitat – Map

Environmental Constraints to Consider

Groundwater Recharge Areas, Wellhead Protection Areas, and Priority Species Habitat are geographically-identified environmental constraints recognized as important for the protection of water quality and biodiversity of New Jersey. DEP recommends avoidance of these areas, to the extent possible, in order to minimize the impact to water quality and species habitat.

- Groundwater recharge areas

Groundwater recharge areas are those sites where a high volume of precipitation and surface waters infiltrate into the soil and act to resupply surface and ground waters. Protection of these areas from over-development, and addressing stormwater runoff for these areas, directly affects the water quality of both drinking water supplies and water-based habitats.

The New Jersey Geological Survey (NJGS) has developed ground water recharge data sets using several data factors, such as land use patterns, impervious surface amounts, soil types, precipitation, and evaporation rates, among others, to calculate the amount of water each area of the state normally contributes to the underlying aquifers. The data are reported and mapped in several standard categories, in units of inches per year.

For the State Planning process, the original ground water recharge data, calculated for each Watershed Management Area, were converted to a volume-based rating, and then grouped into three classes to simplify further analysis, based on the percent contribution to the total recharge amounts. Those undeveloped areas contributing the highest one-third of the recharge volume in each Watershed Management Area were selected as high priority for protection. The final Ground Water Recharge layer used for this analysis includes all undeveloped areas in the state that were identified as contributing the highest one-third of the recharge volume in the appropriate Watershed Management Area.

There is approximately 110 acres of high volume groundwater recharge areas located within Raritan Borough.

- Well Head Protection Areas

Areas of land surrounding public community wells, known as Well Head Protection Areas, from which contaminants may move through the ground to be withdrawn in water taken from the well, have been delineated. Protection of the public health, safety and welfare through protection of ground water resources, ensures a supply of safe and healthful drinking water.

Well Head Protection Areas (WHPA) are mapped areas calculated around a Public Community Water Supply (PCWS) well in New Jersey that delineates the horizontal extent of ground water captured by a well pumping at a specific rate over a two-, five-, and twelve-year period of time for confined wells. The confined wells have a fifty foot radius delineated around each well that defines the well head protection area, which must be acquired and controlled by the water purveyor in accordance with Safe Drinking Water Regulations (see NJAC 7:10-11.7(b)1).

WHPA delineations are conducted in response to the Safe Drinking Water Act Amendments of 1986 and 1996 as part of the Source Water Assessment Program (SWAP). The delineations are the first step in defining the sources of water to a public supply well. Within these areas, potential contamination will be assessed and appropriate monitoring will be

undertaken as subsequent phases of the NJDEP SWAP. WHPA delineation methods are described in "[Guidelines for Delineation of Well Head Protection Areas in New Jersey](#)".

Updates for Public Community Water Supply Well Head Protection Areas are described in [Well Head Delineations Updates List](#).

A complete list of individual Public Community Water Supply Well Head Protection Area delineations are described in [Well Head Delineations List](#).

There are no Wellhead Protection Areas in Raritan Borough. Note that the WHPA Map provided as part of the draft Raritan Borough Stormwater Management Plan from 2004, identifies WHPA within the Borough. This information appears to be dated.

- Priority Species Habitat

Similar to threatened and endangered species, the DEP Endangered Non-Game Species Program also considers "priority species." Priority Species are nongame wildlife that are considered to be species of *special concern* as determined by a panel of experts. These species warrant special attention because of some evidence of decline, inherent vulnerability to environmental deterioration, or habitat modification that would result in their becoming a Threatened species. This category would also be applied to species that meet the foregoing criteria and for which there is little understanding of their current population status in the state. The Landscape Project ranks habitat patches by the status of the species present, as follows:

- **Rank 2** is assigned to patches containing one or more occurrences of at least one non-listed State priority species.

There is Rank 2 Forest, Forested Wetlands, Emergent Wetlands, and Grassland habitat identified by the Landscape Project in Raritan Borough. The majority of this habitat is located in and around the Raritan Landfill. Mapping showing Priority Species Habitat is included on the *Threatened & Endangered Species Habitat map*, as discussed earlier in the 'Environmental Constraints to Avoid' section.

Attachments:

- Groundwater Recharge Areas – Map

Contaminated Areas Considerations

All New Jersey municipalities can be home to contaminated sites, whether the contamination comes from industrial, agricultural, retail, or even residential sources. The information provided in this section is intended to help municipal officials identify known contaminated areas and incorporate consideration of these areas into planning efforts. The existence of a contaminated area does not necessarily mean that it is inappropriate for development or redevelopment. Nonetheless, the severity of the contamination, the potential for remediation, and the potential impact on human health must be considered before development or redevelopment plans are underway.

Known Contaminated Sites List

The Known Contaminated Sites List for New Jersey 2005 includes those sites and properties within the state where contamination of soil or ground water has been identified, or where there has been, or there is suspected to have been, a discharge of contamination. This list of Known Contaminated Sites may include sites where remediation is either currently under way, required but not yet initiated or has been completed. The data included here dates from 2001. Additionally, new contaminated sites have been identified since the creation of this list and are not included here. For further information contact NJDEP's Site Remediation Program and Waste Management (SRWM) lead program, which are identified with each site listed in this data base. Contact information for SRWMs lead program can be acquired at <http://www.state.nj.us/dep/srp/kcs-nj/>.

Note: There are some sites found in the 'official' KSCNJ list that do not exist in the GIS mapped version. There were about 50 sites that either had poor address descriptions and could not be located accurately or are 'sites' that actually describe a case covering several locations and cannot be expressed by a single point. These problem sites were intentionally omitted from the GIS map.

The Known Contaminated Sites in New Jersey report (<http://www.nj.gov/dep/srp/kcs-nj/>) is produced by NJDEP in response to N.J.S.A. 58:10-23.16-17 that requires preparation of a list of sites affected by hazardous substances. It also satisfies the Site Remediation Program's obligations under the New Jersey New Residential Construction Off-Site Conditions Disclosure Act (N.J.S.A 46:3C1 et seq.).

Raritan Borough sufficiently addressed its Known Contaminated Sites in the Municipal Self Assessment Report and, as such, they will not be re-listed here.

Known Contaminated Sites - Classification Exception Areas (CEA)

Classification Exception Areas are DEP designated areas of groundwater contamination meeting certain criteria and associated with Known Contaminated Sites or sites on the Site Remediation Program (SRP) Comprehensive Site List. CEAs are institutional controls in geographically defined areas within which the New Jersey Ground Water Quality Standards (NJGWQS) for specific contaminants have been exceeded. When a CEA is designated for an area, the constituent standards and designated aquifer uses are suspended for the term of the CEA. A public understanding of where groundwater is known to be contaminated can help prevent

inappropriate well placement, preventing potential health risks and can minimize unintended contaminant plume migration. Contaminants of concern within a CEA record are described in one of two ways, either in a field named for the contaminant, e.g., benzene; or listed in a general contaminant field, e.g., VO.

The Department has identified multiple CEAs within Raritan Borough. See attached table: *Groundwater Contamination Areas in Raritan Borough*.

For further information about Classification Exception Areas see:

http://www.state.nj.us/dep/srp/guidance/cea/cea_guide.htm

<http://www.state.nj.us/dep/srp/regs/guidance.htm#cea>

Landfills

NJDEP maintains a list of landfills in the state, including active facilities, properly closed facilities, those being remediated with public funds, those proposed for redevelopment, and inactive landfills. The state has a landfill strategy to notify and work with owners or other responsible parties to bring into compliance inactive landfills that are out of compliance with closure requirements. Two organizations in NJDEP oversee landfill permitting, remedial, and closure work: the vast majority of operating and inactive landfills come under the jurisdiction of the Solid and Hazardous Waste Program in the Department's Environmental Regulation Program. Those landfills that are being remediated with public funding are overseen by the Site Remediation Program, as are sites that are proposed for redevelopment with any component of future use that might directly impact human health, including industrial, commercial or residential use.

Landfills often represent some of the largest tracts of potentially developable land that a municipality and/or county can include in its smart growth and planning efforts. Turning a former landfill into a beneficial use may then enable the protection of other sensitive areas in a community. Innovative uses of landfills include passive open space, active open space, renewable energy "farms" for wind turbines, gas collection and use, and/or solar collection, shopping centers, and mixed use developments.

DEP mapping identifies two Solid Waste Landfills in Raritan Borough: Raritan Sanitary Landfill I and II (PI: 132654; New ID: 1816000780; ID 1816A). Both are non-operating and historic landfills identified by, or reported to, the Department as having suspected or known contamination. Working with local and regional environmental agencies, community representatives, and through review of historic materials, the Site Remediation Program is developing this inventory to prevent injury to human and ecological resources. That inventory is available at <http://www.nj.gov/dep/srp/landfills/>.

For questions regarding the redevelopment of landfill sites, please contact the Office of Brownfield Re-Use at (609) 292-1251.

Toxics Release Inventory

The **Toxics Release Inventory (TRI)** is a publicly available EPA database that contains information on toxic chemical releases and waste management activities reported annually by certain industries as well as federal facilities. For more information on TRI, see <http://www.epa.gov/TRI/>.

DEP mapping identifies three TRI sites located in Raritan Borough:

NAME	STREET	PARENT_CO
Ortho Diagnostics System, Inc.	Route 202	Johnson & Johnson
Middlesex Chemicals, Inc.	1 Elizabeth St.	
Ortho Pharmaceutical Corp.	PO Box 300, Route 202	Johnson & Johnson

Attachments:

- Contaminated Sites – Map
- Groundwater Contamination Areas – Map
- Groundwater Contamination Areas in Raritan Borough - Table

Preserved Lands & Historic Resources

Open space preservation helps to protect New Jersey's rich natural, historic, and cultural heritage. It ensures that animal and plant habitats are protected and that areas of scenic beauty and agricultural importance are preserved. It safeguards streams and water supplies and provides opportunities to enjoy the outdoors. Open space preservation lies at the core of the quality of life of New Jersey's communities - from the most urbanized cities to the most remote rural areas of the state. Besides enhancing the quality of life, protecting open space can provide economic benefits. It can help a community avoid the costly mistakes of misusing available resources. Protected open space usually raises the taxable value of adjacent properties and is less costly to maintain than the infrastructure and services required by residential development. Even taking into account the increased tax base that results from development, open space usually proves easier on the municipal budget in the long-run.

Historic preservation is the identification, evaluation, and protection of historic and archaeological resources so that they continue to play an integral, vibrant role in their communities. New Jersey's historic properties and the environment in which they exist are irreplaceable assets that contribute to the quality of life that residents enjoy and expect. Historic properties are the physical links to our past, providing meaning to the present and continuity with the future. They are the physical records of the events and people that shaped New Jersey's history. Historic properties add visual and intellectual spirit to the physical environment that New Jersey residents experience daily.

Preserved Lands

Based on the Department's records, the following table represents the preserved open space lands located in Raritan Borough. DEP recognizes that its records may be incomplete or incorrect, and appreciates all assistance in keeping its records up-to-date.

Green Acres Program – Open Space Database

Block	Lot	Facility Name	Interest	Type	Funded?
		BASILONE MONUMENT	ET/FE	M	N
10	1	ELIZABETH AVE PARK	ET/FE	M	N
10	10	ELIZABETH AVE PARK	ET/FE	M	N
102	1	BASILONE	ET/FE	C	N
114	1	MILL STREET TRACTS	ET/FE	C	N
115	1	MILL STREET TRACTS	ET/FE	C	N
115	2	MILL STREET TRACTS	ET/FE	C	N
116.02	10	RARITAN VALLEY PARK	ET/FE	M	Y
116.02	11	RARITAN VALLEY PARK	ET/FE	M	N
116.03	6	MILL STREET TRACTS	ET/FE	C	N
117	6	DUKE ISLAND	ET/FE	C	Y
117	7	DUKE ISLAND / CANAL ST PARK - P/DIV	PT/FE	C	Y
117	8	DUKE ISLAND	ET/FE	C	Y

53	3.01	OPEN SEATING AREA	ET/FE	C	N
54	16	RAILROAD LOTS	ET/FE	C	N
54	2	FIRST AVE TENNIS COURTS	ET/FE	C	N
54	3	RAILROAD LOTS	ET/FE	C	N
58	5	FRELINGHUYSEN PARK	ET/FE	M	N
59	1	FRELINGHUYSEN PARK	ET/FE	M	N
59	2	FRELINGHUYSEN PARK	ET/FE	M	N
59	9.01	FRELINGHUYSEN PARK	ET/FE	M	N
62	2	BASILONE PARK	ET/FE	M	N
66	1	BASILONE PARK	ET/FE	M	Y
67	1	BASILONE PARK	ET/FE	M	Y

Interest: ET/FE - Entire Taking/Fee Simple;

Type: M - Municipal; C - County; N - Non Profit

Funded?: Y - Park received Green Acres funding; N - Park did not receive Green Acres funding

Historic Resources

The NJ Historic Preservation Office administers a variety of programs that offer protection for historic properties. The HPO consults with federal agencies under Section 106 of the National Historic Preservation Act for federally funded, licensed or permitted projects. At the state level, the New Jersey Register of Historic Places Act requires that actions by state, county, or local governments, which may impact a property listed in the New Jersey Register of Historic Places, be reviewed and authorized through the HPO. The HPO also provides advice and comment for a number of permitting programs within the Department of Environmental Protection, including some permits required under the [Land Use Regulation Program](#).

The most effective way to protect historic resources and promote our architectural and archaeological heritage is through local stewardship. When implemented at the local level, historic preservation activities may take the form of master plan elements, comprehensive zoning ordinances, regulated code enforcement, or public education and outreach programs. Local initiatives have far reaching effects on preserving historic resources for future generations. The HPO provides technical assistance, training, and other resources for historic preservation to New Jersey's communities through a variety of programs.

The following New Jersey and National Registers of Historic Places listings include properties and historic districts in New Jersey for which a formal action was taken by the State Historic Preservation Officer or designee. The listings are current through the end of 2002, and the HPO will update these listings on a periodic basis to reflect ongoing additions and corrections.

The listings itemize the buildings, structures, sites, objects, and districts listed on the New Jersey Register of Historic Places (SR) and the National Register of Historic Places (NR). They also include resources that have received Certifications of Eligibility (COE), opinions of eligibility from the State Historic Preservation Officer (SHPO Opinion), or Determinations of Eligibility (DOE) from the Keeper of the National Register. These properties and historic districts all meet the New Jersey and National Register criteria for significance in American history, archaeology, architecture, engineering or culture, and possess integrity of location, design, setting, materials, workmanship, feeling and association. Properties that have been entered on the New Jersey and/or National Registers of Historic Places are listed by their historic names, which may be

different from their current names. Properties that have SHPO Opinions or DOE's are listed by their historic name, when known. The New Jersey and National Registers of Historic Places for Somerset County can be found at <http://www.state.nj.us/dep/hpo/identify/lists/somerset.pdf>.

Permit Extension Act

On September 6, 2008 Governor Jon S. Corzine signed the Permit Extension Act of 2008 (P.L. 2008, Chapter 78). For your information and convenience, DEP provides information at <http://www.nj.gov/dep/opppc/extension.htm>. If the Department's Permit Extension Act website does not address the particular circumstances of a permit holder or applicant, questions may be submitted in writing to NJ Department of Environmental Protection, Office of Permit Coordination and Environmental Review, P.O. Box 423, Trenton, New Jersey 08625-0423, by phone at (609) 292-3600, or at <http://www.nj.gov/dep/opppc/permitcoor.htm>.

Notice of Permit Extension Act Provisions

Take notice that, pursuant to the “Permit Extension Act of 2008” (Act), P.L. 2008, c. 78, approvals, as defined in section 3 of the Act, including any Department authorization in the form of a permit, approval, license, certification, waiver, letter of interpretation, agreement, center designation, or any other executive or administrative decision, except for administrative consent orders, which expire during the period of January 1, 2007 through July 1, 2010, are hereby extended through July 1, 2010. This Act automatically extends any approvals granted by the Department of Environmental Protection, including, but not limited to, those issued under the authority of the following statutes:

- (A) Waterfront Development Law, N.J.S.A. 12:5-1 et seq.
- (B) Wetlands Act of 1970, N.J.S.A. 13:9A-10 et seq.
- (C) Freshwater Wetlands Protection Act, N.J.S.A. 13:9B-1 et seq.
- (D) Coastal Area Facility Review Act, N.J.S.A. 13:19-1 et seq.
- (E) Water Supply Management Act, N.J.S.A. 58:1A-1 et seq.
- (F) Well Drilling Permits, N.J.S.A. 58:4A-5 et seq.
- (G) Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq.
- (H) The Realty Improvement Sewerage and Facilities Act (1954), N.J.S.A. 58:11-23 et seq.; and N.J.S.A. 58:11-25.1 et seq.
- (I) Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq.
- (J) Safe Drinking Water Act, N.J.S.A. 58:12A-1 et seq.
- (K) Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq.

Nothing in the Act shall have the effect of extending:

1. any permit or approval issued within an environmentally sensitive area as defined in the Act;
2. any permit or approval within an environmentally sensitive area issued pursuant to the Highlands Water Protection and Planning Act, N.J.S.A. 13:20-1 et seq.;
3. any permit or approval issued pursuant to the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq., except where work has commenced, in any phase or section of the

development, on any site improvement, as defined in paragraph (1) of subsection a. of section 41 of the Municipal Land Use Law, N.J.S.A. 40:55D-53 or on any buildings or structures; or

4. any coastal center designated pursuant to the Coastal Area Facility Review Act, N.J.S.A. 13:19-1 et seq., that as of March 15, 2007

(a) had not submitted an application for plan endorsement to the State Planning Commission, and

(b) was not in compliance with the provisions of the Coastal Zone Management rules at N.J.A.C. 7:7E-5B.6;

5. any permit or approval issued pursuant to federal assumption or delegation. The Act shall not affect any administrative consent order issued by the Department in effect or issued during the extension period, nor shall it be construed to extend any approval in connection with a resource recovery facility as defined in N.J.S.A. 13:1E-137.

Nothing in the Act shall affect the ability of the Commissioner of the Department to revoke or modify a specific permit or approval, or extension thereof pursuant to the Act, when that specific permit or approval contains language authorizing the modification or revocation of the permit or approval by the Department.

In the event that any approval tolled pursuant to the Act is based upon connection to a sanitary sewer system, the approval's extension shall be contingent upon the availability of sufficient capacity, on the part of the treatment facility, to accommodate the development whose approval has been extended. If sufficient capacity is not available, those permit holders whose approvals have been extended shall have priority with regard to the further allocation of gallonage over those approval holders who have not received approval of a hookup prior to the date of enactment of the Act. Priority regarding the distribution of further gallonage to any permit holder who has received the extension of an approval pursuant to the Act shall be allocated in order of the granting of the original approval of the connection. Further, nothing in the Act shall be deemed to extend the obligation of any wastewater management planning agency to submit a wastewater management plan or plan update, or the obligation of a municipality to submit a wastewater management plan or plan update, pursuant to the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq. and the Water Quality Management Planning rules, N.J.A.C. 7:15, adopted by the Department effective July 7, 2008. Nothing in the Act shall be construed or implemented in such a way as to modify any requirement of law that is necessary to retain federal delegation to, or assumption by, the State of any authority to implement a federal law or program.

Finally, nothing in the Act shall be deemed to extend or purport to extend any permit or approval issued by the government of the United States or any agency or instrumentality thereof, or to any permit or approval by whatever authority issued of which the duration or effect or the date or terms of its expiration are specified or determined by or pursuant to law or regulation of the federal government or any of its agencies or instrumentalities.

Attachments:

- Permit Extension Act Environmentally Sensitive Areas – Map

Summary of Major Issues

1. Watershed Management Area Planning

Additional information on WMA 9 may be found at the NJ Water Supply Authority's project website at www.raritanbasin.org.

2. WMP – Urbanized Municipality

Raritan Borough's MSA indicates that the Borough is considered an "urbanized municipality" as defined in the WQMP rule. DEP notes that the currently posted list (http://www.nj.gov/dep/watershedmgt/DOCS/WQMP/municipal_table_08.pdf) of urbanized municipalities does *not* include Raritan Borough. For this purpose, "urban lands" are defined based on 2002 Land Use as urban, water, and wetlands, as well as preserved lands. Based on this definition, Raritan Borough does not meet the definition of "urbanized municipality". However, Raritan Borough – through Somerset County – may demonstrate that permanent restrictions (preserved open space/farmland, other deed restrictions) and/or additional development since 2002 on various parcels results in consistency with the definition of "urbanized municipality".

3. Transfer of Development Rights

One of the purposes of a designated center is to accommodate growth that would otherwise occur in the environs. While Raritan Borough may be significantly developed, there is still remaining areas for development and redevelopment. As such, DEP recommends that Raritan Borough consider participating in the Highlands Council TDR program as a means to benefit from the existence of the Region. Participation in the Highlands TDR program provides certain benefits to the Town such as enhanced planning grants from the Council of up to \$250,000; eligibility for a grant to reimburse the reasonable costs of amending municipal development regulations, and; the authorization to impose impact fees. It would also serve to protect water quality and natural resources in the Highlands Region that benefit – directly or otherwise – the citizens of the Borough.

While possibly beyond the scope of this Report, DEP also recommends that the municipalities within the Somerset Regional Center consider cooperatively developing a TDR program to transfer development from the environs into the Regional Center.

Development and implementation of a TDR program are eligible activities under the DEP-managed Local Greenhouse Gas Reduction Grant Program (additional information below). That grant program provides preference and additional funding to regional projects.

4. Historic Preservation Issues

The NJ State Historic Preservation Office (SHPO) has reviewed the historic preservation issues in the documents provided by Raritan Borough, and offers the following comments:

- Raritan Borough should adopt a historic preservation element to their master plan.
- In general the information on Native American habitation could, and should, be expanded. The construction of the Lyman Street Bridge resulted in the discovery and

excavation of an archaeological site that changed the predictive model for the Raritan River drainage. It is the Lyman Street Prehistoric Archaeological site (28-So-127).

- There are many more historic sites in Raritan than those listed in the submitted document.

In addition, the Borough should review the NJ Historical Commission's (NJ Department of State) grant program at <http://www.nj.gov/state/divisions/historical/grants/>.

5. Open Space

DEP's open space data appears to differ from that identified in Raritan Borough's MSA. DEP requests that Raritan Borough submit both GIS shapefiles and its ROSI.

6. Flooding Issues

Flooding issues should be addressed within the Borough's All Hazard Mitigation Plan which is required by FEMA. Somerset County has prepared a plan for its communities, which Raritan Borough should have participated in. This plan allows the Borough to be eligible for several mitigation grant programs for flood mitigation and disaster relief. These grant programs are administered through the Office of Emergency Management (OEM) within State Police.

In addition, the Borough should enforce and maintain a flood damage prevention ordinance in order to remain in good standing with the National Flood Insurance Program (NFIP). Participation in the NFIP will allow residents of the Borough to purchase federally backed flood insurance which is required by mortgage companies.

7. Redevelopment Area(s)

- Orlando Drive

As noted in the MSA, much of the area in the Orlando Drive Corridor is located within the Floodway, 100-year or 500-year flood zones of the Raritan River. Note that per the Flood Hazard Area Control Act rule (N.J.A.C. 7:13-2.2(a)) new buildings and other obstructions are prohibited in floodways. There is also habitat for threatened and endangered species included. Both issues must be addressed in planning efforts for redevelopment of the corridor.

- Federal Steel/Johnson Drive

DEP notes the existence of multiple contaminated sites on the Federal Steel site that must be addressed as part of redevelopment. Further, the impact to the Raritan River tributary (south/west of sites), associated threatened and endangered species habitat, and preserved open space, should be considered as part of the planning for redevelopment.

- DEP recommends that towns require "green buildings" (LEED, Green Globes) in redevelopment areas, to the extent practicable.

8. Center Boundary

- DEP supports the inclusion of Raritan Borough in the proposed/amended Somerset Regional Center. Should the Regional Center concept with Raritan and Bridgewater not

continue, DEP supports designation of Raritan Borough as a Town Center in-and-of itself.

- DEP notes that while the expiration date of the vast majority of the Somerset Regional Center was extended to July 1, 2010 per the Permit Extension Act, the portions of the Borough identified as “environmentally sensitive areas” were not included in that extension.

9. Planning Areas

The Metropolitan Planning Area (PA1) identified in the draft State Plan Map update appears to cut through the center of existing development in the southeast corner of the Borough. **DEP recommends that the Planning Area boundary be modified slightly** - southerly, utilizing Orlando Drive as the boundary.

10. Local Greenhouse Gas Reduction Grant Program

DEP has announced a grant program that will provide approximately \$2.5 million to local governments to reduce greenhouse gas emissions. The Local Government Greenhouse Gas Reduction Grants Program is a competitive grant process available to municipalities, counties, local authorities, school boards and county colleges.

This grant program is intended to support New Jersey’s local government efforts to plan, develop and implement measures that reduce greenhouse gas emissions through projects that result in energy efficiency, renewable energy, distributed energy and sustainable land use planning. A paramount element of this program is the need for local governments to identify how their efforts result in measurable reductions in greenhouse gas emissions or energy demand.

For a full description of the grant program, pre-application form and process go to: www.nj.gov/dep/opsc/ghggrant.html or e-mail questions to GHGGrants@dep.state.nj.us. For a copy of the Press Release go to: http://www.nj.gov/dep/newsrel/2009/09_0015.htm.

The grant Pre-Application deadline for this Round has passed. DEP recommends that Raritan Borough consider submitting an application for funding in the next Round.

11. Grant & Loan Programs

DEP’s grant and loan programs are listed at: <http://www.nj.gov/dep/grantandloanprograms/>.

Requests for Assistance

Following are the Raritan Borough requests for State Assistance as provided in the MSA (*in italics*), for which DEP is the primary contact, and DEP's response.

Orlando Drive Greenway Project

The Orlando Drive Greenway Visioning Project has been a work in progress for about one year. The Borough received a grant through the Municipal Land Use Center and Somerset County to conduct visioning for the area along Orlando Drive, which includes a number of existing open space parcels, as well as some of Raritan's older industrial properties, a newer high density rental housing project, the Raritan Mall, and some "historic" properties owned by the Duke Farms foundation. From a vehicular standpoint, Orlando Drive is considered a bypass roadway for vehicles traveling from Route 206 to areas north/west, and has been described as "bumpy," difficult to cross, and a thoroughfare. What makes this area unique is the fact that running along Orlando Drive is the Raritan River, and the area has been identified by the Somerset County Planning Board as one of the gaps in the County's comprehensive "greenway." Money to continue this project is needed as this involves a major road reconstruction since Orlando Drive was constructed on top of a land fill and pockets of methane gas are causing major dips and bumps in the road bed. Located south of Orlando Drive, but along the greenway is the Borough's DPW. Money to relocate this use outside of the floodplain is need. Furthermore, monies to assist in an acquisition of "gap sites" may be needed, if deemed appropriate, as well as the relocation of the Basilone Memorial Statue and development of future pocket park.

- The Green Acres Program has allocated most of its current funding at this time. New Jersey voters will decide in November whether to approve more funding for the Garden State Preservation Trust. If the Public Question is approved, Green Acres will be able to consider funding requests from eligible applicants, which includes municipalities. Acquisition of open space sites and pocket park development have, in prior bond acts, been eligible projects.

Relocation of the Basilone Memorial Statue may or may not be eligible for funding, depending on the circumstances.

Potential applicants such as Raritan Borough may review the Green Acres website at <http://nj.gov/dep/greenacres/> for news and updates.

Municipal Museum

Raritan is a community with a rich history going back to the Lenni Lenape Indians who lived along the banks of the river. There are a number of old historic structures in town including our original 1898 firehouse on Anderson Street and the General John Frelinghuysen House, which is one of the original homes in town, and the building which currently houses the Raritan library. Unfortunately, the expansion and need for more shelf space in the library has forced the relocation of many of the Borough's historic treasures, which were previously stored on the second floor of the building. There is another historic building, known as the Cornell/Middaugh building, which was at one time was used as a tavern and meeting place during the 1700's local government. This wonderful structure would be a truly magnificent building for our local

historical society to house their relics. Monies to help secure this building as a town museum are needed.

- SHPO questions the economic viability of a museum dedicated to the history of a single community and proposes that state aid might be better spent on planning documents for historic resources, or a web site that could disseminate information on municipal history.

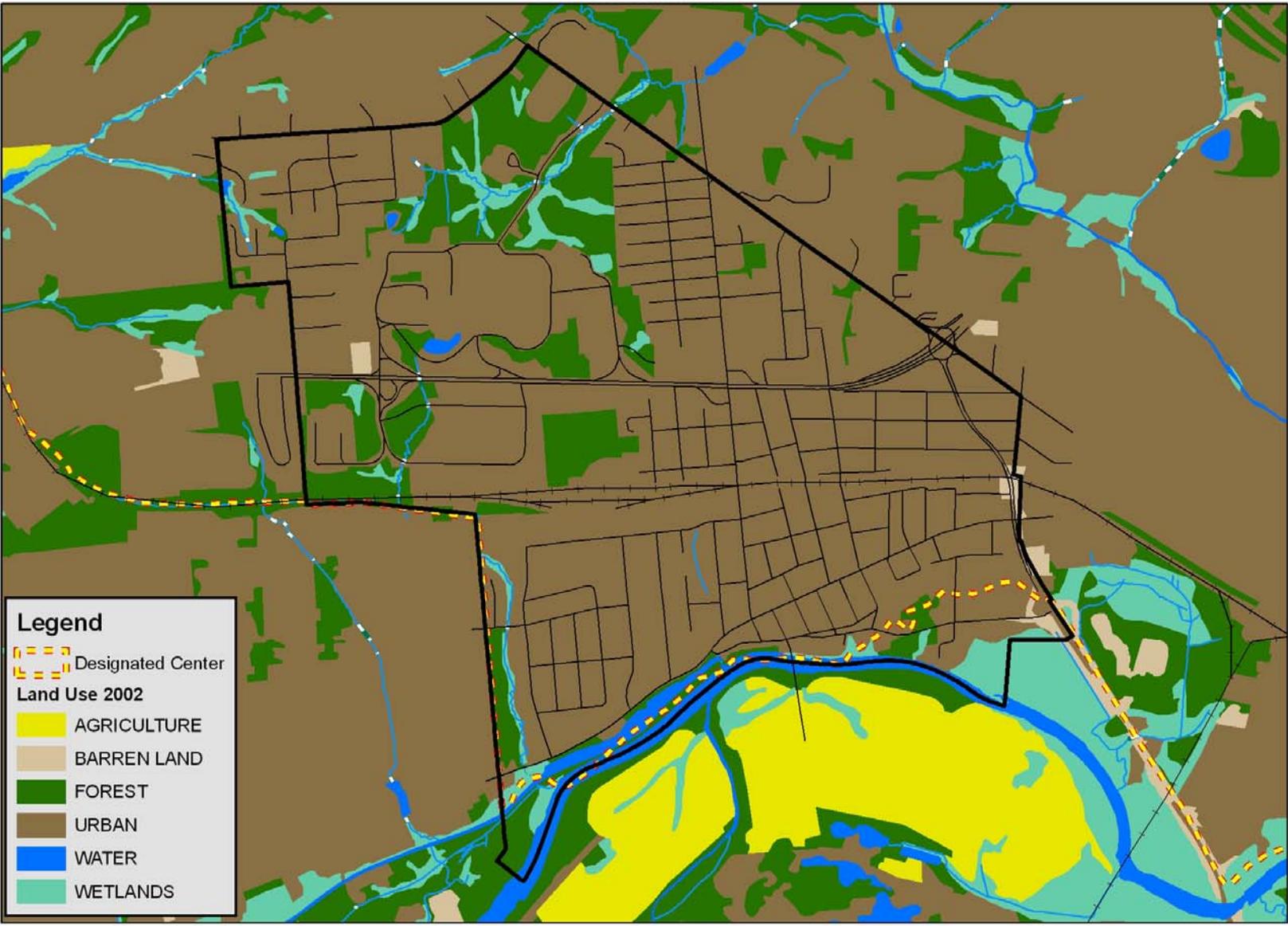
PUBLIC IMPROVEMENTS/INFRASTRUCTURE

Monies to keep up with the Borough's on-going sanitary sewer maintenance and repair are needed.

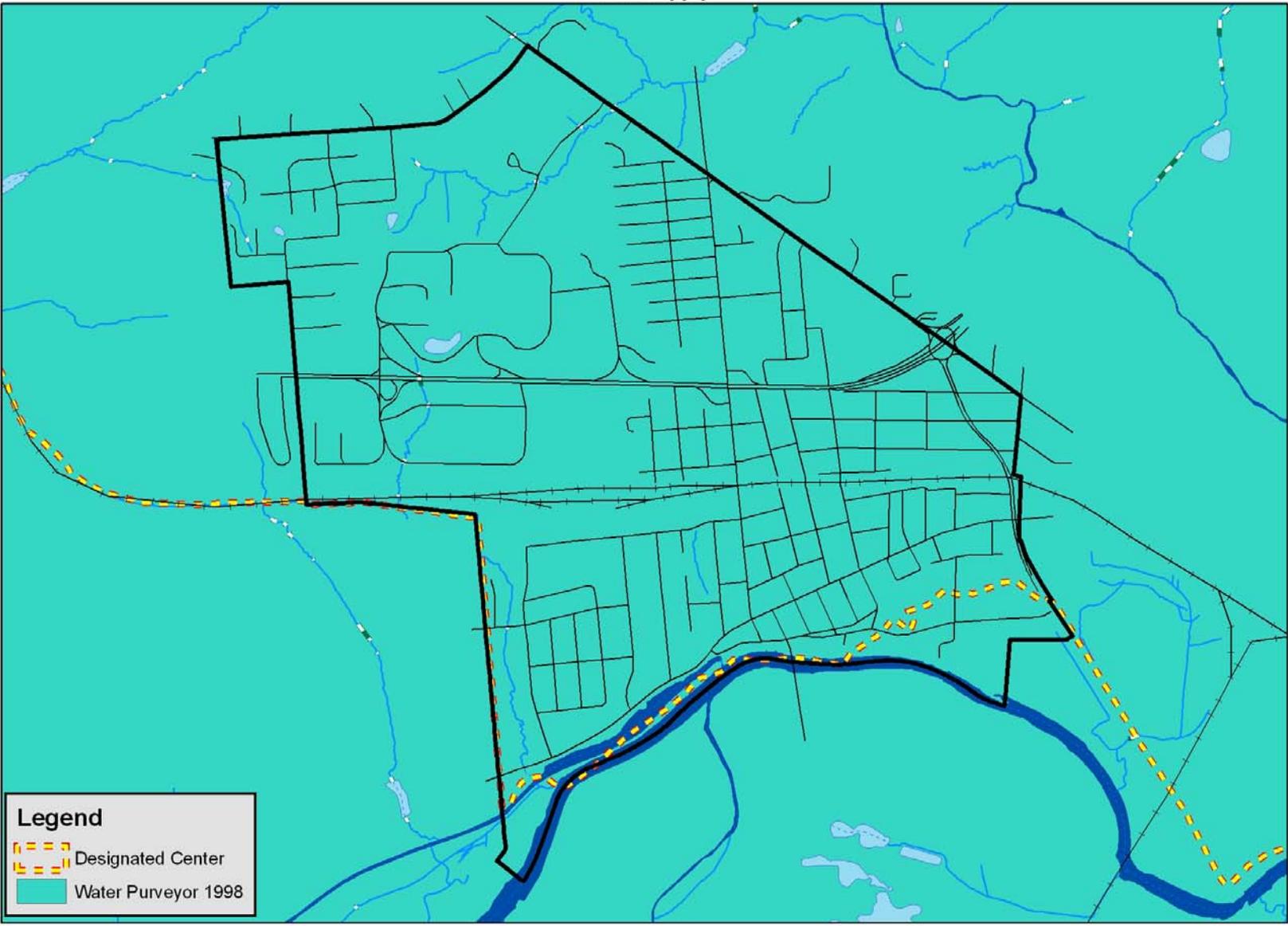
- DEP's Municipal Finance Element (<http://www.nj.gov/dep/dwq/mface.htm>) and the NJ Infrastructure Trust (<http://www.njeit.org/>) are two potential sources of funding for this type of project.

Maps

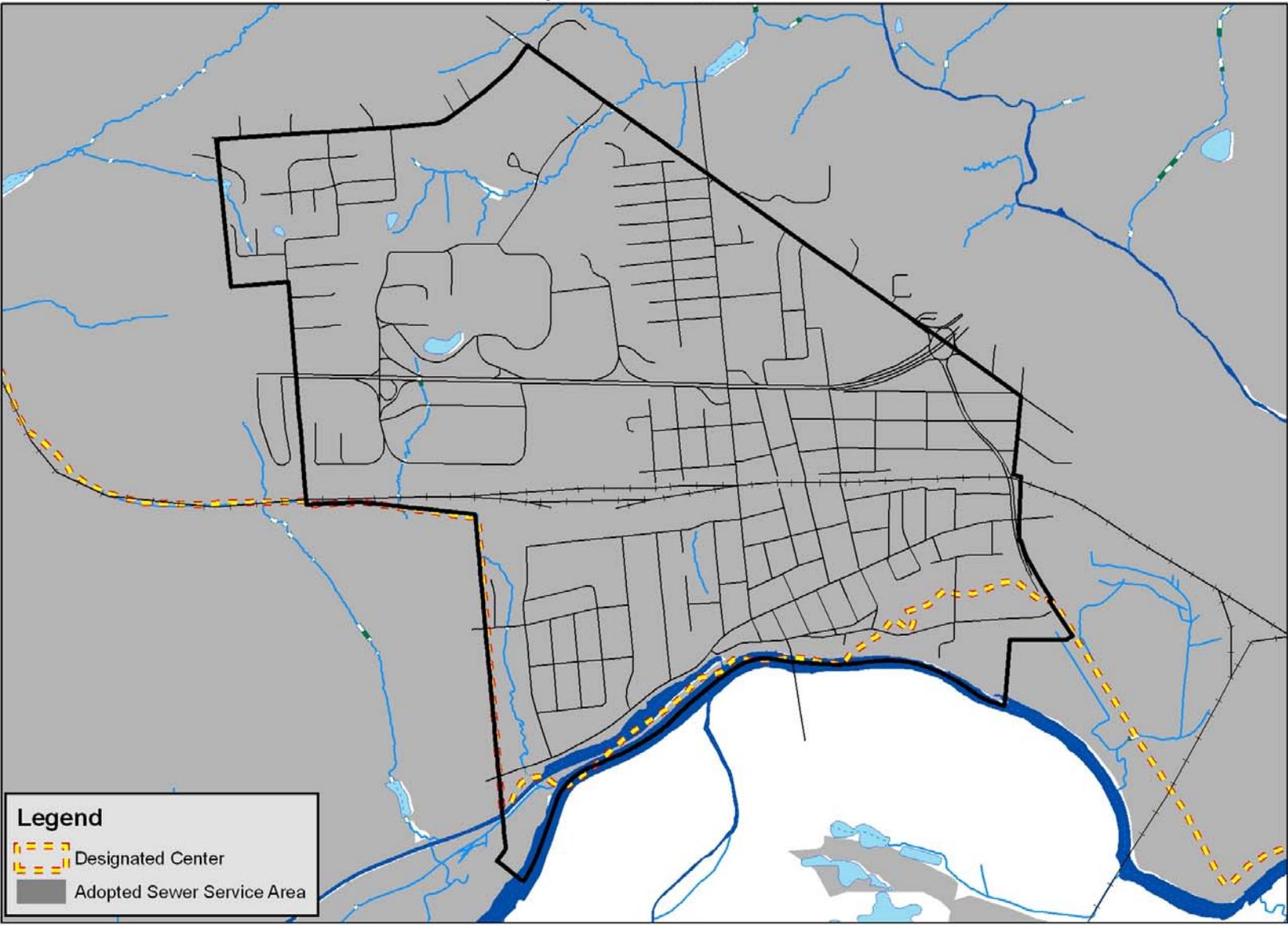
Raritan Borough, Somerset County
Opportunities & Constraints Analysis
Land Use/Land Cover



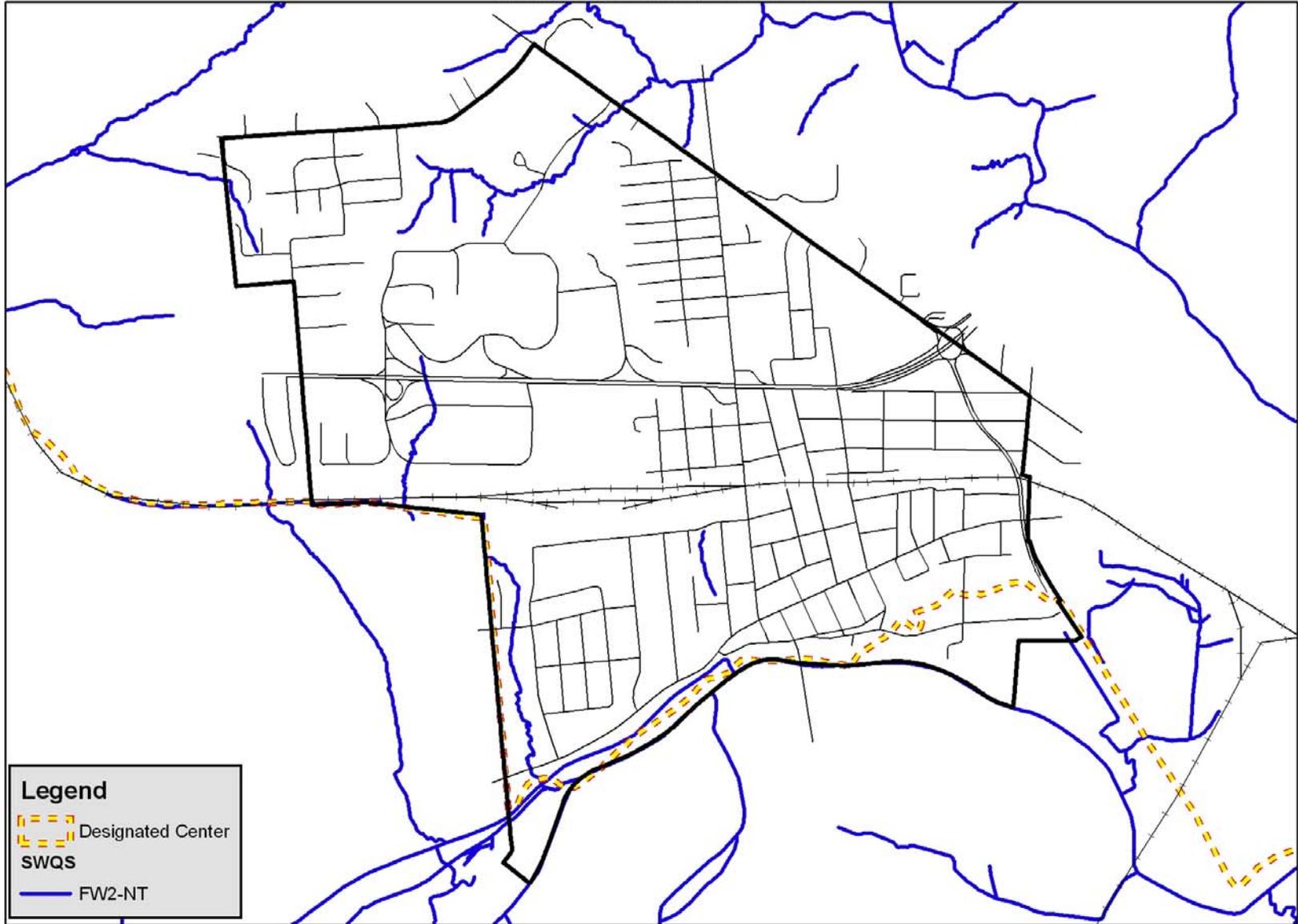
Raritan Borough, Somerset County
Opportunities & Constraints Analysis
Water Supply



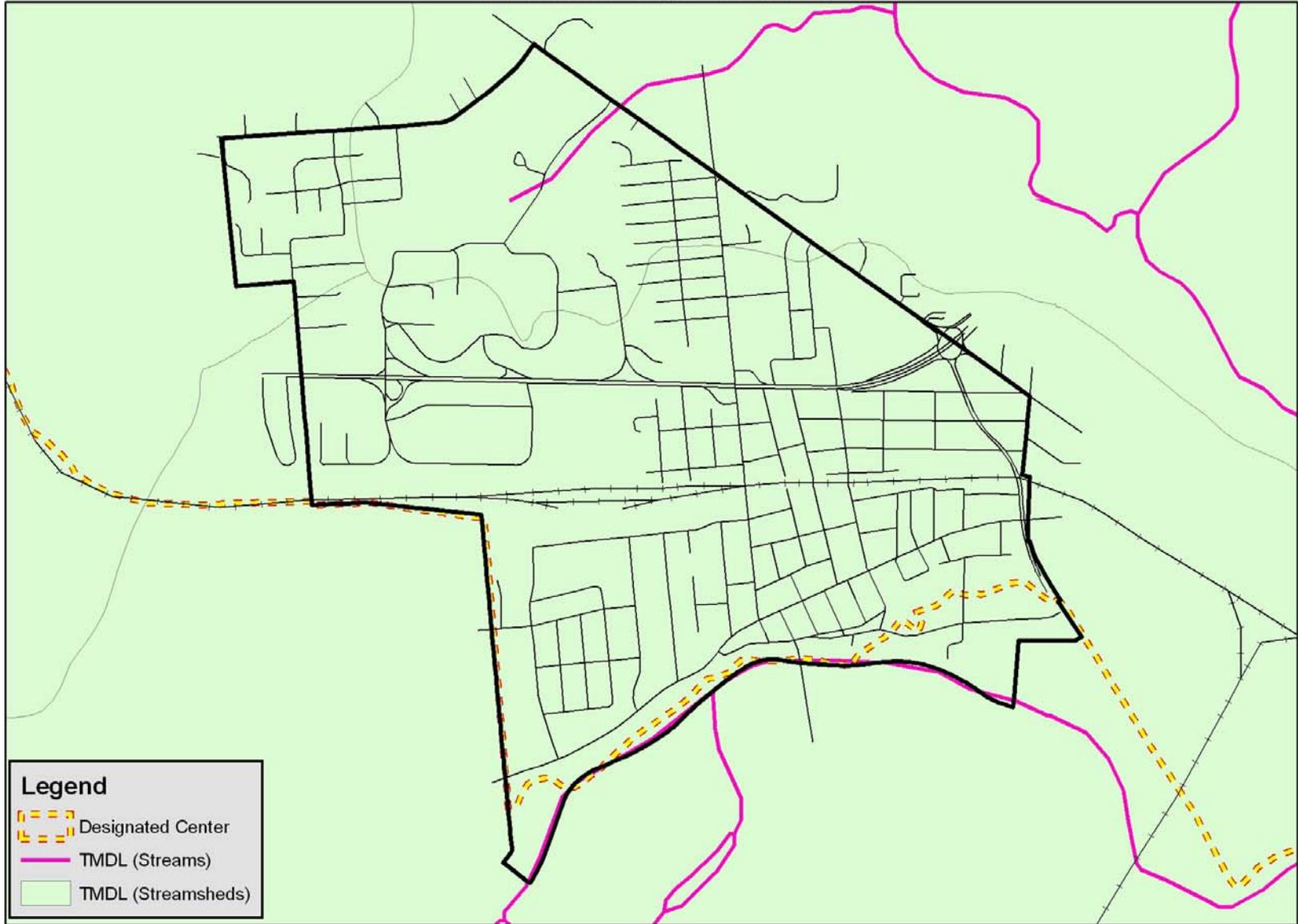
**Raritan Borough, Somerset County
Opportunities & Constraints Analysis
Adopted Sewer Service Area**



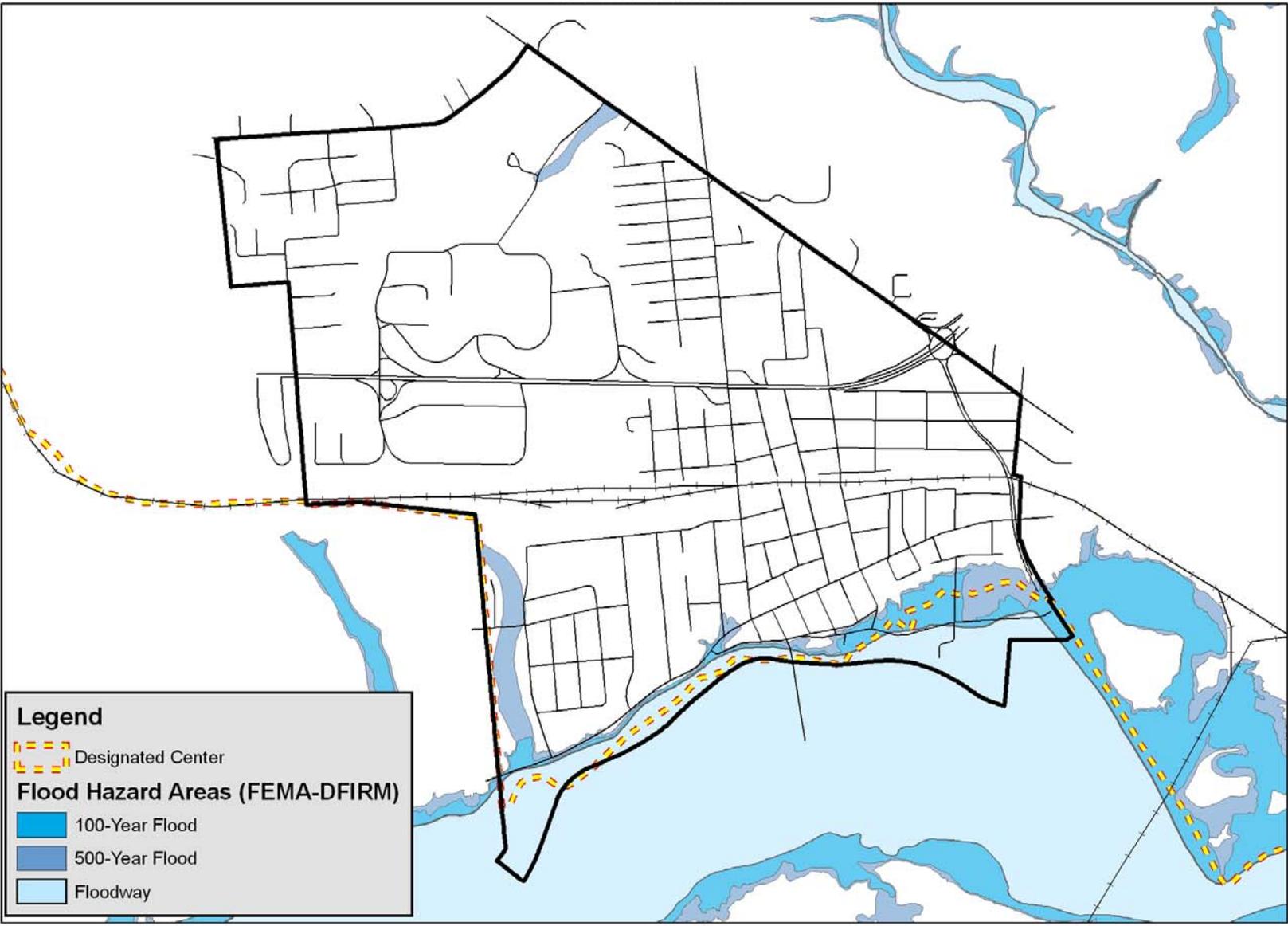
Raritan Borough, Somerset County
Opportunities & Constraints Analysis
Surface Water Quality Standards



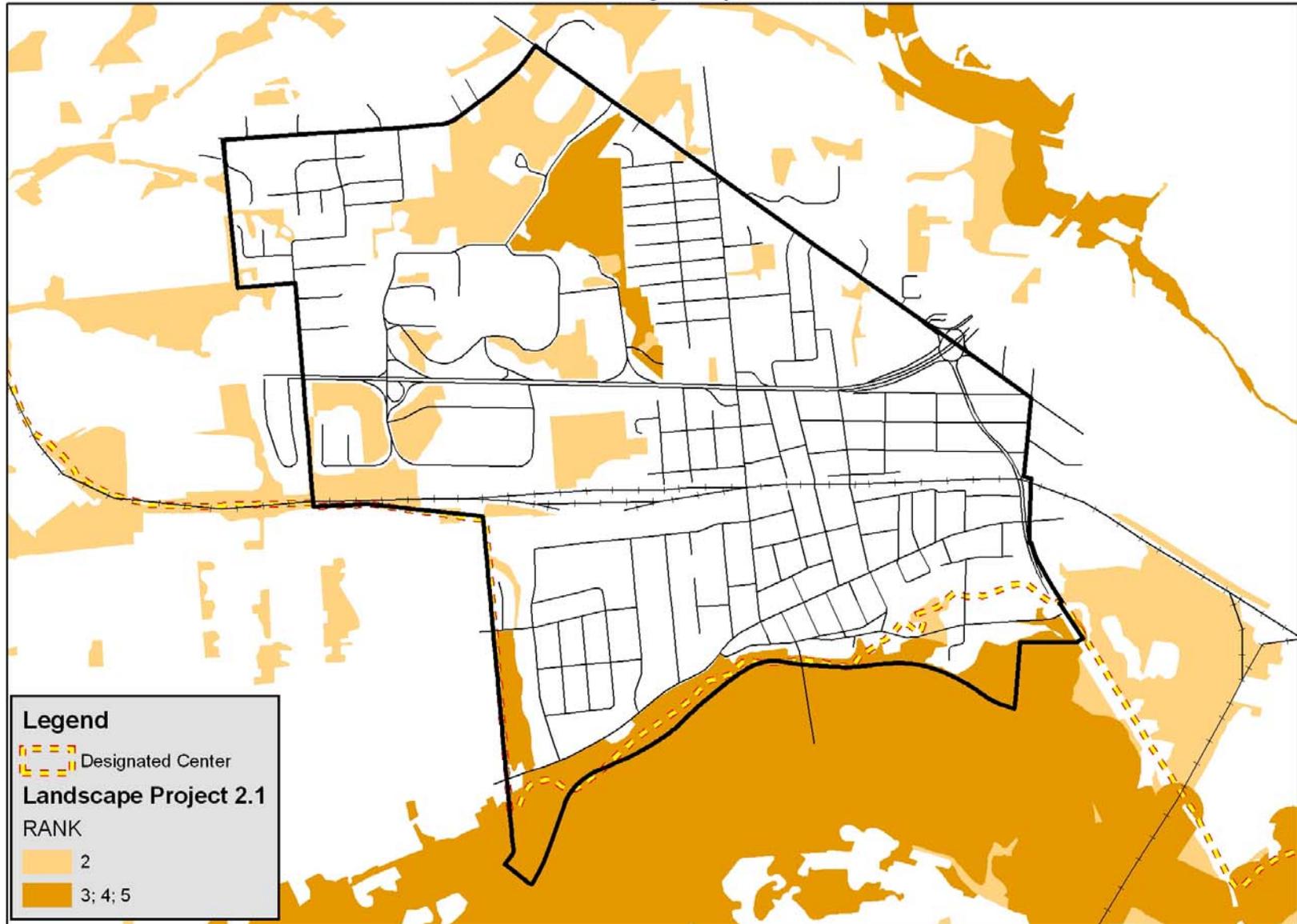
Raritan Borough, Somerset County
Opportunities & Constraints Analysis
Total Maximum Daily Loads (TMDLs)



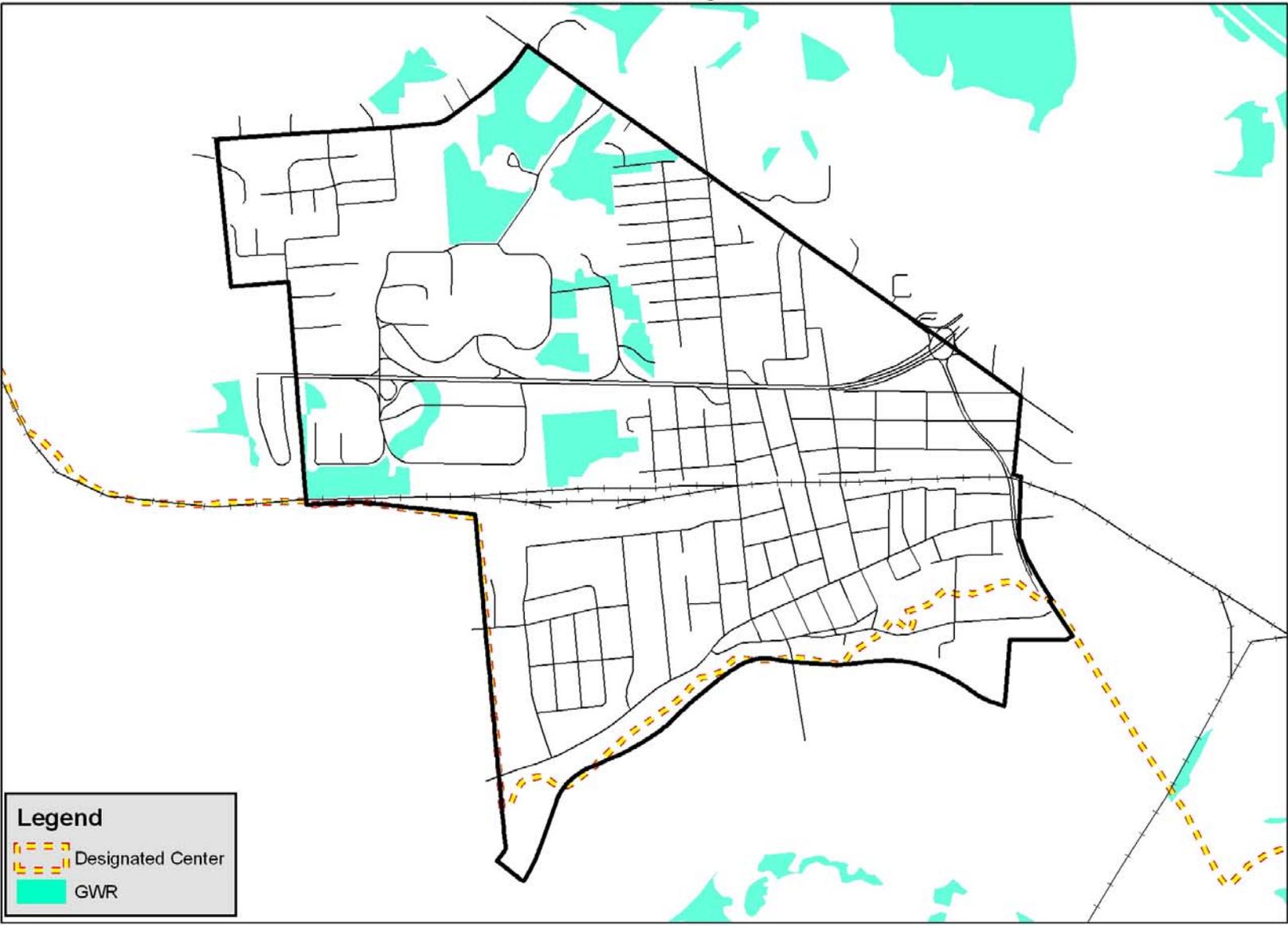
Raritan Borough, Somerset County
Opportunities & Constraints Analysis
Flood Hazard Areas



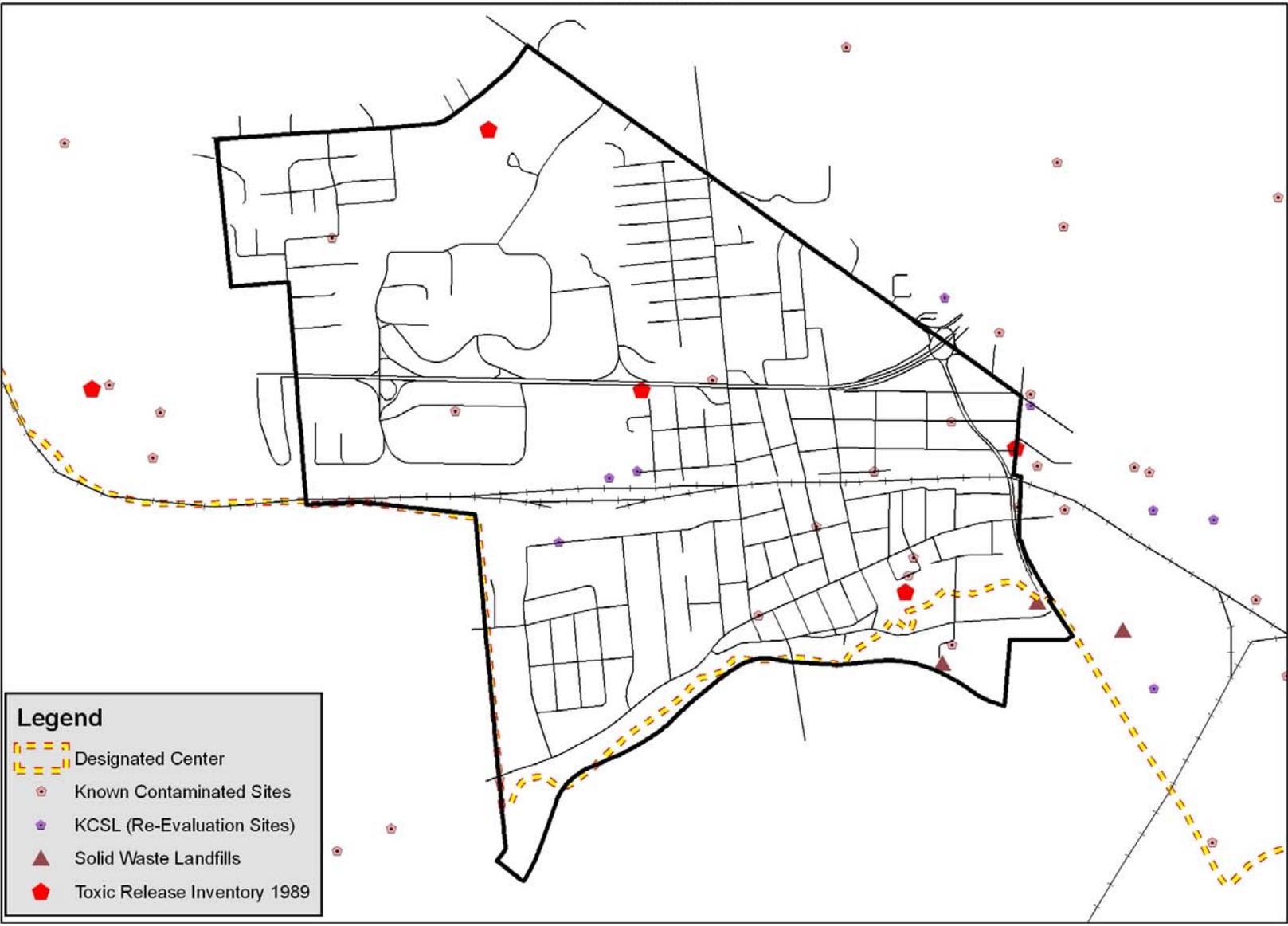
Raritan Borough, Somerset County
Opportunities & Constraints Analysis
Threatened & Endangered Species Habitat



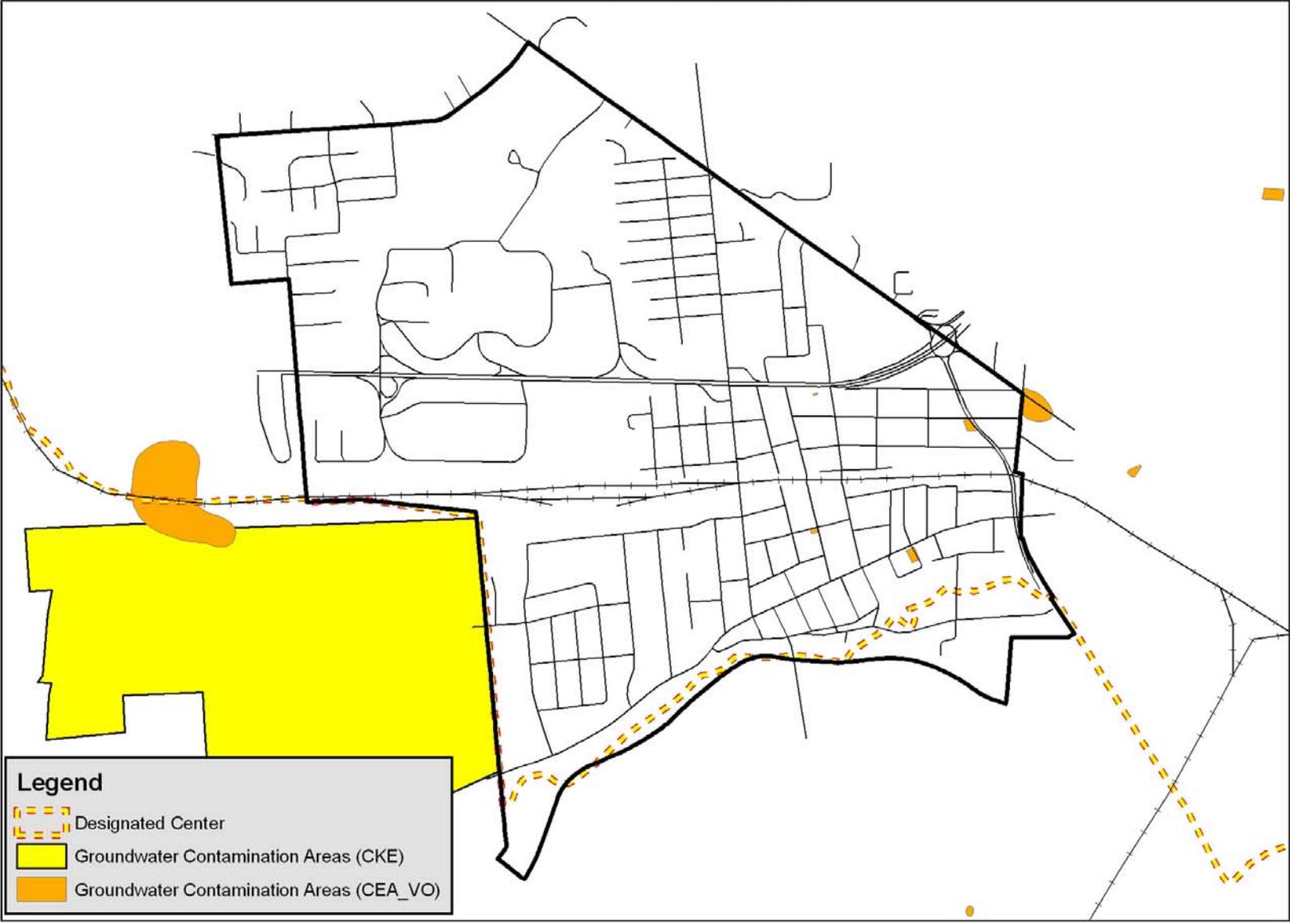
Raritan Borough, Somerset County
Opportunities & Constraints Analysis
Groundwater Recharge Areas



Raritan Borough, Somerset County
Opportunities & Constraints Analysis
Contaminated Sites



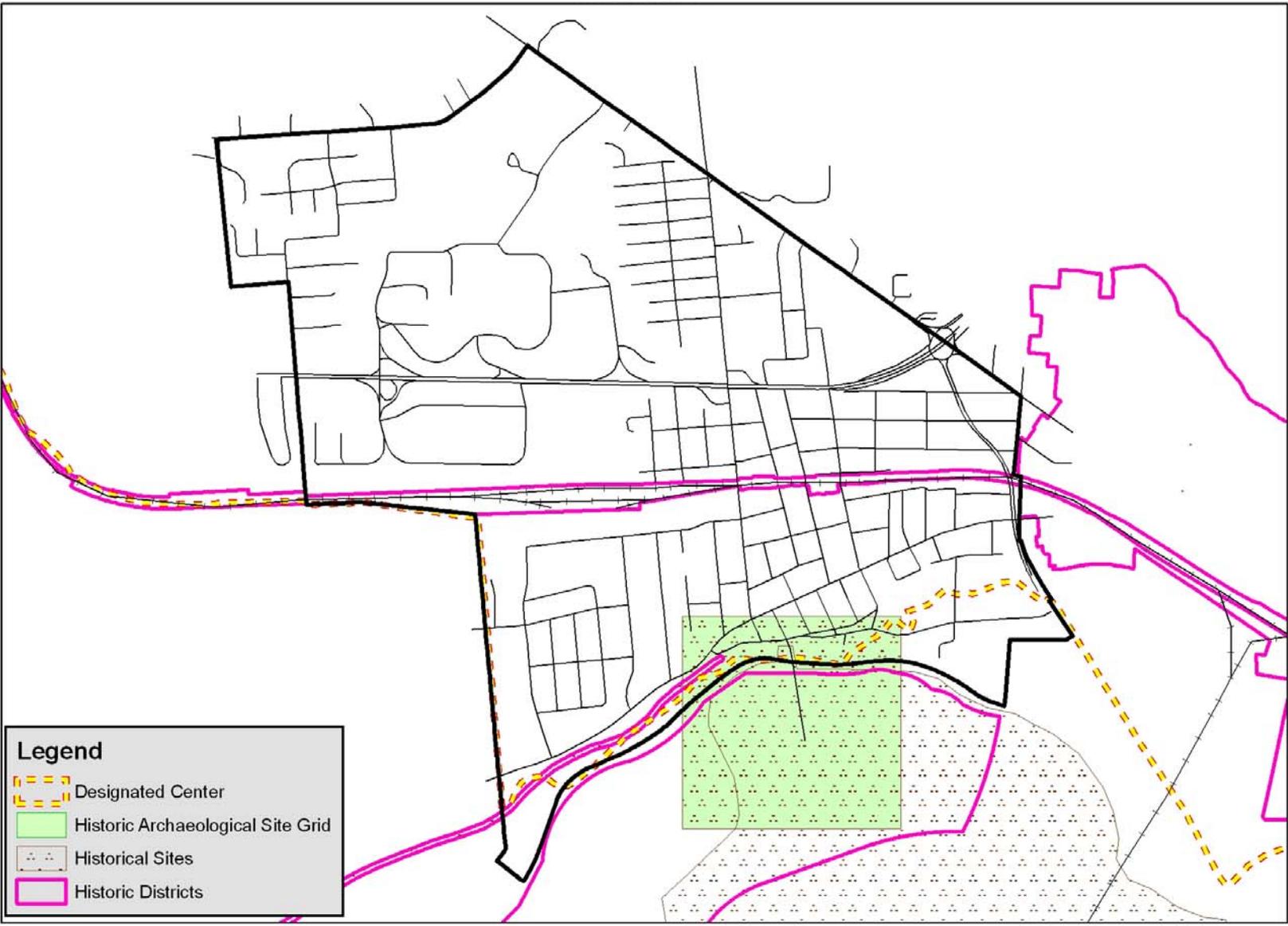
Raritan Borough, Somerset County
Opportunities & Constraints Analysis
Groundwater Contamination Areas



Raritan Borough, Somerset County
Opportunities & Constraints Analysis
Historic Sites



Raritan Borough, Somerset County
Opportunities & Constraints Analysis
Historic Areas



Raritan Borough, Somerset County
Opportunities & Constraints Analysis
Open Space



Raritan Borough, Somerset County
Opportunities & Constraints Analysis
Permit Extension Act



Additional Attachments

Groundwater Contamination Areas in Raritan Borough

CEA NUM	NAME	ADDRESS	BLK LOT	KCSL	FINAL REM	CLOSED	WRA	GW CLASS	BENZENE	MTBE	TBA	LEAD PB	TICS	VO
1193	Getty Service Station #95142	Rt. 206 & Belll Ave.	49 6,7	NJL600102180	Yes	No	Yes	II-A	Yes			Yes		Xylenes
1191	Raritan Auto Service	40 E. Somerset St.	109 1,1.01	NJL600132054	No	No	Yes	II-A	Yes	Yes	Yes			
2232	Texaco Service Station (B&T Assoc)	403 Rt. 202 N.	41 4	NJL600002380	Yes	No	Yes	II-A	Yes	Yes				
99932 PLUME	Stabiles Getty Service Station	39 Anderson St	88 1		No	No	Yes	II-A	Yes				Yes	Xylenes

- FINAL REM** Denotes if the CEA was part of a final remedy decision. Yes - This CEA is a part of a conditional "No Further Action" agreement. No - The creation of this CEA is not a part of a "No Further Action" agreement.
- CLOSED** Denotes if the CEA has been removed from the site. Yes - This CEA had been deemed to be no longer contaminated and restrictions associated with CEA/WRAs have been lifted. No - This CEA is active and being enforced at this time.
- WRA** Denotes if the CEA is part of a Well Restriction Area (WRA). Yes - A well restriction has been declared in the area impacted by this CEA. No - A Well Restriction (WRA) has not been designated for this CEA.
- GW CLASS** Identifies the GW classification of the portion of the aquifer in which the CEA lies. II-A - Potable water.
- BENZENE** The contaminant Benzene is of concern for this CEA.
- MTBE** The contaminant MTBE is of concern for this CEA.
- TBA** The contaminant t-Butyl Alcohol is of concern for this CEA.
- LEAD PB** The contaminant Lead (Pb) is of concern for this CEA.
- TICS** Tentatively Identified Compounds (TICs). The total concentration of TICs are of concern for this CEA.
- VO** A listing of those Volatile Organic contaminants which were not explicitly defined in this database.

NJDEP Office of Planning and Sustainable Communities

The Office of Planning and Sustainable Communities was formed to facilitate the Department's move toward a proactive planning approach based on principles of sustainability and environmental capacity-based planning.

Mission

To coordinate the [sustainable development](#) and [environmental capacity-based planning](#) policies of the Department and proactively work with other state agencies, regional entities, local governments and other groups to incorporate these policies into all levels of land use and environmental planning.

Background

In January, 2007, the Department of Environmental Protection (DEP) adopted its [Policy Priorities and Action Plan](#) which outlines the strategic direction of the agency over the next three years. The Plan identifies eight broad goal areas and underlying objectives.

One of the eight goal areas is Sustainable Growth:

Maximize use of department resources to encourage sustainable growth and livable communities by incorporating consistent criteria for the protection of natural resources and development of smart growth and green design principles into DEP rulemaking, priority setting and planning efforts, other state smart and economic growth priorities, and in regional and local planning efforts.

The first objective of this goal is:

“Incorporate sustainable growth and environmental protection criteria into state, regional and local planning.”

At the core of this goal is a recognized need for more progressive statewide environmental planning by the Department to help inform the local land use development and redevelopment process. Historically, the Department has engaged primarily in environmental planning in targeted areas based on statutory direction. Critically important work has been done in such areas as water quality management planning, water supply master planning, habitat protection planning (Landscape Project) and county/state solid waste planning. DEP is now committed to ensuring that these various planning programs are integrated and coordinated so that our guidance to regional and local planning agencies is consistent, comprehensive and supportive of both local and state priorities.

In a significant business practice improvement, DEP is also committed to implementing the Sustainable Growth goal by broadening the scope of its major project review process by requiring consideration and rewarding incorporating of green design the principles and practices.

Office of Planning and Sustainable Communities

401 E. State Street, 7 Floor East
P.O. Box 402
Trenton, NJ 08625-0402
Phone: (609) 341-5311
Fax: (609) 292-3268

NJ DEPARTMENT OF TRANSPORTATION

**State Development and Redevelopment Plan
Plan Endorsement
Opportunities and Constraints Analysis**

For:

Borough of Raritan, Somerset County

October 28, 2009

This document constitutes the New Jersey Department of Transportation's component of the State Opportunities and Constraints Analysis conducted as part of the Plan Endorsement process. This document provides a collection of the most recent data and information that exists in the Department pertaining to transportation features, studies, projects, grants, designations and other significant issues as applicable. The document should serve as a baseline to inform the remainder of the Plan Endorsement process. It should be understood that this assessment reflects conditions as they presently exist, and that changes may occur at any time during the Plan Endorsement process.

NJDOT has examined the following categories for pertinent data:

State Highways

Route 28 – MP 1.05 – 2.51

Route 202 – MP 23.86 – 24.43

Route 206 – MP 70.71 – 71.64

Straight Line Diagram sheets are attached.

State Highway Access Management Code – Access Levels and Desirable Typical Sections

According to the attached table, Route 28 from milepost 0.00 – 2.22 is classified as Access Level 4 (driveway with provision for left turn access via left turn lane) with a desirable typical section (DTS) of 2A (two lanes, with shoulders or parking). Based upon updated information, there is a proposed Access Level change between mileposts 1.05 and 2.22 from AL to AL 5 (driveway with provision for left-turn access limited by spacing requirements and safety considerations). Mileposts 2.22 – 3.00 are classified as Access Level 5 with a DTS of 2A. The designation of a Center would not change the Access Levels for any portion of these segments.

Route 202 from milepost 19.04 – 26.25 is classified as Access Level 3 (right-turn access with provision for left-turn access via jughandle) with a DTS of 4A (four lanes, divided, with shoulders or parking). There are no proposed AL or DTS changes. The designation of a Center would not change the Access Levels for any portion of this segment.

Route 206 from milepost 70.63 – 71.25 is classified as Access Level 3 with a DTS of 6A (six lanes, divided, with shoulders or parking). Based upon updated information, there is a proposed new link between mileposts 71.25 and 71.64 with a new AL 3, DTS 6A. This segment previously did not have an access classification. The designation of a Center would not change the Access Levels for any portion of these segments.

Congestion Management System

According to the attached chart, part of this section of Route 28 is classified as “Severely Congested.” The intersection of Route 28 and the entrance to the shopping center at milepost 2.07 is ranked 224 out of 372 high need signalized intersections on state highways.

This section of Route 202 is classified as “Severely Congested.”

This section of Route 206 is classified as “Very Congested.”

Major Capital Projects/Initiatives and Mitigation Projects

The FY 2010-2011 Study and Development Program contains a project for operational at Route 202 and First Avenue (milepost 23.90) to reduce congestion.

The FY 2010-2011 Study and Development Program contains a project to provide operational and safety improvements to the Route 202/206/22 interchange complex from North Thomson Street to Commons Way. The improvements would focus on reducing the congestion and weaving that occur in the vicinity of Route 202/206 and Route 22 in Raritan, Somerville and Bridgewater.

Designated Transit Villages

Not Applicable

Designated Scenic Byways

Not Applicable

Open Local Aid Grant Projects

Raritan Borough was awarded FY 2010 Municipal Aid funds for improvements to Johnson Drive in the amount of \$200,000.

Corridor Studies

Not Applicable

Local Planning Assistance Projects

Not Applicable

Bicycle and Pedestrian Local Planning Assistance Projects

Not Applicable

Public Use/General Aviation Airports

Not Applicable; however there is a helistop at J & J Ortho, not actually within the Borough limits.

Rail Freight Lines

Conrail freight service is available on the same line that provides passenger service to the NJ TRANSIT Raritan Valley Line.

Raritan appears to maintain some industrial base, as evidenced by a higher than average number of manufacturing jobs and a stable number of industrial parcels between 1996 and 2002. The plan calls for maintenance of a balanced land use pattern and enhancement of the remaining industrial areas. The Bureau of Rail Services encourages retention of industrial use along freight-served rail lines.

Traffic Engineering and Safety Initiatives

Traffic Engineering and Investigations has proposed changes to Route 202 and First Avenue and is awaiting a response from the Borough at this time. The Borough needs to more specifically state its wishes regarding signage along Route 202. It should be noted that any local changes to traffic calming and parking that affect the state highways need a review by Traffic Engineering and Investigations.

Existing and Planned Park-and-Rides

NJ TRANSIT owns the following four Raritan Station park-and-rides in the Borough:

Railroad Avenue and Thompson Street – 42 spaces - \$2.00 fee per day

Anderson Street – 16 spaces - \$2.00 fee per day

Thompson Street adjacent to station – 30 spaces - \$30.00 fee per month

Raritan Station Main Lot – Thompson and Anderson Streets – 110 spaces - \$30.00 fee per month.

Other Significant Issues

None at this time.

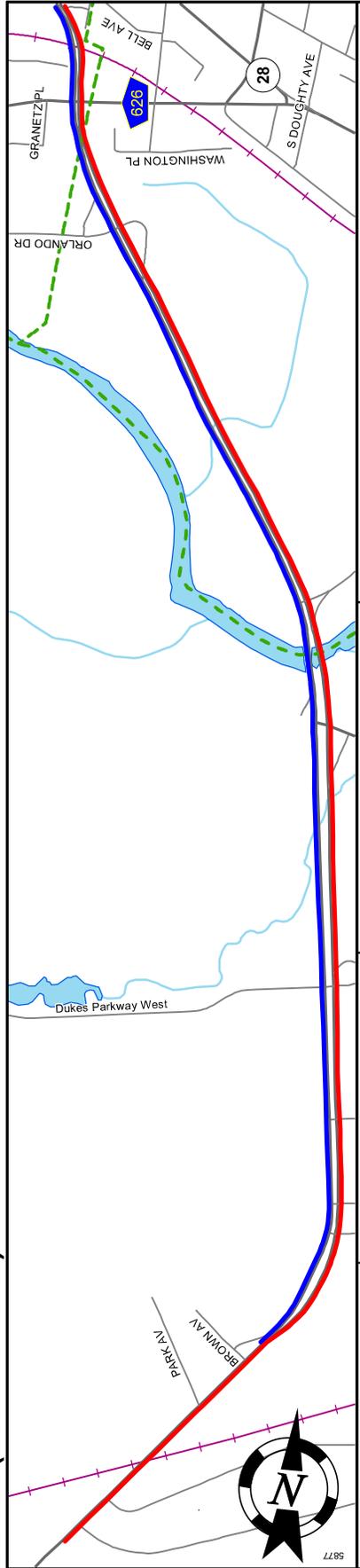
ATTACHMENTS

Straight Line Diagram Sheets
Access Classification Table
Congestion Management System Chart

NOTE: GIS data layers have been provided to the OSG GIS unit by the NJDOT GIS unit.

Mile Posts: 68.000 - 71.000

US 206 (South to North)



Pavement	24	12	36	24	55	24	2	50
Shoulder								
Number of Lanes	2	3	3	2	3	2	2	2
Speed Limit	55	36	36	24	55	24	2	50
Street Name	Hillsborough Twp, Somerset Co Disabled American Veterans Highway Somerville Boro, Somerset Co Raritan, Som. Co.							
Interstate Route								
US Route								
NJ Route								
County Road								
Interchange Number								
Grade								
Separated Interchange								
Traffic Signal								
Traffic Monitoring Sites								
Road Underpass								
Road Overpass								

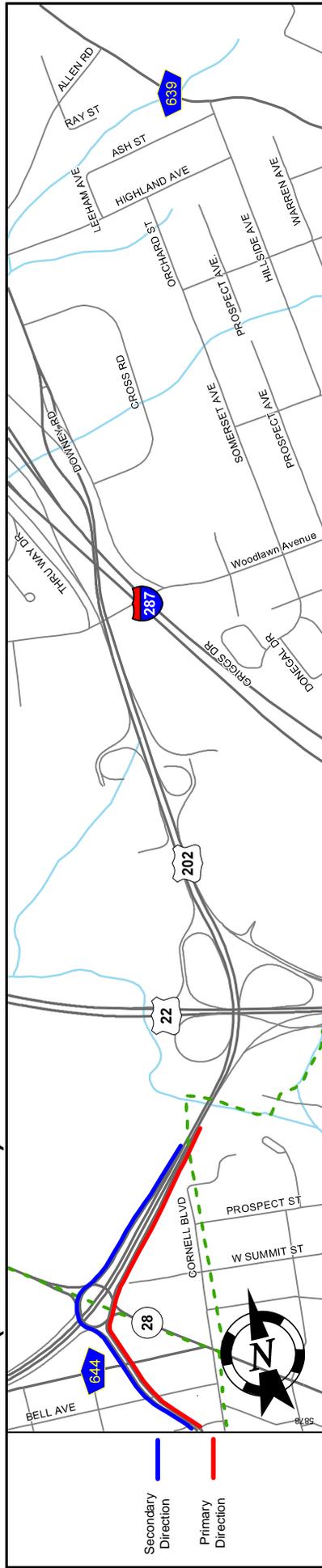
Street Name	Disabled American Veterans Highway							
Jurisdiction	N.J.D.O.T.							
Functional Class	Urban Principal Arterial							
Federal Aid - NHS Sy	NHS							
Control Section	1810							
Speed Limit	45	55	36	24	55	24	2	40
Number of Lanes	2	3	3	2	3	2	2	2
Med. Type	None	None	None	None	None	None	None	None
Med. Width	0	VAR						
Pavement	24	24	36	14	36	24	24	15
Shoulder	8	12	12	14	12	12	12	15
Traffic Volume	23,952 (2003)							
Traffic Sta. ID	4-4-211							
Structure No.	1810167	1810168	1810169	1810170	1810171	1810172	1810173	1810174
Enlarged Views	N/A							

Date last inventoried: March 2008

SRI = 00000206

Mile Posts: 71.000 - 71.640

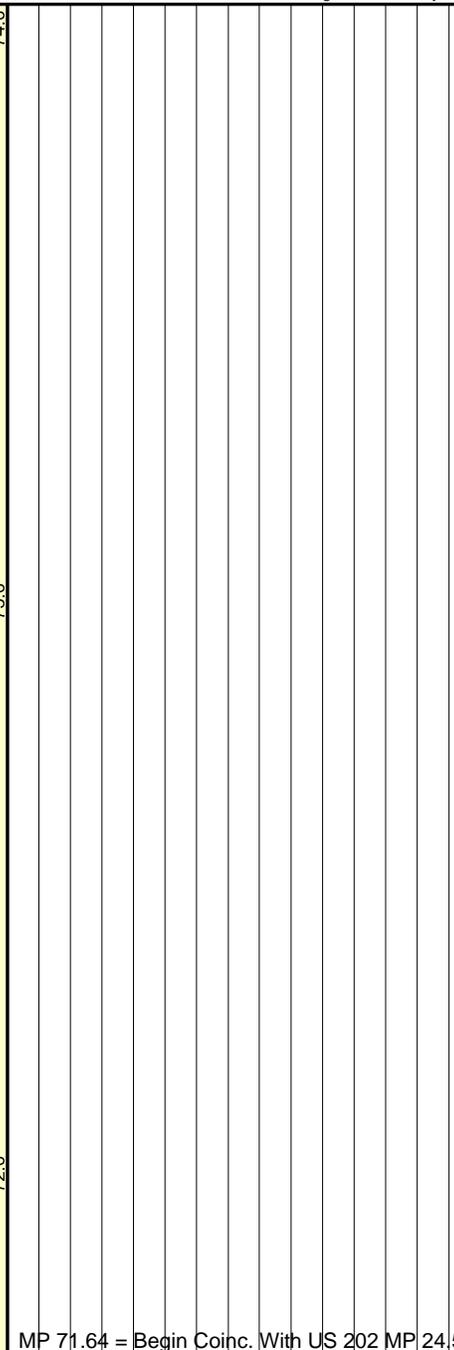
US 206 (South to North)



Pavement	24
Shoulder	12
Number of Lanes	2
Speed Limit	50
Street Name	Disabled American Veterans Highway
Interstate Route	
US Route	
NJ Route	
County Road	
Interchange Number	
Grade	
Separated Interchange	
Traffic Signal	
Traffic Monitoring Sites	
Road Underpass	
Road Overpass	

Street Name	Disabled American Veterans Highway
Jurisdiction	N.J.D.O.T.
Functional Class	Urban Principal Arterial
Federal Aid - NHS Sy	NHS
Control Section	1810
Speed Limit	40
Number of Lanes	2
Med. Type	Positive
Med. Width	14
Pavement	24
Shoulder	15
Traffic Volume	
Traffic Sta. ID	
Structure No.	
Enlarged Views	

MP 71.64 = Begin Coinc. With US 202 MP 24.50
 MP 71.64-78.32 See US 202 MP 24.50-31.51

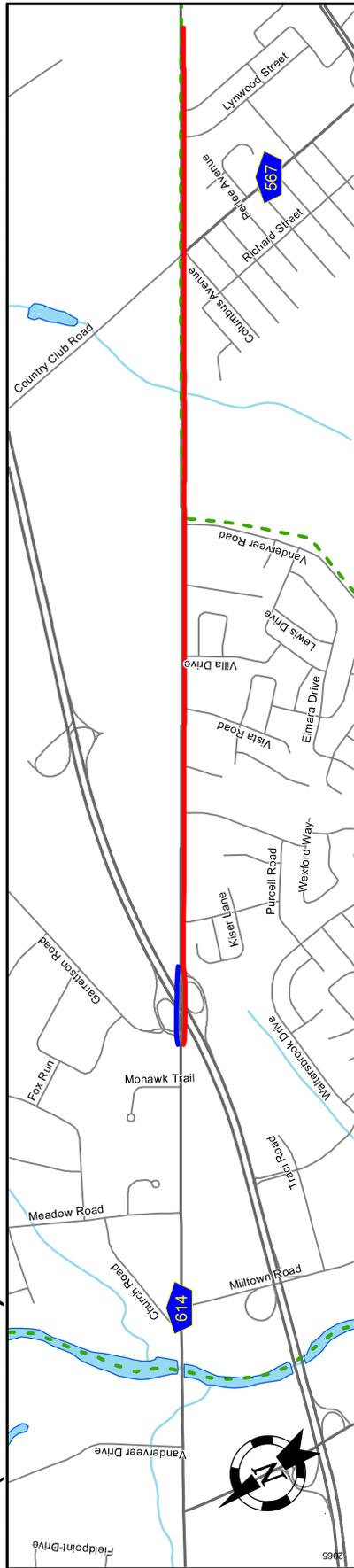


SRI = 00000206

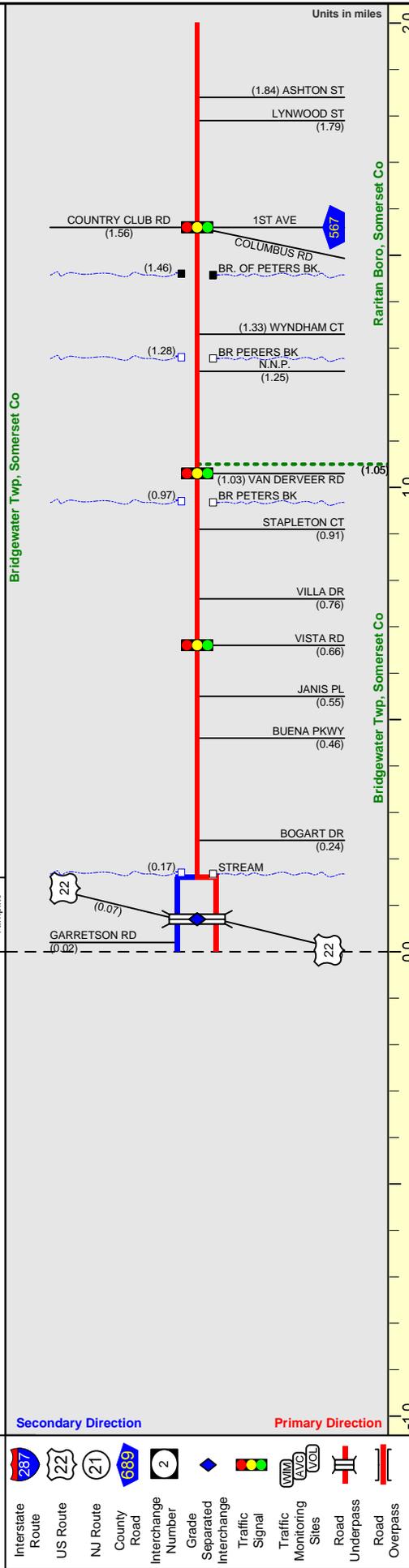
Date last inventoried: March 2008

Mile Posts: 0.000 - 2.000

NJ 28 (West to East)



Pavement	22
Shoulder	0
Number of Lanes	1
Speed Limit	45
Street Name	Easton Turnpike



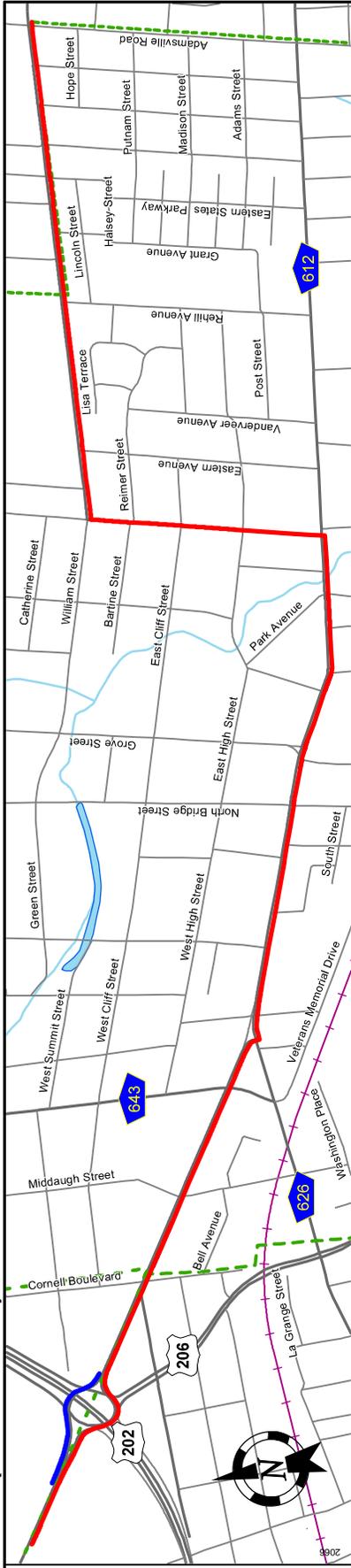
Street Name	Easton Turnpike
Jurisdiction	N.J.D.O.T.
Functional Class	Urban Minor Arterial
Federal Aid - NHS Sy	STP
Control Section	1804
Speed Limit	45
Number of Lanes	2
Med. Type	None
Med. Width	0
Pavement	22
Shoulder	0
Traffic Volume	20,241 (2003)
Traffic Sta. ID	4-4-334
Structure No.	1804150
Enlarged Views	1804153, 1804156, 157, 1804152

Date last inventoried: April 2008

SRI = 00000028

Mile Posts: 2.000 - 5.000

NJ 28 (West to East)



Pavement	24
Shoulder	10
Number of Lanes	2 + 4
Speed Limit	45
Street Name	Easton Turnpike

Interstate Route	
US Route	
NJ Route	
County Road	
Interchange Number	
Grade	
Separated Interchange	
Traffic Signal	
Traffic Monitoring Sites	
Road Underpass	
Road Overpass	

Street Name	Easton Turnpike	West End Avenue	Main Street	Gaston Avenue	Union Avenue
Jurisdiction	N.J.D.O.T.				
Functional Class	Urban Principal Arterial				
Federal Aid - NHS Sy	STP				
Control Section	1804	1805	1806	1807	1808
Speed Limit	45	35	30	40	40
Number of Lanes	4	2	None	24	6
Med. Type	None	None	None	44	24
Med. Width	0	VAR	0	66	6
Pavement	48	24	42	40	24
Shoulder	10	6	0	40	6
Traffic Volume	10,813 (2006)	7,278 (2006)	14,987 (2003)		
Traffic Sta. ID	4-4-335	4-4-337	4-4-338		
Structure No.	1807157	1805150	1805151		
Enlarged Views					

Date last inventoried: April 2008

SRI = 00000028

Mile Posts: 23.000 - 26.000

US 202 (South to North)



Pavement	Shoulder	10
Number of Lanes		55
Speed Limit		55
Street Name	US 202	US 202
Interstate Route US Route NJ Route County Road Interchange Number Grade Separated Interchange Traffic Signal Traffic Monitoring VLM Sites Road Underpass Road Overpass	23.0 23.06 23.06 23.90 23.99 24.03 24.03 24.14 24.14 24.03 23.96 23.90 23.77 24.03 24.43 24.43 24.43 24.77 24.86 24.86 25.03 25.03 25.50 25.50 25.78 25.78 26.00	
Raritan Boro, Somerset Co Bridgewater Twp, Somerset Co Bridgewater Twp, Somerset Co	Raritan Boro, Somerset Co Bridgewater Twp, Somerset Co Bridgewater Twp, Somerset Co	
Street Name	US 202	US 202
Jurisdiction	N.J. O.T.	US 202
Functional Class	Urban Principal Arterial	US 202
Federal Aid - NHS Sy	STRAHNET Non-Inter.	NHS
Control Section	1807	1808
Speed Limit	55	55
Number of Lanes	Unprotected	55
Med. Type		Positive
Med. Width	28	VAR
Pavement		
Shoulder	8	12
Traffic Volume		
Traffic Sta. ID		69.341 (2009)
Structure No.		4-4-208
Enlarged Views		1808150 1808171.151 1808153 1808154

Date last inventoried: July 2006

SRI = 00000202

See Enlarged View #58

ROUTE (SRI)	MILEPOST		Existing Appendix B			Proposed Appendix B		
	BEGIN	END	DTS	AL	CELL	DTS	AL	CELL
00000028	0.00	2.22	2A	4	3	2A	5	9
00000028	2.22	2.25	2A	5	6	2A	5	9
00000028	2.25	3.00	2A	5	6	2A	5	6

ROUTE (SRI)	MILEPOST		Existing Appendix B			Proposed Appendix B		
	BEGIN	END	DTS	AL	CELL	DTS	AL	CELL
00000202	19.04	26.25	4A	3	1	4A	3	1

ROUTE (SRI)	MILEPOST		Existing Appendix B			Proposed Appendix B		
	BEGIN	END	DTS	AL	CELL	DTS	AL	CELL
00000206	70.63	71.25	6A	3	1	6A	3	4
00000206	71.25	71.64				6A	3	4



New Jersey Department of Transportation

Bureau of Systems Planning

CMS Priority Ranking

NJ 28 (MP 1.05 - 2.51) Raritan Boro., Somerset County

CMS Link Number	Route	Begin Milepost	End Milepost	One-Way ADT (2006) (Veh./Day)	No. of Lanes (NB/EB)	No. of Lanes (SB/WB)	V/C Max	Overall Score	Priority Rating	System Top Percentile	County	County Top Percentile	MPO	MPO Top Percentile
1343	28	1.00	2.22	9535	1	1	1.20	7.78	High	11	Somerset	18	NJTPA	13
1344	28	2.22	2.34	6198	2	2	0.65	3.14	Low	83	Somerset	98	NJTPA	86
1345	28	2.34	2.68	5496	1	1	0.82	4.44	Low	62	Somerset	88	NJTPA	66

Part of this section of roadway is "Severely Congested".

- Highest Score in this section

The Overall Score shown above considers V/C ratio and ADT per lane. Each factor is weighted 50%.

Priority Ratings are based on the Overall Score of 0 to 10, as follows:

HIGH = 7.00+

MEDIUM = 5.00 - 6.99

LOW < 5.00

Note:

The intersection of NJ 28 and Entrance to shopping center (MP 2.07) is ranked 224 out of 372 high need signalized intersections on State highways.



New Jersey Department of Transportation

Bureau of Systems Planning

CMS Priority Ranking

US 206 (MP 70.71 - 71.64) Raritan Boro., Somerset County

CMS Link Number	Route	Begin Milepost	End Milepost	One-Way ADT (2006) (Veh./Day)	No. of Lanes (NB/EB)	No. of Lanes (SB/WB)	V/C Max	Overall Score	Priority Rating	System Top Percentile	County	County Top Percentile	MPO	MPO Top Percentile
965	206	70.00	70.80	16211	2	2	0.88	5.47	Medium	45	Somerset	64	NJTPA	50
966	206	70.80	71.25	18057	2	2	1.00	6.15	Medium	33	Somerset	51	NJTPA	39

This section of roadway is "Very Congested".

- Highest Score in this section

The Overall Score shown above considers V/C ratio and ADT per lane. Each factor is weighted 50%.

Priority Ratings are based on the Overall Score of 0 to 10, as follows:

HIGH = 7.00+

MEDIUM = 5.00 - 6.99

LOW < 5.00



New Jersey Department of Transportation

Bureau of Systems Planning

CMS Priority Ranking

US 202 (MP 23.86 - 24.43) Raritan Boro., Somerset County

CMS Link Number	Route	Begin Milepost	End Milepost	One-Way ADT (2006) (Veh./Day)	No. of Lanes (NB/EB)	No. of Lanes (SB/WB)	V/C Max	Overall Score	Priority Rating	System Top Percentile	County	County Top Percentile	MPO	MPO Top Percentile
769	202	23.40	23.90	21499	2	2	1.17	7.26	High	16	Somerset	28	NJTPA	20
770	202	23.90	24.43	21936	2	2	1.20	7.66	High	12	Somerset	20	NJTPA	15

This section of roadway is "Severely Congested".

- Highest Score in this section

The Overall Score shown above considers V/C ratio and ADT per lane. Each factor is weighted 50%.

Priority Ratings are based on the Overall Score of 0 to 10, as follows:

HIGH = 7.00+

MEDIUM = 5.00 - 6.99

LOW < 5.00



New Jersey Department of Transportation

Bureau of Systems Planning

CMS Priority Ranking

NJ 28 (MP 1.05 - 2.51) Raritan Boro., Somerset County

CMS Link Number	Route	Begin Milepost	End Milepost	One-Way ADT (2006) (Veh./Day)	No. of Lanes (NB/EB)	No. of Lanes (SB/WB)	V/C Max	Overall Score	Priority Rating	System Top Percentile	County	County Top Percentile	MPO	MPO Top Percentile
1343	28	1.00	2.22	9535	1	1	1.20	7.78	High	11	Somerset	18	NJTPA	13
1344	28	2.22	2.34	6198	2	2	0.65	3.14	Low	83	Somerset	98	NJTPA	86
1345	28	2.34	2.68	5496	1	1	0.82	4.44	Low	62	Somerset	88	NJTPA	66

Part of this section of roadway is "Severely Congested".

- Highest Score in this section

The Overall Score shown above considers V/C ratio and ADT per lane. Each factor is weighted 50%.

Priority Ratings are based on the Overall Score of 0 to 10, as follows:

HIGH = 7.00+

MEDIUM = 5.00 - 6.99

LOW < 5.00

Note:

The intersection of NJ 28 and Entrance to shopping center (MP 2.07) is ranked 224 out of 372 high need signalized intersections on State highways.