



**State of New Jersey**  
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**JON S. CORZINE**  
*Governor*

**JOSEPH V. DORIA, JR.**  
*Commissioner*

July 17, 2009

The Honorable Raymond Heck  
Mayor, Millstone Borough  
1353 Main Street  
Millstone, NJ 08844

**RE: Millstone Borough, Plan Endorsement Opportunities and Constraints Analysis**

Mayor Heck:

The Office of Smart Growth (OSG) and our State agency partners have reviewed the Municipal Self Assessment submitted by Millstone Borough on May 11, 2009 along with supplemental information submitted on June 26, 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.

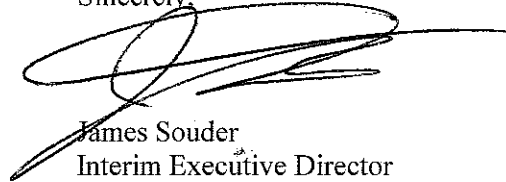
The Opportunities and Constraints Analysis is intended to guide the Borough's Community Visioning Process and to provide the Borough with preliminary consistency issues with the State Development and Redevelopment Plan and relevant State regulations. This document can be found on the OSG website at the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

The Office of Smart Growth and State Agencies remain committed to working with the Borough of Millstone. Should you have any questions regarding the Plan Endorsement process or the enclosed Opportunities and Constraints Analysis, please feel free to contact Barry Ableman, OSG Principal Planner for the Borough of Millstone at (609) 292-3228 or via e-mail at [bableman@dca.state.nj.us](mailto:bableman@dca.state.nj.us).

If you intend to seek a waiver from 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 the "Tarantino Charrette" and any other similar meetings. Without this information a waiver cannot be granted since the State Planning Commission feels that community input is critical to the municipalities' planning outcome.

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 Millstone Borough, at (609) 292-3228 or via email at [bableman@dca.state.nj.us](mailto:bableman@dca.state.nj.us).

Sincerely,

A handwritten signature in black ink, appearing to read 'James Souder', written over a horizontal line.

James Souder  
Interim Executive Director

JS:ba

c: State Agency Partners (*Via E-Mail*)  
Bob Bzik, PP/AICP, Planning Director, Somerset County Planning Board (*Via E-Mail*)  
Joy Farber, Esq, Chief Counsel and Policy Director, OSG (*Via E-Mail*)  
Karl Hartkopf, PP/AICP, Planning Director, OSG (*Via E-Mail*)  
Barry Ableman, Principal Planner, OSG (*Via E-Mail*)  
Lynn Reynolds, CVDA (*Via E-Mail*)  
Millstone Borough Plan Endorsement File

# State Agency Opportunities & Constraints Analysis

## Borough of Millstone County of Somerset



**July 20, 2009**

**Office of Smart Growth  
Department of Community Affairs  
State of New Jersey**

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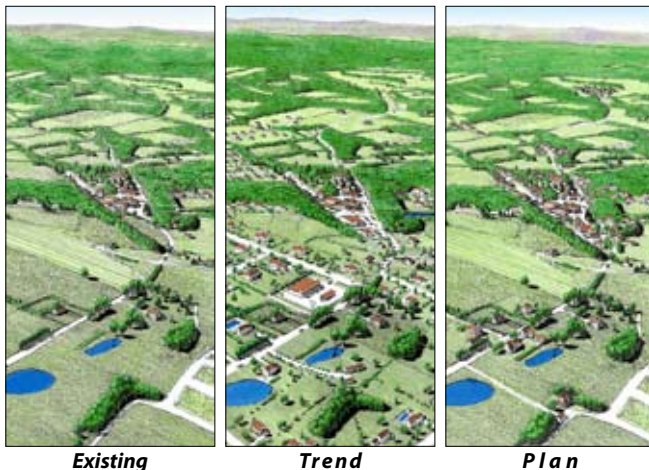
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## Introduction

On May 11, 2009 the Borough of Millstone in Somerset County submitted their Municipal Self-Assessment Report to the New Jersey Office of Smart Growth (OSG). Additional information regarding requested Planning Area modifications was submitted on June 26, 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 with 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 and 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, and historic 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 Millstone initiated the Plan Endorsement process by attending a pre-petition meeting with OSG and our partner State agencies on September 18, 2007. On December 18, 2008, the Borough of Millstone adopted a resolution authorizing the creation of their Plan Endorsement Advisory Committee (PEAC), in which five members were designated. As previously mentioned, the Borough submitted their Municipal Self Assessment Report to OSG for review on May 11, 2009.



The Municipal Self Assessment Report was authorized by the Borough of Millstone via resolution number on February 16, 2009. Pursuant to the State Planning Rules, this State Agency Opportunities and Constraints Analysis has been provided to the Borough on July 15, 2009.

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

The historic borough along the Millstone River was settled by Quakers around 1690 on land that was occupied by Lenape Indians. It was an important crossroad during the Revolutionary war where General Washington's camped after their victory in Princeton. A number of historic buildings remain within Millstone's historic district recognized by the National Register of Historic Places.

The Borough has conducted community visioning and developed plans to build on its historic character while seeking sustainability through the development and preservation of the more than 100 acres that remain which could potentially could be developed. To move toward achieving their goals, a great deal of planning has been undertaken by the Borough. The results include a redevelopment plan and designating a portion of the Borough as an Area in Need of Rehabilitation. Together with the acquisition of property with the County, they are moving toward meeting their economic development, affordable housing and open space goals.

The State Plan Policy Map accompanies the State Plan and categorizes every area in the State into a specific Planning Area based on its suitability for growth and development. The State Plan Map that was adopted in 2001 depicts the 439 acres in Millstone as predominantly Fringe Planning Area with 389 acres. There are also small portions of the Map that are Suburban Planning Area and Environmentally Sensitive Planning Area, 8 acres and 5 acres respectively. The remaining 37 acres are Park Lands.

The State Planning Commission is nearly concluded with the Cross-Acceptance Process and will adopt the revised State Plan in the beginning of 2010. During Cross-Acceptance modifications to the map were negotiated by the Office of Smart Growth with representatives from the Somerset County Freeholders and Planning Board that better reflect current conditions and planning goals. In Millstone, Suburban Planning Area was eliminated while Fringe Planning Area acreage was reduced to 268 acres. The negotiations also addressed updated

environmental data that increased the Environmentally Sensitive Planning Area to 83 acres. At the same time Park Land increased to 88 acres due to the additional open space acquisitions. This past month the County acquired additional land which means that approximately 30% of the Borough is permanently preserved.

Designating the Borough a Village Center through the Plan Endorsement process will further enable Millstone to reach its planning goals and further its consistency with the State Plan. By designating the entire borough a Village Center serves a number of purposes. The first is to establish the sewer service area in appropriate portions of the borough that are Fringe Planning Area where growth is being encouraged. The establishment of sewer service area according NJ wastewater quality management rules will also address health issues in the Borough on existing residential properties that are small where septic systems have failed. The growth that is planned will be predominantly in the newly established Traditional Neighborhood Development zone who's purpose is to support mixed-use, walkable development that emulates the character of the older, historic sections of the Borough. Plans are also in place for the

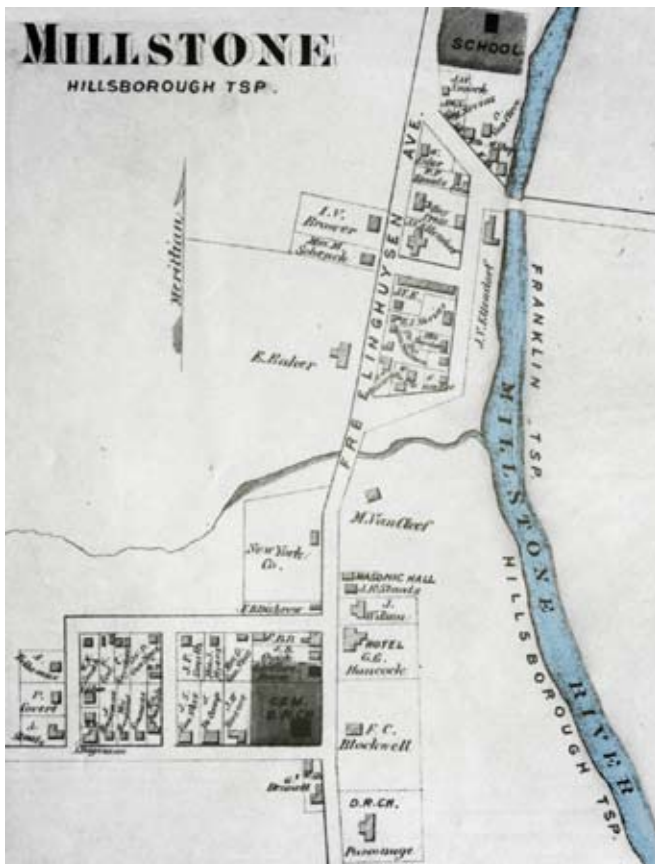
Borough to continue to support the historic elements of the community. Finally the new development will address the needs of the Borough's fair share housing plan.

Millstone Village Center will be an example of how a community effectively uses the Plan Endorsement process. On going planning efforts will enable the Borough with the County's help to preserve open space and implement the rehabilitation plan that will keep the small historic borough sustainable. The .66 square mile municipality is bisected by the North/South County Route 533 or River Road. The mixed-use, Village Commercial district allows residential dwelling units above the first floor. Millstone has also conducted several key studies to address its economic revitalization while continuing to deal with flooding issues, most recently in 2007.

Any subsequent visioning should utilize both the Trend Analysis and the analysis that was conducted by the Borough as part of their redevelopment efforts.

### 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) 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 will determine



Millstone has experienced ordered, organic growth since 1873, the date of the map above.

### Figure 1 - Summary Table

<b>land consumption (acres)</b>	
urbanized lands	200
constrained lands	132
current developable land	107
<b>buildings</b>	
existing residential units	173
new residential units	34
new commercial sq ft	515,209
<b>people</b>	
current residents	412
additional residents at buildout	79
total residents at buildout	491
current jobs	50
additional jobs at buildout	182
total jobs at buildout	232

the amount of housing and commercial space that can potentially be built given current zoning regulations.

Ultimately, the information provided throughout this document shall be utilized to inform the Community Visioning Process. The objective of the analysis is to provide the municipality with an idea of how it might appear at time of 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 and Commercial Trend - Building Cover Method. Household size was identified as 2.43 persons per household (median) (U.S. Census Bureau (2000). American FactFinder: Millstone Borough, N.J.

The zoning schedule for Millstone Borough was provided in their MSA and is found in Appendix A for reference for minimum lot size, maximum height and maximum coverage based on the December 11, 2000 zoning ordinance also provided in the MSA. It does not address redevelopment efforts underway. Tables used in calculating the results of the TREND Analysis have been shown as Figures 1 through 3 for reference for Millstone Borough. A brief summary of the findings are provided (opposite page) and intended to be used as a guide during the visioning process.

Keep in mind that if the rehabilitations efforts underway are implemented and that if building proceeds as planned, the Trend Analysis based on the December 11, 2000 zoning ordinance is unlikely to be realized as outlined. Instead more housing, affordable and market rate, along with more permanent open

space will be created. The plan will also provide a foundation for economic development and environmental protection efforts along the Milestone River.

## Trend Analysis for Millstone Borough

### Millstone Borough Residential Buildout Method

The Residential Buildout Method (Figure 1) assumes buildout of existing residential zones at the maximum density permitted by the Borough's current zoning ordinance. 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 development.

Historically, the Borough saw a significant increase in population post World War II until 1970. Each census subsequently saw continued decreases in population ranging from almost 9% to 16% declines in the last three censuses. The population went from a high of 630 people in 1970 and rested at 410 in 2000. During this period people relocated out of Millstone in part, because of severe flooding that caused tremendous damage. During Tropical Storm Floyd in 1999 for example, 25 structures in Millstone were flood damaged. The North Jersey Transportation Planning Authority (NJTPA), the Metropolitan Planning Organization (MPO) for Somerset County, estimates that by 2030 there will be 380 additional people or 790 in total. The projected growth may not be achieved due in part to the current economic conditions.

At the end of 2008 the Borough submitted their Fair Share Housing Plan to the Council on Affordable Housing (COAH) and petitioned for Third Round

**Figure 2 - 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	e	f=d*e	g	h=f*g
R-1	77	72	5	4	1	3	2.43	7
R-2	72	37	35	28	0.5	13	2.43	31
R-20	46	42	4	3	1	2	2.43	4
R-8	8	8	0	0	1	0	2.43	0
RA	43	33	10	8	0.2	1	2.43	2
VC	11	9	2	2	1	2	2.43	4
VC					or 1 per on floors above	13	2.43	31
<b>total</b>	<b>245</b>	<b>192</b>	<b>53</b>	<b>42</b>		<b>34</b>		<b>79</b>

land consumption

buildings

people

Substantive Certification. The Borough and COAH were in mediation to resolve outstanding issues. Also keep in mind that when conducting Community Visioning that providing access to affordable housing is a goal of the State Plan. This means that any future plans should remember to address affordable housing.

### Millstone Borough Commercial Buildout

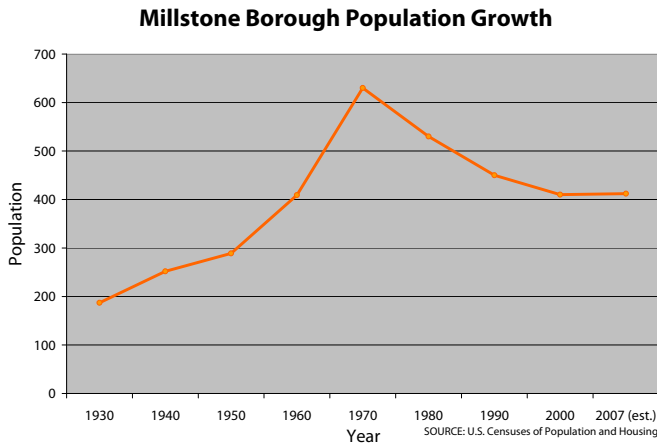
The Commercial Buildout Method (Figure 2) assumes buildout of currently designated commercial zones at the maximum density permitted under current zoning regulations. While encouraging the growth of commercial businesses within the Borough is admirable, zoning for such commercial enterprises must be realistic and planned according to the Borough’s vision – a vision which should include a mix of uses and provide an opportunity for Borough residents to live within close proximity to where they work and shop to minimize auto use, reduce traffic congestion and enhance pedestrian mobility.

The Borough’s current zoning indicates that more than 500,000 square feet of additional commercial floor space could be supported within the amount of available land in the VC (Village Commercial) and LI (Light Industrial) Zones. Although this development would likely generate more than 180 new jobs in the Borough, that level of development does not accurately reflect their historic preservation and economic development goals.

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. Environmental constraints like flood zones must also be considered when setting the economic development agenda. Millstone’s future vision should build on the the Revitalization Strategy for Millstone outlined in the 2004 Vision Plan and the 2009, Certification of Conditions for Determination of an Area in Need of Rehabilitation and balanced with the 2005, Flood Mitigation Plan.

### Cross-acceptance III

On April 28, 2004, the New Jersey State Planning Commission approved the release of the Preliminary State



In addition to population estimates, the Residential Buildout Method estimates that current zoning will support approximately 34 additional residential units. According to the 2000 U.S. Census the home ownership rate in Millstone is 87.6% significantly greater than the US rate of 66.2%. The R-2 zone has the largest amount of developable unconstrained land with 28 acres. Under current zoning one large property, known as the Van Cleef site with a 2-acre minimum lot size, would generate approximately 13 single family dwelling units. As a result of sound planning and negotiations a new Traditional Neighborhood will be developed with greater density of 80-Age Restricted housing units and better utilization of green space. It will be built in the character of similar developments in neighboring Hillsborough and address their affordable housing needs.

Figure 3 - Commercial Trend - Floor Area Ratio Method

commercial zone	total land in commercial zone (acres)	total constrained land in commercial zone (acres)	total developable land (acres)	permitted FAR	maximum floorspace permitted (sq ft)	floorspace per job (sq ft)	number of jobs
	a	b	c=a-b	d	e=a*d*43560	f	g=e/f
VC	11	9	2	0.20	99,403	1,000	99
LI	64	32	32	0.15			
LI *	64	32	20	0.15	415,806	5,000	83
* Only approximately 20 acres could be developed, because of other area & height requirements							
<b>total</b>	<b>75</b>	<b>41</b>	<b>54</b>		<b>515,209</b>		<b>182</b>
			land consumption		buildings		people



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. Millstone Borough requested to change Fringe Planning Area to Suburban Planning Area through the Somerset County Planning Board, the Negotiating Entity for Somerset County. Instead, OSG and the Negotiating Entity agreed to modifications to the Fringe Planning Area boundaries.

*State Plan Policy Map - Planning Areas*

<i>(in acres)</i>	<i>Suburban</i>	<i>Fringe</i>	<i>Env Sens</i>	<i>Park</i>
<i>2001 State Plan</i>	<b>8</b>	<b>389</b>	<b>5</b>	<b>37</b>
<i>2009 State Plan</i>	<b>0</b>	<b>268</b>	<b>83</b>	<b>88</b>
<i>Proposed Post-Endorsement</i>	<b>0</b>	<b>253</b>	<b>98</b>	<b>88</b>

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. These revisions still require State Planning Commission (SPC) approval, which will occur prior to the release of the draft Final State Development and Redevelopment Plan (State Plan) in the beginning of 2009.

The State Development and Redevelopment Plan Policy Map 2001 as well as the Negotiated Preliminary Policy Map for the third round of Cross Acceptance has been enclosed for reference. Millstone provided comments in their MSA for Planning Area modification and Village Center boundaries. Although they sought

a center for only a portion of the Borough, it was felt by State Agencies that designating the entire borough a Village Center, while maintaining its Fringe Planning Area boundaries would provide the best opportunity for the Borough to guide its future growth. The State Planning Commission will need to finalize the recommendation of these amendments to the SPPM before the map changes and center boundary will appear on the map.

## Conclusion

The Borough of Millstone is actively planning and taking steps to realize its planning goals through Plan Endorsement. Continued discussion will need to address the following.

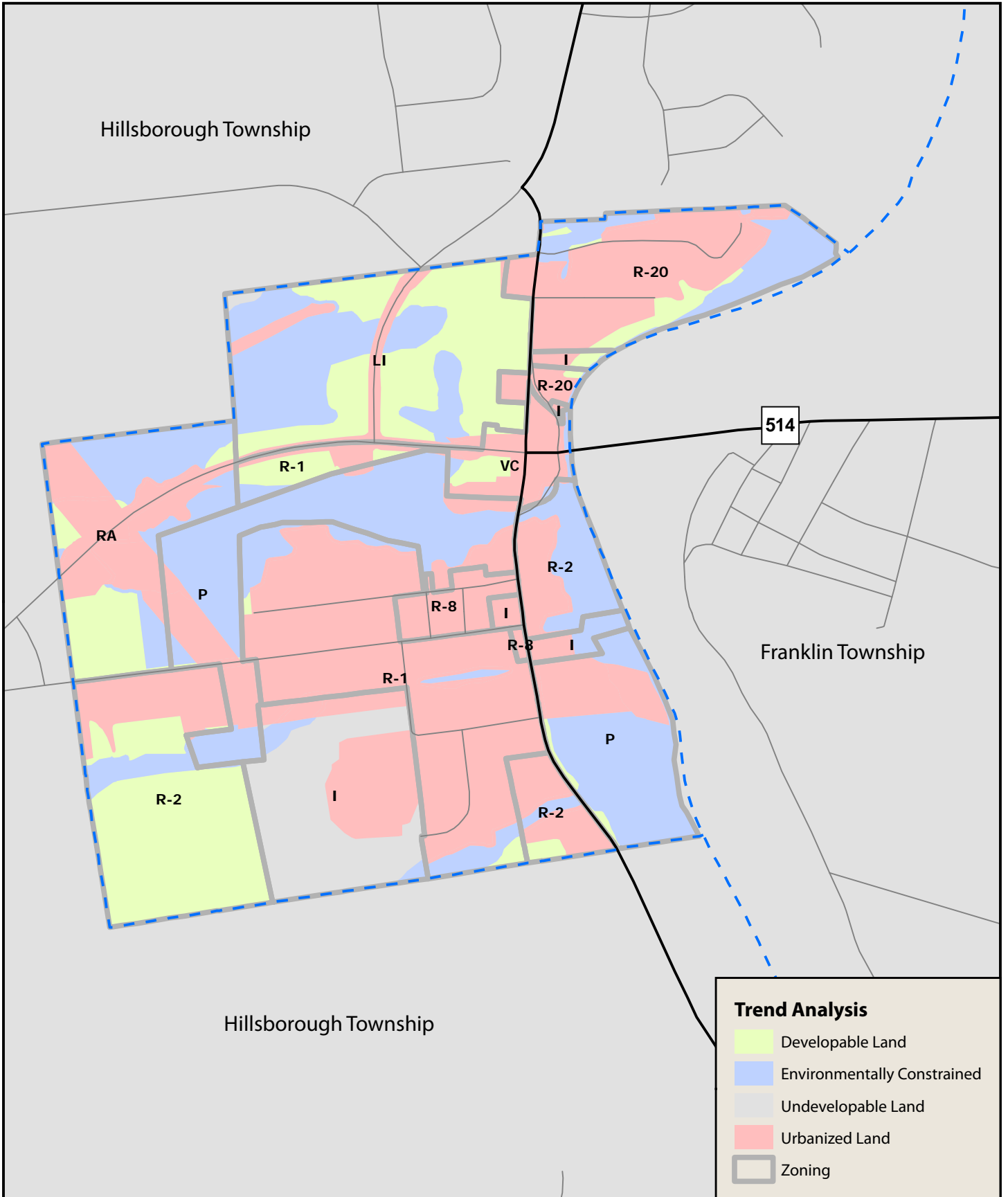
- Before a recommendation from OSG for Plan Endorsement can be made, an up to date GIS map that accurately reflects properties that are now Public Open Space. This will enable the state agencies and borough to resolve all mapping issues.
- The Borough needs to continue to work with the County on the waste water quality management plan. To accommodate the inclusion of the portion of the St. Joseph property where a group has been discussed, the Borough should first modify their fair share plan to include it as part of their affordable housing plan. The final determination will depend on capacity to accommodate all of the future planned growth.
- Discussions regarding the technical guidance you are seeking regarding the clean up and relocation of the gas station and possibly other properties in the flood plain should be addressed through either with the Brownfields Redevelopment Interagency Team (BRIT) or Development Opportunities InterAgency Team (DOIT) coordinated by OSG.
- The NJ DOT, Local Transportation Planning Assistance Unit can provide technical assistance to the Borough in their effort to develop traffic calming measures for River Road (CR 533) and other local circulation issues the municipality might have.

Millstone Borough Zoning Table

	R-1		R-2		R-20		R-8		RA		TVC	MUMC	I	P
	R-1 Residential	R-2	R-2 Density Cluster	R-20 no public water	R-20 with public water	R-8 no public water	R-8 with public water	Rural Agricultural	RA Density Cluster	Traditional Village Commercial				
<i>Principle permitted use (as described in Development Ordinance)</i>	single family dwellings	one family dwellings	private residential uses	private residential uses	private residential uses	private residential uses	one family dwellings & agriculture	retail & office	mandatory cluster	government & religious	open space, active & passive recreation			
<b>Development Ordinance section</b>	D-107	D-108	D-109.1	D-109.2	D-110	D-110 E	D-112.A (2006)	D-112.B (2006)						
<b>Bulk Requirements</b>														
Lot area-min. (SF unless noted)	1 acre	2 acres	1 acre	20,000 sf	1 acre	20,000 sf	5 acres	6,000 SF for bldgs <4,000 sf, 10,000 sf for bldgs 4,001-8,000 sf, 1.5 acres for bldgs 8,001-10,000 sf, 1.2nd Fl residential unit/1,000 sf retail bldg	Single-fam det.: 5,000 sf, Single-fam semi-det.: 5,000 sf, TH: 3,1000 sf	3 acres				
Min. lot frontage at street (ft.)	140	20	140	90	140	50	225	150	75	Single-fam: 45; TH: 28				
Min. front yard setback (ft.)	45	45	45	30	45**	15**	50	50	10 ft min-15 ft max.	10 ft min-25 ft max	30			
Min. rear yard setback (ft.)	20 ft or 20% lot depth	30 ft or 20% lot depth	35	35	35	25	50	50	15 ft min. for principal building	25	50			
Min. side yard setback (ft.)	20	30	20*	20*	20	10	30	30	7.5 ft; 15 ft min. betw buildings	5	50	40		
<b>Other Requirements</b>														
Max. height (ft.)	35	35	35	35	35	35	35	35	35	35	35	35	25	
Max. building coverage (%)	20	10							20	70	50 ft to residential	5		
Max. lot coverage (imperv.) (%)														
<b>Buffer</b>														
Off-street parking														
Density		1 family / 2 ac. exclusive of streets								1 family / 5 ac. exclusive of streets	Single-fam detached: 30%-100%; Single-fam semi-detached 0%-60%; Townhouse: 0%-60%			

\* For lots of 20,000 s.f. the minimum side yard may be reduced to 15 ft. provided that the combined total side yards equal a minimum of 40 ft.

\*\* In instances where existing buildings on the same side of street within 200 ft. form established setback line, front yard setback may be reduced to fit that line, but no less than 10 ft., except on Amwell Rd. where front yard setback is a minimum of 15



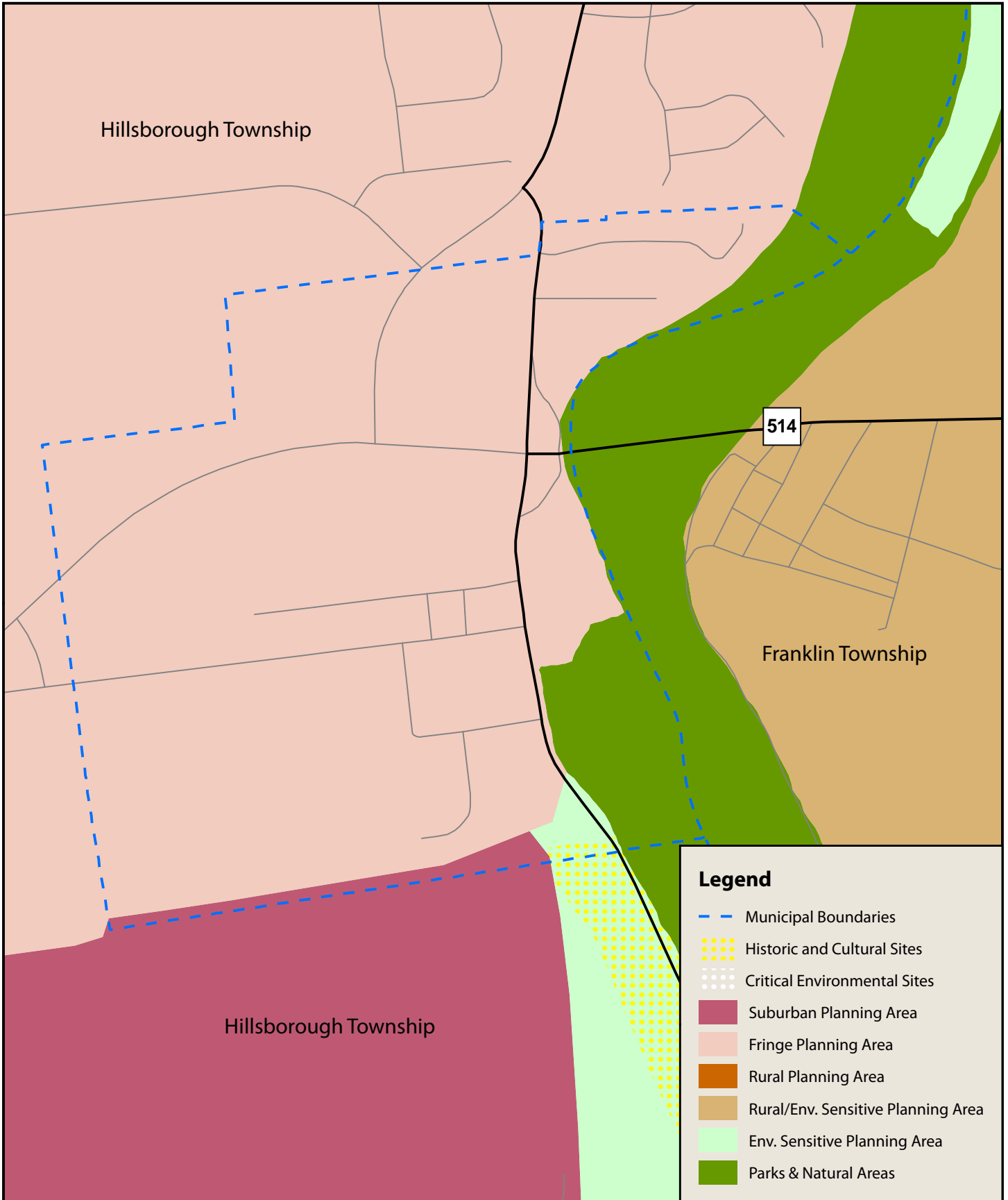
# Millstone Borough

Office of Smart Growth Trend Analysis



1 inch = 1,000 feet





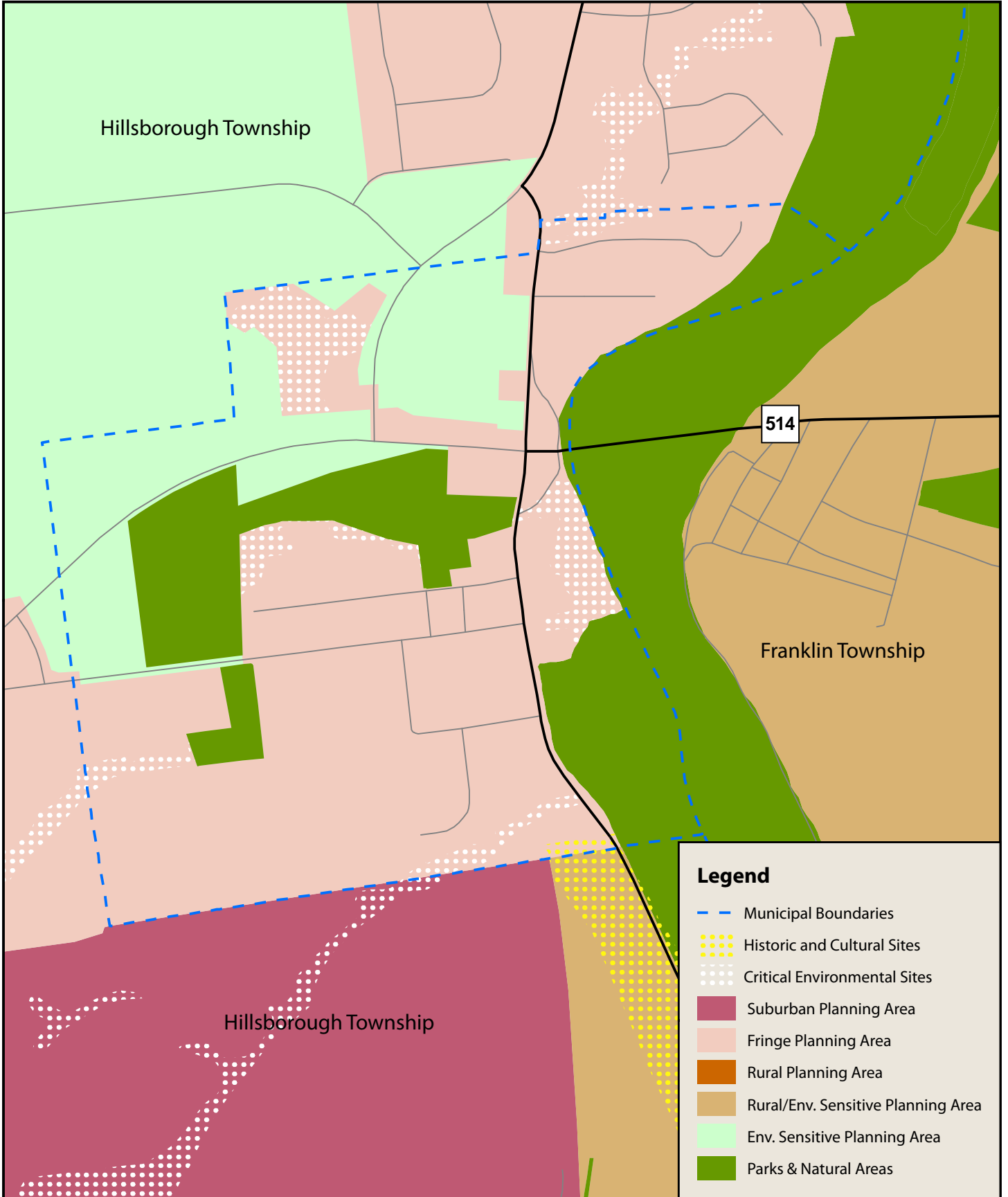
# Millstone Borough

2001 State Plan Policy Map



1 inch = 1,000 feet





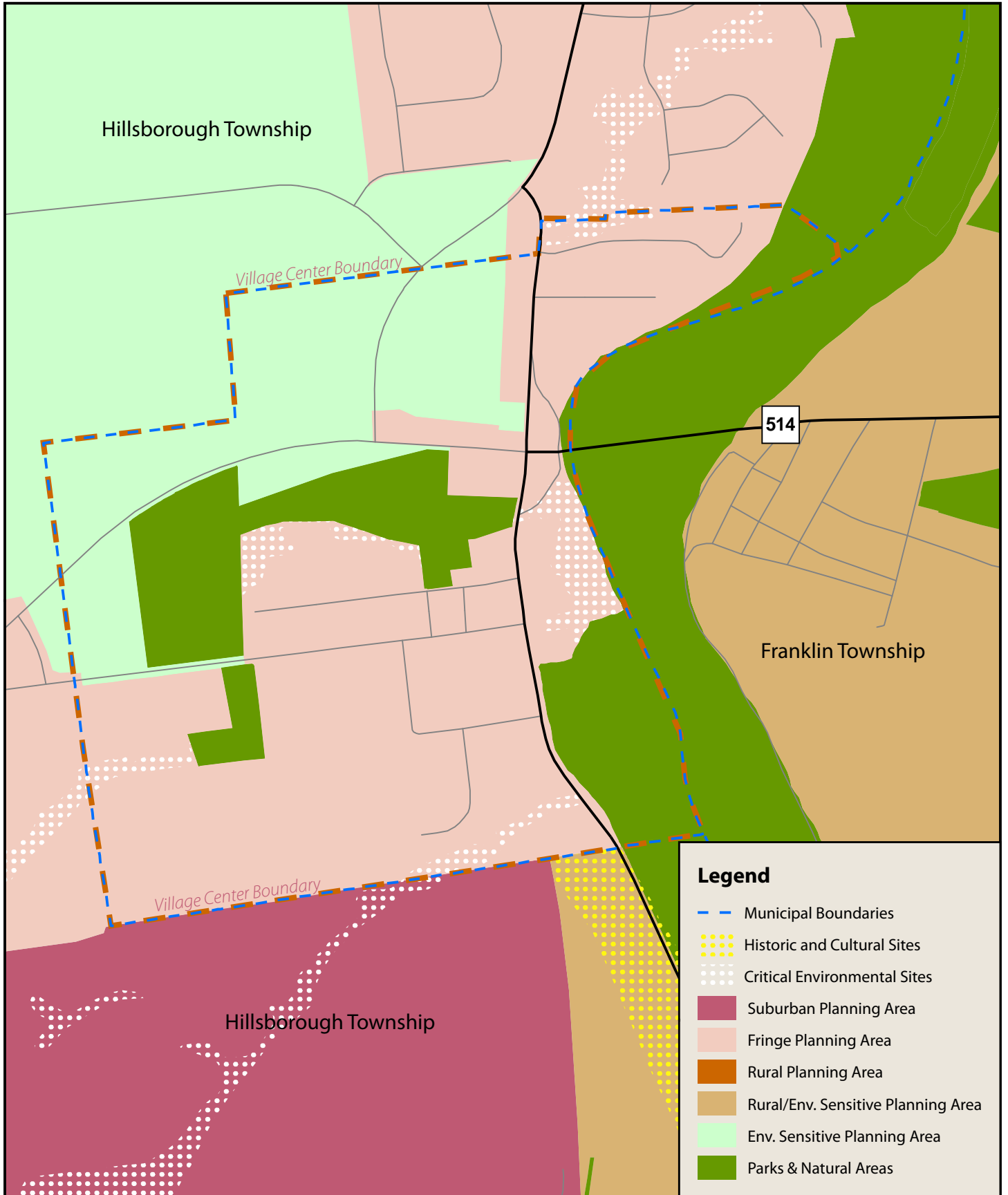
# Millstone Borough

2009 Draft Final State Plan Policy Map



1 inch = 1,000 feet





# Millstone Borough

Proposed State Plan Policy Map Changes



1 inch = 1,000 feet



# **NJ Department of Environmental Protection**



## **State Development & Redevelopment Plan Plan Endorsement Opportunities & Constraints Analysis**

for:

Borough of Millstone, Somerset County

*June 18, 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 Millstone 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.*



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## 2002 Land Use/Land Cover

The 2002 Land Use/Land Cover (LULC) dataset captures the state of the land use and natural land cover statewide. The land use/land cover data sets contain important land use data used in a wide variety of environmental analyses, including this analysis, as well as in other DEP programs. This data set is intended to serve as a resource for analysis rather than regulatory delineations.

This series is based on photography captured in the Spring of 2002 and were produced by visually interpreting color infrared photography. Every effort has been made to ensure that all land use data sets are as accurate as possible. However LULC data are not intended to substitute for on the ground jurisdictional boundaries.

Freshwater wetlands were first mapped under the New Jersey Freshwater Wetlands Mapping Program and were incorporated into the land use land cover datasets. The freshwater wetlands delineations in these data are for screening purposes only and are **not** regulatory. The Division of Land Use Regulation of the NJDEP determines the extent and final determination of freshwater wetlands in the State of New Jersey.

Based on this analysis, the following land use/land cover types, and their approximate acreages, are found in Millstone Borough:

TYPE	ACRES
AGRICULTURE	84.10
BARREN LAND	0.00
FOREST	58.58
URBAN	187.64
WATER	4.8
WETLANDS	105.38

### Attachments:

- Map - Land Use/Land Cover in Millstone Borough

# 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.*

## Water Availability

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

There is one Public Water Supply System in Millstone Borough serving a portion of Millstone Borough's population. The Deficit/Surplus table, and a map showing the system location within the municipality, are provided with this report.

PWSID	WATER SYSTEM NAME	POPULATION SERVED	WATER SYSTEM TYPE
2004002	New Jersey American – Elizabethtown	255	Community

New Jersey American-Elizabethtown - the Deficit/Surplus table for New Jersey American-Elizabethtown shows FIRM capacity for this system to be approximately 41.617 mgd. However, this capacity is available throughout the purveyor area and is not necessarily available to Millstone 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>. Not all Public Water Supply Systems will have associated Deficit/Surplus tables available on the Department's website. The website currently contains public water systems that have a demand greater than 100,000 gallons of water per day and have had some water main extension activity since January 1, 2002. 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 are no Non-Community Water Systems serving specific uses in Millstone Borough.

Attachments:

- o Deficit/Surplus table – New Jersey American-Elizabethtown  
<http://www.nj.gov/cgi-bin/dep/watersupply/pwsdetail.pl?id=2004002>
- o Water Supply - Map

### Wastewater Treatment

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

There are no DEP-regulated wastewater facilities serving Millstone Borough.

Amendments to the Groundwater Quality Standards (N.J.A.C. 7:9C) have recently been adopted. The primary amendment related to this analysis is the establishment of 2 mg/L (or parts per million, or ppm) nitrate as representative of the existing ground water quality statewide, for the purpose of evaluating compliance with the antidegradation policy at N.J.A.C. 7:9C-1.8(a). The implications of this proposal are that the Department will not approve a wastewater management plan amendment unless the existing ground water quality of 2 mg/L nitrate will be maintained on a HUC 11 watershed basis. Based on this policy, the Department has developed a "septic density" for each HUC 11 watershed in the State that identifies what the *comparable residential zoning density* would be in order to meet the groundwater quality goal. Note that the Department does not recommend uniformly zoning at these densities across the HUC 11 watershed. DEP intends this comparable residential zoning density to represent the total number of units that, if built, would not result in a degradation of groundwater quality by exceeding the 2 mg/L nitrate limit. Instead, the Department advocates center-based development, clustering, and protection of environmental features and agriculture land.

Millstone Borough falls within one HUC11 watersheds. The following table indicates the watershed and the residential density allowed under the nitrate limit.

<b>HUC11</b>	<b>% Twp in HUC11</b>	<b>2 mg/L nitrate limit</b>
Millstone River (below/inc Carnegie Lake)	100%	6.5 acres/ residential unit

### Water Quality Management Plan - Sewer Service Area Mapping

The Department has recently adopted amendments to the Water Quality Management Planning rules 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 rules. Millstone Borough should continue to coordinate with the County to ensure consistency between municipal planning and the County WMP.

Attachments:

- o Nitrate Dilution Concentrate Target by HUC11 - Map

# Environmental Constraints Analysis

*The following section identifies those environmental constraints that should be considered by Millstone 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. Millstone 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.

Land Use/Land Cover data based on 2002 aerial photography identifies approximately 105 acres of wetlands in Millstone Borough. It should be noted that these wetlands are based on aerial photo interpretation and 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 Waters in Millstone Borough.**

The Surface Water Quality Standards data used for this analysis is based on a DRAFT version released for general distribution as a preliminary product. NJDEP is releasing this draft version for public review and any potential data errors should be reported to the Department.

- 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. One of the over 400 TMDLs developed by the Department to date, only one TMDL encompasses Millstone Borough. The TMDL was developed for fecal coliform impairment for the stream segment known as known as *Millstone River at Blackwells Mills*.

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 TMLD to the appropriate WQMP(s).

#### **TMDL and Drainage Area - Millstone Borough, Somerset County**

<b>TMDL Name</b>	<b>Parameter</b>	<b>Percent Reduction</b>	<b>Document</b>	<b>EPA Approval</b>
Millstone River at Blackwells Mills ID# 01402000	Fecal coliform	95%	TMDL for fecal coliform to address 48 streams in the Raritan Water Region	09/29/2003

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 TMDL that encompasses Millstone Borough, Somerset County is nonpoint source driven. The TMDL document was established as an amendment to the Raritan Water Quality Management Plan (WQMP). All of 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](http://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 and agricultural land use sources must be the focus for implementation. Urban land use will be addressed primarily by stormwater regulation. Agricultural land uses will be addressed by implementation of conservation management practices tailored to each farm. Wherein urban land use will be addressed primarily by stormwater regulation through the municipality's MS 4 permit.

#### Short-term and Long-term Management Strategies

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 TMDL calls for the collection of additional monitoring data in order to target measures to realize reduction.

#### Millstone River at Blackwells Mills (#1402000)

Between Blackwells Mills Road and Route 632 Causeway: This stretch contains fields and pastures along the right bank of the stream. There was also a horse trail that ran along the stream. The predominant land uses in this watershed are agriculture and urban. Geese, wildlife, and domestic pets can be found throughout the watershed. Possible sources of fecal coliform within this segment include geese, poultry, wildlife, domestic pets, and horses. Monitoring: a fecal coliform survey is recommended to focus on the significant sources of contamination. Strategies: organize local community based goose management programs; prioritize for EQIP funds to install agricultural BMPs Phase II stormwater program

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),

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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 waterbody.

Attachments:

- TMDLs – Map
- Flood Hazard Areas – 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 there are two versions of the Landscape Project that impact Millstone Borough . Version 3.0 was developed, and recently released, specifically for the Highlands Region. This version was developed using a new methodology and based on updated species occurrence data. Millstone Borough is covered by Landscape Project Version 2.1. This version is an update of Version 2.0 that has been in use for some time. This update incorporated new species occurrence data. For additional information on the Landscape Project, see [New Jersey's Landscape Project](#).

There are approximately 191 acres of threatened and endangered species habitat in Millstone Borough . This habitat supports several species, including Bald Eagles and Cooper’s Hawk. The attached *Threatened & Endangered Species Habitat map* shows the extent of habitat in Millstone 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 Millstone 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 are approximately 52 acres of high volume groundwater recharge areas located within Millstone 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 Well Head Protection Areas mapped in Millstone Borough.**

- 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.

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:

- Well Head Protection Areas and 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.

There are twenty known contaminated sites in Millstone Borough. 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.).

## **Active Sites With Confirmed Contamination**

**3/24/2009**

Site ID	PI Number	PI Name	Line1 Address
362930	448348	1 Dugans Grove Road	1 Dugans Grove Road
1580	001249	Getty 95141	1008 Amwell Road

**Closed Sites with Remediated Contamination**  
**3/24/2009**

Site ID	PI Number	PI Name	Line 1 Address
1692	010720	Exxon Biomedical Sciences	101 Mettlers Rd
46944	011099	Millstone Rd Dept Garage	Millstone River Rd

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 currently identifies one CEA within Millstone Borough:

- Getty Service Station #95141 – 1008 Amwell Road - (CEA-VO)

For further information about Classification Exception Areas:

[http://www.state.nj.us/dep/srp/guidance/cea/cea\\_guide.htm](http://www.state.nj.us/dep/srp/guidance/cea/cea_guide.htm)

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.



06/18/2009

**There are no Solid Waste Landfills mapped in Millstone.**

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

Attachments:

- Groundwater Contamination Areas - Map

## 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 two tables represent all of the preserved open space lands located in Millstone Borough. DEP recognizes that its records may be incomplete or incorrect, and appreciates all assistance in keeping its records up-to-date.

#### **State, Municipal, County and Non-Profit Owned Lands Owned Lands**

<b>BLOCK</b>	<b>LOT</b>	<b>NAME</b>
1	22	Borough Park
1	28	Borough Park
1	29	Borough Park
1	7	Borough Park
8	3	Borough Park
8.2	22	Borough Park

### 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.

**New Jersey and National Registers of Historic Places**

<p><b>Bachman-Wilson House</b> (ID#4472) 1419 Main Street SHPO Opinion: 8/10/2005</p>	<p><b>Inch Lines Linear Multistate Historic District</b> (ID#1914) SHPO Opinion: 8/31/1993 (Extends through 12 municipalities in 3 counties. Main Entry/File Location: Union County, Linden City)</p>
<p><b>Millstone Historic District</b> (ID#2533) Ann, North River, South River, West and Main Streets; Alley Way; and Amwell Road NR: 9/13/1976 (NR Reference #: 76001188) SR: 10/4/1974</p>	<p><b>Millstone Causeway (SI &amp; A #18G0505)</b> (ID#3858) Amwell Road over Millstone River SHPO Opinion: 4/30/1997</p>

**Attachments:**

- o Open Space – Map

# 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

# Regional Planning Areas

## Delaware & Raritan Canal Commission

The Delaware and Raritan Canal Commission was established in October 1974 with the adoption of the Delaware and Raritan Canal State Park Law. The Commission was created to accomplish three objectives: review and approve, reject or modify an action by the State in the Canal Park, or any permit for action in the park; undertake planning for the development of the Canal Park; and prepare and administer a land use regulatory program that will protect the Canal Park from the harmful impacts of new development in central New Jersey. Construction of the D&R Canal began in 1830 and was completed in 1834 with the main canal being 44 miles long, 75 feet wide and 7 feet deep and the feeder being 22 miles long, 50 feet wide and 7 feet deep. The upper portion of the feeder canal follows the Delaware River through historic New Jersey towns such as Stockton, Lambertville and Titusville. The main canal passes the Port Mercer bridge tender's house, through the charming villages of Kingston and Griggstown to Blackwells Mills, ending up in New Brunswick.

The 70-mile Delaware and Raritan Canal State Park is one of central New Jersey's most popular recreational corridors for canoeing, jogging, hiking, bicycling, fishing and horseback riding. The canal and the park are part of the National Recreation Trail System. This linear park is also a valuable wildlife corridor connecting fields and forests. A bird survey conducted in the park revealed 160 species of birds, almost 90 of which nest in the park. The New Jersey Department of Environmental Protection's Division of Parks and Forestry owns and manages the D&R Canal as a state park. The D&R Canal Commission, legislated in 1974, assists with the development of the park and regulates land use in the park's 400-square-mile watershed. The New Jersey Water Supply Authority operates and maintains the water transmission complex of the canal as a water supply resource, pumping out about 75 million gallons of water a day.

The D&R Canal Commission administers a land-use regulatory program within the area where new development could have drainage, visual or other ecological impact on the Canal Park. The drainage impact is almost 450 square miles, including parts of Mercer, Hunterdon, Somerset, Middlesex, and Monmouth counties. Projects that result in the disturbance of one acre or more or that result in the cumulative coverage since January 11, 1980 of one quarter-acre or more of impervious cover are subject to the Commission's standards for managing storm water runoff and stream corridor buffers. Additionally, any project proposed for an area within 1,000 feet of the canal is reviewed for its visual impact on the park. The Commission also reviews large projects within one mile of the park for their traffic impact.

Portions of Millstone Borough are along the Delaware and Raritan Canal State Park, and the Department will consult with the Delaware and Raritan Canal Commission regarding your petition for Plan Endorsement. All planning documents and specifically, Millstone's Open Space Plan, will need to be consistent with the objectives of Delaware and Raritan Canal State Park Law.

# Summary of Major Issues

## 1. Somerset County Wastewater Management Plan (WMP) – under development.

Millstone Borough should continue to participate in the development of the Somerset County WMP.

- A major consideration of the WMP is the delineation of sewer service area. As discussed earlier in this report, sewer service area is not permitted in environmentally sensitive areas. In Millstone Borough, this effectively limits potential sewer service area to existing development and agricultural fields. However, because there is no adopted sewer service area in Millstone Borough, connection of these areas to the Somerset Raritan Valley Sewage Authority would be dependent upon demonstration of sufficient capacity at the sewage treatment plant to accommodate potential development in Millstone Borough.
- The MSA also notes that the Van Cleef family has agreed to “forward to Hillsborough a sum of \$500,000 that would pay for a sewer privilege fee” so that the Borough can tie into the Hillsborough sewer system in the future. The MSA also states that, “The Borough has also negotiated with Hillsborough Township to partner in a force main and pump station that would go through the Borough and also serve a portion of Hillsborough Township.” DEP notes that regardless of these agreements, sewer service in Millstone Borough is dependent upon the existence of capacity at the SRVSA sewage treatment plant.
- Should capacity limitations at the SRVSA sewage treatment plant limit, or negate, the potential for centralized sewer service in Millstone, the Borough may want to consider (if it hasn’t already) studying the potential for a package plant to serve the Van Cleef development and/or existing development throughout the Borough, possibly in cooperation with Hillsborough Township.
- While the State Plan does not recommend sewer service area in the Fringe, Rural and Environmentally Sensitive Planning Areas, the WQMP rule does not place these specific limitations on mapping of sewer service area.
- The WQMP rule utilizes the Plan Endorsement process to allow extensions of sewer service area into areas where it would otherwise not be permitted, due to the existence of environmentally sensitive features.

## 2. TDR

- DEP believes that the Van Cleef tract may be suitable as a TDR Receiving Area for either the Hillsborough Township TDR plan or Highlands Council TDR program. Participation in the Hillsborough TDR plan could serve to preserve areas outside of the Borough, but that if developed, could impact the Borough. Participation in the Highlands TDR program provides certain benefits to the Borough 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. DEP recommends Millstone Borough consider participation in one of these programs.

- Similarly, should the proposed preservation of the Rezem and/or Mindel tracts fall through, DEP believes that they too may be suitable as a TDR Receiving Area for either the Hillsborough Township TDR plan or Highlands Council TDR program.

### 3. Affordable Housing Sites

Through the Wastewater Management Planning process, Block 8, Lot 4 (presumably the St. Joe's property) was identified as a planned COAH site, and requested for inclusion in SSA. This proposal is contrary to the MSA that states that the entirety of Millstone Borough fair share requirements would be met on the Van Cleef tract. This is also consistent with the information submitted to COAH. Email correspondence between Millstone Borough and Somerset County has verified that there are no group homes currently proposed for Block 8, Lot 4. **DEP will consider inclusion of the minimum area necessary to serve a group on this site upon demonstration that the Borough's fair share requirements can not be met on the Van Cleef tract, and when this site is included in an approved Fair Share Plan.**

### 4. Historic Issues

- Relocation of historic properties located within the boundaries of a NJ Register listed district (such as the Millstone Historic District) is subject to the provisions of the New Jersey Register of Historic Places Act. The procedures implementing review under the New Jersey Register of Historic Places Act are outlined in N.J.A.C. 7:4, and consist of the following steps:
  - Submission of an Application for Project Authorization;
  - HPO review for determination of Encroachment or No Encroachment;
  - Review by the Historic Sites Council for those projects deemed Encroachments. Projects that do not constitute an encroachment are approved administratively;
  - Final action by the DEP Commissioner based on HPO and Historic Sites Council recommendations
- During previous negotiations for State involvement in the purchase of the Rezem tract, both the Green Acres program and State Historic Preservation Office supported the use of the site as a Heritage Park due to its historic significance. However, both Green Acres and SHPO have expressed concern that the area eventually proposed for preservation would result in a less-than viable Heritage Park.

While documentary evidence may suggest that Revolutionary War related activities occurred at a particular location, archaeological deposits documenting these activities do not always exist. Second, archaeological excavation of Revolutionary War sites is not appropriate in all cases. Many Revolutionary War-related archaeological resources are ephemeral in nature, and do not lend themselves to large, block excavation, as is usually envisioned by people wanting to sponsor "archaeological investigation" as a public draw. It may be more appropriate for parcels containing Revolutionary War archaeological remains to be preserved in situ and interpreted based upon the documentary record, rather than on the physical archaeological record.



- For guidance on survey (inventory) of local resources visit <http://www.state.nj.us/dep/hpo/1identify/survarcht.htm>
- If Millstone Borough has a historic preservation ordinance and commission, the Borough may apply to become a Certified Local Government (CLG). As a CLG the Borough would be eligible for grants and enhanced technical assistance. For more information on CLG program and eligible grants see <http://www.state.nj.us/dep/hpo/3preserve/local.htm#clg>
- In addition, you may view the NJ Historical Commission's (NJ Department of State) grant program at <http://www.nj.gov/state/divisions/historical/grants/>.

## 5. Flooding Issues

Flooding issues should be addressed within the Borough's All Hazard Plan which is required by FEMA. This plan allows the municipality to be eligible for several grant programs for flood mitigation. These programs are administered through the Office of Emergency Management (OEM) within State Police. Somerset County Office of Emergency Management has begun to develop the plan. Millstone should participate in that effort (if not already).

Other flood mitigation work ongoing in the Basin includes:

- The New York District Army Corps of Engineers, in partnership with DEP, is working on creating a watershed management program that will provide flood damage reduction to the Millstone Watershed. This project has not moved as quickly as anticipated due to federal funding issues. Additional information can be found at: <http://www.nan.usace.army.mil/business/prjlinks/flooding/stone/index.htm>
- The Green Acres Program is implementing a new Blue Acres initiative included in the Green Acres Bond Act approved in 2007. The Blue Acres acquires lands in the floodways of multiple rivers and tributaries in NJ. This program may allow for buyouts of repetitive loss properties in Millstone Borough.
- The DEP Office of Engineering and Construction is coordinating with OEM, FEMA and Green Acres on these flood mitigation projects.

## 6. Site Remediation Issues

Millstone Borough has requested assistance with multiple site remediation issues. The DEP Site Remediation Program administers multiple financial assistance programs, including the Hazardous Site Remediation Fund (HDSRF) to provide funding to public entities for the investigation and/or remediation of a suspected or known discharge of a hazardous substance. Visit the Site Assistance program for further information: <http://www.nj.gov/dep/srp/finance/>. Should Millstone Borough's proposed site remediation projects be eligible for site remediation financial assistance, DEP staff will work to coordinate the remediation project with ongoing planning efforts through the Plan Endorsement process.

## 7. Rezem Tract

The MSA states that Somerset County has announced plans to purchase the Rezem tract as permanent open space. **Please provide the current status of this effort. Please also provide, to the extent possible, mapping showing the portion of the site to be purchased, if not the entire site.**

- Two Garden State Preservation Trust grants have been approved for preservation of this site, both in the amount of \$400k (totaling \$800k). The first approval is fully executed and the funding available for use. The second approval is currently in front of the NJ Legislature.

8. Mindel Tract

The MSA assumes acquisition of the Mindel tract as open space. **Please provide the current status of any efforts to preserve this property.**

9. Redevelopment Area.

Included within the multitude of GIS data provided by the Borough is a shapefile for a "Redevelopment Area". However, the MSA states that, "There are no current plans for potential growth area designations within Millstone Borough". **Please explain the Redevelopment Area shapefile.**

10. TMDLs

Information on geese management can be found at the following links:

- Management of Canada Geese in Suburban Areas - A Guide to the Basics (November 2000). [http://www.nj.gov/dep/watershedmgt/DOCS/pdfs/goose\\_management.pdf](http://www.nj.gov/dep/watershedmgt/DOCS/pdfs/goose_management.pdf)
- Additional information is on the Division of Fish and Wildlife website at [http://www.nj.gov/dep/fgw/pdf/goose\\_control\\_info.pdf](http://www.nj.gov/dep/fgw/pdf/goose_control_info.pdf)
- Information on stormwater pollution and a model ordinance for wildlife feeding can be found at [http://www.state.nj.us/dep/stormwater/tier\\_A/ordinances.htm](http://www.state.nj.us/dep/stormwater/tier_A/ordinances.htm)

11. Local Greenhouse Gas Reduction Grant Program

DEP has announced a new 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.

**Pre-Applications are due by Friday July 31, 2009.** For a full description of the grant program and pre-application form and process go to: [www.nj.gov/dep/opsc/ghggrant.html](http://www.nj.gov/dep/opsc/ghggrant.html) or

e-mail questions to [GHGGrants@dep.state.nj.us](mailto:GHGGrants@dep.state.nj.us). For a copy of the Press Release go to: [http://www.nj.gov/dep/newsrel/2009/09\\_0015.htm](http://www.nj.gov/dep/newsrel/2009/09_0015.htm).

## 12. Village Center Proposal

Multiple shapefiles labeled “Village Center” were provided by the Borough, but it is unclear if these shapefiles were meant as actual proposals for the State Plan designation. These shapefiles limited the Village Center area to areas of existing and proposed development only. DEP recommends that the entirety of the Borough be included in a Village Center designation so that open space and the proposed heritage park may potentially benefit from the designation.

## 13. DEP Proposed Planning Area Changes

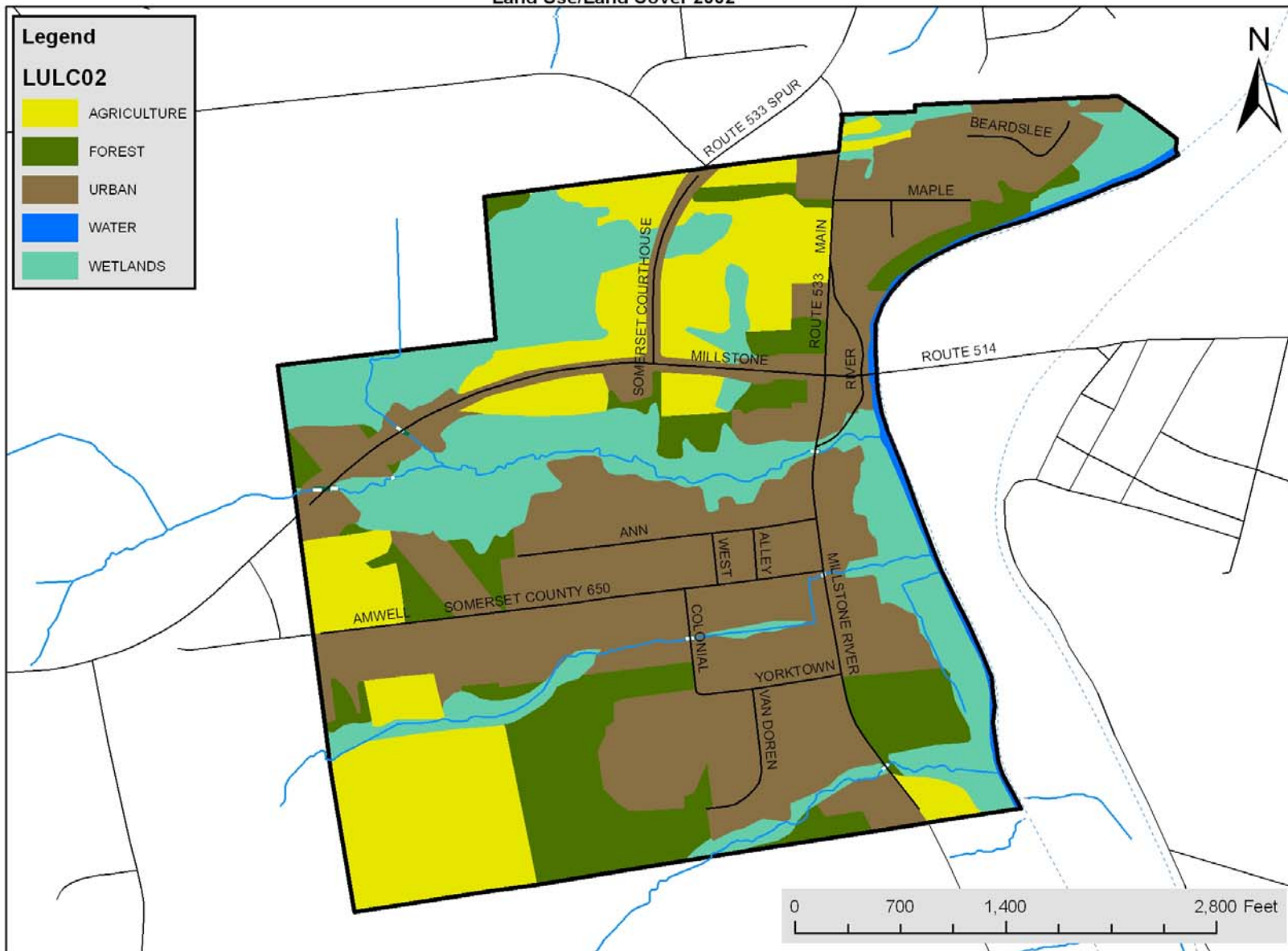
The current State Plan Map identifies Millstone Borough almost entirely as Planning Area 3 (Fringe). It is DEP’s understanding that, through the Cross Acceptance process, the State Plan Map was modified to identify the areas in the north and northwest portions of Millstone to Planning Area 5 (Environmentally Sensitive). However, a portion of the Rezem tract would still be mapped as Planning Area 3, with a Critical Environmental Site overlay (CES). DEP does not believe that a CES completely surrounded by Planning Area 5 makes any sense, and recommends that the entirety of the Rezem tract be mapped as Planning Area 5, unless, and until such time that, it is permanently preserved. At a minimum, the Rezem tract west of County Route 533 Spur/Somerset Courthouse Road should be mapped as Planning Area 5.

06/18/2009

## **Maps**

06/18/2009

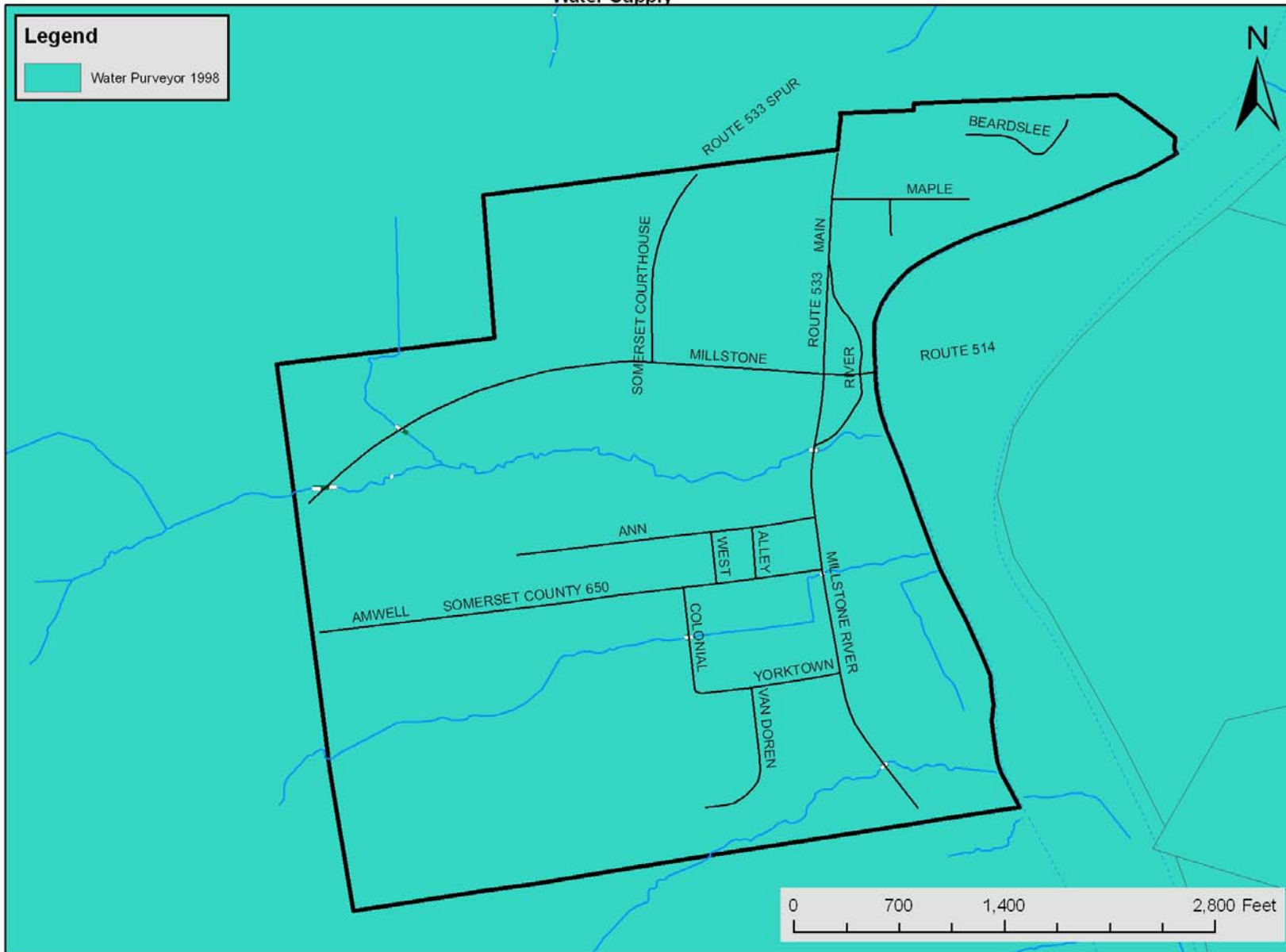
### Millstone Borough, Somerset County Land Use/Land Cover 2002



3.

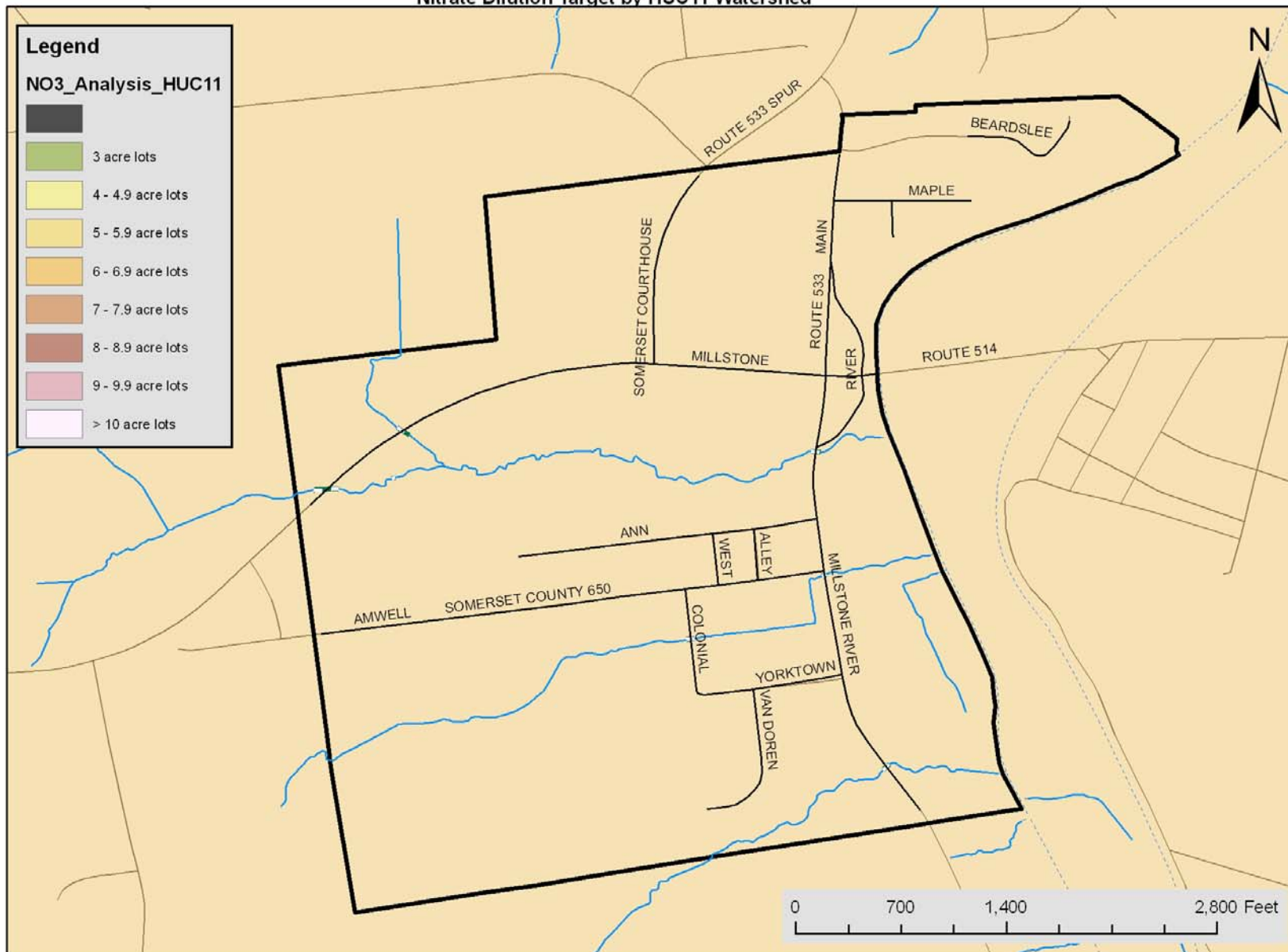
06/18/2009

### Millstone Borough, Somerset County Water Supply



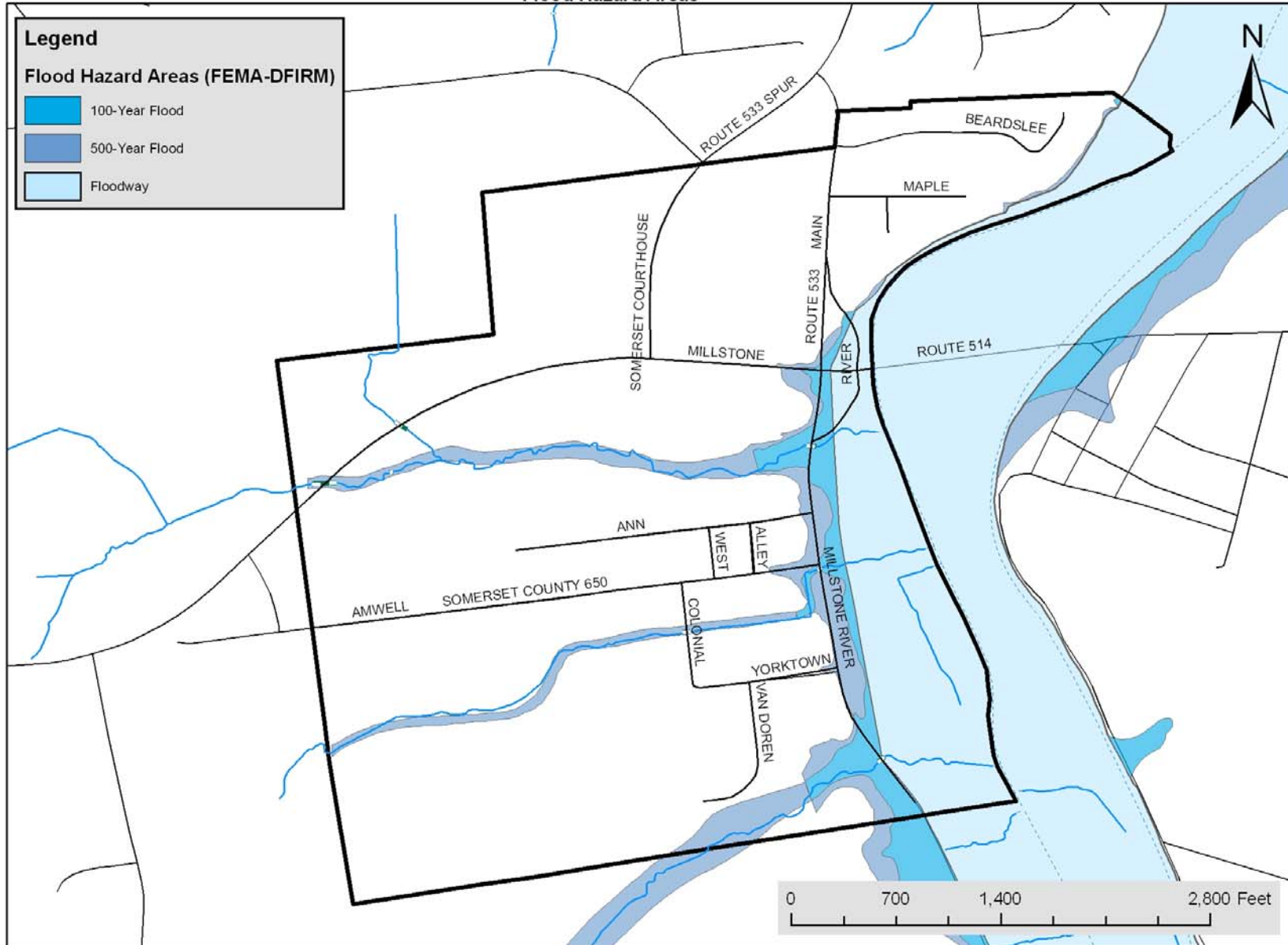
06/18/2009

### Millstone Borough, Somerset County Nitrate Dilution Target by HUC11 Watershed



06/18/2009

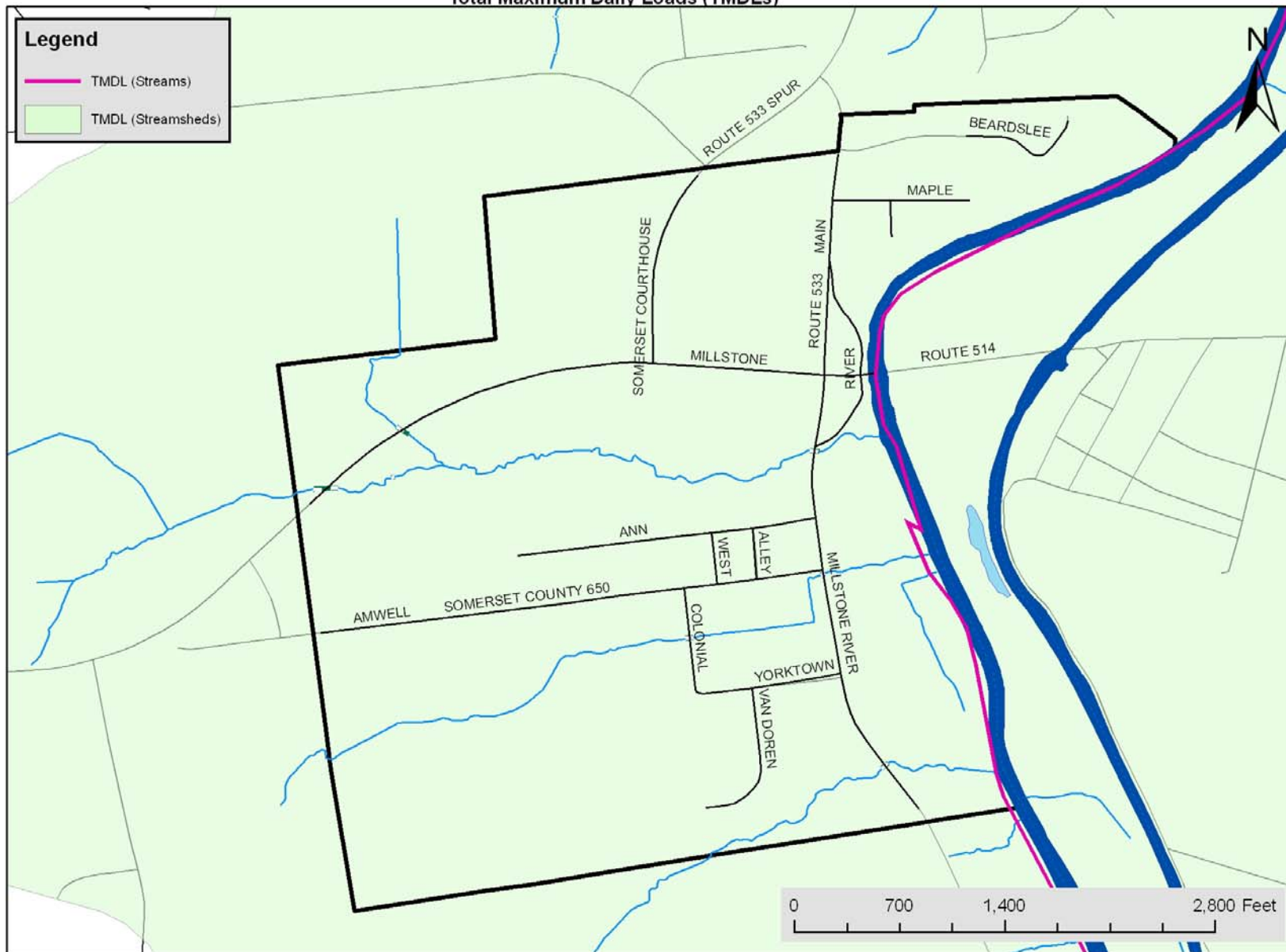
### Millstone Borough, Somerset County Flood Hazard Areas





06/18/2009

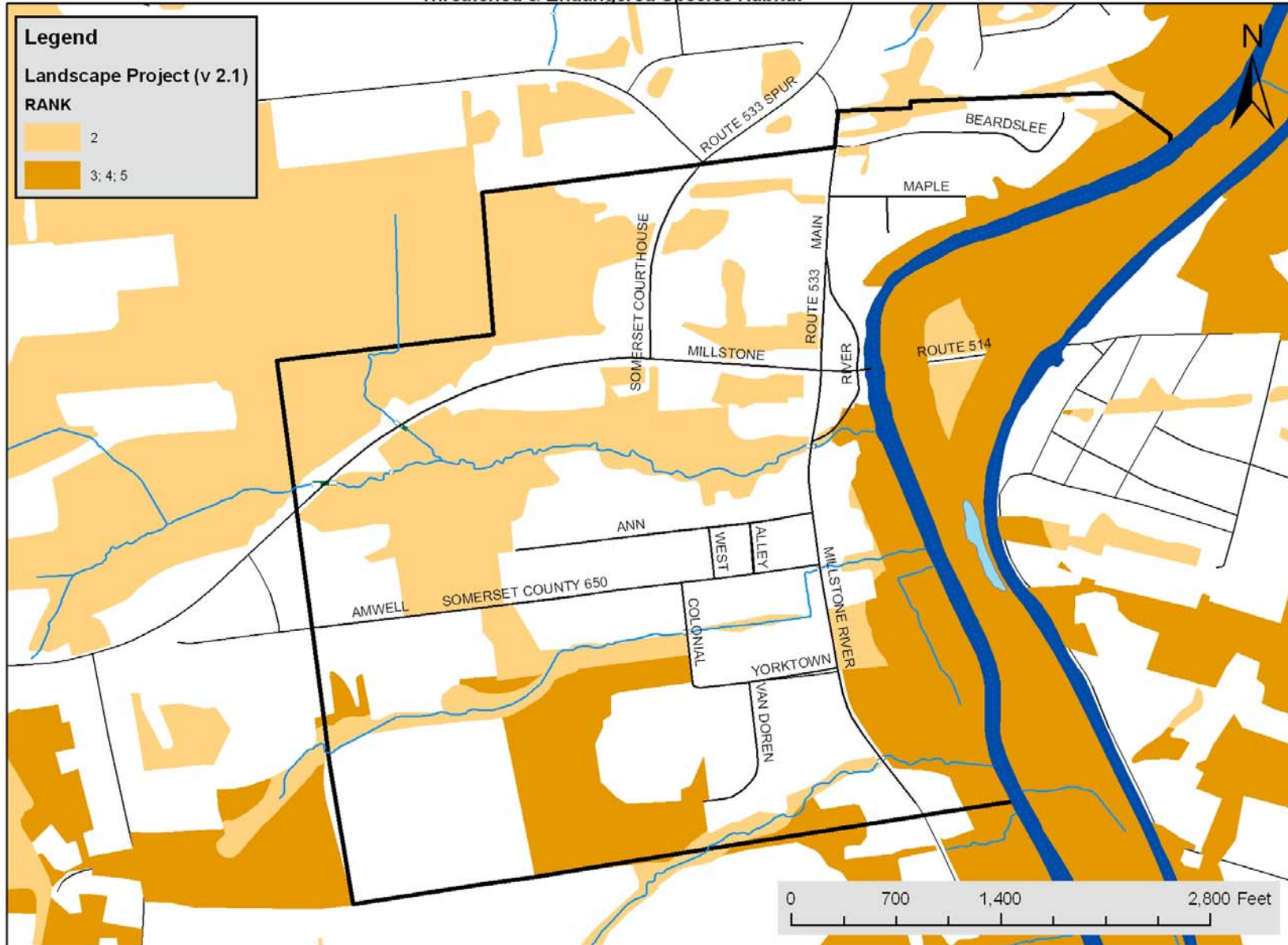
### Millstone Borough, Somerset County Total Maximum Daily Loads (TMDLs)



NJ Department of Environmental Protection

06/18/2009

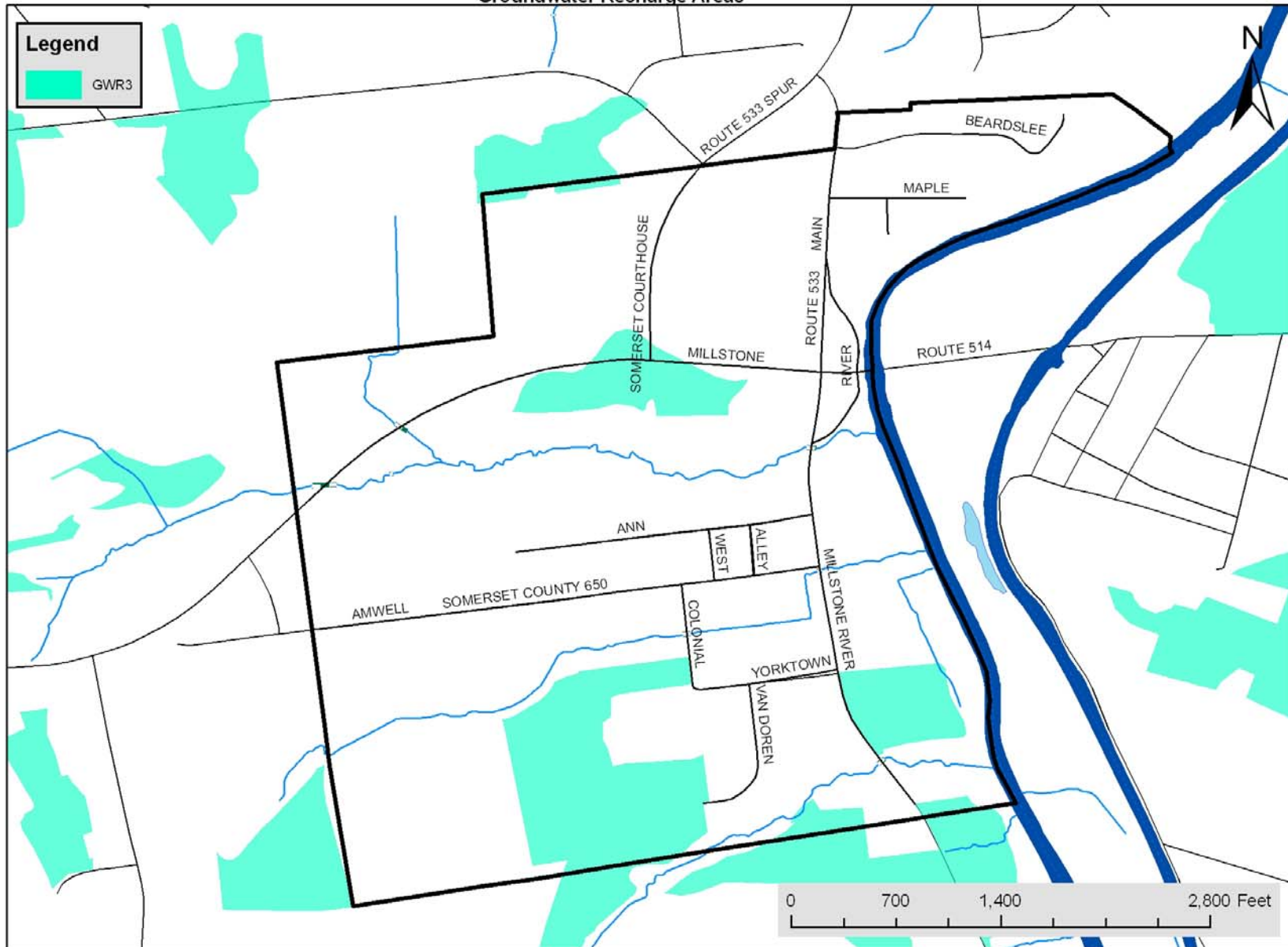
### Millstone Borough, Somerset County Threatened & Endangered Species Habitat



NJ Department of Environmental Protection

06/18/2009

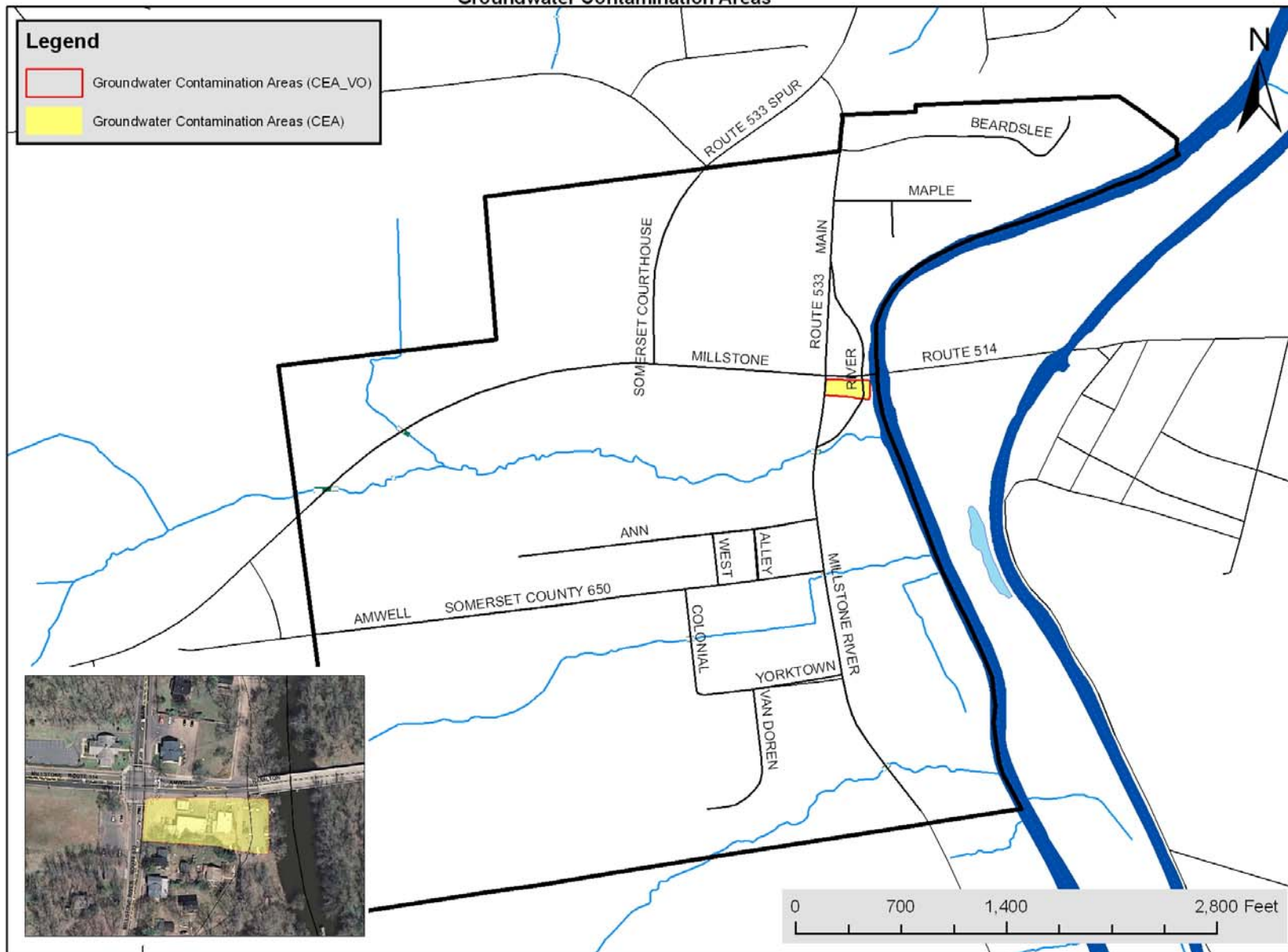
### Millstone Borough, Somerset County Groundwater Recharge Areas



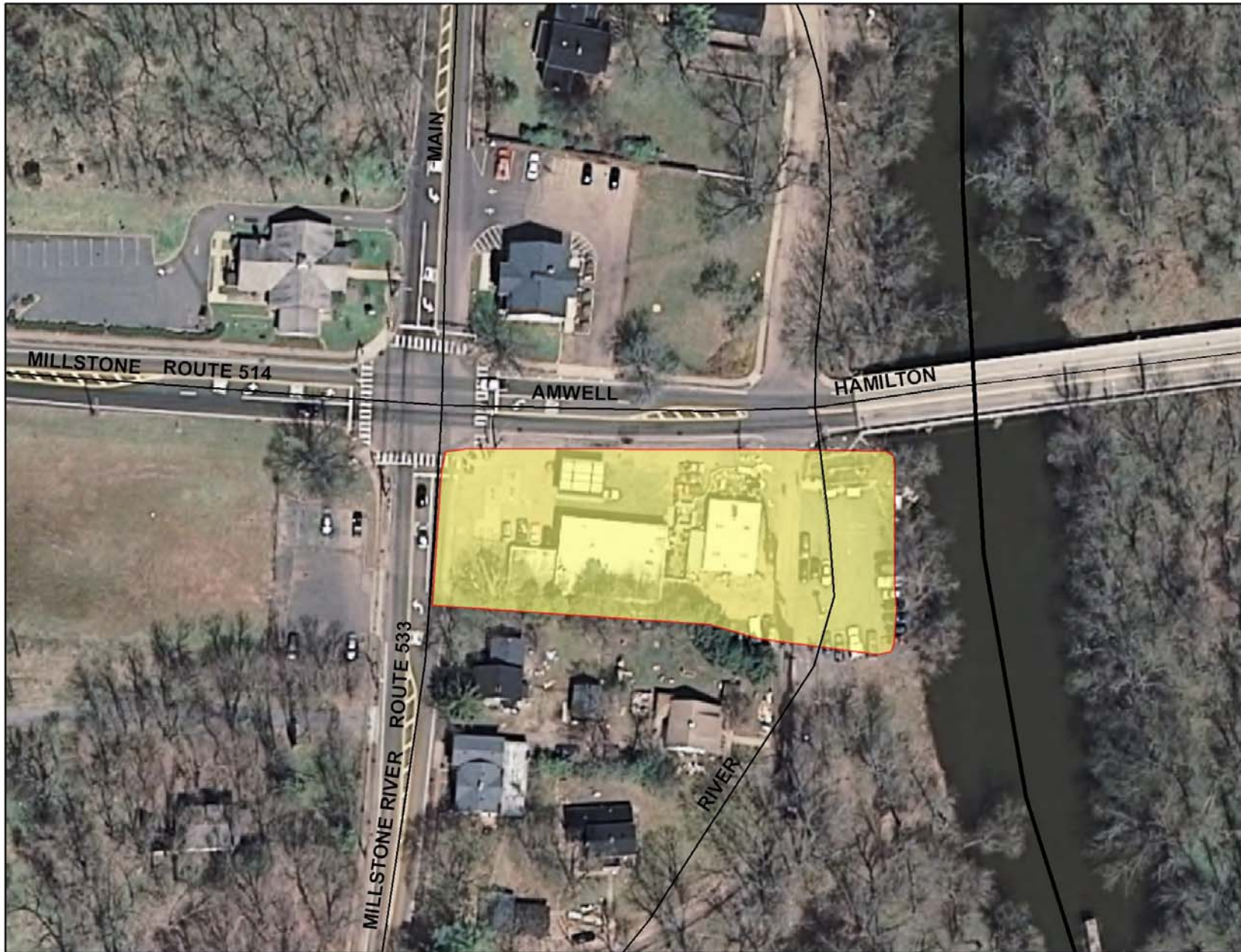
NJ Department of Environmental Protection

06/18/2009

### Millstone Borough, Somerset County Groundwater Contamination Areas



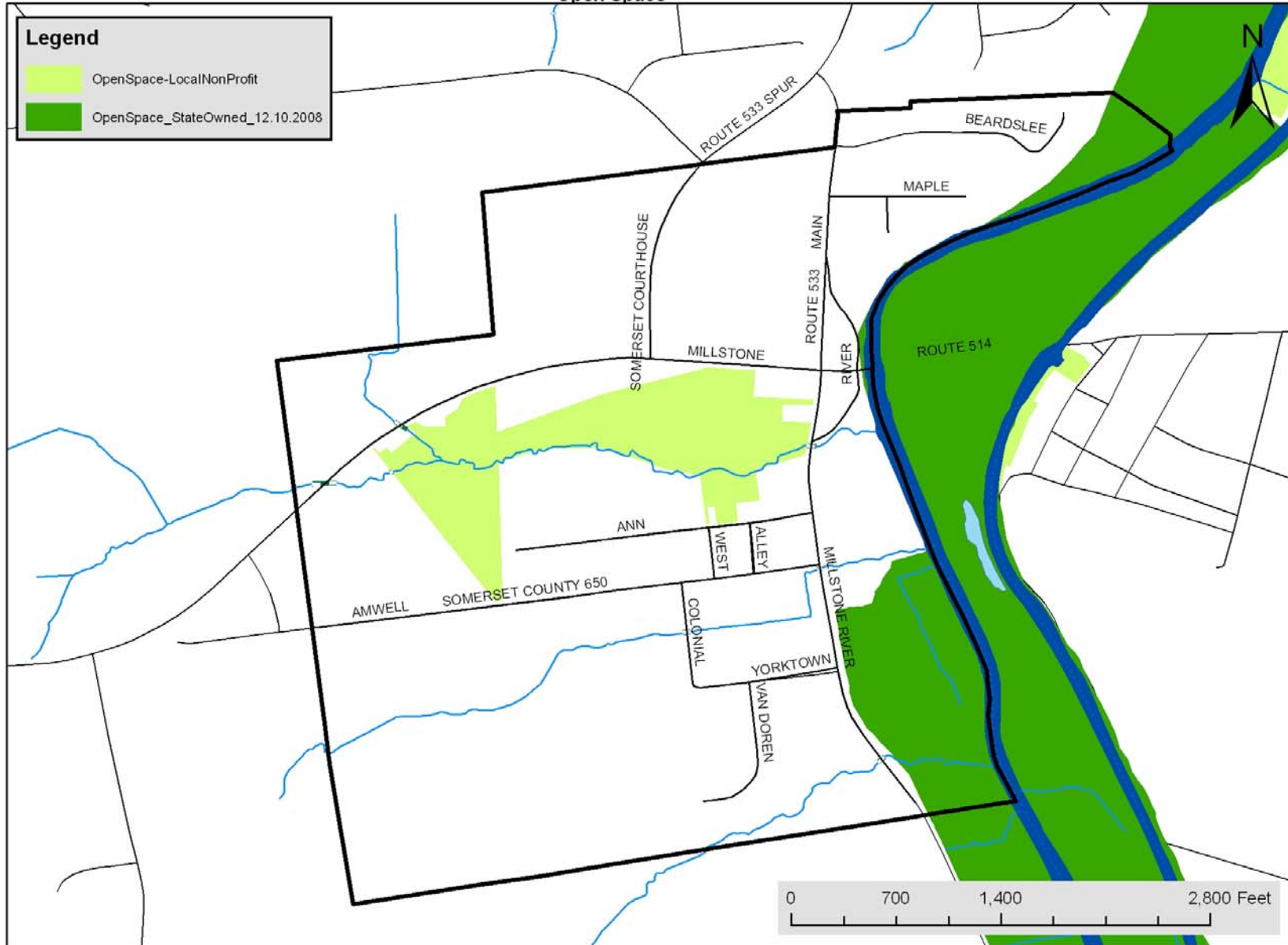
06/18/2009



NJ Department of Environmental Protection

06/18/2009

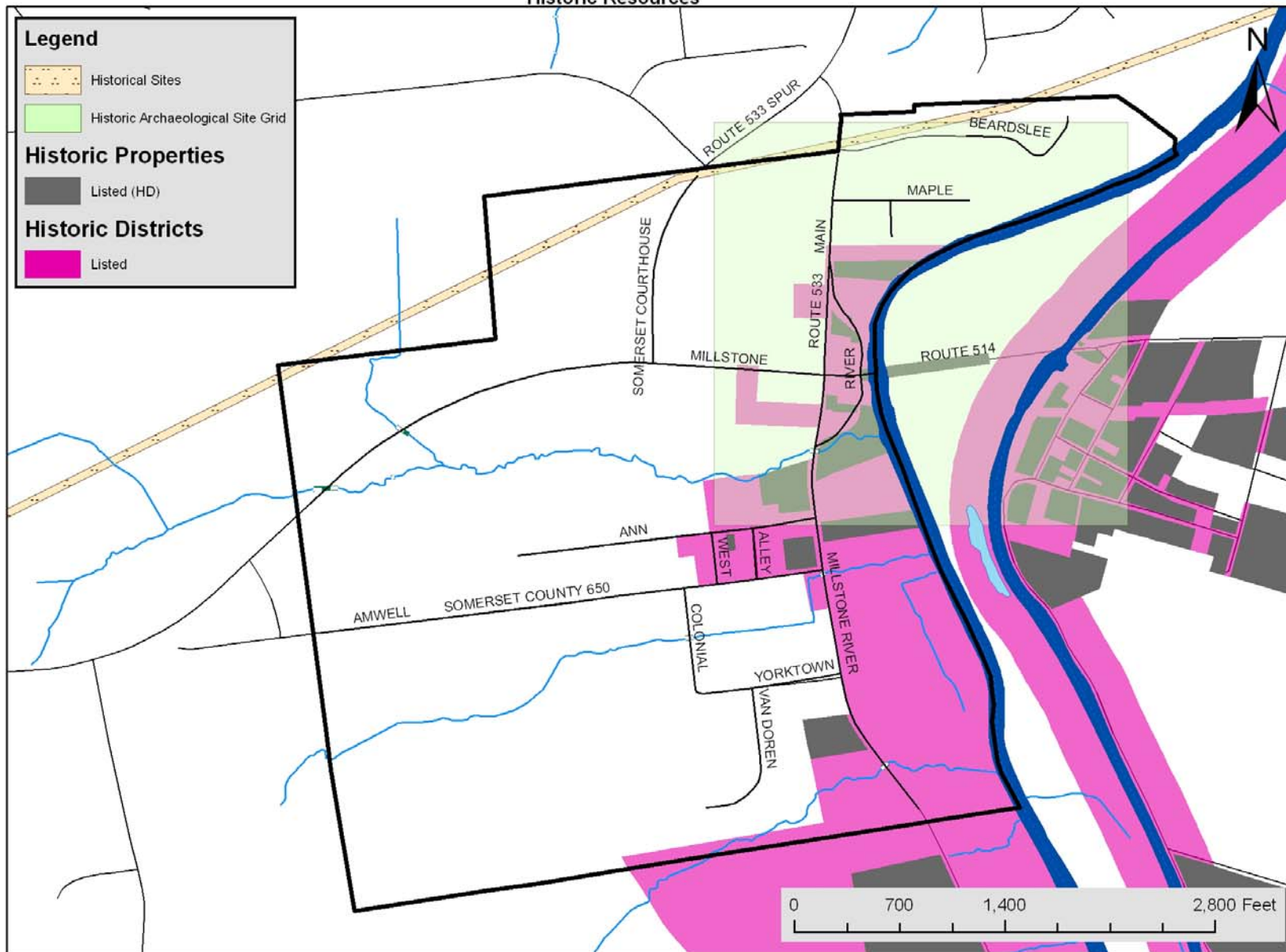
### Millstone Borough, Somerset County Open Space



NJ Department of Environmental Protection

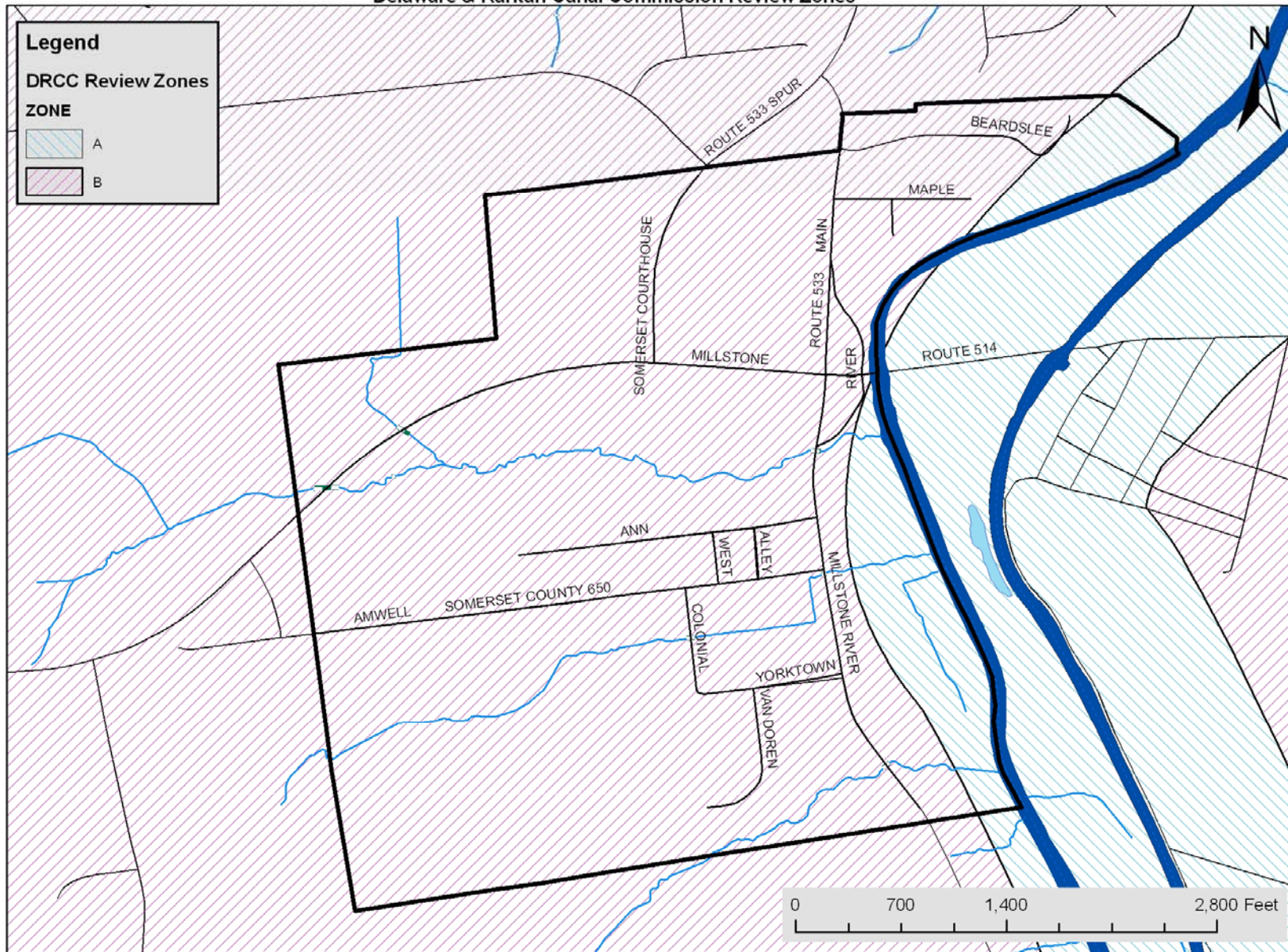
06/18/2009

### Millstone Borough, Somerset County Historic Resources



06/18/2009

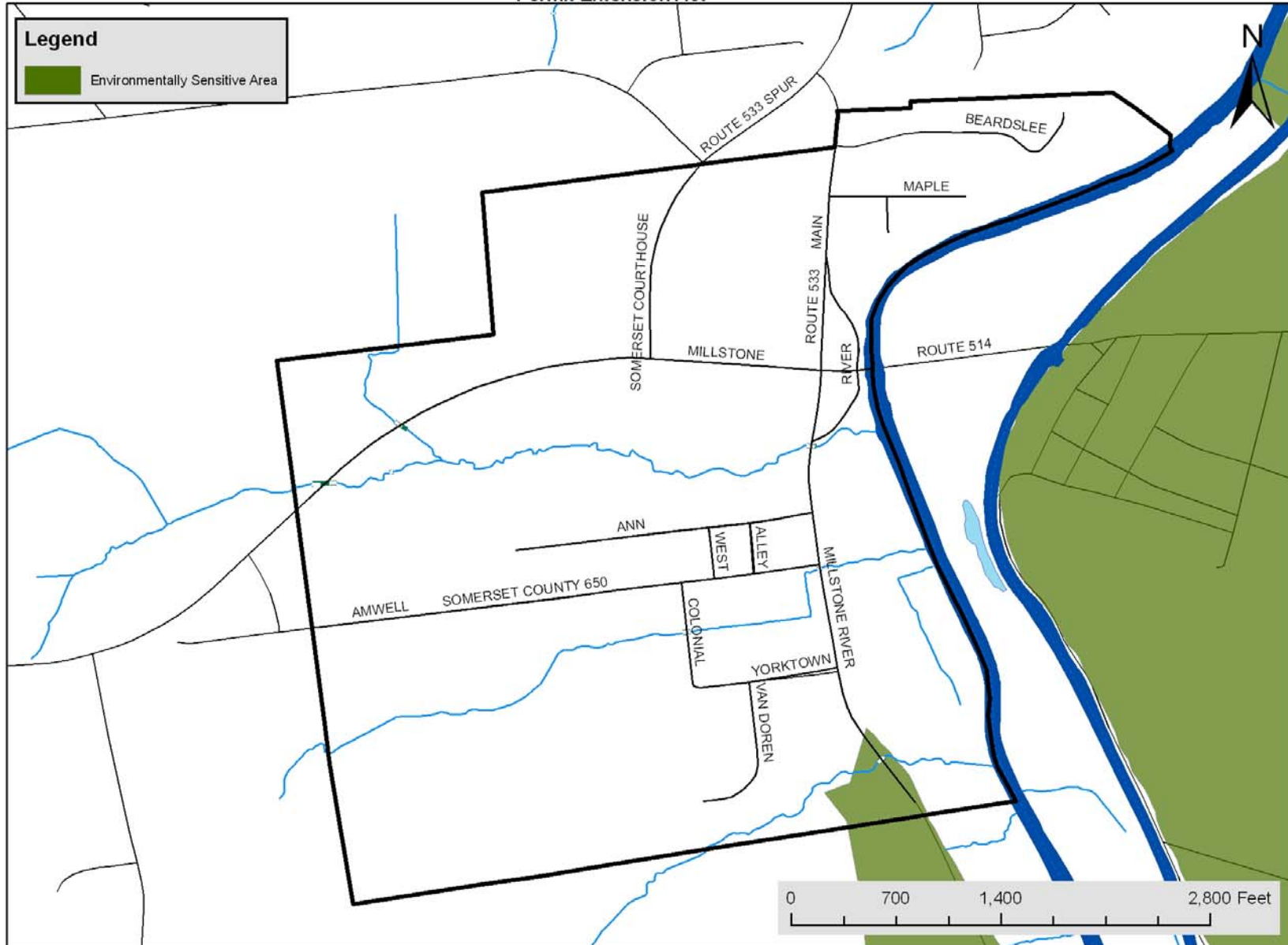
**Millstone Borough, Somerset County**  
Delaware & Raritan Canal Commission Review Zones





06/18/2009

### Millstone Borough, Somerset County Permit Extension Act



NJ Department of Environmental Protection

# Additional Attachments

## Public Water System Deficit/Surplus

### ELIZABETHTOWN WATER COMPANY

PWSID: 2004002  
 County: Union

Last Updated: 04/15/08

► [Glossary of Terms Listed Below](#)

Water Supply Firm Capacity: 231.500 MGD

#### Available Water Supply Limits

	Allocation	Contract	Total
Monthly Limit	6761.500 MGM	N/A MGM	6761.500 MGM
Yearly Limit	65022.500 MGY	N/A MGY	65022.500 MGY

#### Water Demand

	Current Peak	Date	Committed Peak	Total Peak
Daily Demand	188.460 MGD	08/2006	1.423 MGD	189.883 MGD
Monthly Demand	5842.250 MGM	08/2006	22.056 MGM	5864.306 MGM
Yearly Demand	55119.090 MGY	2007	173.131 MGY	55292.221 MGY

#### Water Supply Deficit or Surplus

Firm Capacity	Water Allocation Permit
41.617 MGD	897.194 MGM
	9730.279 MGY

**Note:** Negative values (a deficit) indicate a shortfall in firm capacity and/or diversion privileges or available supplies through bulk purchase agreements.

#### Bureau of Water System and Well Permitting Comments:

Well source capacity as reported is 16.50 MGD

#### Bureau of Water Allocation Comments:

Contractual commitments for the bulk sale of water may reduce any water supply surplus

For more information concerning water supply deficit and surplus, please refer to:

- [Firm Capacity and Water Allocation Analysis](#) (Pdf Format)
- [Currently Effective Water Allocation Permits by County](#)  
 This report displays all effective water allocation permits issued by the department.
- [Pending Water Allocation Permits with Requests for a Hearing](#)  
 All pending water allocation permits with public hearing requests.
- [Water Allocation Permits Made Effective within a Selected Timeframe](#)  
 This report displays water allocation permits based on a specified date range.

**Questions regarding safe demands and firm capacity please contact the Bureau of Water System and Well Permitting at 609-984-6831 or for questions concerning water allocation and status please contact the Bureau of Water Allocation at 609-292-2957.**

Questions may also be sent to the [Division of Water Supply](#)

## **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 Environmental Protection**



## **State Development & Redevelopment Plan Plan Endorsement Opportunities & Constraints Analysis**

for:

Borough of Millstone, Somerset County

***ADDENDUM***

*July 7, 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 Millstone 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.*

# Addendum

On June 29, 2009, the NJ Office of Smart Growth (OSG) informed the State Agencies (including DEP) reviewing the Millstone Borough Plan Endorsement petition, that Millstone Borough had not submitted its proposed Planning Area changes along with their Municipal Self Assessment. At that time, OSG also transmitted GIS shapefiles and a brief description of the proposed changes to those same State Agencies. As DEP has already submitted its Opportunities and Constraints (OCA) Report for Millstone Borough to OSG, this Addendum was produced and submitted to OSG and acts in addition to the DEP OCA Report dated June 18, 2009. This Report addresses three issues included in OSG's correspondence of June 29, 2009: Millstone Borough's proposed Planning Area changes; proposed Center Designation; and sewer service area.

## Planning Area Changes

The DEP OCA Report dated June 18, 2009, included the following recommended Planning Area changes:

The current State Plan Map identifies Millstone Borough almost entirely as Planning Area 3 (Fringe). It is DEP's understanding that, through the Cross Acceptance process, the State Plan Map was modified to identify the areas in the north and northwest portions of Millstone to Planning Area 5 (Environmentally Sensitive). However, a portion of the Rezem tract would still be mapped as Planning Area 3, with a Critical Environmental Site overlay (CES). DEP does not believe that a CES completely surrounded by Planning Area 5 makes any sense, and recommends that the entirety of the Rezem tract be mapped as Planning Area 5, unless, and until such time that, it is permanently preserved. At a minimum, the Rezem tract west of County Route 533 Spur/Somerset Courthouse Road should be mapped as Planning Area 5.

Millstone Borough's proposed Planning Area changes are consistent with this recommendation. DEP fully supports their adoption. However, DEP notes that the Rezem tract may have been purchased/preserved at the time of this Report. The final Planning Area designation for Millstone Borough should reflect the current status of that effort at the time of adoption.

## Center Designation

It is DEP's understanding that Millstone Borough is proposing that a portion of the Borough be designated a Village Center. DEP reiterates its recommendation from the June 18, 2009 OCA Report:

DEP recommends that the entirety of the Borough be included in a Village Center designation so that open space and the proposed heritage park may potentially benefit from the designation.

## Sewer Service Area Delineation

DEP understands the need for centralized sewer service to support the development proposals in Millstone Borough. However, the potential for sewer service area within Millstone Borough is dependent upon capacity to support that development at the Somerset Raritan Valley Sewage

Authority treatment plant. The final sewer service area delineation and capacity analysis will be completed through Hunterdon County Wastewater Management Plan update.

The information provided in the DEP OCA Report dated June 18, 2009 is included here again for clarity's sake:

- A major consideration of the WMP is the delineation of sewer service area. As discussed earlier in this report, sewer service area is not permitted in environmentally sensitive areas. In Millstone Borough, this effectively limits potential sewer service area to existing development and agricultural fields. However, because there is no adopted sewer service area in Millstone Borough, connection of these areas to the Somerset Raritan Valley Sewage Authority would be dependent upon demonstration of sufficient capacity at the sewage treatment plant to accommodate potential development in Millstone Borough.
- The MSA also notes that the Van Cleef family has agreed to “forward to Hillsborough a sum of \$500,000 that would pay for a sewer privilege fee” so that the Borough can tie into the Hillsborough sewer system in the future. The MSA also states that, “The Borough has also negotiated with Hillsborough Township to partner in a force main and pump station that would go through the Borough and also serve a portion of Hillsborough Township.” DEP notes that regardless of these agreements, sewer service in Millstone Borough is dependent upon the existence of capacity at the SRVSA sewage treatment plant.
- Should capacity limitations at the SRVSA sewage treatment plant limit, or negate, the potential for centralized sewer service in Millstone, the Borough may want to consider (if it hasn't already) studying the potential for a package plant to serve the Van Cleef development and/or existing development throughout the Borough, possibly in cooperation with Hillsborough Township.
- While the State Plan does not recommend sewer service area in the Fringe, Rural and Environmentally Sensitive Planning Areas, the WQMP rule does not place these specific limitations on mapping of sewer service area.
- The WQMP rule utilizes the Plan Endorsement process to allow extensions of sewer service area into areas where it would otherwise not be permitted, due to the existence of environmentally sensitive features.

## **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**

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Phone: (609) 341-5311  
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***NJ DEPARTMENT OF TRANSPORTATION***

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

For:

Borough of Millstone, Somerset County

*June 11, 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**

Not Applicable

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

Not Applicable

**Congestion Management System**

Not Applicable

**Major Capital Projects/Initiatives and Mitigation Projects**

Not Applicable

**Designated Transit Villages**

Not Applicable

**Designated Scenic Byways**

Millstone contains part of the Millstone Valley Scenic Byway, designated in 2001 (map attached). 2.5 miles was added through an addendum application in 2007. A Corridor Management Plan was completed, reviewed by the New Jersey Scenic Byway Advisory Committee, and accepted by the Commission of Transportation in December 2008. An application for National Scenic Byway designation was submitted to the National Scenic Byway Program in December 2008. Determination should occur in early summer 2009. The byway is sponsored by the Millstone Valley Preservation Coalition.

NJDOT presently is working toward execution of an agreement for a 2007 FHWA grant for this byway: Millstone Valley Byway Visitor Services and Facilities. The grant will assist in restoration of the Griggstown Bridge Tender's House.

The Department also obtained an FHWA grant in 2008 in the amount of \$76,320 for assisting the sponsor in strengthening their infrastructure, preparing walking tour guide brochures for the five villages located along the byway (including Millstone), and creating a video to be shown at the Visitors' Center.

NJDOT will continue to assist this byway. Grant funds are available annually, and can be awarded by submitting an application in one or more of six categories. The categories that could work to assist Millstone include 2. Preserve the important historic character of the Borough and 3. Minimize the environmental impact of any development.

NJDOT also has received grant funds to complete Interpretive Plans for all seven state-designated Scenic Byways and a statewide marketing plan for all of the byways.

Finally, the Department currently is working toward an agreement with a consultant to draft a set of guidelines for signage along byways. This byway will be signed in the near future through NJDOT.

### **Open Local Aid Grant Projects**

FY 2008 Municipal Aid Program – Resurfacing of South River Street from Main Street to Amwell Road in the amount of \$50,000.

### **Corridor Studies**

Not Applicable

### **Local Planning Assistance Projects**

The Local Transportation Planning Assistance Unit can provide technical assistance to the Borough in their effort to develop traffic calming measures for River Road (CR 533) and other local circulation issues the municipality might have.

### **Bicycle and Pedestrian Local Planning Assistance Projects**

Not Applicable

### **Public Use/General Aviation Airports**

Not Applicable

### **Rail Freight Lines**

Millstone Borough is not served by rail freight. Although the CSX mainline runs through the adjacent community (Hillsborough), the land use mix is not appropriate for industrial transload.

**Traffic Engineering and Safety Initiatives**

Traffic Engineering and Investigations does not have any active job assignments in Millstone Borough.

**Existing and Planned Park-and-Rides**

Not Applicable

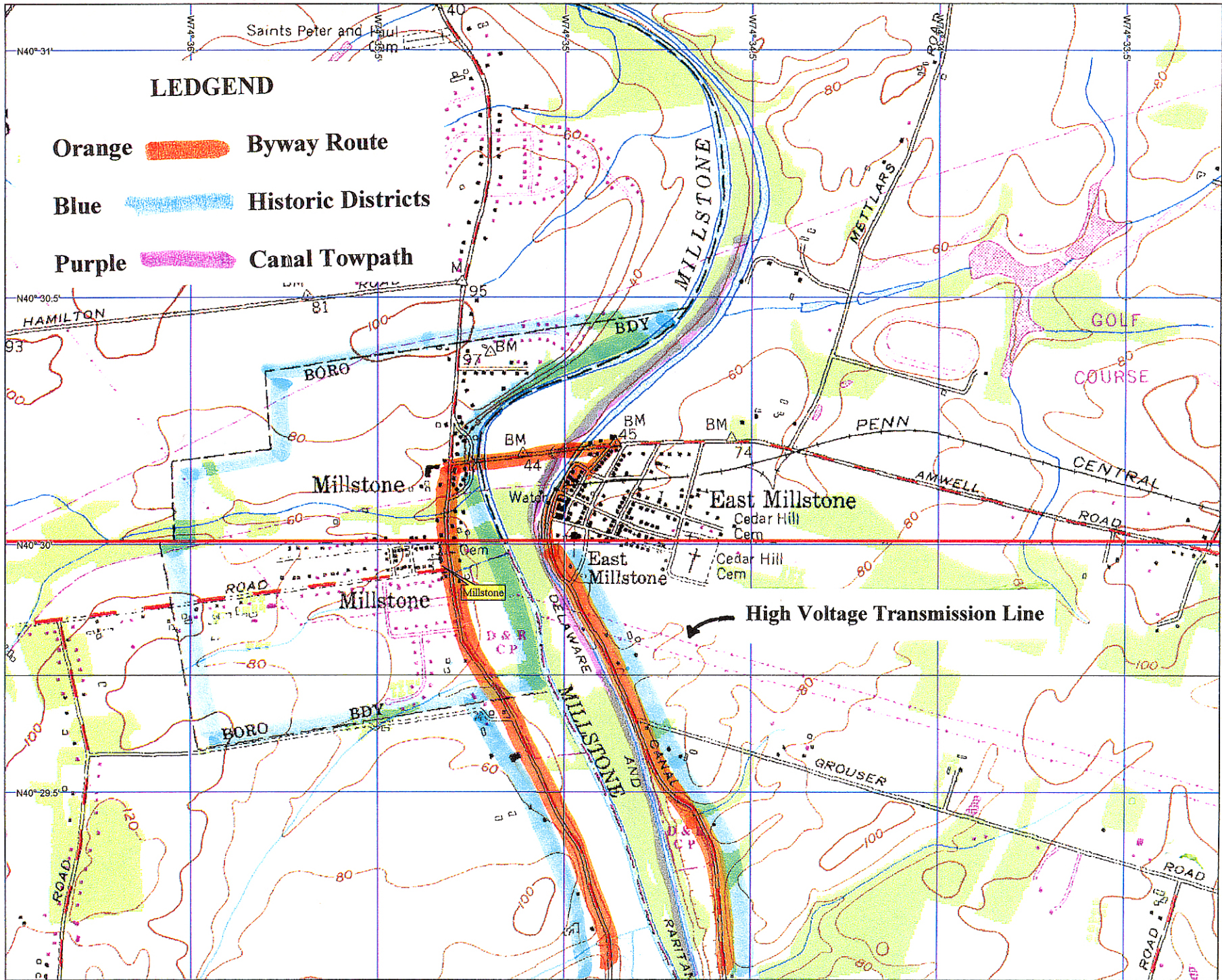
**Other Significant Issues**

Not Applicable

**ATTACHMENTS**

**Millstone Valley Scenic Byway Map**

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



# Memorandum

**TO:** Alan Miller

**FROM:** Chuck Latini, PP, AICP

**DATE:** June 16, 2009

**SUBJECT:** Millstone Borough (Somerset County)  
Opportunities and Constraints Review

The goals listed in Millstone Borough Self Assessment do not include seeking mass transit opportunities. NJ TRANSIT does not provide service to Millstone Borough.

Based upon an analysis of the Borough's Self-assessment and relevant planning documents related to population, employment, zero car household density, regional location and accessibility to job centers, Millstone has a very low transit score. According to the applicable modes of transit based on area and future growth, a low score is indicative of low-density development patterns.

In light of the self-assessment, the Borough's future growth potential has no capacity for transit other than vanpools, paratransit and local social service. If the Borough should ever seek transit services, it would need to significantly increase their density levels to meet any additional threshold other than described above if service was to serve the Borough directly. Notwithstanding, the presence of the Millstone bypass CR-518 may have utility in the future as Hillsborough grows and the need to access to New Brunswick grows.

If you have any questions or require further information, please do not hesitate to contact me at (973) 491-8597.