



State of New Jersey
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JON S. CORZINE
Governor

CHARLES A. RICHMAN
Acting Commissioner

August 12, 2009

The Honorable James Dodd
Mayor, Town of Dover
37 N. Sussex Street
Dover, NJ 07801

RE: Town of Dover, Plan Endorsement Opportunities and Constraints Analysis

Mayor Dodd:

The Office of Smart Growth (OSG) and our State agency partners have reviewed the Municipal Self Assessment submitted by the Town of Dover on June 30, 2009 and would like to commend the Town 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 Town of Dover's Community Visioning Process and to provide the Town with preliminary consistency issues with the State Development and Redevelopment Plan and relevant State regulations. This document can be found on the OSG website at the following link: <http://www.nj.gov/dca/osg/plan/endorsement.shtml>.

If you intend to seek a waiver from any of the visioning requirements of Plan Endorsement, please send a separate letter that addresses the Visioning sessions that have been conducted in the municipality. For example, we need the dates, attendance and minutes from charrettes or workshops that were conducted before finalizing the Transit Oriented Development Plan 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.

The Office of Smart Growth and State Agencies remain committed to working with the Town of Dover. 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 Town of Dover at (609) 292-3228 or via email at bableman@dca.state.nj.us.

Sincerely,

Donna Rendeiro
Acting Executive Director
Office of Smart Growth



DR:ba

c: State Agency Partners (*Via E-Mail*)
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Town of Dover Plan Endorsement File

State Agency Opportunities & Constraints Analysis



Town of Dover County of Morris



August 10, 2009

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

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Introduction

On June 30, 2009, the Town of Dover in Morris County submitted their Municipal Self-Assessment Report to the New Jersey Office of Smart Growth (OSG). As such, OSG and our partner State Agencies have preliminarily assessed local opportunities and constraints, as it relates to existing development, current zoning regulations, infrastructure and natural resources. This report provides for a comparison of information to the Municipal Self-Assessment Reports with the most up-to-date regional and statewide data to determine whether TREND growth is sustainable and viable based on the information provided. This information is intended to guide and direct the Community Visioning Process as to develop a vision with a twenty-year planning horizon. The vision shall provide for sustainable growth, recognize fiscal constraints, housing needs and protection of natural, historic and agricultural resources. Community visioning shall take into consideration the findings and conclusions of the Municipal Self-Assessment and the State Agencies' Opportunities and Constraints Analysis.

Background

The Town of Dover initiated the Plan Endorsement process by attending a pre-petition meeting with OSG and our partner State agencies on May 8, 2006. On July 22, 2008, the Town of Dover adopted a resolution authorizing the creation of their Plan Endorsement Advisory Committee (PEAC), in which five members were designated. As previously mentioned, the Town submitted their Municipal Self Assessment Report to OSG for review on June 30, 2009. The Municipal Self Assessment Report was authorized by the Town of Dover via resolution on March 10, 2009. Pursuant to the State Planning Rules, N.J.A.C. 5:85-7.10, this



Existing

Trend

Plan

State Agency Opportunities and Constraints Analysis has been provided to the Town on August 7, 2009.

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

With more than 6,000 people per square mile living within the 2.7 square mile community that is home to the Dover Train Station and a central business district, the Town of Dover is a perfect example of how the State Plan defines a regional center. The Dover Town Regional Center was designated by the State Planning Commission on December 2, 1994. Currently the adopted State Policy Plan Map shows Dover with its high density as a Planning Area 1 or Metropolitan Planning Area. When the Regional Center was designated, a sunset date of January 7, 2008 was established by the State Planning Commission. Through Plan Endorsement, expired centers can be re-established. Through their three development plans (North Sussex Street Landfill Redevelopment Area, Bassett Highway Redevelopment Plan and the wider Transit Oriented Development (TOD) Plan), they are planning for a sustainable, smart growth future.

The greenways and buffers that have been created under the guidance of the master plan address another goal identified in the State Plan. Since several water bodies cut through Dover, it critical that Dover continue with these efforts to protect these water ways from degradation. Through TREND development, storm water runoff from parking and roads can degrade the water quality of nearby streams and negatively impact open space, woodlands, and wildlife habitat. Under TREND development, many town centers lose their role as the commercial and social hub for the surrounding area. As TREND development occurs, increased non-point source pollution leads to a decline in the quality of surrounding watercourses and areas suitable for significant habitat. TREND development will fragment green corridors, degrading wildlife trails and aquifer recharge areas, while the adjacent open space that defines the center is overwhelmed by development.

While moving forward to implement these plans, Dover needs to continue to be mindful of its environmental constraints. They include addressing the issues identified in Highland Planning Council's portion of this opportunity and constraints report, even though many of those areas are in the Highlands

Planning Area and not the Highlands Preservation Area.. There are water availability issues that need to be addressed in the sub-watershed HUC 14 area cited in the report to insure that the planned growth can be accommodated. At the same time they need to continue to work with Morris County as they prepare their county wastewater quality management plan.

Another issue related to unfettered TREND development is traffic circulation and congestion. Even though Dover is a transit hub on the NJ Transit Morris – Essex Line, they are not immune from strip development along its highways. Singular use strip development results in a cluttered, unappealing pattern of development that generates needless automotive trips along the state and county highways in the town. To minimize traffic and accidents, the development of walkable, mixed-use developments similar to the elements of the proposed TOD plan are encouraged. For example, older shopping centers in decline due to competition from newer, big box, power centers could reposition themselves and the surrounding area using this strategy.

Dover Town Regional Center is an example of a community where mixed-use growth within the center is being realized. It is a 2.7 square mile town interlaced with state, county highways and the Rockaway River, Jackson Brook, Spring Brook, McKeels Brook and Munson Brook that is more than 90% built out. Their current planning efforts and form based code redevelopment will guide redevelopment and infill development, so that the Town can realize its long term goals when the economy begins its turnaround.

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. Although the net result from the TREND Analysis is intended to determine the amount of housing and commercial space that can potentially be built given current zoning regulations. For a small municipality

that only has 185 acres of developable land remaining, it is essentially built out. Infill and redevelopment efforts will determine its future and thus the Trend Analysis projections should be considered subordinate to what will be possible from infill and redevelopment.

Typically, the information provided in the Trend Analysis portion of this document will be utilized to inform the Community Visioning Process. It is meant to provide a vision of what the objective municipality may resemble at full buildout based on current land use and zoning regulations. This series of worksheets represents a basic methodology for the TREND Analysis. Based on mapping data and zoning regulations, OSG inserted relevant data transferred from the Town’s zoning language, into the Residential Buildout Method. The average household size was identified as 3.29 persons per household (median) (U.S. Census Bureau (2000). American FactFinder: Town of Dover, N.J.

Although current plans indicate that mixed-use development is encouraged in the TOD area, there are unknowns based on the form based code implemented by the Town that do not specify density and floor to area ratio information for residential and commercial analysis. Instead, they are guiding the look and feel of the redevelopment based on historical design standards.

The zoning schedule for the Town of Dover is found in Appendix A for reference for minimum lot size, maximum height and maximum coverage based on the April 17, 2008 zoning ordinance provided in the MSA. A brief summary of the findings is provided below and is intended to be used as a guide during the visioning process.

Figure 1 – Summary of Trend Analysis

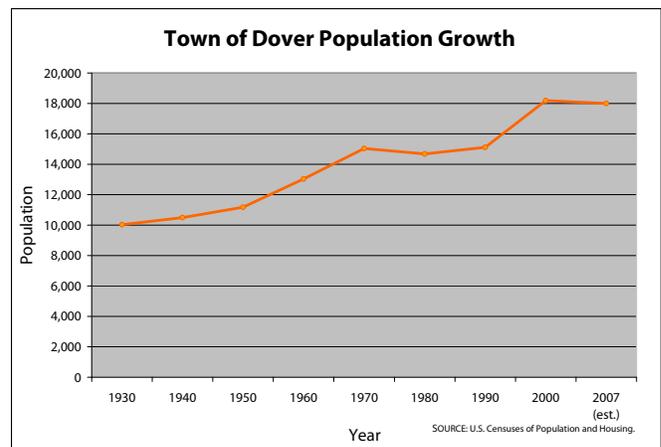
land consumption (acres)	
urbanized lands	1318
constrained lands	243
current developable land	213
buildings	
existing residential units	5,568
new residential units	731
people	
current residents	17,997
additional residents at buildout	2,402
total residents at buildout	20,399

Residential Buildout

The Residential Buildout Method (Figure 2) assumes buildout of existing residential zones at the maximum density permitted by the Town'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. The Residential Buildout Method estimates that current zoning will support 731 additional residential units.

Historically, the Town saw a 19.3% growth in population from 1980 through 2000. The Residential Buildout Method provides that current zoning can support an additional 2,400 residents in the additional residential units, based on the small amount of available land and average household size of 3.29 person's per unit according to 2000 U.S. Census data. With significant growth plans already in place and its strategic location in the Morris County, significant growth beyond these projected values will be the result of redevelopment not addressed in the current zoning ordinance. The form based code plans developed as part of the TOD plan do not have specific densities which do not lend these plans to specific growth projections.

The North Jersey Transportation Planning Authority (NJTPA), the Metropolitan Planning Organization (MPO) for Morris County, estimates that by 2030 there will be more than 2,600 additional people or approximately 20,800 residents total. Although growth is likely



to occur in Dover, the projections made by the NJTPA in 2005 are unlikely to be as robust as anticipated due to the current economic climate. NJTPA projected growth of more than 1,300 people in 2005, but the Census bureau's 2007 population estimate indicates that 191 fewer people reside in the Town since the 2000 census.

According to the 2000 U.S. Census the home ownership rate in Dover is 52.9% less than the statewide rate of 66%. The R-1 and R-2 zones have the largest amount of developable unconstrained lands with 46.6 and 39.9 acres respectively.

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

Figure 2 – Residential Buildout Method

residential zone	total land in residential zone (acres)	total constrained land in residential zone (acres)	total developable land (acres)	total developable residential land (acres)	maximum residential density permitted (units per acre)	potential number of units	average household size (persons per unit)	number of total residents upon buildout
	a	b	c=a-b	d=c*0.8	e	f=d*e	g	h=f*g
C-1	94.2	91.7	2.5	2.0	45.00	89	3.29	292
C-3	24.1	23.4	0.7	0.5	15.00	8	3.29	26
R-1	212.9	166.3	46.6	37.2	5.88	219	3.29	720
R-1S	147.6	143.9	3.8	3.0	1.45	4	3.29	13
R-2	508.7	468.7	39.9	32.0	9.09	290	3.29	954
R-3	244.9	239.6	5.3	4.3	9.09	38	3.29	125
R-3A	55.1	55.1	0.0	0.0	5.88	0	3.29	0
R-4	40.2	38.2	2.0	1.6	15.00	23	3.29	75
RAD	75.9	38.4	37.6	30.1	2.00	60	3.29	197
total	1,404	1,265	138	111		731		2,402

NOTES

b: constrained lands include conserved land, public ownership, conservation easements (deed restrictions), utility easements, or natural factors such as wetlands, floodplains & steep slopes)

d: 0.8 figure is based on 20% takeup of land for right of ways (i.e. roads)

e: data based on current zoning

Commercial Buildout

While a goal of creating jobs and fostering economic development within the state are goals of the State Plan, they must be realized in areas which have appropriate infrastructure and whose environment can support such development. Environmental constraints like water capacity, streams, flood zones and the Highlands Planning Act must also be considered when setting the economic development agenda. Dover's future vision need to build on the current plans while addressing issues raised in the Highland Planning Council's section of the report.

Future commercial development will occur predominantly in the various redevelopment areas identified by The Town of Dover. Since the Transit Oriented Development is based on a form based code and not density and floor to area ratios, it is not possible to determine how much residential and commercial square footage is anticipated. Through The Town of Dover's planning, they are providing for future commercial, open space and mixed-use development. Despite their best planning efforts, market conditions have not yet generated the anticipated development.



Mixed-use development provides the best opportunity to effectively address residential and commercial interests. Walkable communities help to minimize traffic congestion and the other negative externalities of single use development. At the same time Dover's downtown will also be served by allowing 2nd and 3rd floor living and reinvigorating pedestrian traffic and making the area a 24 hour location instead of an 8 to 10 hour destination for day time employment.

Cross-acceptance III

On April 28, 2004, the New Jersey State Planning Commission approved the release of the Preliminary State Development and Redevelopment Plan (State Plan) and the Preliminary State Plan Policy Map. This action launched the third round of Cross-acceptance. Cross-acceptance is a bottom-up approach to planning, designed to encourage consistency between municipal, county, regional, and state plans to create a meaningful, up-to-date and viable State Plan (N.J.S.A. 52:18A-202.b.).

This process is meant to ensure that all New Jersey residents and levels of government have the opportunity to participate and shape the goals, strategies and policies of the State Plan. Through Cross-acceptance, negotiating entities work with local governments and residents to compare their local master plans and initiatives with the State Plan and to identify potential changes that could be made to achieve a greater level of consistency with statewide planning policy. The Morris County Planning Board, the Negotiating Entity for Morris County municipalities, made one request to change a Planning Area designation in the Town of Dover. The request was a correction to the Preliminary State Plan Policy Map (SPPM) to reflect as Planning Area 1 or a Metropolitan Planning Area an area incorrectly identified as Parkland. OSG agreed with the assessment once it was discovered that the area in question was never encumbered with Green Acres restrictions as park land.

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

The State Development and Redevelopment Plan Policy Map 2001 as well as the Preliminary Policy Map for the third round of Cross Acceptance has been enclosed for reference. Ultimately, the State Planning Commission will make the final determination on all amendments to the State Plan Policy Map. Additional changes proposed beyond those indicated in the Preliminary State Plan Policy Map, such as the re-designation of the Dover Town Center, shall occur through the Plan Endorsement process.

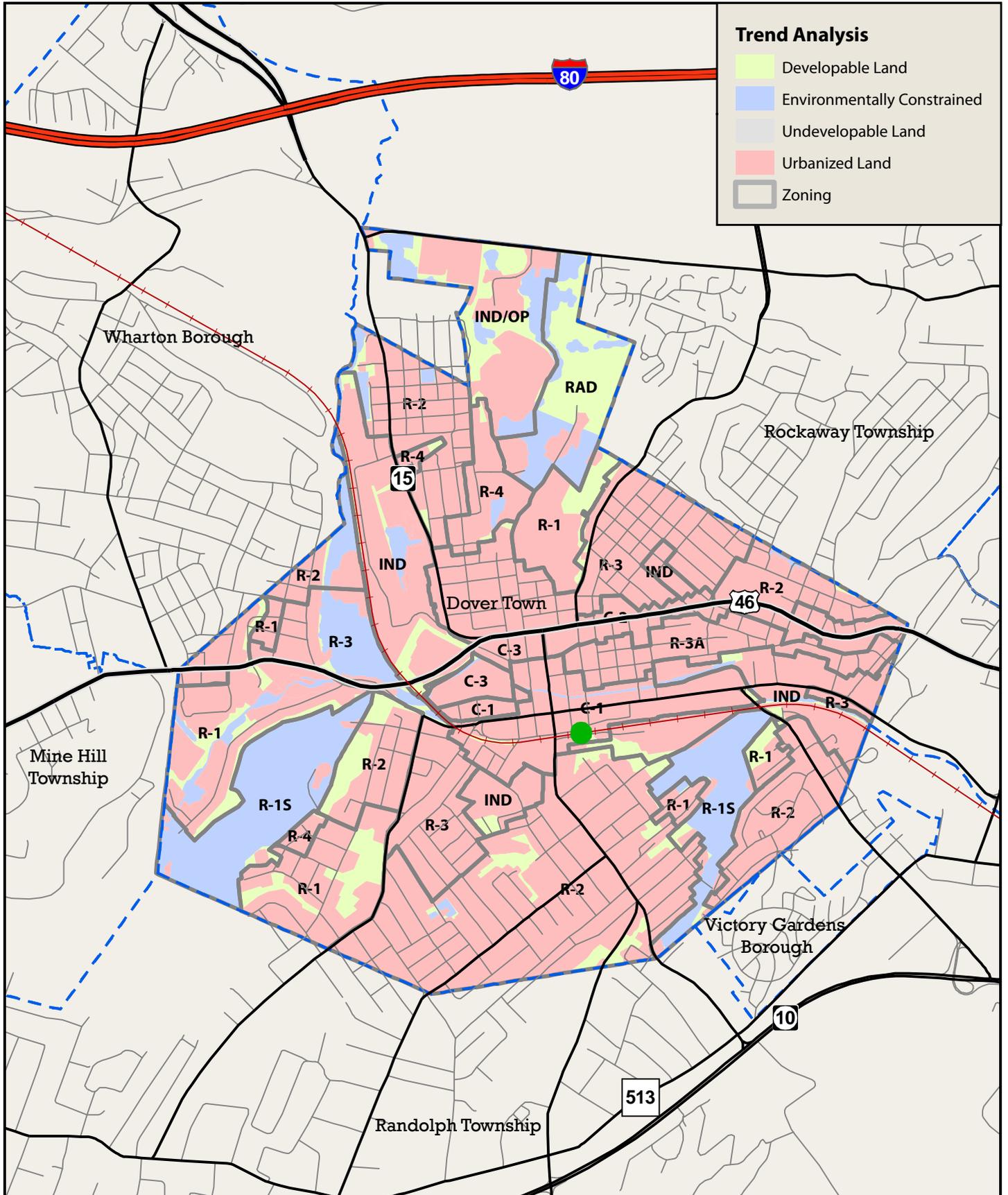
Requirement for Zone

Item	Requirement for Zone											IND/JP	IND	RAD	BHRPA
	R-1	R-1S	R-2	R-3		R-3A		R-4	C-1	C-2	C-3				
Zone Description	Single family	/ Steep Slope (e)	Single family	Double family		Double Family / Rooming House		Multi-Family	Retail Commercial	General Commercial	Light Industrial - Commercial	Industrial	Industrial / Office Park		
Lot Area - min. (SF unless noted)	7,500	30,000	5,000	Single Family Dwelling	Two Family or Duplex Dwelling	Single Family Dwelling	Two Family or Duplex Dwelling	Two Family or Duplex Dwelling	7,500	5 Acres	See §236-19.D	See §236-20.D	2 Acres		
Width at Street Line - min. (feet)	75	100	50	50	75	50	75	200	N/A	100	N/A	N/A	200 (3)		
Yards - min. (feet)															
Front	20 (1)	35	20 (1)	20 (1)	20 (1)	20 (1)	20 (1)	50		20			75		
Rear	30	50	30	30	30	30	30	30		20			50		
Side (one) <small>(principal structures built on or after 4/28/98)</small>	10	10	10	10	10	10	10	10		10 (5)		N/A	30 (4, 5)		
Side (one) <small>(principal structures built before 4/28/98)</small>			7	7	7	7	7	25	See §236-35 through 42				N/A		
Side (total of both) <small>(principal structures built on or after 4/28/98)</small>	25	30	17	17	25	17	25	25	See §236-35 through 42				N/A		
Side (total of both) <small>(principal structures built before 4/28/98)</small>			15	15	15	15	15	15	See §236-35 through 42				N/A		
Other Setback Requirements	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Min. 75 feet setback to any R-1, R-2 or R-3 District Line	N/A	N/A	See §236-20.E for buffer requirements	Min. 75 feet setback to any Residential District Line. Also see §236-21.E for buffer requirements		
Lot Coverage - max. (% / SF - whichever is smaller) (7)	65 / 4,300	30 / 20,000	65 / 4,300	65 / 4,300	65 / 4,300	65 / 4,300	65 / 4,300	65 / 4,300	80	80	80 / NA	65 / NA	45 / NA		
Lot Disturbance - max. (% / SF - whichever is smaller)	N/A	50 / 20,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Building Coverage - max. (%) (7)	25	N/A	25	25	25	25	25	25	80	80	80 / NA	65 / NA	50		
Height - max. (feet / stories above grade)	30 / 2.5	35	30 / 2.5	35 / 2.5	35 / 2.5	35 / 2.5	35 / 2.5	35 / 2.5	160 / 14	160 / 14	80 / NA	65 / NA	45 / NA		
Floor Area - min. (SF per Unit)	1,000	1,000	1,000	800	800	1,000	800	800	See § 236-17	N/A	N/A	N/A	N/A		
Floor Area Ratio (FAR) - max. (%)	55	N/A	55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Off-street parking - min. (spaces) (8)	2 (2)	2 (2)	2 (2)	2 (2)	4 (2)	2 (2)	4 (2)	4 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)		

This Table is prepared as an aid and is to be used in conjunction with Chapter 236 of the Code of the Town of Dover.

Reference Notes

- (1) In Blocks where more than 50% of the properties abutting a common street line are developed, the front yard of a principal building may be the average of all the existing setbacks but in no case less than 10 feet.
- (2) For uses other than Single Family, Two Family or Duplex Dwelling Units, see §236.
- (3) The minimum lot depth shall be 300 feet.
- (4) No side yard shall be less than the height of the building or structure.
- (5) Value represents a minimum for any side yard
- (6) The cluster development option exists in the R-1S Zone. See §236-21.1 for requirements.
- (7) See the "Steep Slope" Ordinance for various adjustments to Lot Coverage and Building Coverage.
- (8) Parking Requirements for Residential Uses before the Planning Board or Board of Adjustment shall be in accordance with the "Residential Site Improvement Standards - NJAC 5:21 et. seq. (RSIS).



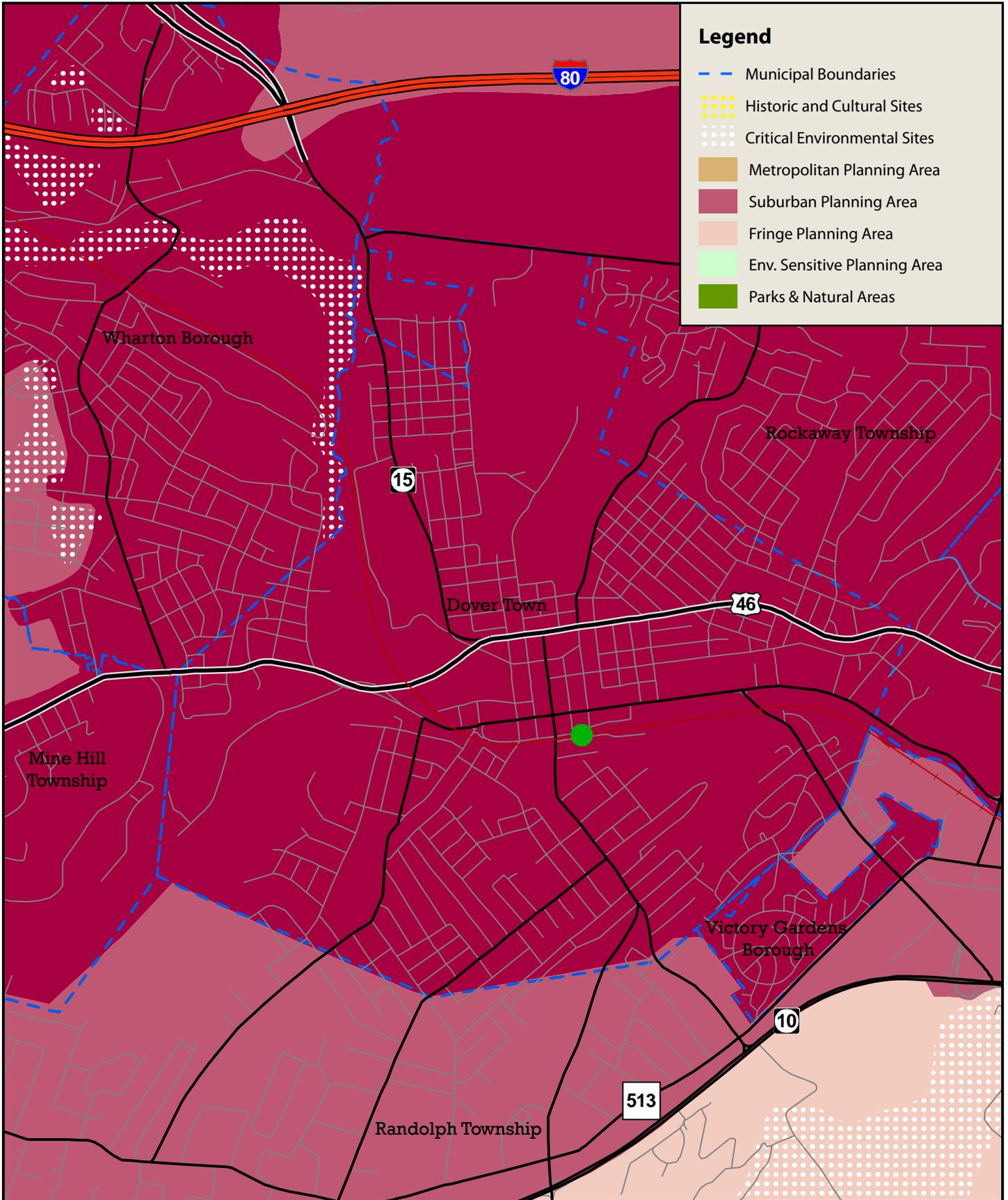
Town of Dover

Trend Analysis Developable Lands



1 inch = 2,000 feet





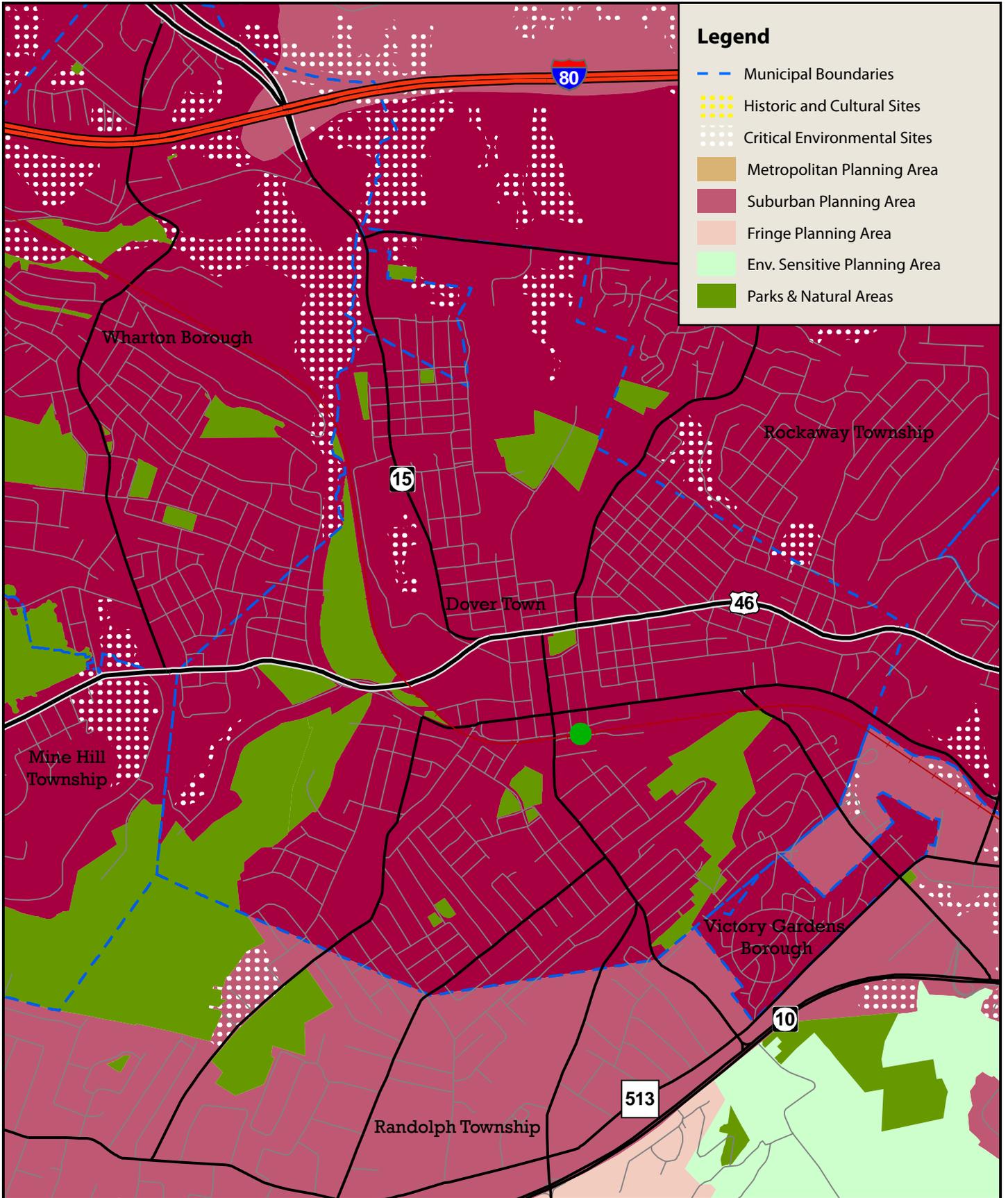
Town of Dover

2001 State Plan Policy Map



1 inch = 2,000 feet





Town of Dover

2009 Draft Final State Plan Policy Map



1 inch = 2,000 feet



NJ Department of Environmental Protection



State Development & Redevelopment Plan Plan Endorsement Opportunities & Constraints Analysis

for:

Town of Dover, Morris County

July 15, 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 the Town of Dover. 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 the Town of Dover:

TYPE	ACRES
AGRICULTURE	0
BARREN LAND	8.89
FOREST	340.18
URBAN	1,313.15
WATER	28.61
WETLANDS	54.75

Attachments:

- Map - Land Use/Land Cover in Town of Dover

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 the Town of Dover is based upon the best data readily available to DEP at the time of this analysis. This data should be used by the Town of Dover to inform its community vision and planning processes.

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

PWSID	WATER SYSTEM NAME	POPULATION SERVED	WATER SYSTEM TYPE
1409001	Dover Water Commission	21,500	Community

Dover Water Commission - the Deficit/Surplus table for Dover Water Commission shows FIRM capacity for this system to be approximately 4.320 mgd, a FIRM capacity surplus around 0.911 MGD. The numbers on the Surplus/Deficit Table show that as of 2007, the Dover Water Commission had its highest daily, monthly and annual usage in 2004. The current Water Allocation Permit (5100) for Dover became effective on August 1, 2006 and is good through July 31, 2016. The permit limits are 112 MGM and 1,153 MGY which is consistent with Surplus/Deficit table.

As currently identified in the Division of Water Supply's Deficit & Surplus Table (<http://www.nj.gov/cgi-bin/dep/watersupply/pwsdetail.pl?id=1409001>), the Dover Water Commission has a surplus of 6.325 MGD (0.2 MGD) of water available based on their current Water Allocation Permit (#5100). Based upon population and water usage projections from the Draft 2009 New Jersey Water Supply Plan, the Dover Water Commission is projected to be in an administrative deficit (a deficit only associated with the limits of their existing Water Allocation Permit) by 2010. The Draft Plan identifies that the current population served by the Dover Water Commission is 27,806 people. With conservative population and water usage projections (100 gallons per person per day), the Dover Water Commission's population served number is projected to increase by 190 people to 27,996 in 2010 and by 210 people to 28,016 by 2020. Subsequently, based on the Dover Water Commission's existing Water Allocation Permit, they are projected to be in an administrative deficit of -0.17 MGD in 2010 and a deficit of -0.19 MGD in 2020.

Note that the available capacity identified above is available throughout the purveyor area and is not necessarily available to the Town of Dover.

07/15/2009

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

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

There are no Non-Community Water Systems serving specific uses in the Town of Dover.

Attachments:

- Deficit/Surplus table – Dover Water Commission
<http://www.nj.gov/cgi-bin/dep/watersupply/pwsdetail.pl?id=1409001>
- Water Supply - Map

Wastewater Treatment

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

There is one DEP-regulated wastewater facility serving the Town of Dover - Rockaway Valley Regional Sewage Authority (RVRSA). All of Dover is located within the currently adopted sewer service area.

Rockaway Valley Regional Sewage Authority (NJPDES permit number NJ022349). The annual average flow for this facility in 2007 was 10.6642 mgd; the permitted flow for this facility is 12.0 mgd. As such, the facility is operating at approximately eighty-eight percent (88%) of its permitted flow. Based on the assumption that a residential unit uses 300 gpd, the remaining flow for this facility could accommodate approximately 4,452 new residential units. Note that the RVRSA serves several communities in the area and not all of the remaining flow may be available to the Town of Dover.

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. Similarly, the Highlands Council Regional Master Plan (RMP) also identifies an appropriate septic density based on RMP Zone based on Zone-specific nitrate targets (Existing Community 2.0 mg/L; Protection 0.72 mg/L) performs the analysis at the HUC 14 watershed level. In the Highlands Region, DEP requires that septic density utilize that data. Note that the Department does not recommend uniformly zoning at these densities across the 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.

The Town of Dover falls within three HUC 14 watersheds. The following tables indicates the watershed and the residential density allowed under the nitrate limits

HUC 14	HUC 14 Name	RMP Zone	Existing Community	Protection
02030103030060	Green Pond Brook (below Burnt Meadow Bk)	Existing Community	6.4	
		Protection		17.7
02030103030070	Rockaway R (74d 33m 30s to Stephens Bk)	Existing Community	5.8	
		Protection		16.1
02030103030090	Rockaway R (BM 534 brdg to 74d 33m 30s)	Existing Community	6.4	
		Protection		17.8

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 Morris in development of a county-wide Wastewater Management Plan based upon on the recent Water Quality Management Planning rules. The Town of Dover should continue to coordinate with the County to ensure consistency between municipal planning and the County WMP.

Attachments:

- o Adopted Sewer Service Area- Map

Environmental Constraints Analysis

The following section identifies those environmental constraints that should be considered by the Town of Dover 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. Dover 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 55 acres of wetlands in Dover. 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 several C1 waters that run throughout the Town. These include portions of the Rockaway River and several unnamed tributaries, Spring Brook, Jackson Brook, and several unnamed tributaries to Green Pond Brook.

- Total Maximum Daily Loads (TMDLs)

In accordance with Section 303(d) of the Federal Clean Water Act (CWA) (33 U.S.C. 1315(B)), the State of New Jersey is required biennially to prepare and submit to the USEPA a report that identifies waters that do not meet or are not expected to meet SWQS after implementation of technology-based effluent limitations or other required controls. This report is commonly referred to as the 303(d) List. In accordance with Section 305(b) of the CWA, the State of New Jersey is also required biennially to prepare and submit to the USEPA a report addressing the overall water quality of the State's waters. This report is commonly referred to as the 305(b) Report or the Water Quality Inventory Report. The Integrated Water Quality Monitoring and Assessment Report combine these two assessments and assigns waterbodies to one of five sublists on the Integrated List of Waterbodies.

Sublists 1 through 4 include waterbodies that are generally unimpaired (Sublist 1 and 2), have limited assessment or data availability (Sublist 3), or are impaired due to pollution rather than pollutants or have had a TMDL or other enforceable management measure approved by EPA (Sublist 4). Sublist 5 constitutes the traditional 303(d) list for waters impaired or threatened by one or more pollutants, for which a TMDL may be required.

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

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

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

Total Maximum Daily Load and Drainage Area

TMDL Name	Parameter	Percent Reduction	Document	EPA Approval
Rockaway River at Blackwell Street 01379853 ID#	Fecal Coliform	92%	TMDL for fecal coliform to address 34 streams in the Northeast Water Region	2003
Rockaway River at Longwood Valley ID# 01379680	Fecal Coliform	96%	TMDL for fecal coliform to address 34 streams in the Northeast Water Region	
Russia Brook (above Milton) HUC 14 02030103030010	Phosphorus	Attain seasonal average of 9.2 µg/L chlorophyll- <i>a</i> in the Wanaque Reservoir	TMDL for the Non-tidal Passaic River Basin Addressing Phosphorus	Adopted by NJDEP 4/24/08 EPA approval 7/31/08

		and seasonal average of 18 µg/L chlorophyll- <i>a</i> in Dundee Lake.	Impairments	
Russia Brook (below Milton) HUC 14 02030103030020	Phosphorus	Same as above	Same as above	Same as above
Rockaway River (above Longwood Lake outlet) HUC 14 02030103030030	Phosphorus	Same as above	Same as above	Same as above
Rockaway River (Stephens Brook to Longwood Lake) HUC 14 02030103030040	Phosphorus	Same as above	Same as above	Same as above
Green Pond Brook (above Burnt Meadow Brook) HUC 14 02030103030050	Phosphorus	Same as above	Same as above	Same as above
Green Pond Brook (below Burnt Meadow Brook) HUC 14 02030103030060	Phosphorus	Same as above	Same as above	Same as above
Rockaway R (74d33m30s to Stephens Brook) HUC 14 02030103030070	Phosphorus	Same as above	Same as above	Same as above
Mill Brook (Morris Co) HUC 14 02030103030080	Phosphorus	Same as above	Same as above	Same as above
Rockaway R (BM534 brdg to 74d33m30s) HUC 14 02030103030090	Phosphorus	Same as above	Same as above	Same as above

In 2008, New Jersey established 27 TMDLs to address total phosphorus impairments throughout the Passaic River Basin. Nutrients such as phosphorus are essential to plants and animals, but too much fosters excessive algae growth, impairing water quality, diminishing recreational experiences, making treatment of drinking water more costly, and depriving water of dissolved oxygen that fish and other aquatic life need to survive. Algae growth has been problematic in the highly developed Passaic River and Pompton Lake-Ramapo River Watersheds of northeastern New Jersey. The TMDLs affect more than 50 sewage treatment plants.

Critical locations where phosphorus is causing excessive primary productivity were identified as the Wanaque Reservoir and Dundee Lake. As part of the TMDL process, the Department adopted watershed criteria in accordance with N.J.A.C. 7:9B-1.5(g)3 in these locations, as the best means to ensure protection of the designated uses. The watershed criteria are expressed in terms of a seasonal average concentration (June 15-September 1) of the response indicator, chlorophyll-*a*. The criteria are tailored to the unique characteristics of each critical location and are expressed as a seasonal average of 9.2 µg/L chlorophyll-*a* in the Wanaque Reservoir and a seasonal average of 18 µg/L chlorophyll-*a* in Dundee Lake.

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 for Implementing Fecal TMDLs

Short term management measures include projects recently completed, underway or planned that are designed to address the targeted impairment. Whereas long term strategies include source trackdown as well as selection and implementation of specific management measures that will address the identified sources. The Department recognizes that TMDLs alone are not sufficient to restore impaired waterbodies. The TMDL establishes the required reduction target and provides the regulatory framework to effect these reductions. The TMDL implementation plan for each of the TMDL Reports calls for the collection of additional monitoring data in order to target measures to realize reduction.

- **Rockaway River at Blackwell Street (Site ID #01379853)** - Potential sources of fecal coliform include Hurd Park (goose population, no riparian buffer), and landfills.
- **Rockaway River at Longwood Valley (Site ID #01379680)** - Wildlife and failing septics noted as potential sources of fecal coliform
- **Long-Term Management Strategies**

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

- **Source Categories for Long-Term Management Strategies**

1) Canada Geese

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

Canada Goose Damage Management Plan

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

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

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

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

2) Stormwater Detention Basins and Impoundments

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

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

3) Pet Waste

Specific management measures to reduce pet waste include:

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

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

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

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

Implementation of TMDLs for the Non-Tidal Passaic River Basin Addressing Phosphorus Impairments

Significant load reductions from nonpoint sources are needed in order to attain water quality criteria and designated uses. The Passaic TMDL Implementation Plan identifies a suite of completed, on-going and planned activities needed to achieve the identified load reductions. In many cases, the completed and on-going projects have been made possible through EPA 319(h) grant awards. This funding is used in conjunction with state CBT funds, other federal funds (EQIP, CRP and CREP), and local funds to address nonpoint sources of pollutants. New Jersey will continue to rely on 319(h) funding as a key element for accomplishing NPS reductions through TMDL implementation and thereby restoring water quality and designated uses. The implementation plans for the Passaic River and Pompton Lake-Ramapo River Watershed TMDLs required municipalities in the contributory drainage area of the TMDL to adopt an ordinance consistent with a model ordinance provided by the Department as an additional measure of the Municipal Stormwater Permit. The model ordinance can be viewed at www.state.nj.us/dep/watershedmgt/rules.htm under the section heading, "Water Quality Management Planning Rule".

During a 2008 Earth Week event, the Department Commissioner signed a memorandum of understanding (MOU) with members of the lawn-care industry, who pledged to reduce the amount of phosphorus released by fertilizers in the Garden State by 50 percent by 2010. In signing the MOU, members of the Lawn Care Product Manufacturing Industry agreed to establish technical groups to work with the DEP and Rutgers University's Agricultural

Experiment Station in developing a stewardship program to foster better public education and to review strategies to reduce the levels of phosphorus in fertilizers. The largest distributor of fertilizer in New Jersey has reported a 45% reduction in tons of P₂O₅ from 2006 to 2008 based on sales of their no and/or low phosphorus fertilizer.

The TMDL required that 72 out of the 84 municipalities within the Passaic River Basin adopt a Fertilizer Management Ordinance (www.state.nj.us/dep/watershedmgt/rules.htm). Although the Town of Dover was one of the municipalities exempt from this requirement because it was outside of the extent of the model boundary, yet part of the TMDL drainage area, the Town may wish to also adopt such an ordinance in support of the TMDL. The Department is confident that MOU endeavor along with municipal adoption of the fertilizer ordinance will begin to address the urban stormwater contribution of nutrients to waterbodies in the state.

Point source reduction of phosphorus established through these TMDLs will be achieved through the issuance of New Jersey Pollutant Discharge Elimination System (NJPDES) surface water discharge permits to wastewater treatment plants with a defined phosphorus limit. In addition, dischargers may be allowed to perform water quality trading, provided that an acceptable tool is approved by the Department and EPA.

Attachments:

- o C1 Waterbodies - Map
- o TMDLs – Map
- o FEMA NJ Flood Zones – Map

Environmental Constraints to Avoid

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

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

▪ Threatened & Endangered Species Habitat

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

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

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

Note that the Landscape Project has been updated relatively recently, and released in two versions. Version 3.0, the version that impacts Dover, 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. For additional information on the Landscape Project, see [New Jersey's Landscape Project](#).

There are approximately 190 acres of threatened and endangered species habitat in the Town of Dover; 116 acres of which is identified for Indiana Bat, which is a Rank 5 species. Landscape Project Version 3.0 also includes data regarding potential and confirmed vernal

pool habitat. Vernal pools provide habitat to many species of amphibians, insects, reptiles, plants, and other wildlife. One vernal pool habitat area is located within Dover. The attached *Threatened & Endangered Species Habitat map* shows the extent of habitat in the Town of Dover (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 the Town of Dover.

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 227 acres of high volume groundwater recharge areas located within the Town of Dover.

- 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 approximately 440 acres of Tier 1; 497 acres of Tier 2, and 321 acres of Tier 3 Wellhead Protection Areas in the Town of Dover.

- 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.

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 No.	PI Name	Address
3345	007462	HOWMET TURB COMP CORP ALLOY DIV	10 ROY ST
3870	025975	DOVER GAS	13 W CLINTON ST
3885	023298	DOVER DEPARTMENT OF PUBLIC WORKS GARAGE	211 N SUSSEX ST
3888	018717	WOROCO	341 RT 46
3890	000661	NJ DEPT MILITARY & VET AFFAIRS	479 W CLINTON ST
3892	001474	GETTY 56892	88 E MCFARLAN ST
3895	017226	DEL GAS ENTERPRISES	12 W CLINTON ST
3902	000874	RUTAN COAL & OIL COMPANY INC	311 E BLACKWELL ST

07/15/2009

3905	005167	SPARTAN OIL CO	200 RICHARDS AVE
13610	005250	ROSE CITY PETROLEUM INC (DOVER SHELL)	155 S SALEM ST
35142	G000002113	PRECISION SCREW MACHINE PRODUCTS CO INC	52 RICHBOYNTON RD
40082	015128	HILLTOP EXXON	61 RT 46
46390	008107	R&S STRAUSS INC	419 RT 46 W
48757	020496	DOVER TOWN WATER DEPARTMENT WELL 4	RUTAN DR
49715	026518	CONSOLIDATED METALS CORPORATION	100 E DICKERSON ST
50759	014159	LAKELAND BUS LINES INC	425 E BLACKWELL ST
56814	031837	267 RTE 46 ASSOC	267 RT 46
58091	034024	JOHN E SNYDER ELECTRIC	171 BLACKWELL ST
66552	G000007214	NJ TRANSIT DOVER RAIL YARD	E BLACKWELL ST & S MORRIS ST
66725	G000008979	DOVER TOWN WD WELL 5 & WHARTON WD WELL 3	PRINCETON AVE & W CENTRAL AVE
67055	G000010514	DOVER TOWN SANITARY LANDFILL	N SUSSEX ST
68423	G000024908	AMERICAN WELDERY & STEEL COMPANY	2 S SALEM ST

Pending Sites with Confirmed Contamination

3/24/2009

Site ID	PI No.	PI Name	Address
3354	007839	EXXON R/S 32534	5 MT PLEASANT AVE
54573	023955	OMEGA PLUMBING & HEATING SUPPLY	LEE AVE & RICHARDS AVE
206103	271091	84 PENN AVENUE	637 COVE RD
219525	286543	25 27 GUY STREET	25 27 GUY ST
229455	300326	LINCOLN & MCFARLANE AVE GASOLINE DUMPING	LINCOLN AVE & MCFARLAN AVE
66382	G000005144	ZIMMERMAN BROTHERS AAMCO TRANSMISSION	246 248 RT 46
67013	G000010248	DIME SAVINGS BANK DOVER	6 8 GUY ST
67170	G000011199	119 CLARK STREET	119 CLARK ST

Closed Sites with Remediated Contamination

3/24/2009

Site ID	PI No.	PI Name	Address
3420	008047	NEW JERSEY BELL TELEPHONE COMPAN	242 S SALEM ST
3877	011895	AYERS CHEVROLET OLDS MOBILE INC	1 RT 46
3880	135108	COLLISION CONCEPTS	261 RT 46
3881	005462	SPARTAN OIL COMPANY	15 RICHBOYNTON RD
3893	009996	DOVER GARAGE	105 E MCFARLAN ST
3897	005448	SPARTAN OIL CO	280 W CLINTON ST
3899	030361	JERSEY DRIVE IN CLEANERS	24 26 S MORRIS ST
14307	014630	ST CLARES HEALTH SYSTEM	400 W BLACKWELL ST
19268	025435	METRO FLAG MANUFACTURING CORP	47 BASSETT HWY
21690	92661	TERRA DESIGNS	241 E BLACKWELL ST
24536	027104	DELTRONIC CRYSTAL INDUSTRY	60 HARDING AVE
26923	011146	DOVER CRAFTS	158 W CLINTON ST
31209	001126	DOVER CHRYSLER PLYMOUTH	158 S SALEM ST
38713	010923	JAN PACKAGING INC	100 HARRISON ST

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41815	000955	GRAY SUPPLY CORP	199 FRANKLIN RD
42316	002501	EMERSON QUIET KOOL CORP	88 KING ST
43060	004507	GIES BROS G SPERRY & SONS	67 N BERGEN ST
47179	012463	OLD MUNICIPAL GARAGE	MYRTLE AVE
52314	020972	EAST BLACKWELL ST PROPERTY	291 E BLACKWELL ST
52668	019925	RUTAN DOYLE FLEISCHAM	297 E BLACKWELL ST
53808	022394	ST JOHNS EPISCOPAL CHURCH	11 S BERGEN ST
54839	024535	JOHN WOLF CLEANING AND DYEING	36 E DICKERSON ST
56312	030882	NEWBERRY'S FACILITY (FORMER)	1 5 W BLACKWELL ST
61089	94518	DOVER CHILD CARE CENTER	50 N MORRIS ST
67187	G000011280	AID AUTO COMPANY	69 E BLACKWELL ST
67753	G000021908	117 CLARK STREET	117 CLARK ST
68355	G000024636	32 LAWRENCE STREET	32 LAWRENCE ST
68374	G000024735	3 MYRTLE AVENUE	3 MYRTLE AVE
68407	G000024857	28 NORTH BERGEN STREET	28 N BERGEN ST
68876	G000027573	HOPE HOUSE	19 21 BELMONT AVE
69537	G000030204	53 BERGEN STREET NORTH	53 N BERGEN ST
69792	G000031117	91 MILLBROOK AVENUE	91 MILLBROOK AVE
71019	005613	RICHBOYNTON INDUSTRIAL COMPLEX	RICHBOYNTON RD
71121	G000010168	46 TURNER STREET	46 TURNER ST
71237	G000011177	76 RICHARDS AVENUE	76 RICHARDS AVE
71259	G000011357	52 BRANCH RUN AVENUE	52 BIRCH RUN AVE
71719	G000014348	ROCKAWAY TANK	LEE AVE
71802	G000014825	ULTRA POLY CORPORATION	75 HARRISON ST
72059	G000022518	141 ELM STREET	141 ELM ST
72074	G000022671	86 ELIZABETH STREET	86 ELIZABETH ST
72448	G000024968	340 ROUTE 46	340 RT 46
72456	G000025015	GRIFFS INN	239 E BLACKWELL ST
72717	G000027104	301 RICHARDS AVENUE	301 RICHARDS AVE
73056	G000029815	35 KNICKERBOCKER AVENUE	35 KNICKERBOCKER AVE
73094	G000030257	SALEM PROPERTY ASSOCIATES	9 N SALEM ST
73280	G000033346	82 KING STREET	82 KING ST
73346	G000033607	110 WATSON DRIVE	110 WATSON DR
73982	G000036917	84 PARK AVENUE	84 PARK PL
74059	G000037249	122 HURD ST	122 HURD ST
74318	G000038657	A DUNNER INCORPORATED	285 RT 46
74797	G000041047	54 MYRTLE AVE	54 MYRTLE AVE
75047	G000042133	2 E BLACKWELL ST	2 E BLACKWELL ST
75398	G000043777	12 COOPER STREET WEST	12 COOPER ST
75467	G000044108	140 MT HOPE AVE	140 MT HOPE AVE
75478	G000044147	55 N MORRIS ST	55 N MORRIS ST
75583	G000044541	29 5TH STREET	29 5TH ST
75648	G000044821	121 MORRIS STREET S	121 MORRIS ST
76608	G000005790	MKT GEOTECHNICAL SYSTEMS	100 RICHARDS AVE
78165	G000026341	REFERRALS WORKSHOP	14 24 N SALEM ST
80789	G000060175	TOWN OF DOVER RIGHT OF WAY (ROW)	5 N SUSSEX ST
87913	G000061774	37 CENTRAL AVENUE	37 CENTRAL AVE

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88423	G000062337	43 KNICKERBOCKER AVE	43 KNICKERBOCKER AVE
88642	G000062557	33 SANFORD STREET	33 SANFORD ST
89100	G000063083	42 KNICKERBOCKER AVE	42 KNICKERBOCKER AVE
90861	128751	79 AUDREY PL	79 AUDREY PL
94328	133039	997 PORT AU PRINCE ST	997 PORT AU PRINCE ST
119655	157478	724 6TH AVENUE	724 6TH AVE
125294	165418	339 ASHFORD RD	339 ASHFORD RD
127137	168334	146 PRINCETON AVENUE	146 PRINCETON AVE
141216	187748	10 RIVER DRIVE	10 RIVER DR
169481	222741	272 EAST BLACKWELL STREET	272 E BLACKWELL ST
178344	233738	125 MORRIS STREET	125 MORRIS ST
182377	238698	105 BEECH STREET	105 BEECH ST
183264	239775	6 PALM STREET	6 PALM ST
183820	240441	28 5TH STREET	28 5TH ST
185144	243503	32 AUDREY PLACE	32 AUDREY PL
185170	243538	GRACE UNITED METHODIST CHURCH	98 N SUSSEX ST
190808	250708	21 BYRAM AVENUE	21 BYRAM AVE
196865	258445	27 ELENA PLACE	27 ELENA PL
199902	023225	EAST DOVER ELEMENTARY	302 E MCFARLAN ST
200784	264137	AMSCOT STRUCTURAL PRODUCTS CORPORATION	241 E BLACKWELL ST
203540	267699	108 MYRTLE AVENUE	108 MYRTLE AVE
206106	271094	54 56 BAKER AVENUE	54 58 BAKER AVE
220988	288590	GIOVANNIS RESTAURANT	80 E MCFARLAN ST
224344	292829	CARSON & GEBEL	91 PARK HEIGHTS AVE
225038	293725	17 KNICKERBOCKER AVENUE	17 KNICKERBOCKER AVE
228519	299019	38 EDGEWOOD TERRACE	38 EDGEWOOD TER
257342	329629	35 VAN NOSTRAND AVENUE	35 VAN NOSTRAND AVE
259312	332193	18 RESERVOIR AVENUE	18 RESERVOIR AVE
259345	332233	80 JAMES STREET	80 JAMES ST
298069	022490	L O KOVEN & BROTHER INC	58 HARDING AVE
340910	421582	4 CHRISTOPHER STREET	4 CHRISTOPHER ST
341107	421837	21 CLAREDON AVENUE	21 CLAREDON TER
352719	435334	10 PALM STREET	10 PALM ST
353979	436942	20 LINCOLN AVENUE	20 LINCOLN AVE
353986	436954	12 SAMPSON AVENUE	12 SAMPSON AVE
358455	443276	75 PERRY STREET	75 PERRY ST
362557	447801	48 PROSPECT STREET	48 PROSPECT ST
367647	454755	30 KNICKERBOCKER AVENUE	30 KNICKERBOCKER AVE
370129	458006	7 GREEN TREE LANE	7 GREEN TREE LN
378696	469584	98 PERRY STREET	98 PERRY ST
385252	481044	174 EAST BLACKWELL STREET	174 E BLACKWELL ST
385639	481611	76 HILLSIDE AVENUE	76 HILLSIDE AVE
388107	484828	6 CHRISTOPHER STREET	6 CHRISTOPHER ST

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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 two CEAs within the Town of Dover:

- Region Oil Co. – Richards Avenue - (CEA-VO)
- Getty Service Station #56892 – 88 E. McFarlan St. – (CEA-VO)

For further information about Classification Exception Areas:

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.

There is one Solid Waste Landfills mapped in the Town of Dover – Dover Town Sanitary Landfill – Sussex Street.

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

Toxics Release Inventory

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

There is one TRI site located in the Town of Dover: CONSOLIDATED METAL CORP. 100 E. DICKERSON ST.

Attachments:

- o Contaminated Sites - 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 table represents the preserved open space lands located in the Town of Dover. DEP recognizes that its records may be incomplete or incorrect, and appreciates all assistance in keeping its records up-to-date.

Green Acres Program – Open Space Database

Block	Lot	Facility Name	Interest	Type	Funded?
101	3	HEDDEN PARK	ET/FE	C	N
101	4	HEDDEN PARK	ET/FE	C	N
101	6	HEDDEN PARK	ET/FE	C	N
1102	40	OVERLOOK PARK	ET/FE	M	N
1103	1	OVERLOOK PARK	ET/FE	M	N
1103	2	OVERLOOK PARK	ET/FE	M	N
1103	5	OVERLOOK PARK	ET/FE	M	N
1111	15	SECOND ST PLAYGROUND	ET/FE	M	N
1313	1	JFK COMMONS PARK	ET/FE	M	N
1501		KING FIELD	ET/FE	M	N
1803	29	CRESCENT FIELD	ET/FE	M	N
202	8	HURD PARK	ET/FE	M	Y
2105	2.01	SALEM VILLAGE PARK	ET/FE	M	Y
39	17	HEDDEN PARK	ET/FE	C	N
39	34	HEDDEN PARK	ET/FE	C	N
503	12	HEDDEN PARK	ET/FE	C	N
701	2	WATER WORKS	ET/FE	M	N
901	1	BOWLBY	ET/FE	M	N

Interest: ET/FE - Entire Taking/Fee Simple;
Type: M - Municipal; C - County; N - Non Profit
Funded?: Y - Park received Green Acres funding; N - Park did not receive Green Acres funding

Historic Resources

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

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

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

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

New Jersey and National Registers of Historic Places

Baker Building (ID#2107)

16 West Blackwell Street
NR: 7/1/1981 (NR Ref #81000396)
SR: 5/22/1981
SHPO Opinion: 9/13/1979

Blackwell Street Historic District

(ID#2108) Parts of Blackwell, Dickerson,
Sussex, Bergen, Essex, Morris, Warren,
Prospect, Dewey Streets
NR: 5/21/1982 (NR Ref #82003287)
SR: 3/24/1982

Delaware, Lackawanna, & Western RR Station at Dover (ID#2109)
North Dickerson Street
NR: 5/23/1980 (NR Reference #80002511)
SR: 2/1/1980
(Also included in Thematic Nomination of Operating Passenger Rail Stations)

Guenther Hosiery Mill Historic District (ID#2110)
Encompasses King and Berry streets between Elm and McFarlan Street as well as the Mill itself
SHPO Opinion: 9/9/1993

Morris Canal (ID#2784)
Existing and former bed of the Morris Canal
SHPO Opinion: 4/27/2004
SR: 11/26/1973
NR: 10/1/1974 (NR Reference #: 74002228)
(Extends from the Delaware River in Phillipsburg Town, Warren County to the Hudson River in Jersey City, Hudson County. SHPO Opinion extends period of significance for canal to its 1924 closure.)
See Main Entry / Filed Location:
Warren County, Phillipsburg Town

Lindsley House (ID#3753)
87 North Sussex Street
SHPO Opinion: 5/30/1996

Old Stone Academy (ID#2111)
25-27 East Dickerson Street
SR: 7/5/1979

Railroad Historic District (ID#2112)
SHPO Opinion: 9/1/1978
(Dover Station and Yard Complex. See also Old Main Delaware, Lackawanna and Western Railroad Historic District.)

Old Main Delaware, Lackawanna and Western Railroad Historic District (ID#3525)
Morris and Essex Railroad Right-of-Way (NJ Transit Morristown Line) from Hudson, Hoboken City to Warren, Washington Township, and then along Warren Railroad to the Delaware River
SHPO Opinion: 9/24/1996
See Main Entry / Filed Location:
Hudson County, Hoboken City

Attachments:

- Open Space – Map
- Historic Districts & Properties – Map
- Historic Sites - 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:

- o Permit Extension Act Environmentally Sensitive Areas – Map

Regional Planning Areas

HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL

The Highlands Water Protection and Planning Act was signed into law in August 2004, and instituted protective environmental standards for the portion of northern New Jersey, known as the Highlands region. The Act calls for a fifteen member Highlands Water Protection and Planning Council, which is charged with carrying out the provisions of the Act, including the development of a regional master plan for the Highlands Region. The Highlands Region covers portions of seven counties and 88 municipalities, provides drinking water for over 5 million people, and is approximately 1,250 square miles in area.

The Highlands Regional Master Plan seeks to determine the capacity of the Highlands Region to accommodate economic growth while ensuring the stability and safeguarding of the resources within the Region. The Region is divided between “Planning Areas” and “Preservation Areas”, and lands within the Preservation Area are governed by rules and regulations adopted by the New Jersey Department of Environmental Protection. The Highlands Preservation area is under sole planning authority of the Highlands Council. Any municipality, or portion of a municipality, located within the Highlands Preservation area must conform to the Highlands Regional Master Plan. In the Highlands Planning area, a municipality has the ability to choose between Plan Conformance with the Highlands Regional Master Plan, Plan Endorsement with the State Plan, or may choose to move forward with neither of these options.

The Town of Dover is located within the Highlands Region, and located within in the Highlands Planning area. The Department will consult with the Highlands Council regarding your petition for Plan Endorsement. The portion of your municipality located within the Highlands Planning area, is being reviewed in the State Plan Endorsement process, and is the subject of this report.

Highlands Water Protection and Planning Council

100 North Road (Route 513)
Chester, New Jersey 07930
(908) 879-6737
Fax: (908) 879 4205
Email: highlands@highlands.state.nj.us

Summary of Major Issues

1. Water Supply

Based upon population and water usage projections from the Draft 2009 New Jersey Water Supply Plan, the Dover Water Commission is projected to be in an administrative deficit of -0.17 MGD in 2010 and a deficit of -0.19 MGD in 2020. As such, Dover should begin planning for additional water allocation immediately.

DEP notes that The Dover Water Commission has 3 unconfined wells in the Rockaway River HUC11. However, this HUC11 is located entirely within the Highlands Region and, consistent with the Highlands Act, is therefore subject to the Highlands water availability criteria should the Dover Water Commission propose increasing their existing diversion or locating a new one in that HUC11. As such, DEP recommends that Dover begin talks with the Highlands Council on addressing water supply issues.

2. Transfer of Development Rights

Dover's Municipal Self Assessment notes that its location in the Highlands Planning Area, and the expected growth pressures resulting from the resource protections included in the Highlands Act, "puts Dover in a unique position to work with the Highlands Planning Council and potentially capture the State benefits associated with these development pressures through a concerted planning effort." The MSA also states that "Dover is poised to take advantage of incentives offered in the Highlands Region".

DEP agrees, and believes that the Town of Dover should consider participating in the Highlands Council TDR program as a means to benefit from the existence of the Region. Participation in the Highlands TDR program provides certain benefits to the Town such as enhanced planning grants from the Council of up to \$250,000; eligibility for a grant to reimburse the reasonable costs of amending municipal development regulations, and; the authorization to impose impact fees. It would also serve to protect water quality and natural resources in the Highlands Region that benefit – directly or otherwise – the citizens of the Town.

3. Historic Preservation Issues

- Historic Preservation Commission – DEP supports the Town of Dover's 2007 Master Plan recommendation to create a Historic Preservation Commission. However, the MSA states that "The HPC's area of responsibility would be focused on the Blackwell Historic District"; DEP recommends that Dover consider making the HPC a "Strong Commission" with the responsibility, and power, to review development plans beyond the historic district.

Once 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>

- Expansion of the Historic District – The steps to expand the historic district by the Town should be consistent with, if not mirror, those steps taken in the original process, and outlined in ordinance
- Historic Sites Inventory - DEP will require as part of its Plan Endorsement Consistency Review that Dover develop a Town-wide Historic Sites Inventory, or update the County-wide inventory. At a minimum, this should be performed for the historic district. This work should be done in accordance with *The Guidelines for Architectural Survey*, particularly those dealing with intensive-level regulatory surveys. This guidance is out of print, but is available on the State Historic Preservation Office's website <http://www.state.nj.us/dep/hpo/1identify/survarcht.htm>.
- Tax Credits - The National Park Service web site is a great place to start <http://www.nps.gov/history/HPS/tps/tax/brochure1.htm>
- Morris Canal Historic Sites - Neighboring Warren County has a progressive Morris Canal Greenway Project <http://www.morriscanal.org/>; there would be a public benefit to extending this into other counties. DEP recommends that Dover, and Morris County, investigate expansion of the Greenway Project, or develop a similar project.
- Bassett Highway Redevelopment Plan – DEP notes that the Blackwell Historic District and Bassett Highway Redevelopment Plan area intersect. Ensure consistency with proper historic resource protection in the Redevelopment Area.
- Review the NJ Historical Commission's (NJ Department of State) grant program at <http://www.nj.gov/state/divisions/historical/grants/>.

4. Open Space

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

5. Category One Waters

The mapping included in the MSA does not appear to use the most recent Category One Waters mapping. This data may be downloaded at www.nj.gov/dep/gis.

6. Redevelopment Area(s)

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

7. Community Forestry Management Plan

Please provide a copy (preferably electronic) of the 2005 Town of Dover Community Forestry Plan.

8. 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

07/15/2009

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.

The grant Pre-Application deadline has been extended to September 4, 2009. For a full description of the grant program and pre-application form and process go to: www.nj.gov/dep/opsc/ghggrant.html or e-mail questions to GHGGrants@dep.state.nj.us. For a copy of the Press Release go to: http://www.nj.gov/dep/newsrel/2009/09_0015.htm.

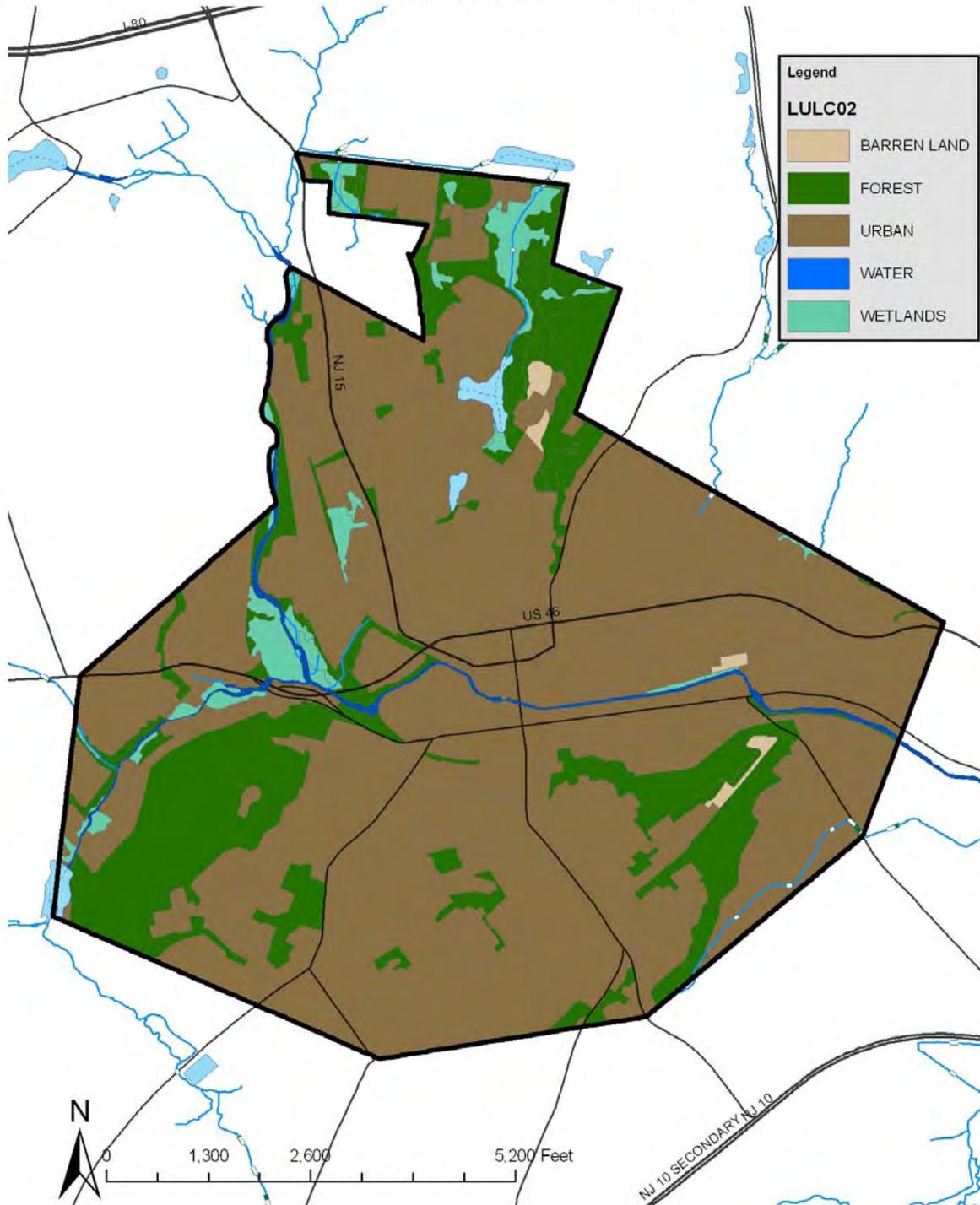
9. Center Proposal

DEP supports designation of Dover as a Regional Center.

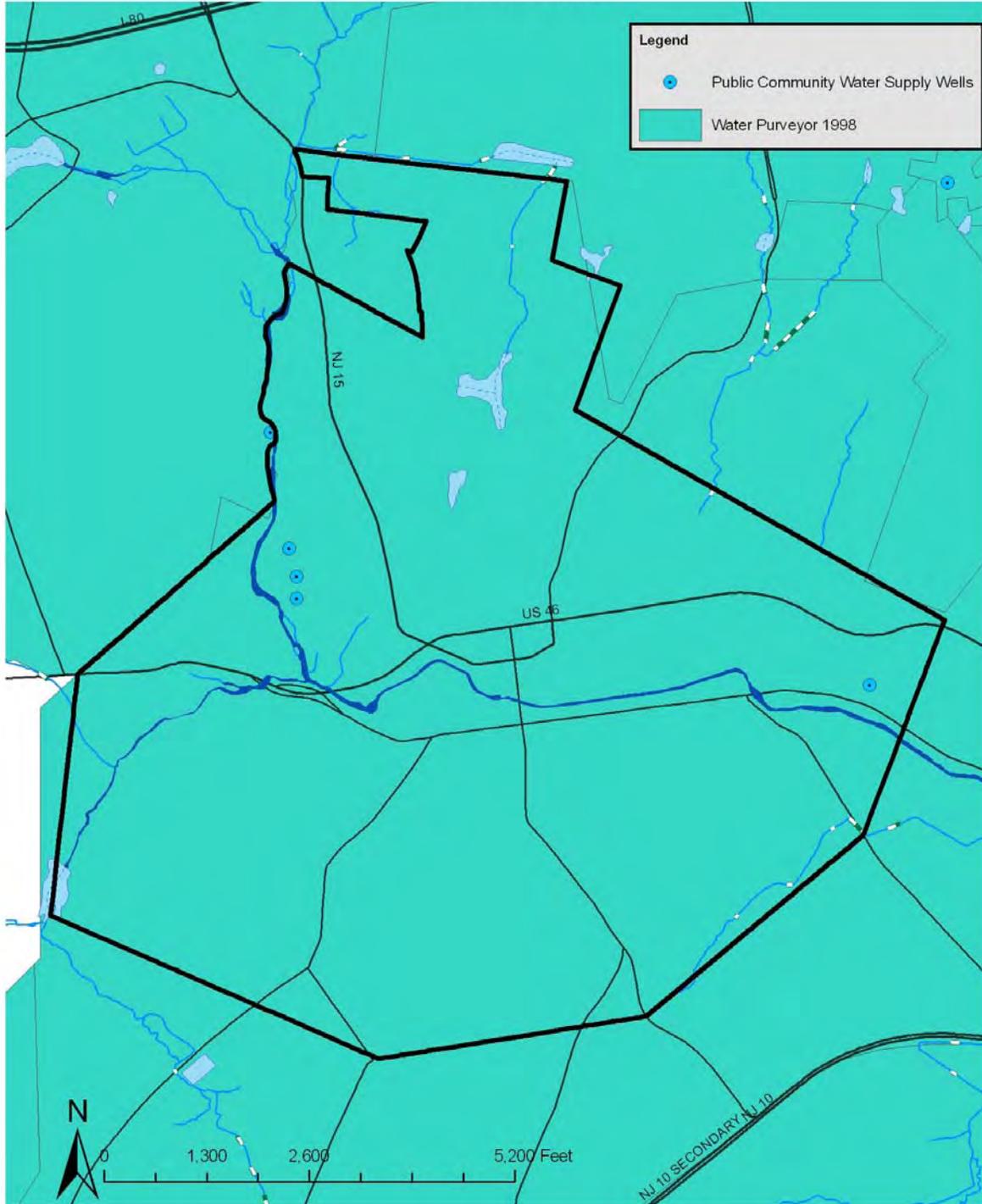
07/15/2009

Maps

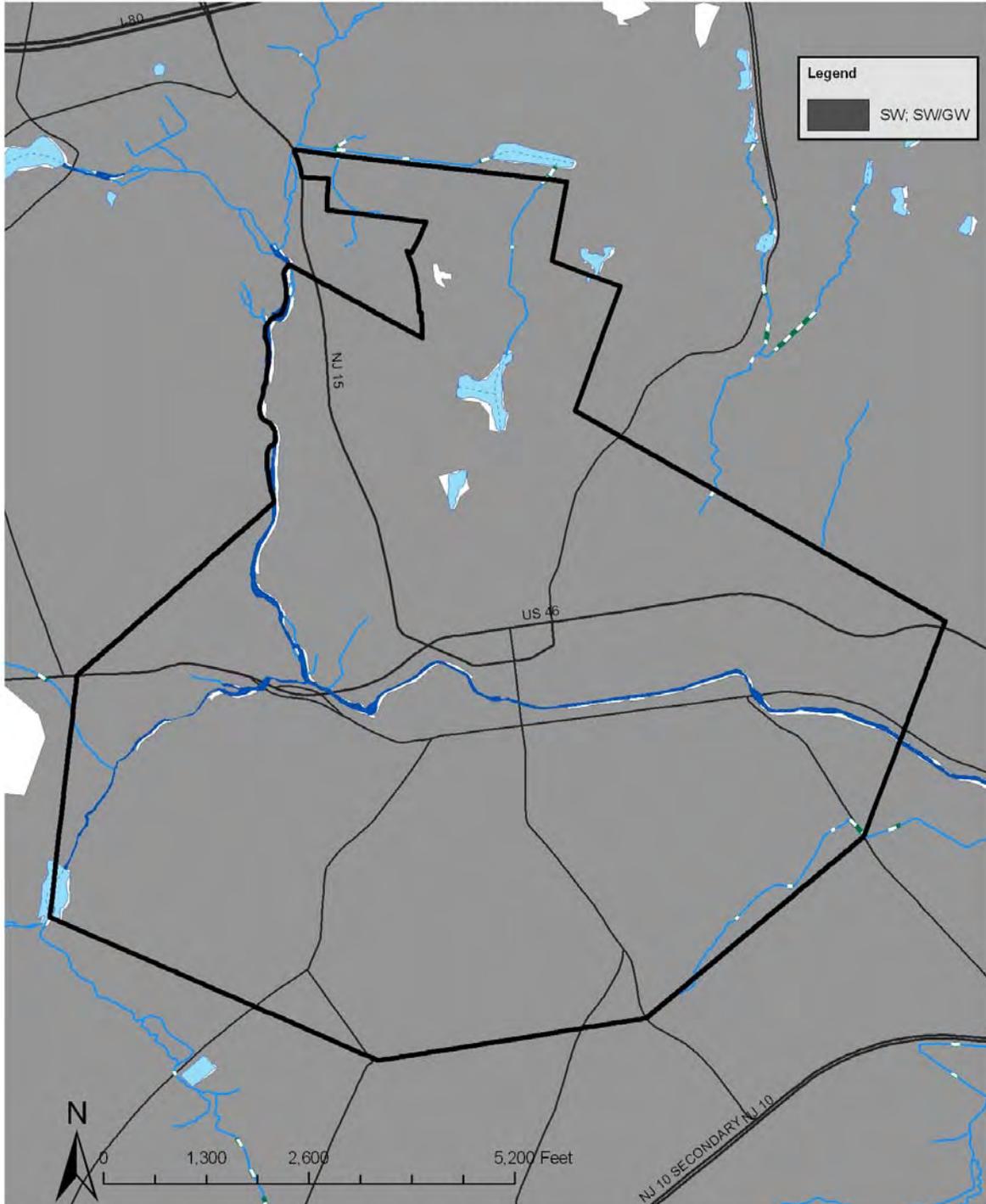
Town of Dover, Morris County Land Use/Land Cover 2002



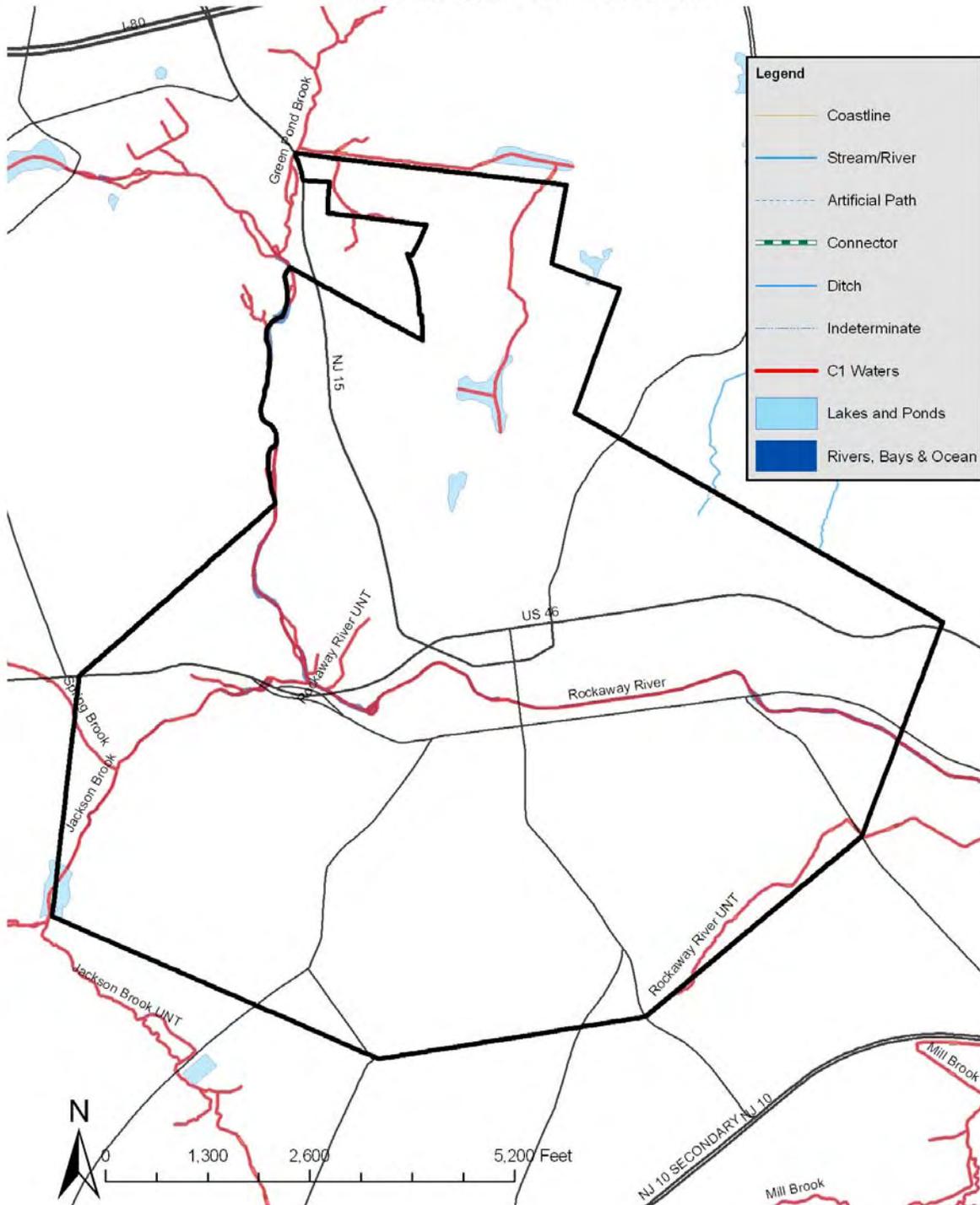
Town of Dover, Morris County Water Supply



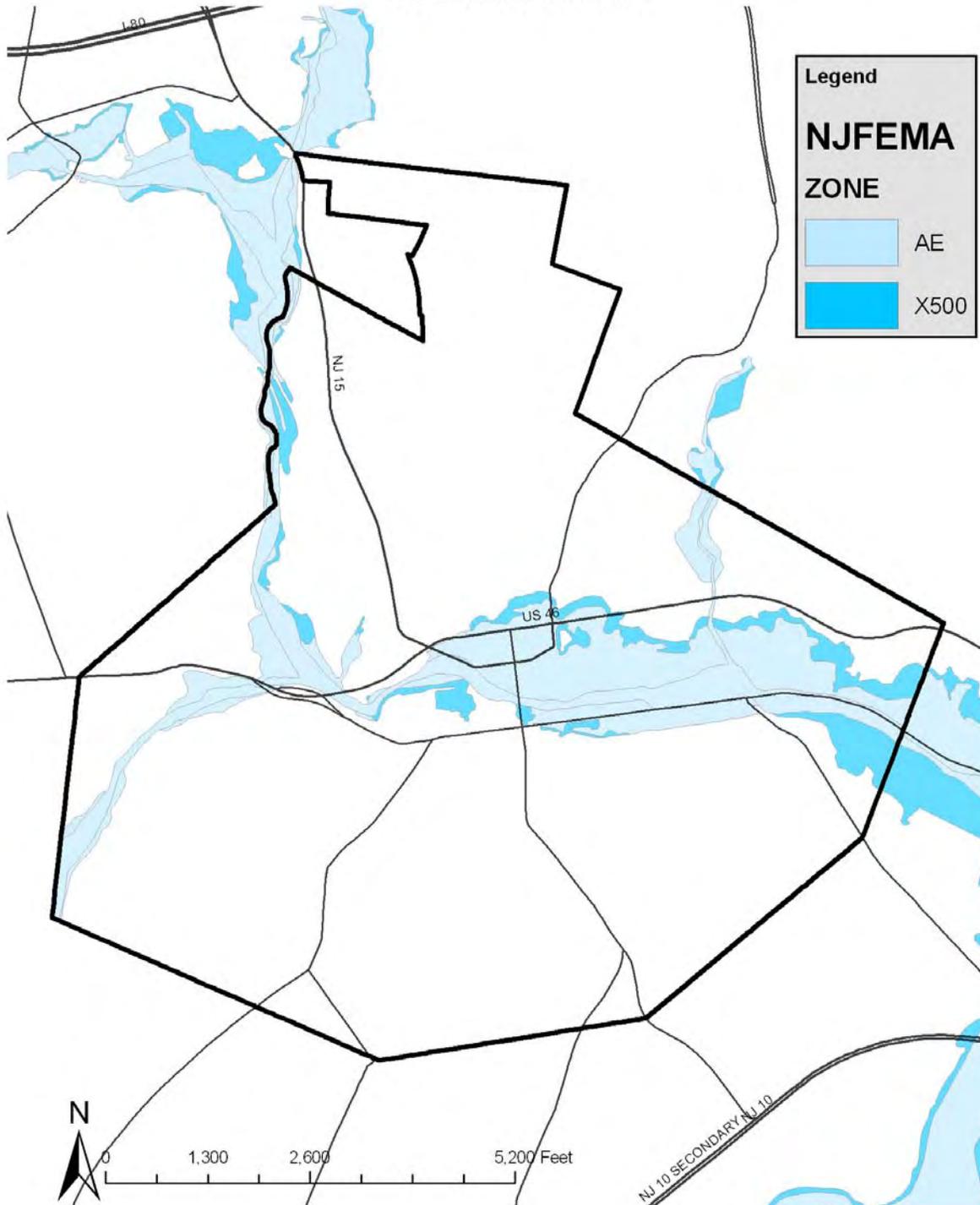
Town of Dover, Morris County Adopted Sewer Service Area



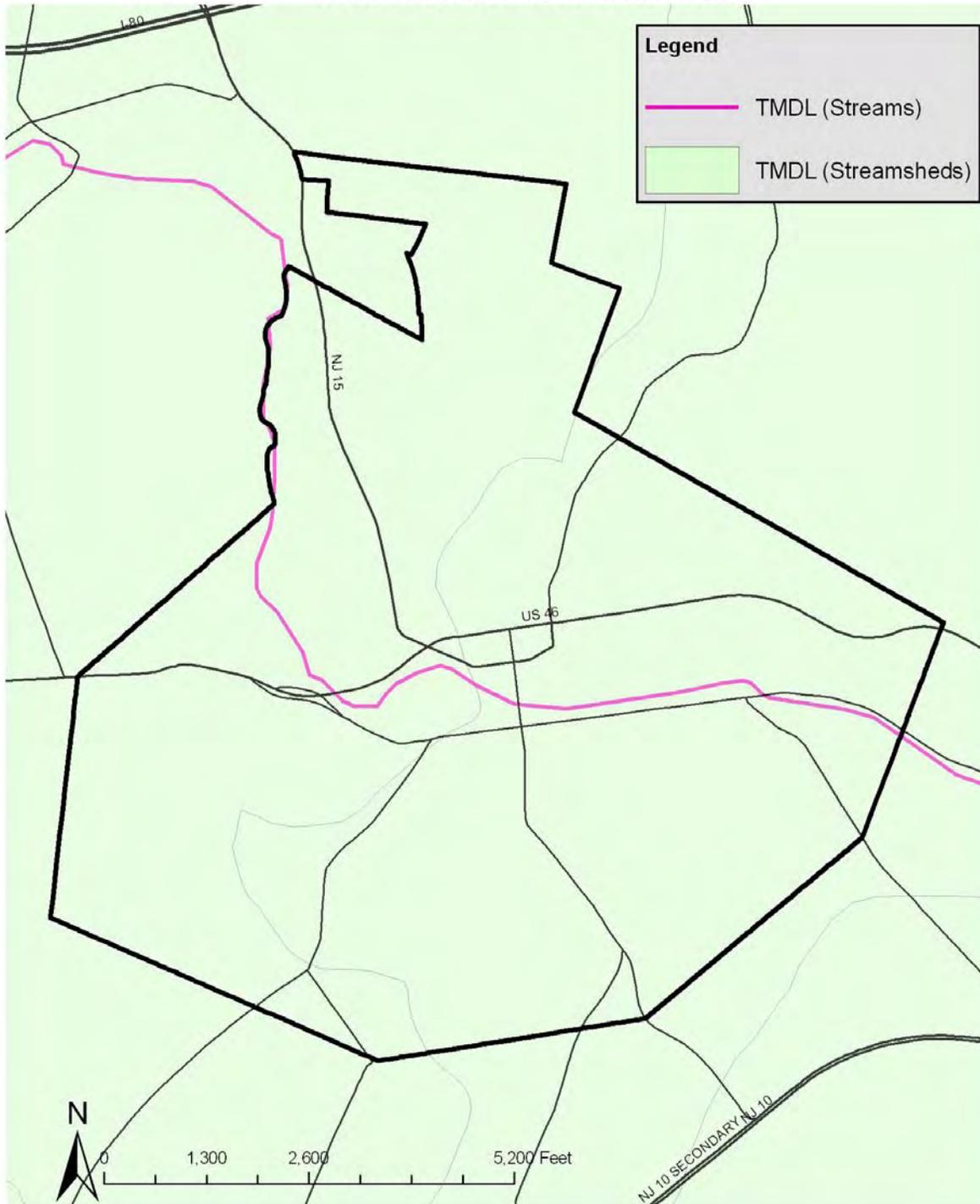
Town of Dover, Morris County C1 Waters and Other Waterbodies



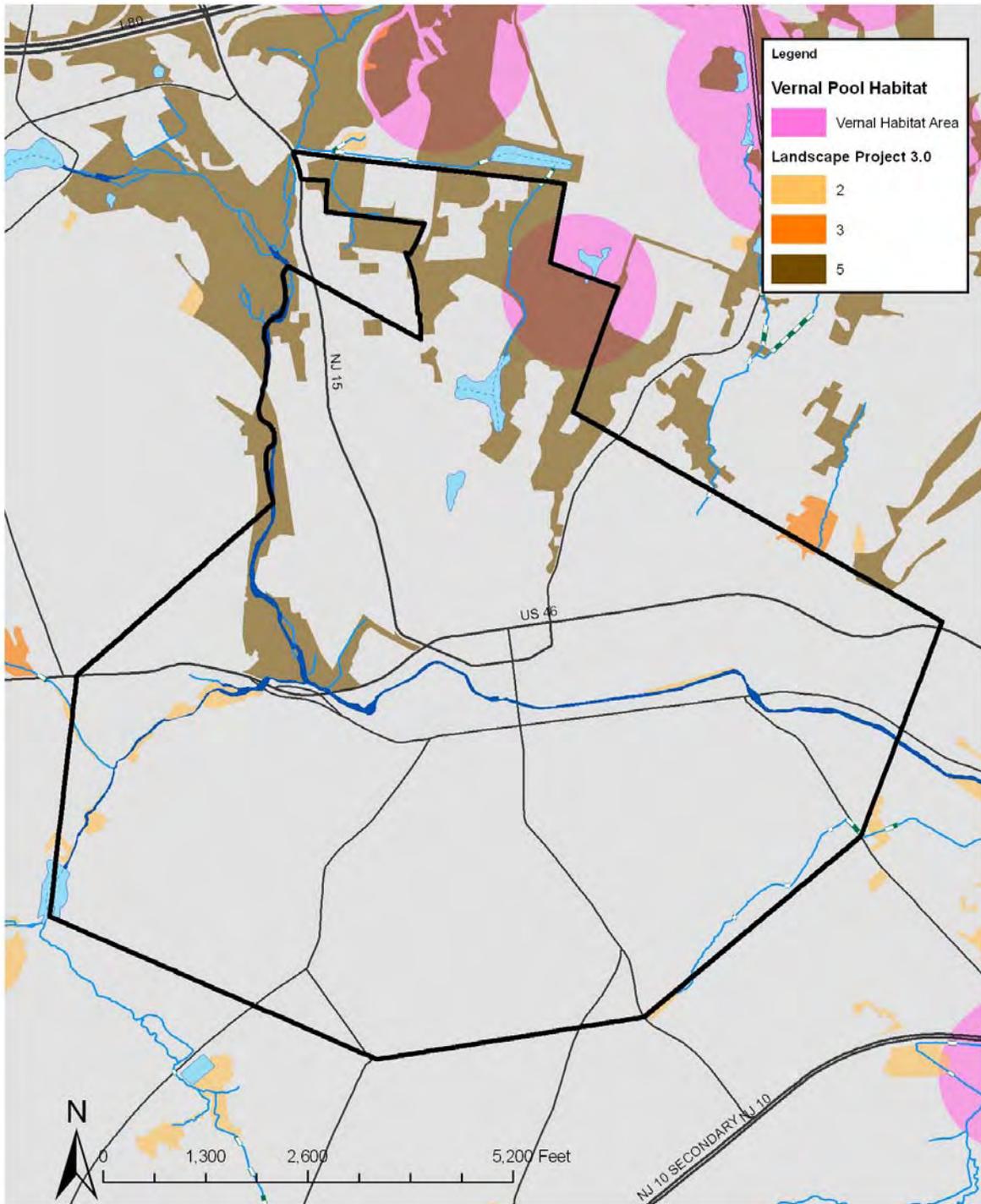
Town of Dover, Morris County NJ FEMA Flood Zones



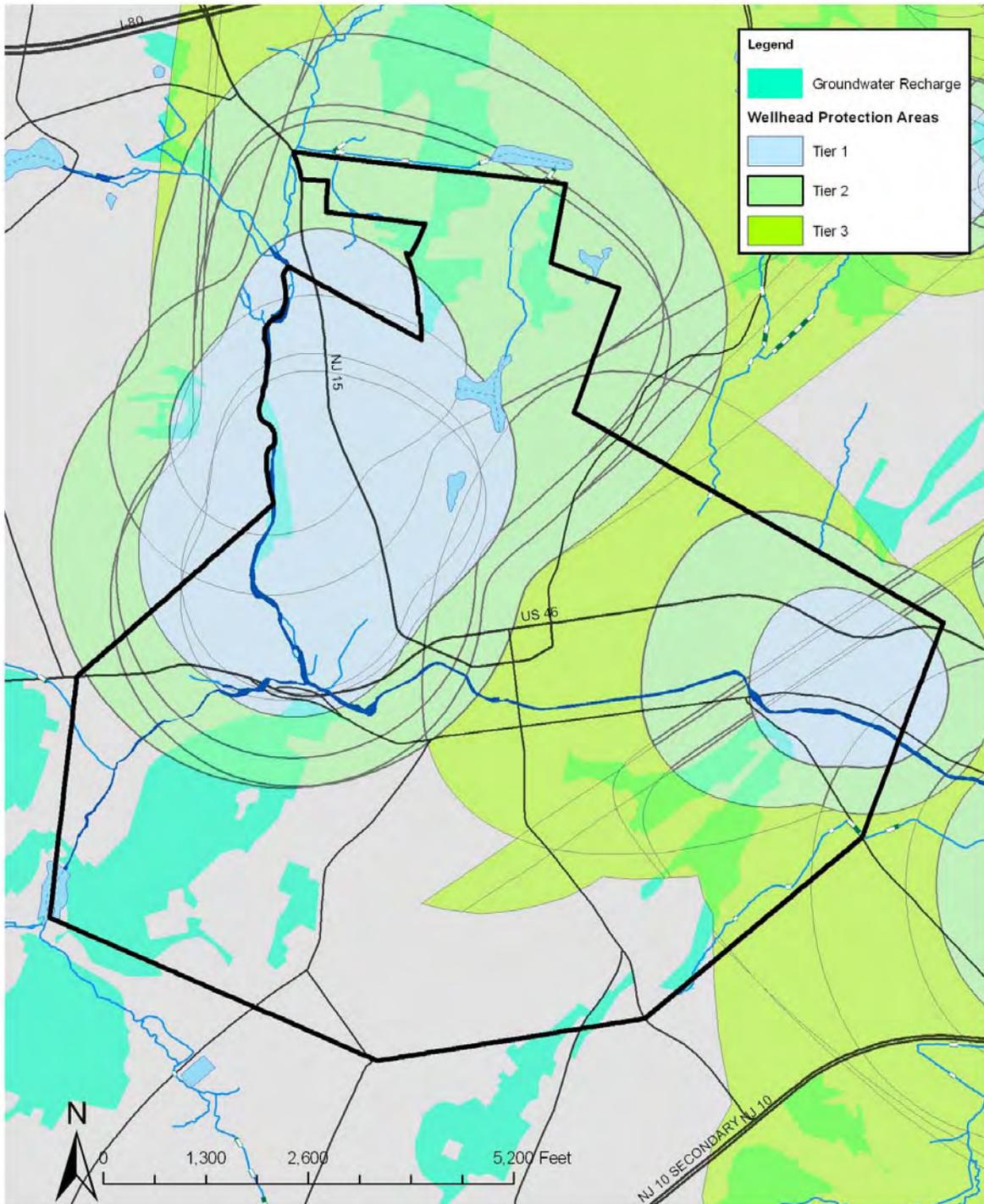
Town of Dover, Morris County Total Maximum Daily Loads (TMDLs)



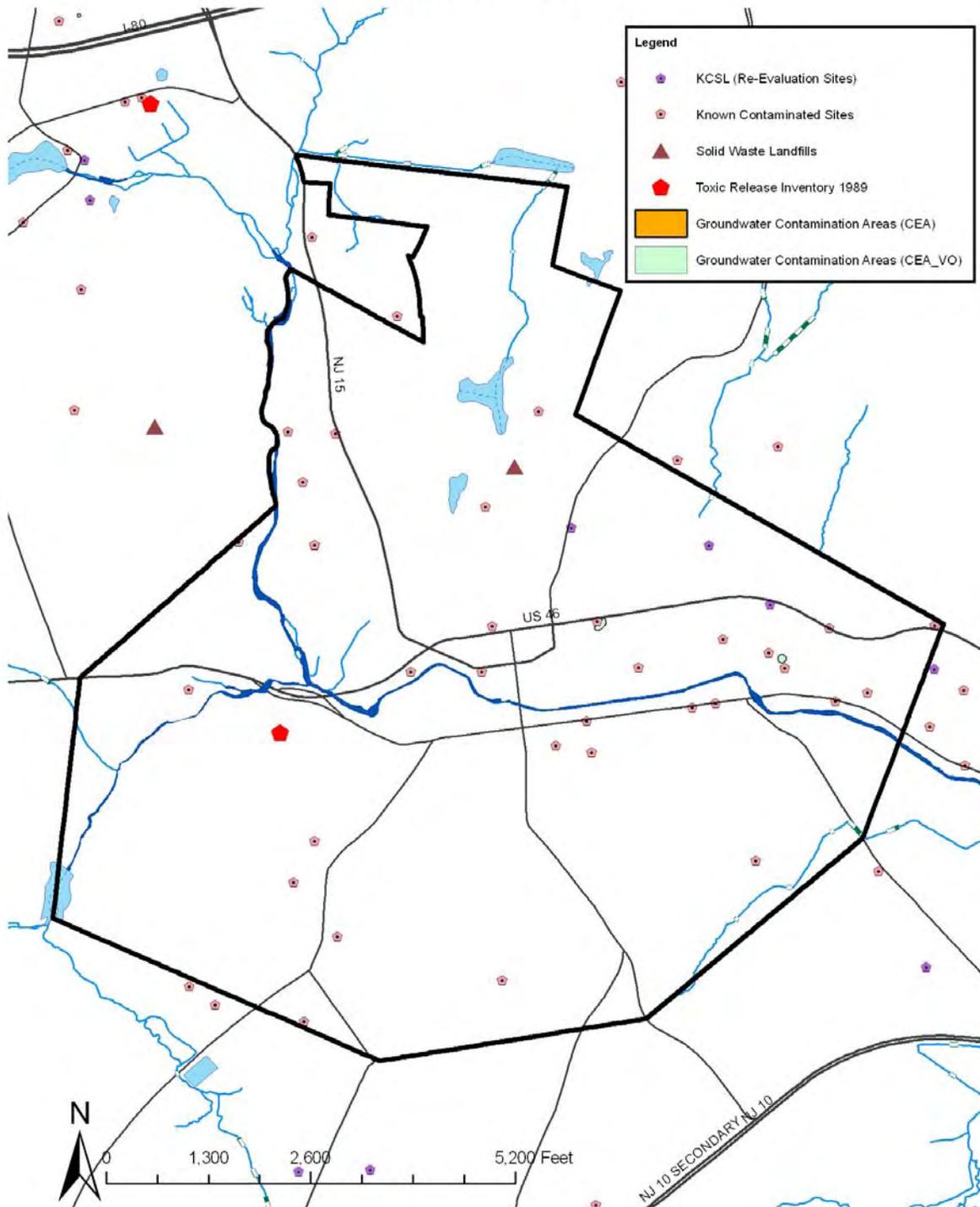
Town of Dover, Morris County Threatened & Endangered Species Habitat (Landscape Project 3.0)



Town of Dover, Morris County Wellhead Protection & Groundwater Recharge Areas

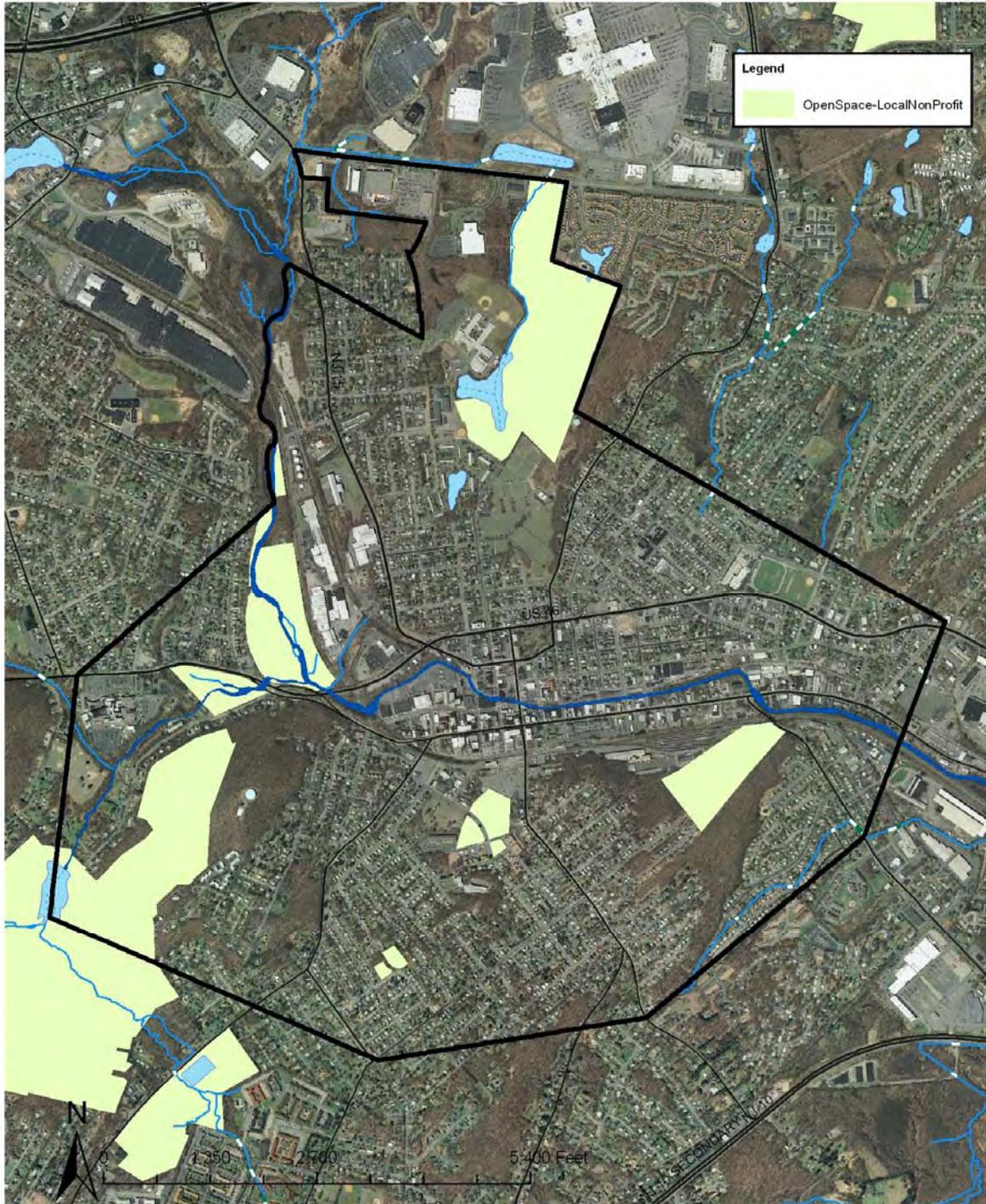


Town of Dover, Morris County Contaminated Sites

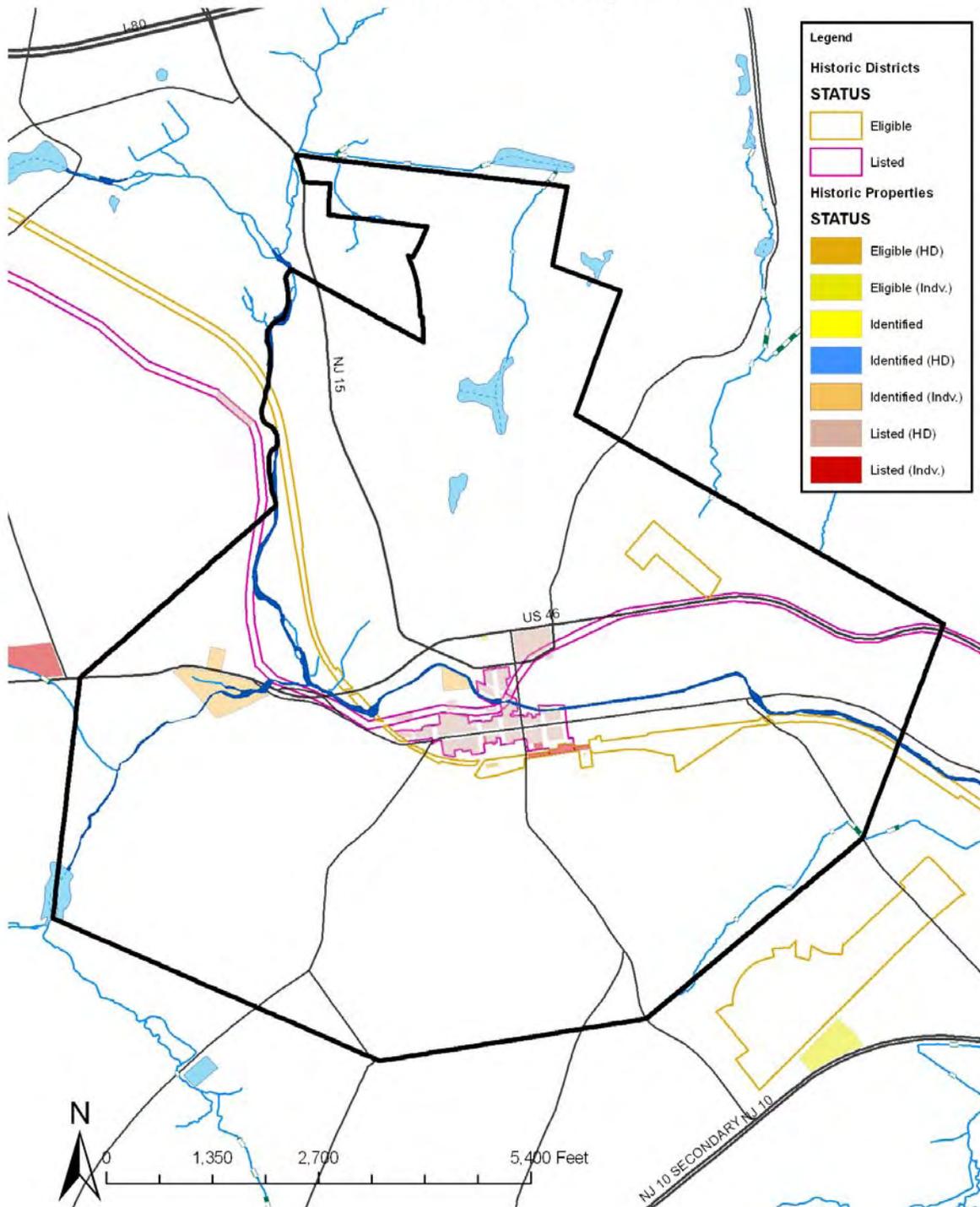


07/15/2009

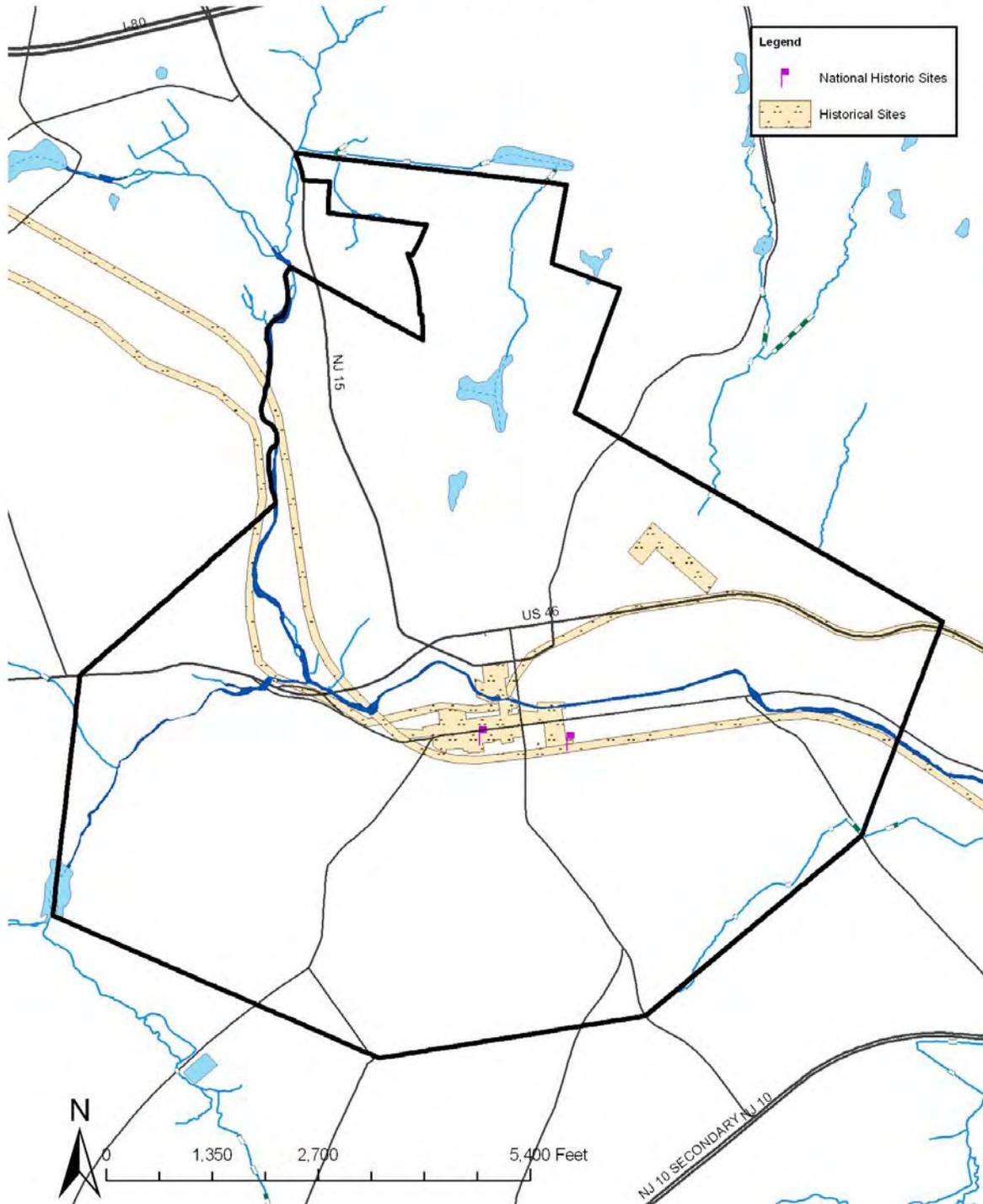
Town of Dover, Morris County Open Space



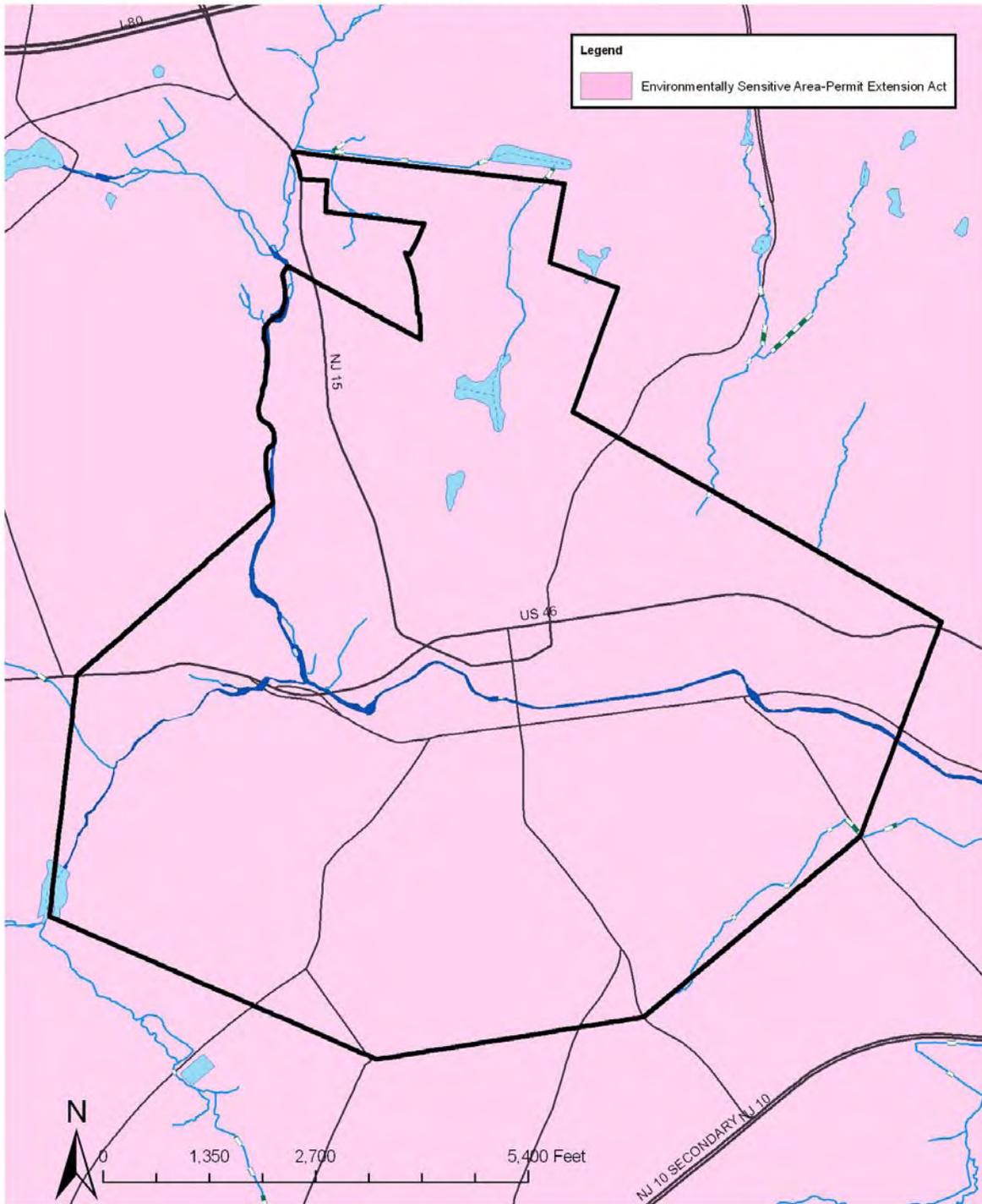
Town of Dover, Morris County Historic Districts & Properties



Town of Dover, Morris County Historic Sites



Town of Dover, Morris County Permit Extension Act



Additional Attachments

Public Water System Deficit/Surplus

DOVER WATER COMMISSION

PWSID: 1409001
County: Morris
Last Updated: 08/08/07

Water Supply Firm Capacity: 4.320 MGD

Available Water Supply Limits

	Allocation	Contract	Total
Monthly Limit	112.000 MGM	N/A MGM	112.000 MGM
Yearly Limit	1153.000 MGY	N/A MGY	1153.000 MGY

Water Demand

	Current Peak	Date	Committed Peak	Total Peak
Daily Demand	3.409 MGD	07/2004	0.000 MGD	3.409 MGD
Monthly Demand	105.675 MGM	07/2004	0.000 MGM	105.675 MGM
Yearly Demand	1068.452 MGY	2004	0.000 MGY	1068.452 MGY

Water Supply Deficit or Surplus

Firm Capacity	Water Allocation Permit
0.911 MGD	6.325 MGM
	84.548 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:

Changes include up to June 2007

Bureau of Water Allocation Comments:

No comments provided

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 TRANSPORTATION

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

For:

Town of Dover, Morris County

July 7, 2009

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

NJDOT has examined the following categories for pertinent data:

State Highways

Route 15 – MP 0.00 – 1.35, 1.40 – 1.61

Route 46 - MP 37.28 – 39.42

Straight Line Diagram sheets are attached.

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

According to the attached table, Route 15 from mileposts 0.00 – 1.35 and 1.40 – 1.61 are classified as Access Level 4 (driveway with provision for left turn access via left turn lane) with a desirable typical section (DTS) of 4C (4 lanes, undivided, with shoulders or parking).

Route 46 from milepost 37.28 – 39.42 is classified as Access level 3 (right-turn access with provision for left-turn access via jughandle) with a DTS of 4A (four lanes, divided, with shoulders or parking).

There are no proposed Access Level or DTS changes. The designation of a Center would not change the Access Levels for any portion of these highway segments.

Congestion Management System

According to the attached charts, most of this section of Route 15 is classified as “Severely Congested”. The section lies within a corridor ranked #47 on the list of 79 congested commuter corridors. The intersection of Route 15 and Morris Street (CR 643 – MP 0.15) is ranked #121 out of 372 high need signalized intersections on State highways. The intersection of Route 15 and Mount Pleasant Avenue (MP 1.61) is ranked #209 out of 372 high need signalized intersections.

Part of this section of Route 46 is “Very Congested”. The section lies within the corridor ranked #29 on the list of 79 congested commuter corridors.

Major Capital Projects/Initiatives and Mitigation Projects

The FY 2009-2018 Statewide Transportation Improvement Program (STIP) and the draft 2010-2019 STIP contain a project for the Prospect Street Bridge over Morristown Line, CR 513. The project will provide for the replacement of the existing bridge superstructure with slight change in vertical alignment of the roadway geometry. The proposed bridge will be a 34-foot, single-span, multi-beam steel structure with an overall width of 45 feet and 25 feet curb-to-curb distance. It will carry a 12-foot, 6-inch travel lane in each direction and 8-foot, 6-inch sidewalk on both sides of the structure. The project will improve bridge underclearances and roadway geometry. Bridge aesthetic treatments to enhance the historic railroad setting will be provided. This project will be designed for bicycle/pedestrian compatibility.

The FY 2009-2018 STIP also contains a project on Route 46, Section 7L and 8K. The project will realign and widen Route 46 from Pequannock Street in the east to Princeton Avenue in the west. The existing Route 46 bridges over the NJ TRANSIT Railroad/Rockaway River and the Morristown and Erie Railroad will be demolished and replaced with new structures. The existing Route 46 and Route 15 grade-separated intersection will be reconstructed as a grade-level T intersection. The proposed T intersection will allow direct access between Routes 46 and 15 in all directions. The intersection will be signalized and will maintain two through travel lanes in each direction. The proposed improvements will replace the existing structurally deficient bridges and will upgrade this stretch of Route 46 to current design standards, which include increasing the bridge underclearances, improving the roadway profile, widening the travel lanes, adding shoulders in each direction and adding dedicated turning lanes.

The FY 2009-2010 and draft FY 2010-2011 Study and Development Programs contain a Rockaway River Greenway project. It is proposed to create a linear greenway along the banks of the Rockaway River from Richboynton Road in Dover to Rockaway Road in Rockaway Township. The project will study alternatives that would relocate the railroad interchange to allow for conversion of the rail line into a linear greenway, as well as the elimination of 12 grade crossings and a state highway bridge.

Designated Transit Villages

The Town has indicated it will not pursue Transit Village designation at this time because of the unresolved issue regarding the affordable housing/Transit Village connection created in Assembly Bill 500.

However, NJDOT currently is funding a consultant effort in Dover in the amount of \$35,750 through the Mobility and Community Form Pilot Program. The purpose of this effort is to use Dover's 2006 TOD Development Plan and 2006 Master Plan for development of a form-based code that the Town can adopt. This initiative began in April 2009 and is expected to be completed by February 2010.

Designated Scenic Byways

Not Applicable

Open Local Aid Grant Projects

FY 2009 Municipal Aid Program – Sammis Avenue from Route 46 to East Blackwell Street in the amount of \$120,000 for milling, resurfacing and curb replacement.

The Town of Dover has a good performance record for implementation of projects in a timely manner.

Corridor Studies

Not Applicable

Local Planning Assistance Projects

Not Applicable

Bicycle and Pedestrian Local Planning Assistance Projects

Although no formal Local Planning Assistance projects are being implemented in Dover at this time, the Office of Bicycle and Pedestrian Programs inspected the intersection of Route 15 and Grace Street in response to a complaint concerning pedestrian improvements at the intersection. The intersection is unsignalized and has limited sight distance due to an existing vertical curve. The existing pedestrian facilities include a painted standard crosswalk and “School Crossing” advance warning signs. The intersection was found to lack pedestrian facilities for students crossing to East Dover High School. Recommended solutions include the provision of a high visibility crosswalk at the intersection, increasing enforcement with regard to speeding and parking in “no parking” areas, and flashing warning beacons for existing “School Crossing” signs. Intersection modifications are expected to be completed during July 2009.

Public Use/General Aviation Airports

Not Applicable

Rail Freight Lines

Dover Town and adjoining municipalities are well served by freight rail, as noted in the Municipal Self-Assessment. Morris County owns the freight line and the Morristown and Erie Railway operates upon it. Both entities have received grants for rail rehabilitation and improvements and have applied for additional grants. Morris County has received American Recovery and Reinvestment Act (ARRA) funds in the approximate amount of \$6 million for the rehabilitation of the Chester Branch in Roxbury. The County has applied for FY 2010 funds for repairs to the Dover and Rockaway line in Dover, as well as an expansion of the Kenvil Team Track in Rockaway.

Traffic Engineering and Safety Initiatives

Traffic Engineering and Investigations is beginning the design of a flashing intersection control beacon at Route 15 and Grace Street. Funding will be provided through the Maintenance operating budget.

Safety Programs is providing improvements at the following intersections:

Route 46 and Pequannock Street
Route 46 and Sussex Street
Route 46 and Perry Street
Route 46 and Elk Road

Existing and Planned Park-and-Rides

NJDOT has an existing park-and-ride lease facility located at 420 East Blackwell Street. This site formerly was leased by Lakeland Bus Line. In January 2009, the Department entered into a 10-year lease agreement with a representative of C & C Salvage, Inc., the landowner of record, for 84 commuter parking slots. The property is listed in Dover Town, but also borders Rockaway Borough. A map is attached.

Other Significant Issues

The Department recently became aware of the possibility that the Bassett Highway Redevelopment Plan might not go forward at this time.

ATTACHMENTS

Straight Line Diagram Sheets
Access Classification Table
Congestion Management System Chart
Dover Park and Ride Map

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

ROUTE (SRI)	MILEPOST		Existing Appendix B			Proposed Appendix B		
	BEGIN	END	DTS	AL	CELL	DTS	AL	CELL
00000015	0.00	1.35	4C	4	5	4C	4	11
00000015	1.40	1.61	4C	4	5	4C	4	11

ROUTE (SRI)	MILEPOST		Existing Appendix B			Proposed Appendix B		
	BEGIN	END	DTS	AL	CELL	DTS	AL	CELL
00000046	37.28	39.42	4A	3	4	4A	3	4



New Jersey Department of Transportation

Bureau of Systems Development & Analysis

CMS Priority Ranking

US 46 (MP 37.28 - 39.42) Dover Town, Morris County

CMS Link Number	Route	Begin Milepost	End Milepost	One-Way ADT (2006) (Veh./Day)	No. of Lanes (NB/EB)	No. of Lanes (SB/WB)	V/C Max	Overall Score	Priority Rating	System Top Percentile	County	County Top Percentile	MPO	MPO Top Percentile
2389	46	37.29	37.45	9000	1	1	1.15	6.65	Medium	25	Morris	29	NJTPA	30
2390	46	37.45	37.81	9451	2	1	0.89	5.90	Medium	38	Morris	50	NJTPA	43
2391	46	37.81	38.20	9740	2	2	0.29	2.48	Low	91	Morris	98	NJTPA	93
5479	46	38.20	38.49	12352	2	2	0.99	5.23	Medium	49	Morris	61	NJTPA	54
5478	46	38.49	38.66	12452	2	2	0.60	3.95	Low	70	Morris	81	NJTPA	73
2393	46	38.66	39.80	11039	2	2	0.53	3.50	Low	77	Morris	86	NJTPA	80

Part of this section of US 46 is "Very Congested".

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

Priority Ratings are based on the Overall Score, as follows:

RED HIGH = 7.00+
 ORANGE MEDIUM = 5.00 - 6.99
 GREEN LOW < 5.00

Note: This section is within the corridor which is ranked # 29 on the list of 79 congested commuter corridors.



New Jersey Department of Transportation

Bureau of Systems Development & Analysis

CMS Priority Ranking

NJ 15 (MP 0.00 - 1.35, 1.4 - 1.61) Dover Town, Morris County

CMS Link Number	Route	Begin Milepost	End Milepost	One-Way ADT (2006) (Veh./Day)	No. of Lanes (NB/EB)	No. of Lanes (SB/WB)	V/C Max	Overall Score	Priority Rating	System Top Percentile	County	County Top Percentile	MPO	MPO Top Percentile
369	15	0.00	0.10	10000	1	1	1.50	8.13	High	8	Morris	5	NJTPA	10
5234	15	0.10	0.39	10000	2	2	1.50	6.56	Medium	27	Morris	32	NJTPA	31
5235	15	0.39	0.70	10000	1	1	1.37	7.69	High	12	Morris	11	NJTPA	14
371	15	0.70	1.51	9119	1	1	1.00	6.18	Medium	33	Morris	42	NJTPA	38
372	15	1.51	1.80	12191	2	2	1.50	6.90	Medium	21	Morris	23	NJTPA	25

Most of this section of NJ 15 is "Severely Congested".

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

Priority Ratings are based on the Overall Score, as follows:

RED HIGH = 7.00+ **ORANGE** MEDIUM = 5.00 - 6.99 **GREEN** LOW < 5.00

Note: This section is within the corridor which is ranked # 47 on the list of 79 congested commuter corridors.

Note: The intersection of NJ 15 and Morris St. (CR 643) (MP 0.15) is ranked # 121 out of 372 high need signalized intersections on State highways.
 The intersection of NJ 15 and Mt. Pleasant Ave. (MP 1.61) is ranked # 209 out of 372 high need signalized intersections on State highways.
 There are approximately 2500 signalized intersections on State highways.

Memorandum

TO: Office of Smart Growth

FROM: Chuck Latini, PP, AICP

DATE: August 4, 2008

SUBJECT: Town of Dover Opportunities and Constraints Report

The Town of Dover is a highly accessible rail and bus community located along the Morris & Essex Line as well as the Montclair/Boonton Line operated by NJ TRANSIT. The Montclair/Boonton line has direct service from Hackettstown to Hoboken Station, with transfers to PATH and Ferry services to New York. The Morris & Essex Line offers Mid-Town Direct service into New York Penn Station. Rail station daily/permit parking is provided at the station.

Bus service to and from Dover is served by the 872, 874, 875, 877, 880 lines to and from various points in the region including Morristown. While there is some discussion surrounding bus operations serving Dover and the inter-modal potential of the existing station, at this time, NJ TRANSIT does not foresee a significant need to substantially expand service to Dover.

In their Self-Assessment report, Dover noted that it has worked with OSG and NJT on Transit-oriented development planning for their historic downtown and immediate vicinity. These efforts are supported by NJT and continues to work with the community on issues related to Station area planning and redevelopment.

Based upon an analysis of population density, employment density and zero car household density, Dover has a transit score of medium-high. According to the applicable modes of transit based on area and future growth, a medium-high transit score is supportive of the types of transit present within the community. Given the Town's current planning efforts, new development will significantly increase the density around both bus and rail transit access points, thus adding to its attractiveness as a true center within Morris County.

Given Dover's optimal public transit access, it appears that its existing development and future growth is adequately served by the existing transit system and services. As development pressure increases in the region however, mainly due to the Highlands and the redevelopment potential that exists in the Downtown, service may change and be adjusted in the future.

The Town has worked on perfecting its plans for many years now. Through its visioning efforts and outreach to various stakeholders, the Town is well positioned itself for future growth. NJ Transit fully supports Dover's petition for endorsement.

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



JON S. CORZINE
Governor

State of New Jersey

Highlands Water Protection and Planning Council
100 North Road (Route 513)
Chester, New Jersey 07930-2322
(908) 879-6737
(908) 879-4205 (fax)
www.highlands.state.nj.us



JOHN R. WEINGART
Chairman

EILEEN SWAN
Executive Director

Highlands Council Opportunities and Constraints Analysis Dover Town, Morris County

In response to the Town of Dover's Resolution Authorizing Application for Plan Endorsement and submittal of the Town of Dover Municipal Self-Assessment Report to the Office of Smart Growth (OSG), the Water Protection and Planning Council (Highlands Council) staff has prepared a preliminary assessment of local opportunities and constraints with regard to development, infrastructure (water, wastewater, transportation), and water resources, natural resources, agricultural resources, scenic resources, and historic, cultural, and archaeological resources for the Highlands Region. This analysis includes the most current Highlands Council data in order for the OSG to prepare a full Opportunities and Constraints analysis to determine whether trend growth is sustainable based on the resources and infrastructure available in the municipality and on a regional basis.

The Highlands Regional Master Plan (RMP) was adopted by the Highlands Council on July 17, 2008, and became effective on September 8, 2008. As the product of a long-term, participatory, and region-wide planning effort, the Highlands RMP is representative of the collective response of the wider community to the Legislature's call for a Highlands comprehensive master plan. The Highlands RMP is accompanied by supporting digital spatial data and 15 technical report documents. These documents are available on the Highlands Council website at the following link: <http://www.state.nj.us/njhighlands/master/index.html>.

The Highlands Council website serves as a means for sharing current technical data. This information will include, but not be limited to, the Highlands Resource data layers and the LUCM Series and supporting data layers, along with the narrative information below. Digital spatial data is available for the LUCM Series and supporting data layers on the website at the following link: http://www.highlands.state.nj.us/njhighlands/actmaps/maps/gis_data.html.

The Highlands Council is regularly maintaining the information in its databases and GIS layers in order to maintain the quality and timeliness of the data. However, the Highlands Council recognizes unintentional inaccuracies may occur, particularly where data or information is derived from sources other than the Highlands Council. The Highlands Council recognizes more accurate local information may be readily available and will be considered by the Highlands Council through Map Updates. The narrative below includes approximate percentages that are based on the total land area in the Town of Dover.

Highlands Preservation and Planning Area (boundaries represented on each map by stipple pointing inward toward the Preservation Area)

- 100% Planning Area (1,746 acres)
- 0% Preservation Area (0 acres)

Highlands Final Regional Master Plan – Land Use Capability Map Zone (Map 1)

- Approximately 4% Protection Zone

- Approximately 0% Conservation Zone
- Approximately 0% Conservation Zone Environmentally Constrained Sub-Zone
- Approximately 80% Existing Community Zone
- Approximately 16% Existing Community Environmentally Constrained Sub-Zone
- Approximately 0% Lake Community Sub-Zone
- Approximately 0% Wildlife Management Sub-Zone

Land Use Capability Map Series - Water Availability by sub watershed HUC 14 (Map 2)

- 3 HUC's Represented
- Approximately 0% Non-Deficit HUC 14 at 0.10 to 0.39
- Approximately 0% Non-Deficit HUC 14 at 0.05 to 0.09 MGD
- Approximately 0% Non-Deficit HUC 14 at 0.00 to 0.04 MGD
- Approximately 0% Deficit HUC 14 at -0.09 to 0.00 MGD
- Approximately 60% Deficit HUC 14 at -0.99 to -0.10 MGD
- Approximately 40% Deficit HUC 14 at -7.10 to -1.00 MGD

Land Use Capability Map Series – Highlands Domestic Sewerage Facilities – Existing Areas Served (Map 3)

- Approximately 0.1% of the Protection Zone, 83.4% of the Existing Community Zone, and 14.3% of the Existing Community Environmentally Constrained Sub-Zone are served by Public Wastewater
- Public Wastewater Entity: Rockaway Valley Regional Sewerage Authority
- 0.1333 million gallons per day (MGD) available capacity
- The public wastewater entity serves multiple municipalities in this region and the available capacity is not solely for the Town of Dover.

Land Use Capability Map Series – Highlands Public Community Water Systems – Existing Areas Served (Map 4)

- Approximately 0.1% of the Protection Zone, 67.7% of the Existing Community Zone, and 13.9% of the Existing Community Environmentally Constrained Sub-Zone are served by Public Water
- Public Water Entity: Dover Water Department / Wharton Water Department
- 11.188 / -16.678 million gallons per month (MGM) available capacity
- The public water entity serves multiple municipalities in this region and the available capacity is not solely for the Town of Dover.

Land Use Capability Map Series – Septic System Yield Analysis by Zone by Municipality (Informational only no map)

- Nitrate Targets by LUCM Zone - values represent the median nitrate concentrations for the Planning Area by zone, using 4 persons per household, 10 pounds of nitrate per person-year, and drought recharge by HUC14 subwatershed:
 - Planning Area, Existing Community Zone: 2 mg/L
 - Planning Area, Conservation Zone: 1.87 mg/L
 - Planning Area, Protection Zone: 0.72 mg/L

Highlands Constraints

- **Water and Natural Resources** (Maps 5 and 6)
 - 1 Confirmed Vernal Pool + 1,000' (buffer is within municipal border)
 - Approximately 7% Critical Wildlife Habitat
- **Wellhead Protection, Carbonate Rock, and Prime Ground Water Recharge** (Maps 7 and 8)
 - Approximately 25% 2-Year Tier Wellhead Protection Area
 - Approximately 28% 5-Year Tier Wellhead Protection Area
 - Approximately 17% 12-Year Tier Wellhead Protection Area

- Approximately 0% Carbonate Rock
- Approximately 14% Prime Ground Water Recharge Areas
- **Steep Slopes and Riparian Areas** (Maps 9 and 10)
 - Approximately 24% Steep Slopes are classified as Severe
 - Approximately 1% Steep Slopes are classified as Moderate
 - Approximately 33% of the Existing Community Zone is within the Riparian Area

Conservation Priority Area (Map 11)

- Approximately 1.2% Conservation Priority Area

Preserved Open Space and Agricultural Lands (Map 12)

- Data generated by Highlands Council as of 12/31/07 and based on NJDEP Green Acres, SADC, county and local data available as of that date.
- Approximately 15% (267 acres) Preserved Open Space
- Significant parks (state)/National Wildlife Refuge (federal): Hedden Park (Cty)
- Approximately 0% (0 acres) Preserved Agricultural Land

Historic, Cultural, Archaeological and Scenic Resources (Maps 13 and 14)

- Historic resource data generated by GIS as of 12/31/07 and based on NJDEP SHPO data.
- 5 sites listed on the New Jersey / National Registers of Historic Places (NJ / NRHP)
- 0 sites deemed eligible for listing NJ / NRHP
- 4 sites with a formal SHPO opinion
- Historic Districts: Guenther Hosiery Mill Historic District (HD), Morris Canal, Blackwell Street HD, Old Main Delaware, Lackawanna and Western Railroad HD, Railroad HD
- Sites on the Highlands Scenic Resource Inventory: Hedden Park (Cty)

Potential Redevelopment and Infill Opportunities (Map 15)

- No UEZ, FTZ or local approved Redevelopment Areas
- Redevelopment Opportunity: multiple, potentially underutilized, properties identified by the Redevelopment & Infill Analysis Tool, subject to municipal approval

Impervious Surface Represented & Federal & State Potentially Contaminated Sites (Maps 16 and 17)

- All impervious surface represented
- Data represents a selection of publically reported Federal and State contaminated site database information
- 4 Highlands Tier 1 Contaminated Sites: American Weldery & Steel Co., Dover Town Sanitary Landfill, Dover Town Water Dept. Well 4, Precision Screw Machine Products Co., Inc.
- 12 Highlands Tier 2 Contaminated Sites: Spartan Oil Co. (2 sites), Dover Gas, Consolidated Metals Corp., NJ Transit Dover Rail Yd, Getty, Del Gas Enterprises Inc. III, Spartan Oil Co (3rd site), Dover Properties LLC, John Snyder Electric, 267 Rte 46 Assoc., Old Municipal Garage

Transportation/Transit Conditions (Maps 18 and 19)

- Dover (Montclair Boonton Line) rail station, 1 park and ride, and 2 active freight lines
- Lakeland & Morris County Metro (private) and NJ Transit public bus commuter services
- Transit Score > = 3

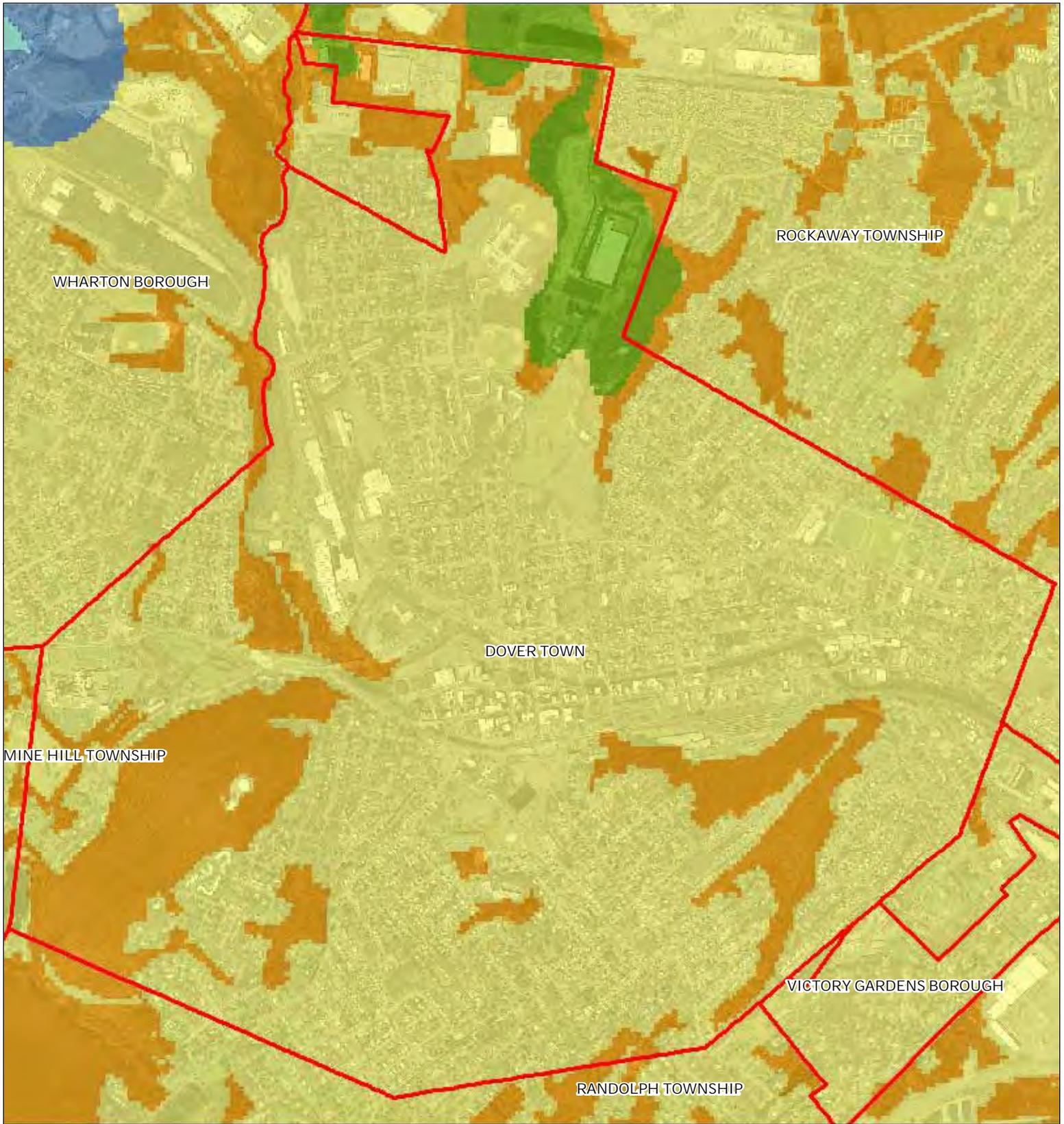
COAH Third Round Status (Informational only no map)

- **COAH Extension:** No
- **Scarce Resource Order Lifted 4/14/09**
- Date Petition Filed for Third round: 12/19/05 / Status: Petition

- Rehab = 251 / Adj. Prior Round = 6 / Projected Growth Share (2004 through 2018) = 137 units
- Actual Certificates of Occupancy (Jan. 2004 through June 2008) = 126 units (20% = 25 units)
Non-residential square footage = 80,414 sq. ft. = 9 affordable units (estimate)
- **COAH Growth Share Vacant Land Numbers (Full Build Out)**
 - Preservation Area = 0 units, Planning Area = 292 units, Total = 292 *20% = 58 affordable units
 - Non-residential square footage = 112,919 sq. ft. = 15 affordable units (estimate)
- Trust Fund Balance = \$74,130
- Existing Population = 18,188 (2000 census)

Highlands Grant Programs and Status (Informational only no map)

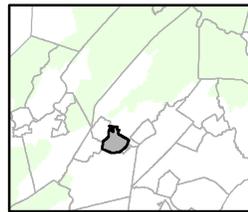
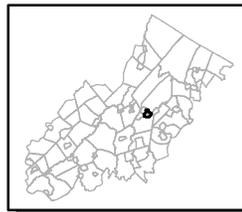
- 2006 COAH 3rd Round Grant \$7,500; Status: Closed
- 2006 MP3 Grant \$35,000; Status: Closed



Regional Master Plan Overlay Zone Designation

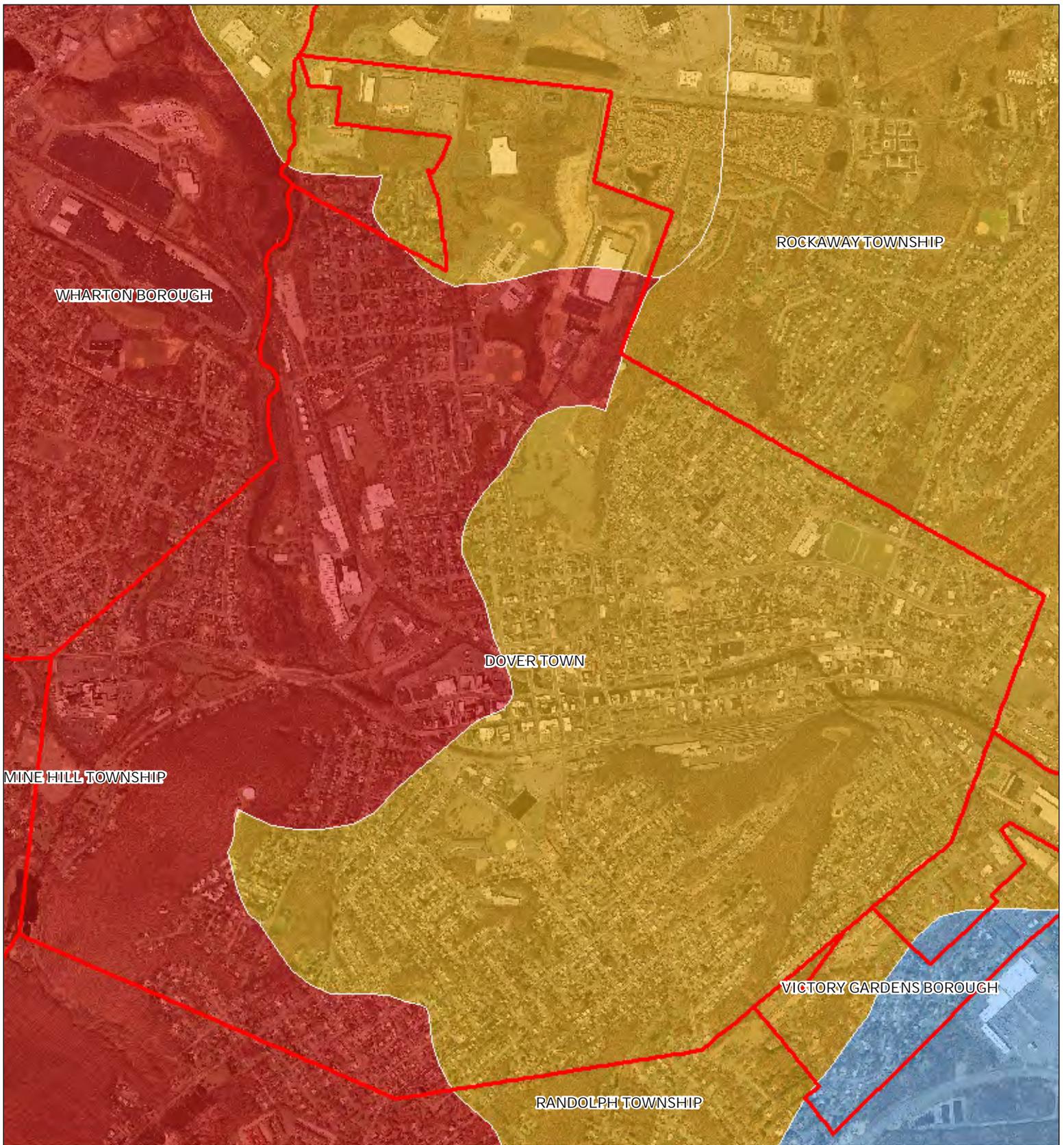
- | | |
|---|---|
| Zone | |
|  | <i>Protection</i> |
|  | <i>Conservation</i> |
|  | <i>Existing Community</i> |
|  | <i>Lake Community</i> |
|  | <i>Wildlife Management</i> |
|  | Lakes Greater Than 10 acres |
|  | Preservation Area |
|  | Municipal Boundaries |
| Sub-Zone | |
|  | <i>Existing Community Environmentally Constrained</i> |
|  | <i>Conservation Environmentally Constrained</i> |

DOVER TOWN



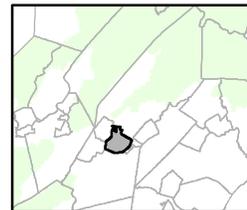
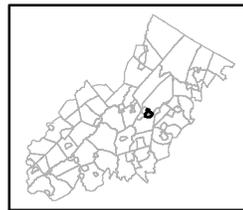
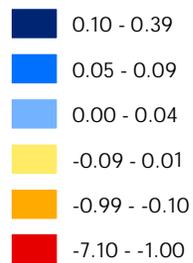
1 inch = 0.269 miles





Net Water Availability by HUC14 Subwatershed

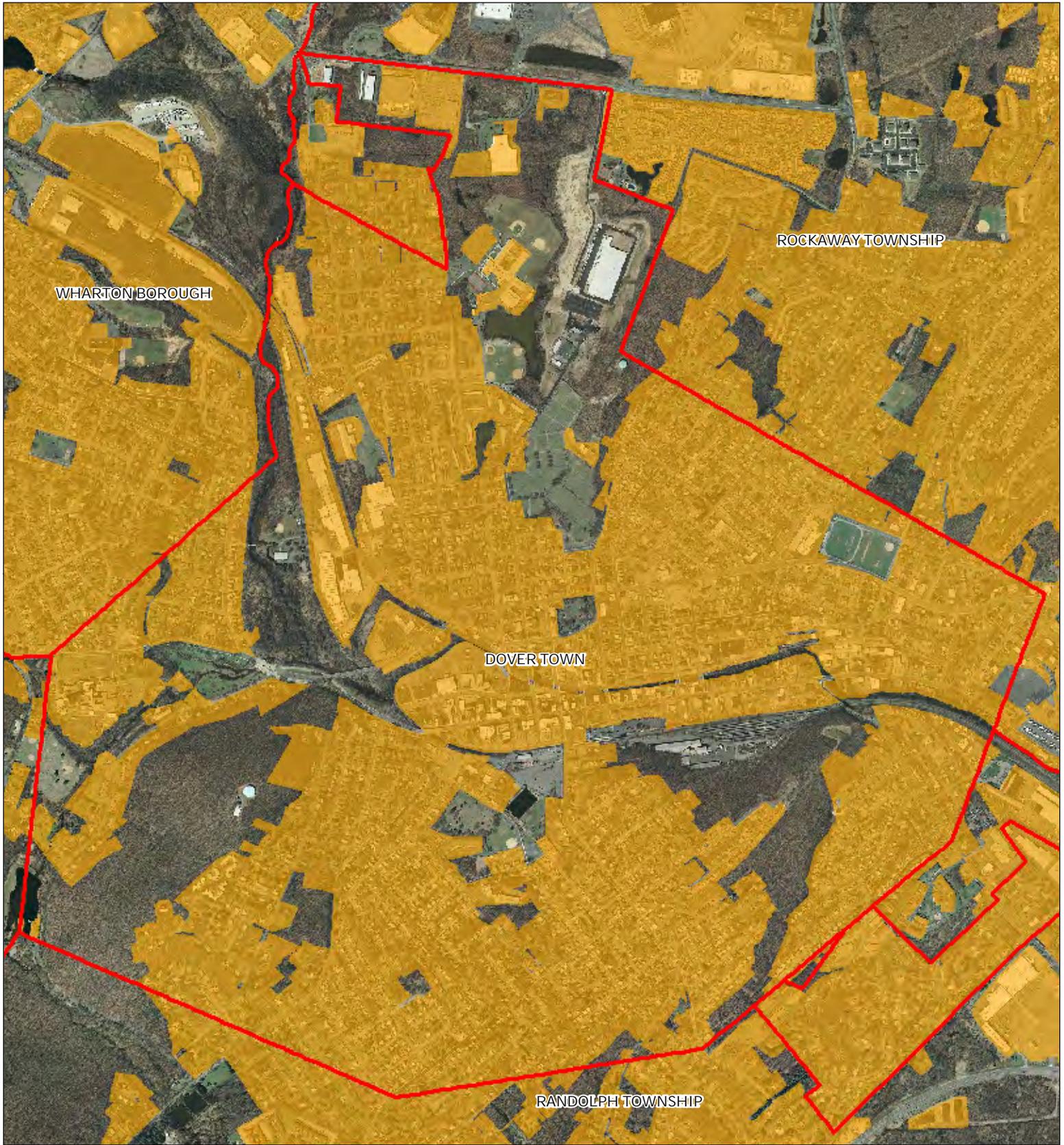
Million Gallons Per Day (MGD)



1 inch = 0.274 miles



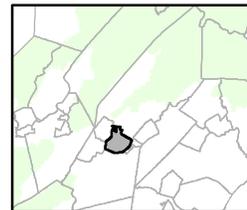
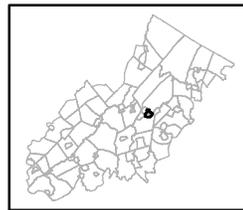
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Highlands Domestic Sewerage Facilities

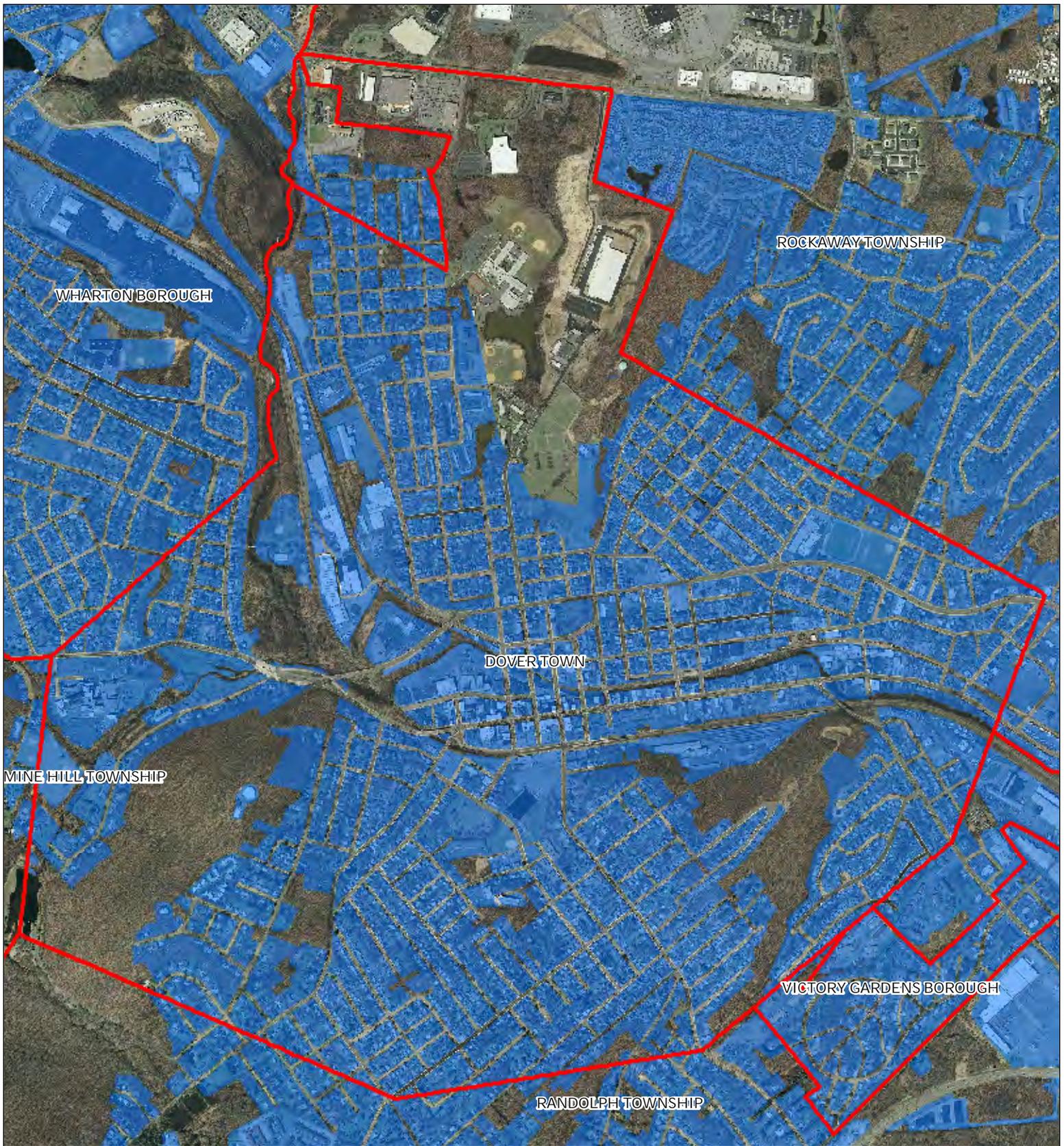
- Existing Area Served
- Preservation Area
- Municipal Boundaries

DOVER TOWN



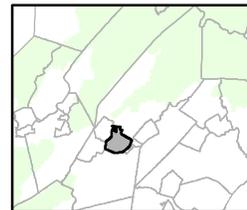
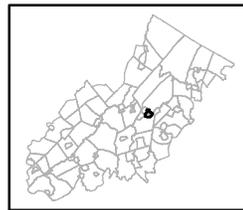
1 inch = 0.274 miles





- Public Community Water Systems
- Preservation Area
- Municipal Boundaries

DOVER TOWN



1 inch = 0.274 miles

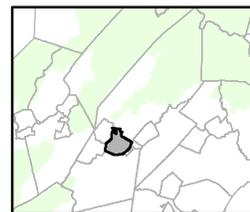
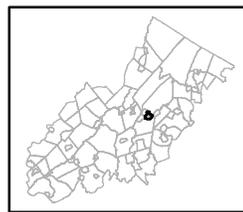


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- Vernal Pools + 1000ft Buffer
- Preservation Area
- Municipal Boundaries

DOVER TOWN



1 inch = 0.274 miles

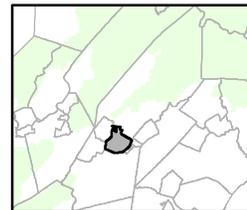
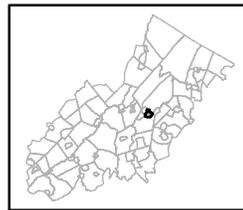


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-  Critical Wildlife Habitat
-  Preservation Area
-  Municipal Boundaries

DOVER TOWN



1 inch = 0.274 miles



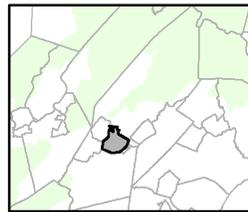
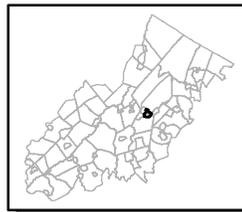


- Public Community Wells
- Non-Public Community Wells

Wellhead Protection Areas

-  2-Year Tier
-  5-Year Tier
-  12-Year Tier

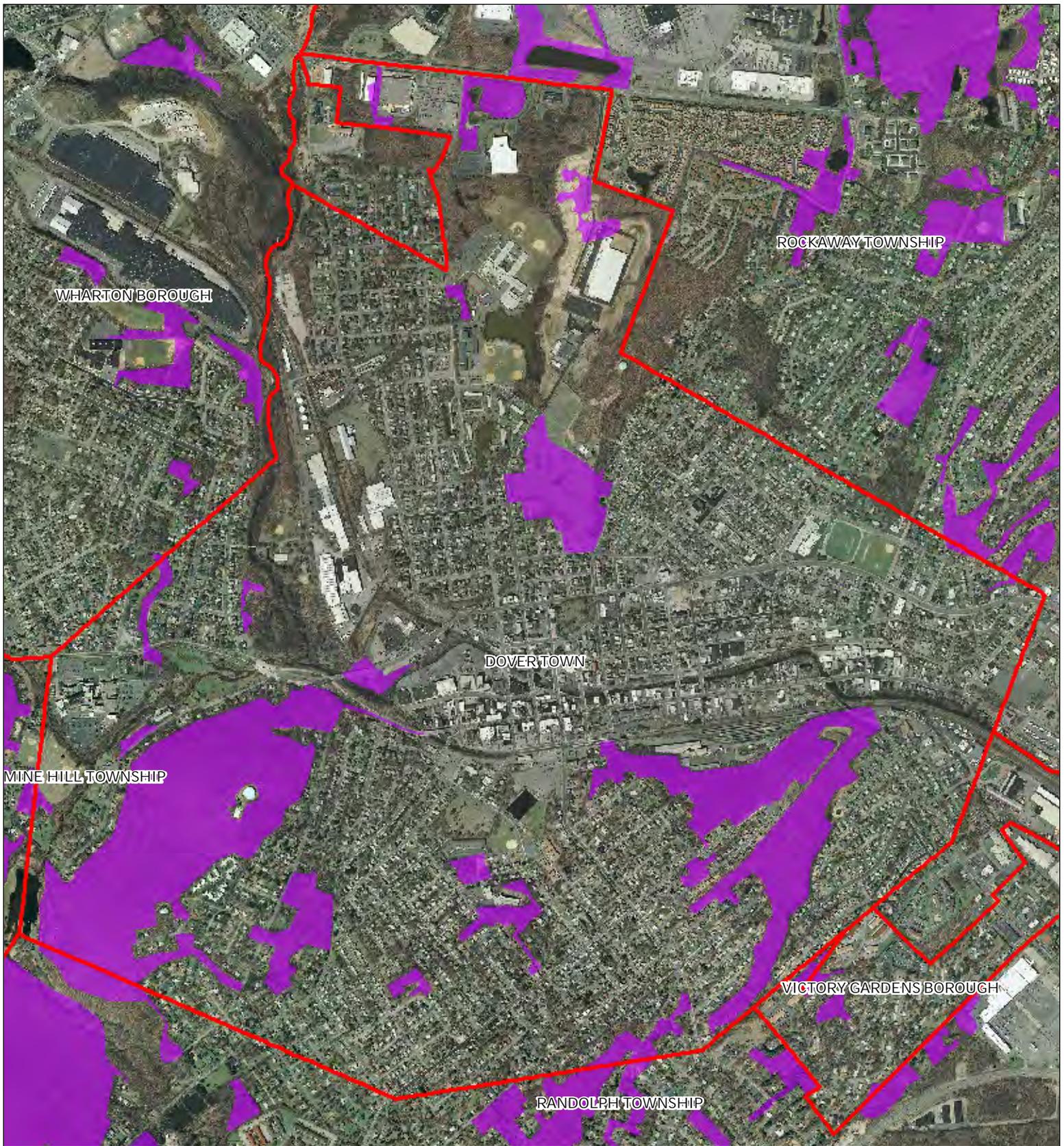
-  Preservation Area
-  Municipal Boundaries



1 inch = 0.274 miles

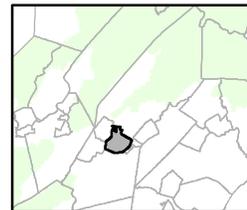
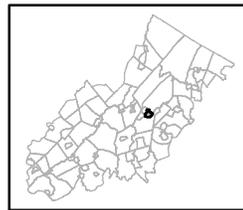


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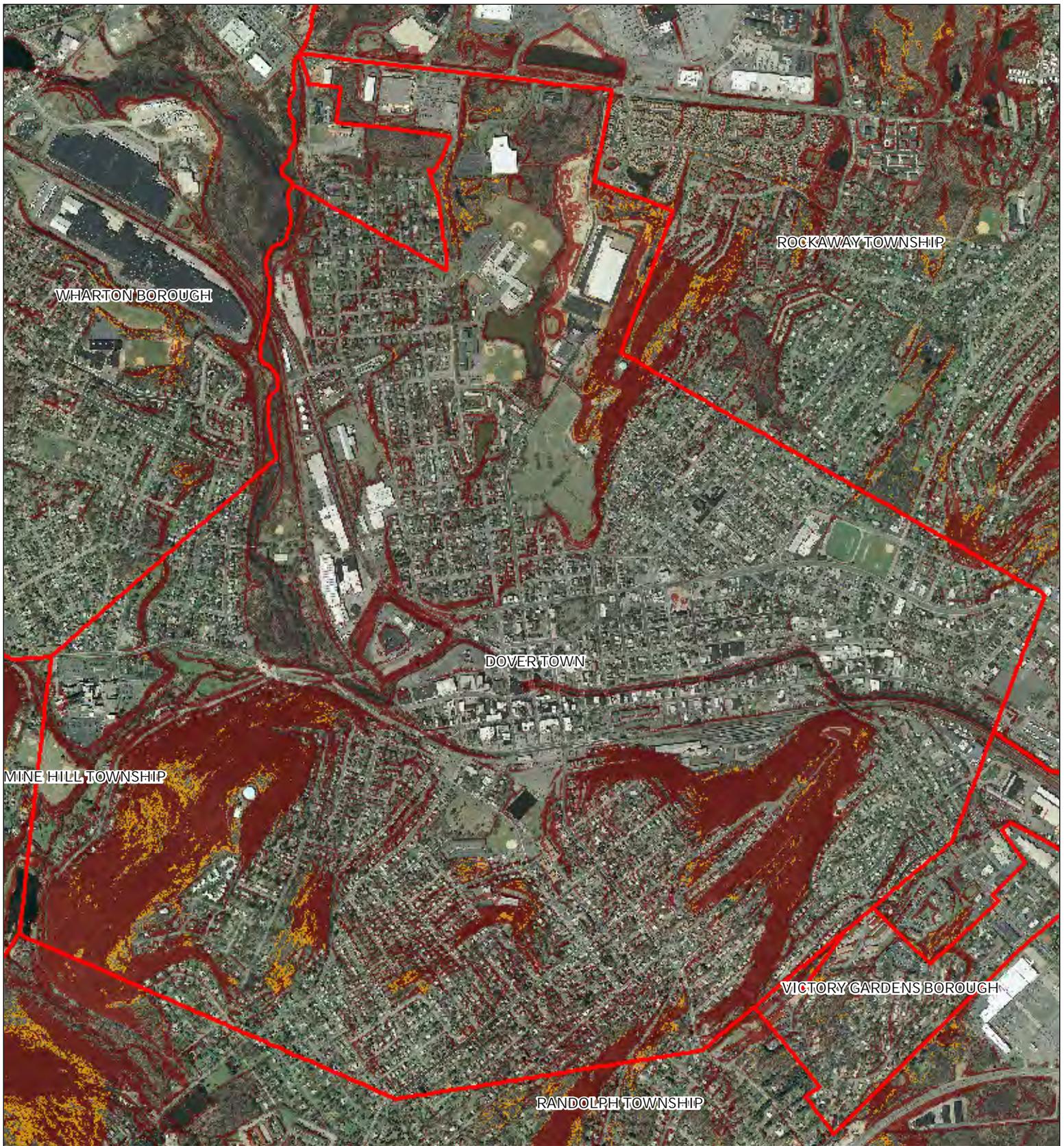
DOVER TOWN

-  Prime Ground Water Recharge Areas
-  Preservation Area
-  Municipal Boundaries



1 inch = 0.274 miles

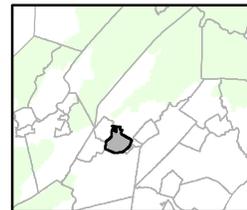
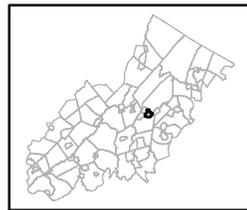




Step Slopes

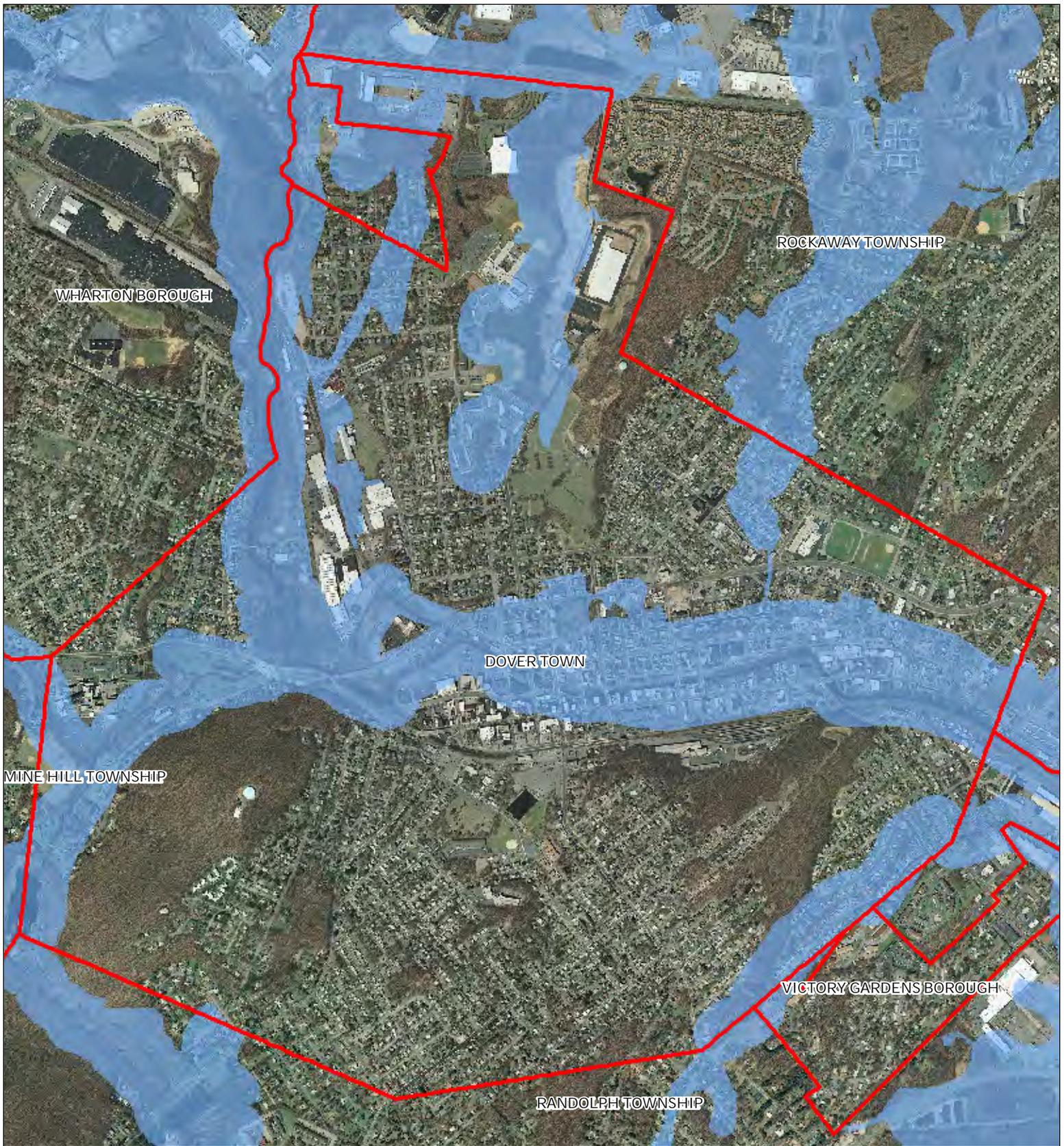
-  Moderate
-  Severe
-  Preservation Area
-  Municipal Boundaries

DOVER TOWN



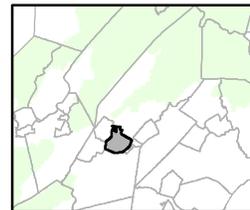
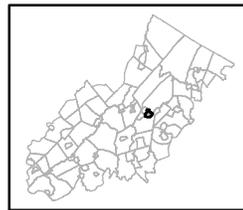
1 inch = 0.274 miles





DOVER TOWN

-  Riparian Area
-  Preservation Area
-  Municipal Boundaries



1 inch = 0.274 miles



N



Conservation Priority Area

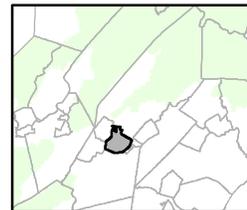
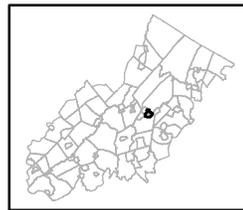
 Moderate

 High

 Preservation Area

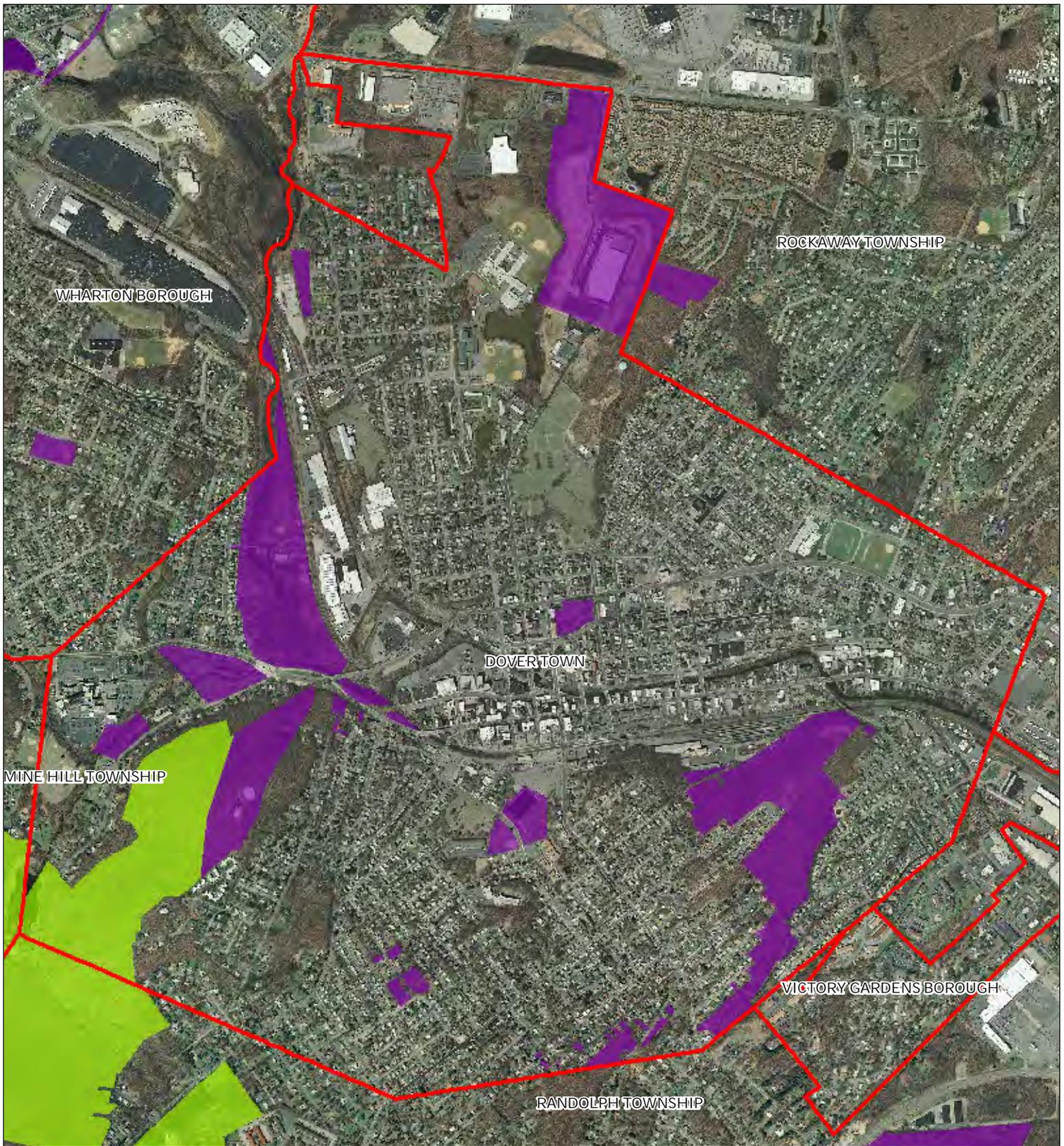
 Municipal Boundaries

DOVER TOWN



1 inch = 0.274 miles





ROCKAWAY TOWNSHIP

WHARTON BOROUGH

DOVERTOWN

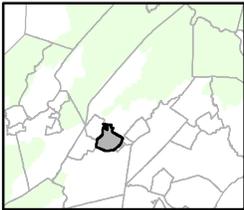
MINE HILL TOWNSHIP

VICTORY GARDENS BOROUGH

RANDOLPH TOWNSHIP

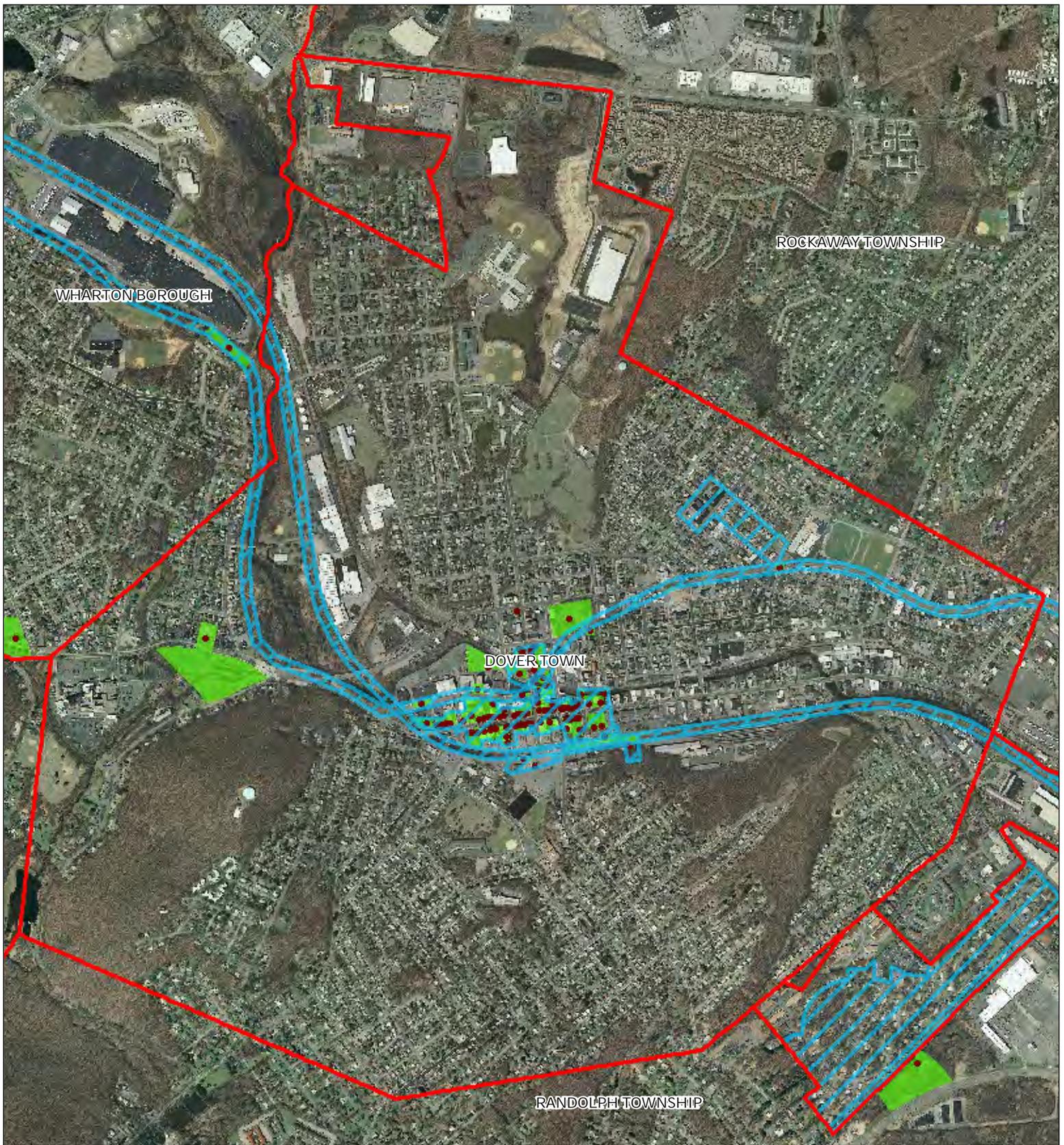
DOVER TOWN

- | | |
|------------------------|-------------------------------|
| Conservation Easements | Preserved Lands |
| Green Acres | Federal Open Space |
| SADC Easements | State Open Space |
| SADC Final | County Open Space |
| SADC 8 Year | Municipal Open Space |
| SADC Preserved | Non-Profit/Private Open Space |
| Municipal Boundaries | Water Supply Watershed Lands |
| Preservation Area | Preserved Farmland |



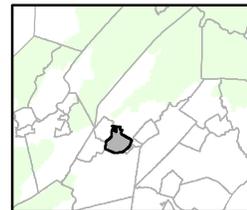
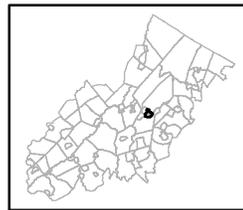
1 inch = 0.274 miles





-  Preservation Area
-  Municipal Boundaries
-  Archaeological Grids (1 sqmi)
-  NJ Historic Districts
-  Historic Property Points
-  Historic Property Polygons

DOVER TOWN



1 inch = 0.274 miles





WHARTON BOROUGH

ROCKAWAY TOWNSHIP

DOVERTOWN

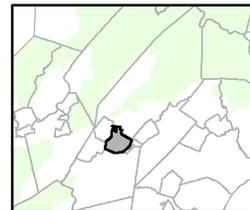
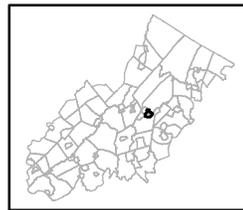
MINE HILL TOWNSHIP

VICTORY GARDENS BOROUGH

RANDOLPH TOWNSHIP

DOVER TOWN

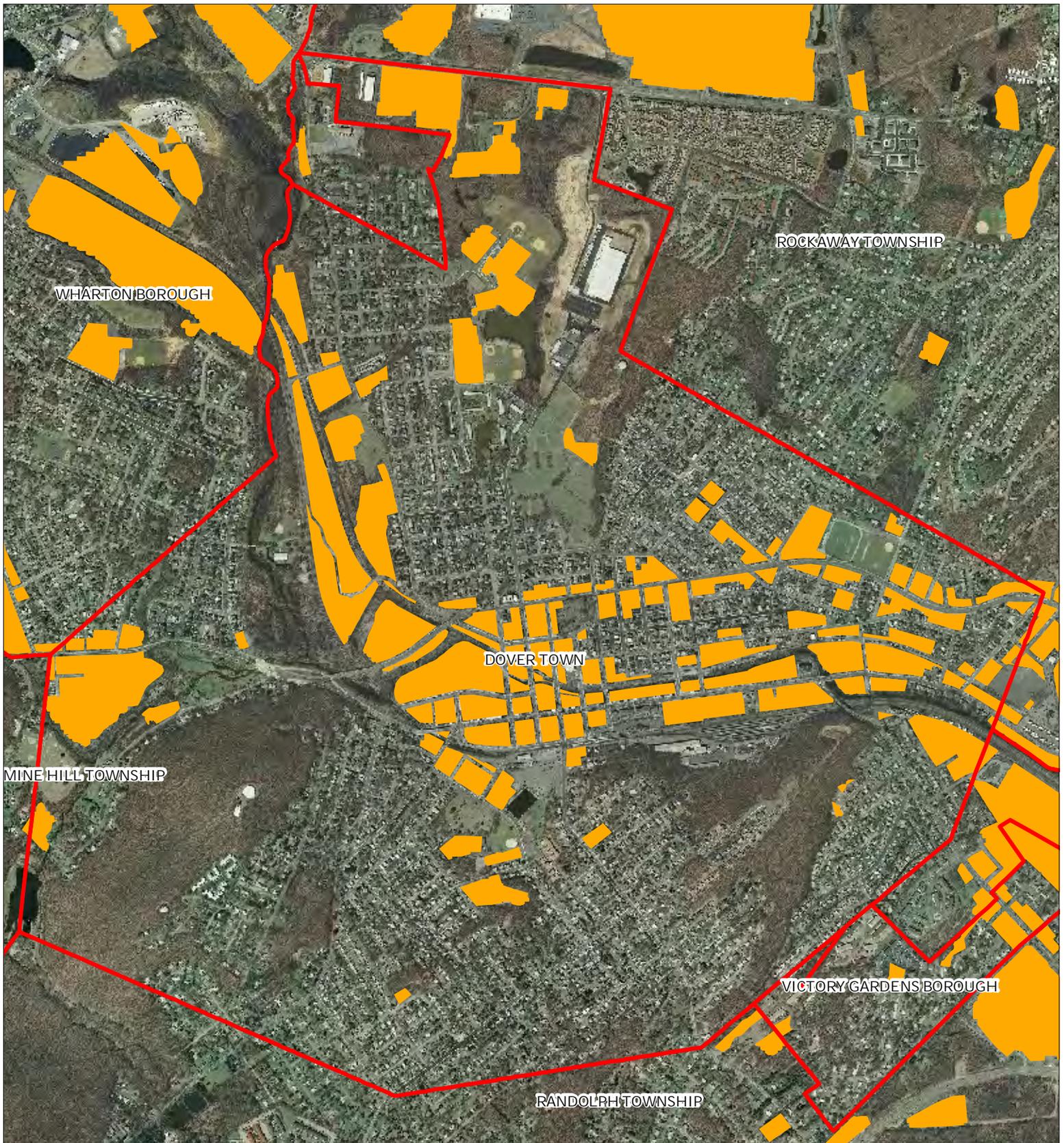
-  Scenic Resources
-  Municipal Boundaries
-  Preservation Area



1 inch = 0.274 miles

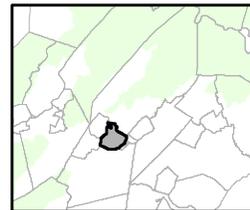
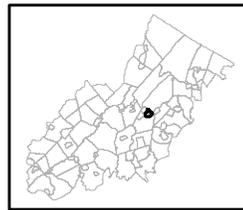


N



DOVER TOWN

-  Redevelopment Opportunity
-  Municipal Boundaries



1 inch = 0.274 miles





WHARTON BOROUGH

ROCKAWAY TOWNSHIP

DOVER TOWN

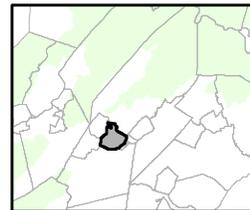
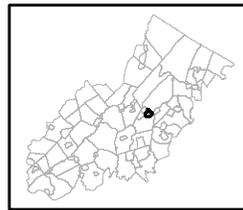
MINE HILL TOWNSHIP

VICTORY GARDENS BOROUGH

RANDOLPH TOWNSHIP

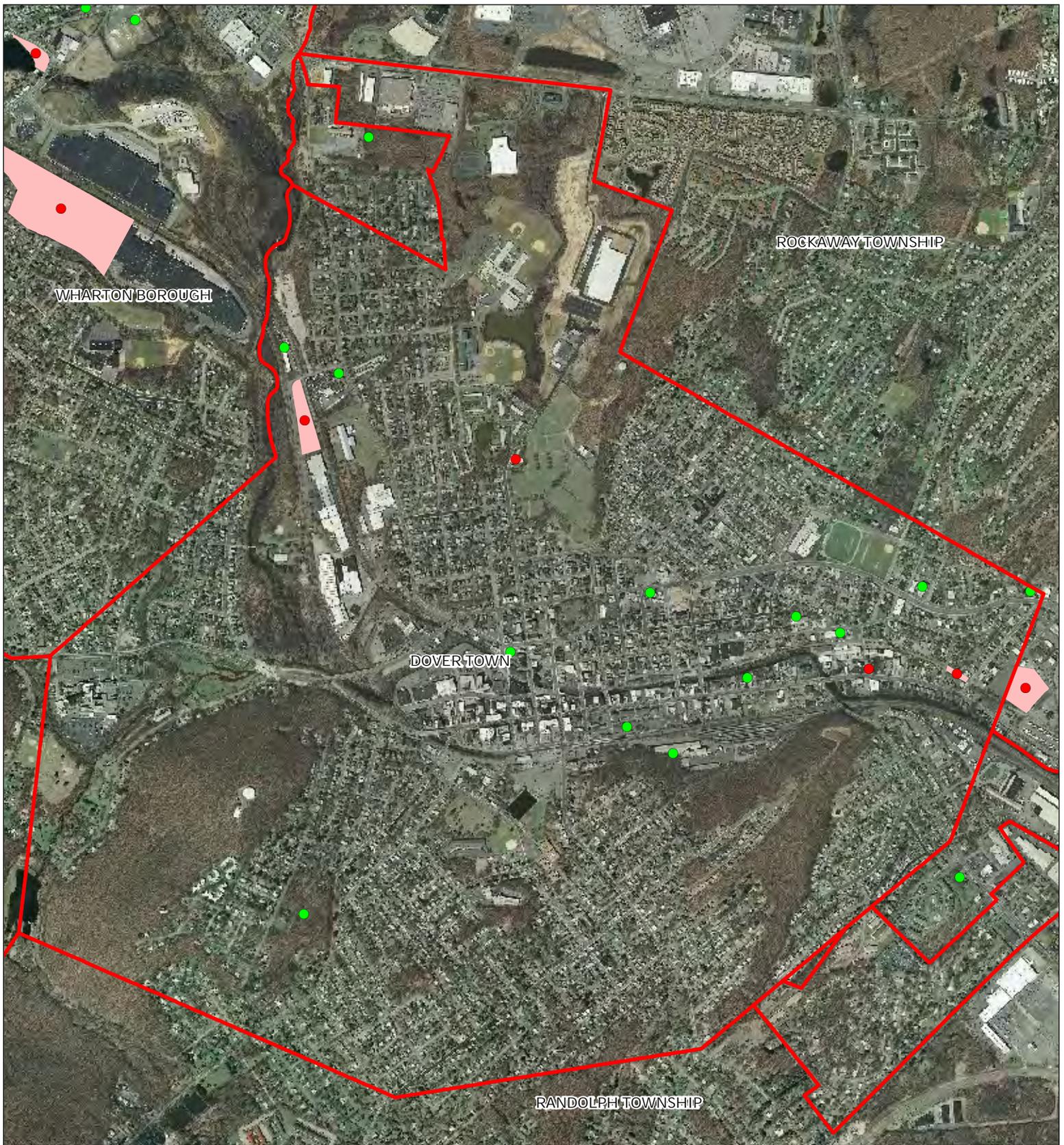
DOVER TOWN

-  Impervious Surface
-  Municipal Boundaries



1 inch = 0.274 miles

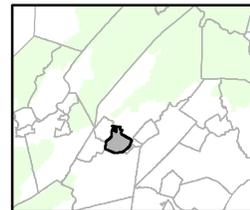
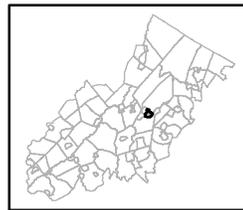




Highlands Contaminated Site Inventory

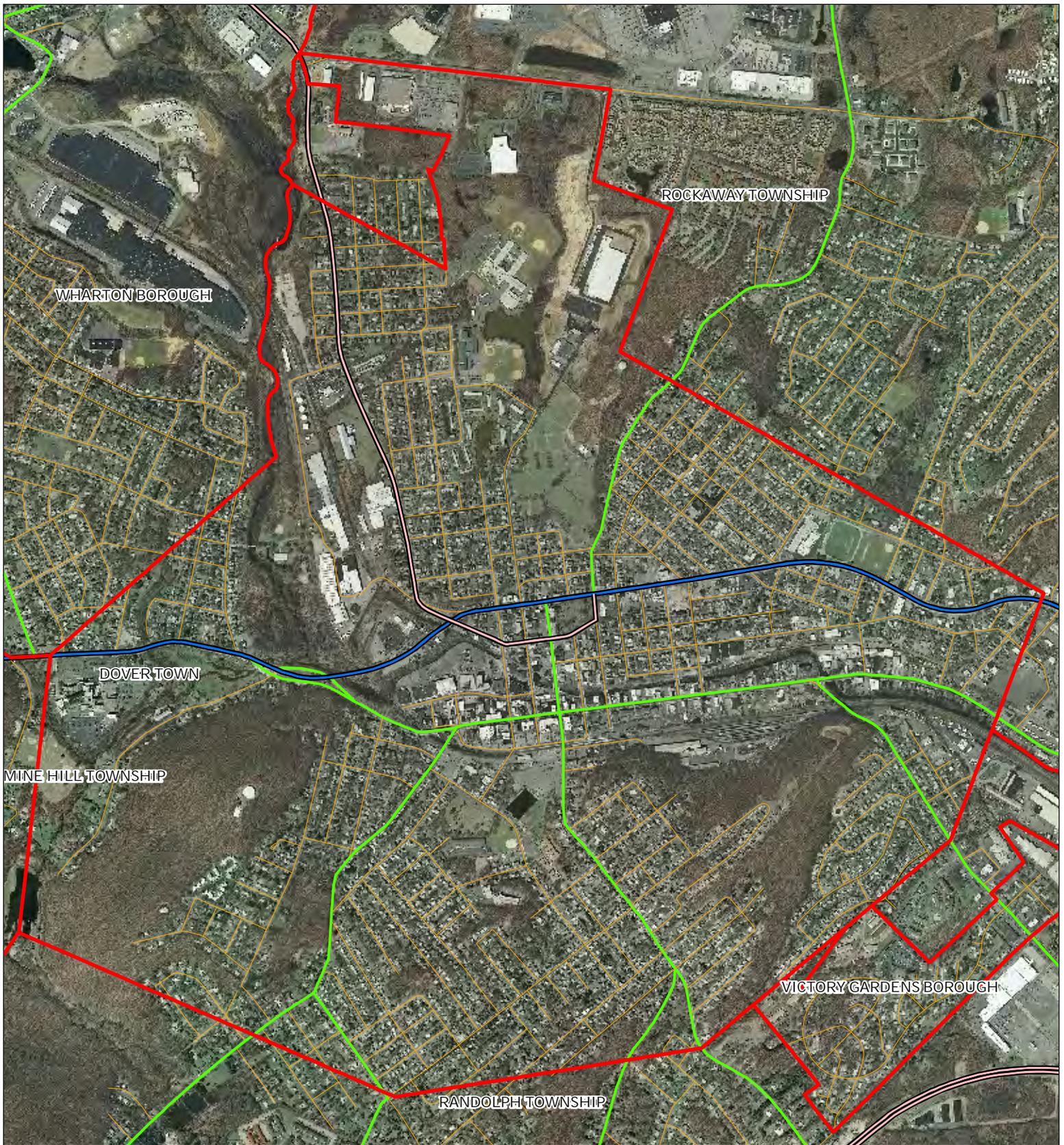
DOVER TOWN

- Tier 1 Sites
- Tier 1 Sites (Polygons)
- Tier 2 Sites
- Preservation Area
- Municipal Boundaries



1 inch = 0.274 miles



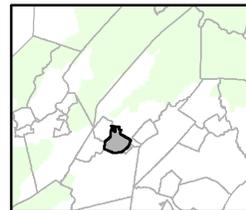
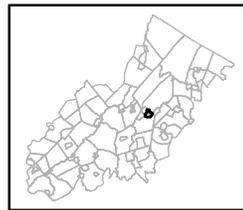


Roadway Network

-  Interstate Highways
-  U.S. Routes
-  State Routes
-  County Routes
-  Local Routes

-  Preservation Area
-  Municipal Boundaries

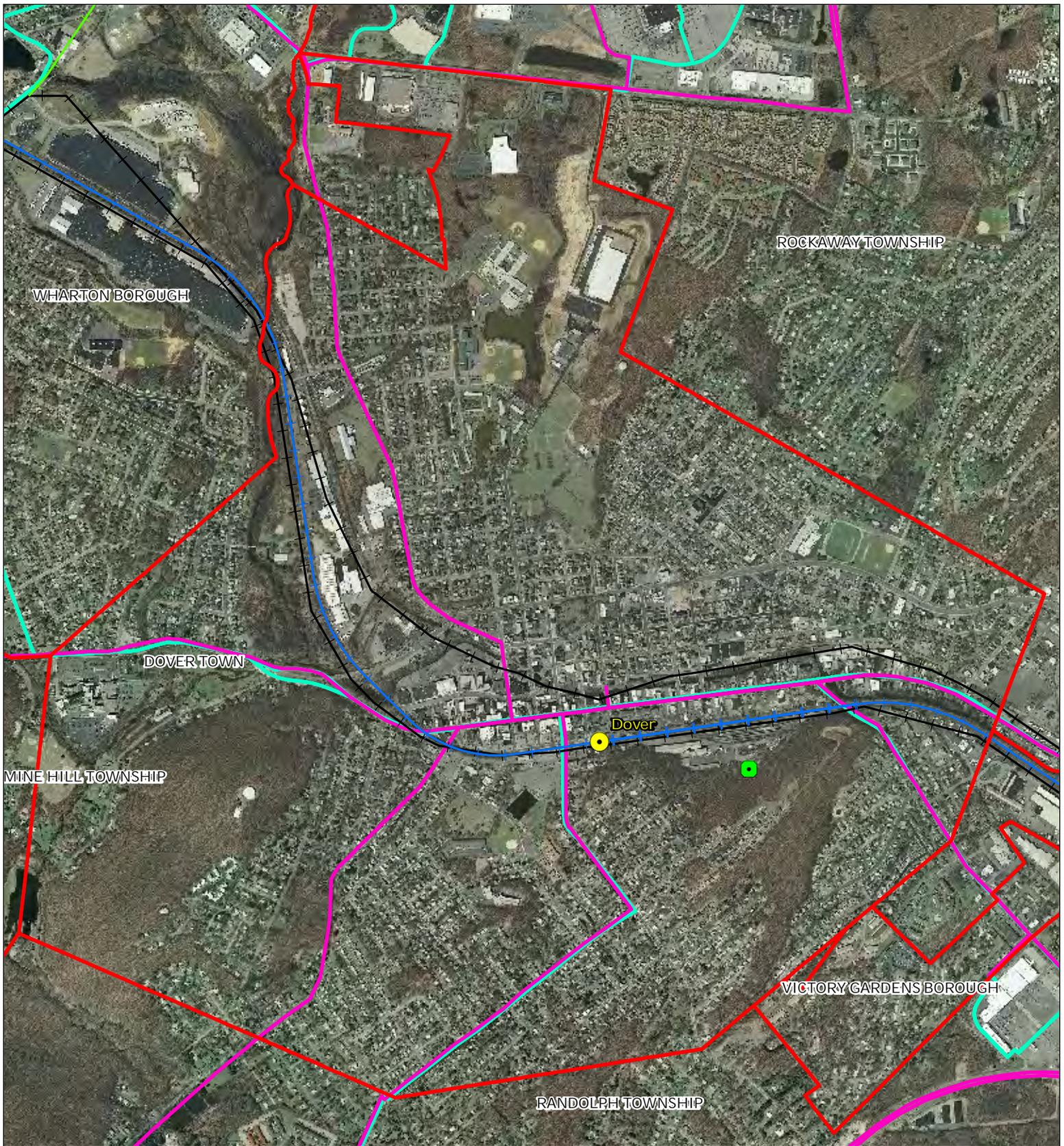
DOVER TOWN



1 inch = 0.274 miles

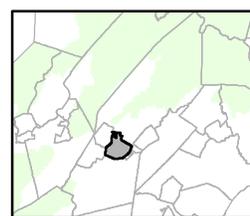
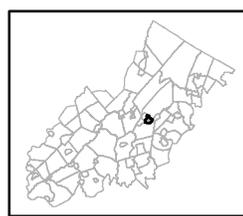


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- Rail Network**
- Boonton Line*
 - Main Line & Bergen County Line*
 - Morris and Essex Line*
 - Raritan Valley Line*
- Freight Rail Lines**
- Freight Rail Lines*
 - Abandoned Freight Rail*
- Rail Stations
 - Park and Ride Sites
 - Private Bus Lines
 - NJ Transit Bus Lines
 - Airports

DOVER TOWN



1 inch = 0.274 miles

