

HARDYSTON

Township



MASTER PLAN

OCTOBER 2003

Prepared by Heyer, Gruel + Associates

HARDYSTON MAYOR AND COUNCIL

Mayor Leslie Hamilton
Deputy Mayor James Armstrong
Councilman Kenneth Kievit
Councilman Wayne Ross
Councilman William Lasinski

HARDYSTON PLANNING BOARD

Leslie Hamilton
Carl Miller
Kenneth Kievit
Ed Zinck
James Vecchio
Gregg Eisenecker
Robert Neubig
Randy Roof
Thomas Zygmunt
John Monell

TOWNSHIP MANAGER

Marianne Smith

LAND USE COORDINATOR

Community Development Director, James Kilduff

Adopted by the Hardyston Township Planning Board on October 30, 2003

Prepared by

Heyer, Gruel & Associates

Community Planning Consultants
63 Church Street, 2nd Floor
New Brunswick, New Jersey 08901
732-828-2200

The original of this report was signed and sealed in accordance with N.J.S.A. 45:14A-12.


Susan S. Gruel, P.P. #1955


Fred Heyer, P.P. #3581



TABLE OF CONTENTS

Goals and Objectives	1
Community Profile	4
Previous Master Plans: An Historic Perspective On Local Planning	9
Land Use Plan Element	12
Conservation Plan Element	19
Open Space and Recreation	39
Community Facilities Plan Element	48
Utilities	52
Circulation Plan Element	55
Economic Plan Element	67
Housing Plan Element	71
Historic Preservation Element	72
Recycling Element	73
Relationship to Other Plans	75



GOALS AND OBJECTIVES

Introduction

The overall intent of this Master Plan is to preserve and enhance Hardyston's rural character by protecting existing residential developments, conserving valuable natural resources, and providing community facilities and amenities that meet the needs and expectations of Hardyston residents. Preservation is to be balanced against economic development objectives consistent with the regional center proposed for Hardyston, Franklin Borough, Hamburg and Odgensburg.

Issues

During the public participation process, the following issues were identified. This plan includes a number of recommendations designed to address these issues. The issues, as identified through an extensive outreach process, serve as a basis for the establishment of concentrations of the goals and objectives of the Township.

The issues were:

- The impact of large scale medium density residential projects
- The need for a civic center with municipal services near the Township's population
- The future of the recreation commercial zone
- Lake Girard as open space
- Using the tributaries of the Walkill River as open space
- Encouraging the development of long term mass transit options
- Preserving rural character and sustaining groundwater availability
- The appropriateness of the B-2 zone along Route 23
- The appropriate zoning of the Wheatsworth Road area
- Rt. 23 congestion and drainage issues
- Economic development and use of the industrial park on North Church Road
- Keeping the tax rate down
- A design theme for the Township
- Recreation opportunities for teenagers
- The need for child care
- The need for senior citizen housing

Goals

The goals of a Township represent the long-term vision and values held collectively by the residents of the Township. These goals are intended to address current issues in a broad perspective and set forth principles for the development of Hardyston. Some goals have been taken from earlier Master Plans, as these are still relevant. Other goals respond to new or emerging issues within the Township.

- To provide municipal services that serve the needs of the residents
- To maintain harmonious land uses and circulation patterns
- To retain water quality and environmental resources
- To minimize the impact of development on wildlife
- To retain the natural features and amenities that give the Township its rural character
- To provide open space and recreational opportunities close to all residents
- To encourage economic development in the Route 94 corridor and in the regional center
- To encourage the preservation of the Township's historic and cultural resources
- To promote recreation and eco-tourism as a means of economic development

Objectives

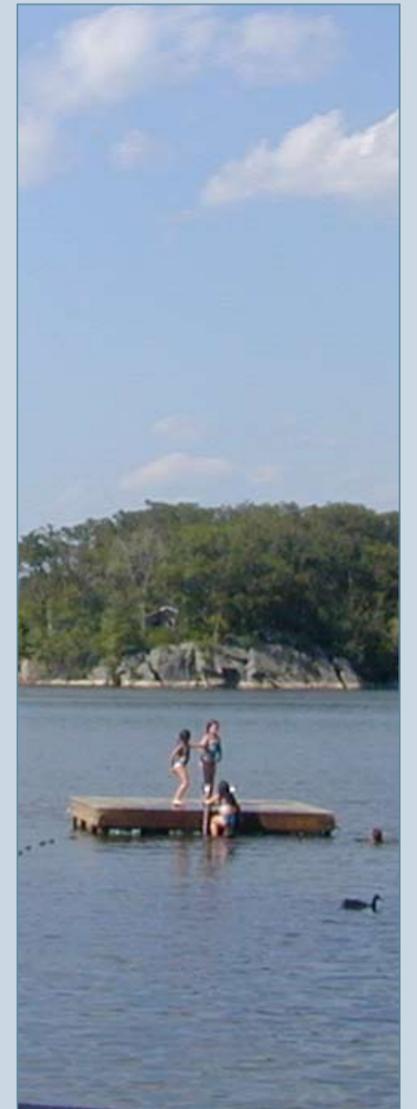
The objectives seek to guide the development of the Township with more specific recommendations than the broad goals provide. The objectives are established in order to bring a higher level of specificity to the general goals set forth in the Master Plan.

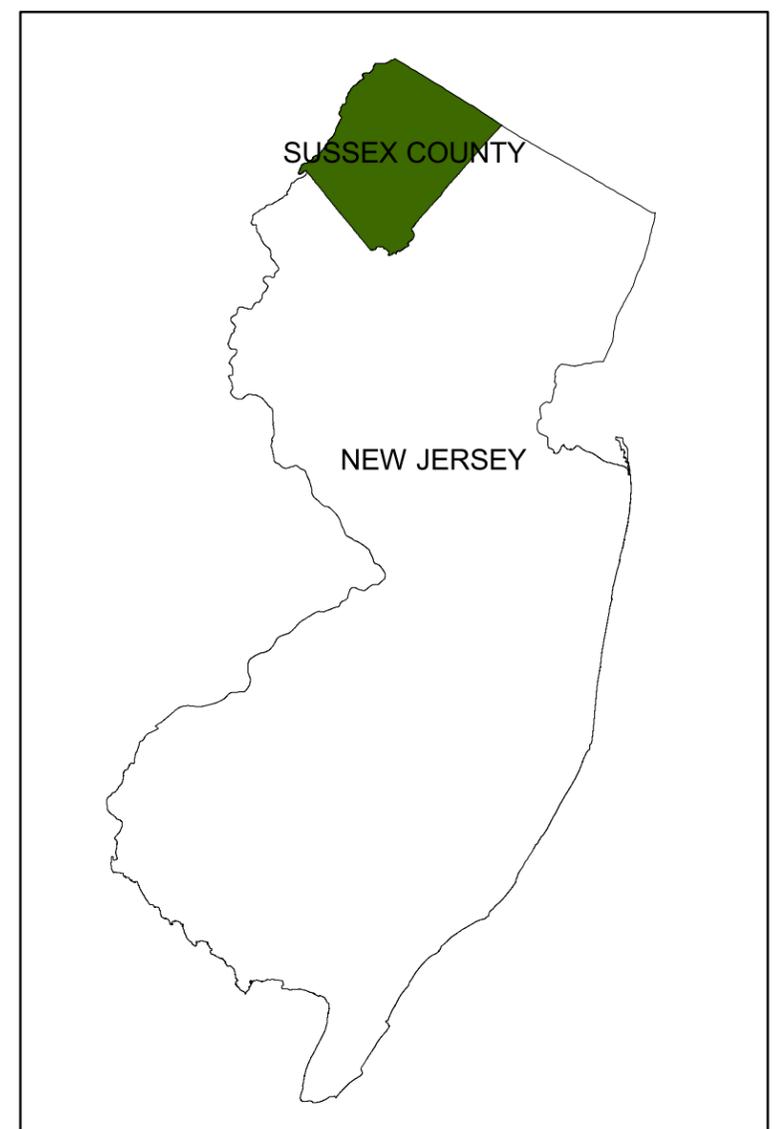
Land Use Objectives

- Minimize the impact of large scale medium density residential development on the surrounding natural environments.
- Preserve and enhance the existing established rural residential and recreational character of Hardyston.
- Promote "Smart Growth" principles.
- Establish a design theme for the Township and its public buildings, consistent with the Township's rural character.

Conservation Objectives

- Protect areas constrained by steep slopes, poor drainage, floodprone lands and wetlands.
- Minimize site disturbance.
- Minimize the visual impact of development on important natural environments.
- Use all available tools to protect and preserve environmentally sensitive natural resources in the Township.
- Protect the groundwater.





Regional Context Map	
HARDYSTON TOWNSHIP SUSSEX COUNTY NEW JERSEY	
 HEYER, GRUEL & ASSOCIATES <small>COMMUNITY PLANNING CONSULTANTS</small>	<small>October 2003</small>

Open Space and Recreation Objectives

- Preserve as much open space as possible, especially lakes, streams, tributaries and significant habitats.
- Promote recreational opportunities for teenagers.
- Enhance the recreation opportunities of the Township through better use of current facilities.

Community Facilities Objectives

- Maintain and enhance the level of community facilities consistent with the character and development of the Township.
- Create a civic center with municipal services and recreational facilities near the center of the Township's population.
- Concentrate community facilities in those areas with higher densities.

Utility Objectives

- Utilize utility plans as a growth management tool, extending infrastructure only in areas intended for growth.
- Preserve and maintain the existing utility infrastructure including public water, sanitary sewer and storm water facilities.
- Preserve and protect the Township's public water supply including storage areas, treatment facilities and the distribution system.

Circulation Objectives

- Provide safe vehicular, pedestrian and bicycle circulation by improving traffic signals at key intersections, utilizing traffic calming measures, providing adequate on and off street parking and sidewalks in appropriate locations.
- Encourage and support mass transit options even those which are only likely in the long run.
- Create efficient circulation patterns and calm traffic on local, county and state roads.
- Enhance potential gateway locations to improve the appearance of the Township's transportation corridors. Capitalize on the gateway to Sussex County theme.
- Improve way-finding signage on major roads and at gateway locations to facilitate circulation and identify the route to key activity centers and destinations in the Township.
- Take necessary measures to mitigate the effects of increased regional traffic.

Economic Objectives

- Promote economic development along established corridors and in the Stockholm area.
- Strengthen existing commercial districts and corridors by encouraging a mix of uses that provide employment, retail opportunities, services and entertainment.
- Encourage the reuse of vacant non-residential buildings.
- Develop economic development strategies focusing on recreation and eco-tourism.
- Capitalize on the expanding purchasing power created by new residential development in the region.

Housing Objectives

- Provide adequate housing for all ages and demographics, especially senior citizens.

Historic Preservation Objectives

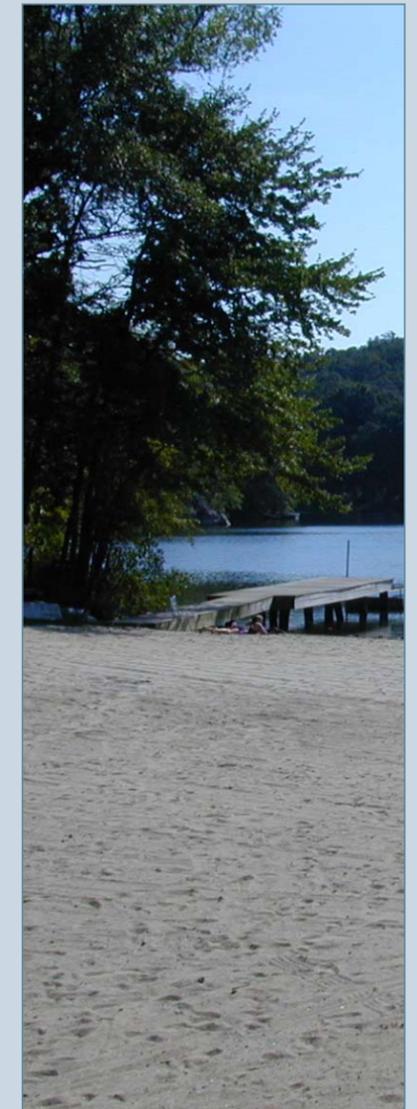
- Consider conducting a survey to identify additional properties for nomination to the State and National Registers of Historic Places.
- Encourage awareness and protection of Hardyston's cultural, social, and historic heritage to provide a link to the past, to enhance to visual appearance of neighborhoods and to promote economic development.

Recycling Objectives

- Continue to be a leader in the use of recycled materials throughout the community, including parks and Township offices.

Comparison to Other Planning Efforts

- Consider land use policies in light of their impact on the region.
- Promote the designation of Hardyston as a "Regional Center".



COMMUNITY PROFILE

INTRODUCTION

This element presents general demographic and housing characteristics and employment trends for Hardyston Township. These trends influence the present and future development of the Township. This section analyzes the changes that have taken place over time in population, housing and income characteristics.

POPULATION CHANGE

The 2000 population of Hardyston Township was 6,171 persons, an increase of 896 people from the 1990 population. The population trends experienced in Hardyston Township, Sussex County and the State of New Jersey from 1930 through 2000 are shown in Table III-1. Hardyston has experienced steady growth over this time period, as have Sussex County and the State of New Jersey.



Year	Hardyston Township			Sussex County			New Jersey		
	Population	Change		Population	Change		Population	Change	
		Number	Percent		Number	Percent		Number	Percent
1930	946	-	-	27,830	-	-	4,041,334	-	-
1940	1,034	88	9.3	29,632	1,802	6.5	4,160,165	118,831	2.9
1950	1,279	245	23.7	34,423	4,791	16.2	4,835,329	675,164	16.2
1960	2,206	927	72.5	49,255	14,832	43.1	6,066,782	1,231,453	20.3
1970	3,499	1,293	58.6	77,528	28,273	57.4	7,171,112	1,104,330	18.2
1980	4,553	1,054	30.1	116,119	38,591	49.8	7,365,011	463,899	6.5
1990	5,275	722	15.9	130,943	14,824	12.8	7,730,188	365,177	5.0
2000	6,171	896	17.0	144,166	13,223	10.1	8,414,350	684,162	8.9

Source: U.S. Census 2000

POPULATION COMPOSITION BY AGE AND SEX

An analysis of age group characteristics provides insight into changes in population. This comparison is helpful in assessing impacts of changes on community facilities and services.

Tables III-2, III-3, and III-4 show the breakdown of population by age and sex for the Township, the County and the State for 1990 and 2000. The largest increase in the Township occurred in the 55 to 64 year cohort, which experienced an increase of 305 people, or 86.2 percent. The Township's 45 to 54 year age group also showed a significant increase of 335 people, or 50.7 percent. In contrast, the 25 to 34 year age group decreased by 226 people, or 22.7 percent. The County also experienced significant increases in the 55 to 64 and 45 to 54 age groups, and a significant decrease in the 25 to 34 year cohort. The State had its most significant increases in the 45 to 54 and 5 to 14 year age groups, and experienced its largest decrease in the 25 to 34 year age group.

Population	1990		2000		Change, 1990 to 2000	
	Number	Percent	Number	Percent	Number	Percent
Under 5	400	7.6%	424	6.9%	24	6.0%
5 to 14	740	14.1%	913	14.7%	173	23.4%
15 to 24	670	12.7%	581	9.4%	-89	-13.3%
25 to 34	994	18.8%	768	12.4%	-226	-22.7%
35 to 44	971	18.4%	1,200	19.4%	229	23.6%
45 to 54	661	12.5%	996	16.1%	335	50.7%
55 to 64	354	6.7%	659	10.6%	305	86.2%
65 and over	485.0	9.1%	630	10.3%	145	29.9%
Total	5,275	100.0%	6,171	100.0%	896	17.0%
Male	2,581	48.9%	3,038	49.2%	457	17.7%
Female	2,694	51.1%	3,133	50.8%	439	16.3%

Source: U.S. Census 1990 and 2000

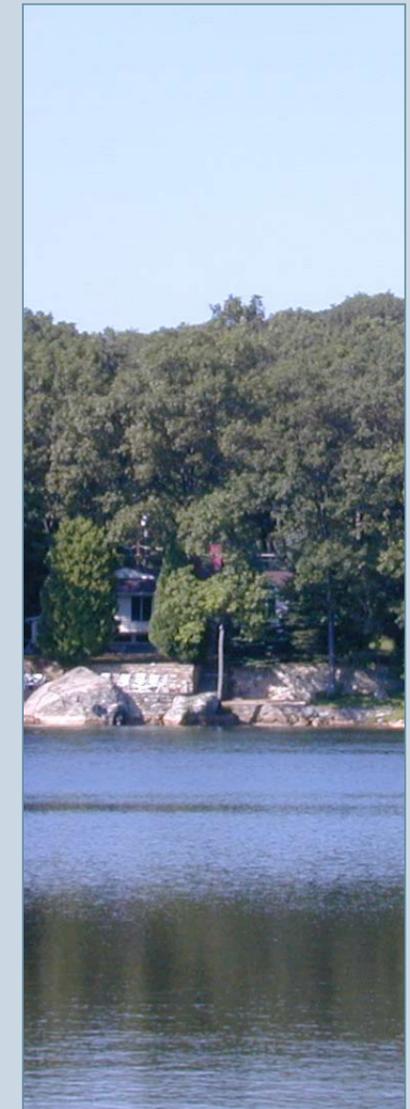


Table III-3

Population by Age and Sex, 1990 and 2000, Sussex County

Population	1990		2000		Change, 1990 to 2000	
	Number	Percent	Number	Percent	Number	Percent
Under 5	10,894	8.3%	9,815	6.8%	-1,079	-9.9%
5 to 14	19,925	15.2%	23,876	16.6%	3,951	19.8%
15 to 24	16,542	12.6%	15,517	10.7%	-1,025	-6.2%
25 to 34	23,503	17.9%	17,501	12.1%	-6,002	-25.5%
35 to 44	24,385	18.6%	27,881	19.3%	3,498	14.3%
45 to 54	15,206	11.6%	23,384	16.2%	8,178	53.8%
55 to 64	8,804	6.7%	13,040	9.0%	4,236	48.1%
65 and over	11,684	8.9%	13,152	9.1%	1,468	12.6%
Total	130,943	100.0%	144,166	100.0%	13,223	10.1%
Male	64,967	49.6%	71,338	49.5%	6,371	9.8%
Female	65,976	50.4%	72,828	50.5%	6,852	10.4%

Source: U.S. Census 1990 and 2000

Table III-4

Population by Age and Sex, 1990 and 2000, New Jersey

Population	1990		2000		Change, 1990 to 2000	
	Number	Percent	Number	Percent	Number	Percent
Under 5	532,637	6.9%	563,758	6.7%	31,148	5.8%
5 to 14	974,027	12.6%	1,195,106	14.2%	221,079	22.7%
15 to 24	1,071,982	13.9%	1,005,295	11.9%	-66,687	-6.2%
25 to 34	1,360,651	17.6%	1,189,040	14.1%	-171,611	-12.6%
35 to 44	1,196,659	15.5%	1,435,106	17.1%	238,447	19.9%
45 to 54	843,009	10.9%	1,158,898	13.8%	315,889	37.5%
55 to 64	719,798	9.3%	753,984	9.0%	34,786	4.8%
65 and over	1,032,025	13.4%	1,113,136	13.2%	81,111	7.9%
Total	7,730,188	100.0%	8,414,350	100.0%	684,162	8.9%
Male	3,735,685	48.3%	4,082,813	48.5%	347,128	9.3%
Female	3,994,503	51.7%	4,331,537	51.5%	337,034	8.4%

Source: U.S. Census 1990 and 2000

RACE AND NATIVITY

Tables III-5 and III-6 show the breakdown of population by race for the Township, the County and the State. The majority of the Township's and the County's population is White, representing approximately 95 percent of the overall population, with the largest minority of both being of Hispanic or Latino origin both representing approximately 3 percent of population. The State is more diverse, with significant African American (13.6%), Hispanic (13.3%), and Asian (5.7%) populations.

Table III-5

Population by Race, 2000

Population	Hardyston Township		Sussex County		New Jersey	
	Number	Percent	Number	Percent	Number	Percent
Total Population	6,171	100.0	144,166	100.0	8,414,350	100.0
One race - Total	6,086	98.6	142,516	98.9	8,200,595	97.4
White	5,897	95.6	138,015	95.7	6,104,705	75.6
Black or African American	52	0.8	1,502	1.0	1,141,821	13.6
American Indian and Alaska Native	10	0.2	161	0.1	19,492	2.3
Asian	97	1.6	1,738	1.2	480,276	5.7
Hawaiian and Pacific Islander	0	0.0	28	0.0	3,329	0.0
Some other race	30	0.5	1,072	0.7	450,972	5.4
Two or more races	85	1.4	1,650	1.1	213,755	2.5
Hispanic or Latino (of any race)	199	3.2	4,822	3.3	1,117,191	13.3
Not Hispanic or Latino (of any race)	5,972	96.8	139,344	96.7	7,297,159	86.7

Source: U.S. Census 2000

Table III-6

Population by Race, 1990 and 2000, Hardyston Township

Population	1990		2000		Change, 1990 to 2000	
	Number	Percent	Number	Percent	Number	Percent
Total Population	5,275	100	6,171	100	896	17
One race - Total	5,275	100	6,086	98.6	811	15.4
White	5,194	98.5	5,897	95.6	703	13.5
Black or African American	17	0.3	52	0.8	35	205.9
American Indian and Alaska Native	6	0.1	10	0.2	4	66.7
Asian	50	0.9	97	1.6	47	94
Hawaiian and Pacific Islander	0	0.0	0	0	0	0
Some other race	8	0.2	30	0.5	22	275
Two or more races	N/A	N/A	85	1.4	N/A	N/A
Hispanic or Latino (of any race)	76	1.4	199	3.2	123	161.8
Not Hispanic or Latino (of any race)	5,199	98.6	5,972	96.8	773	14.9

Source: U.S. Census 1990 and 2000



COMMUNITY PROFILE

As shown in Table III-7, the majority of the Township's population was born in the United States representing approximately 95 percent of the overall population. Similarly, almost 72 percent of the population was born in New Jersey. Foreign-born residents comprise only 4.8 percent of the Township's population.

Table III-7 Nativity And Place Of Birth		
	Number	Percent
Total population	6,144	100
Native	5,848	95.2
Born in United States	5,807	94.5
Born in New Jersey	4,388	71.4
Born in different state	1,419	23.1
Born outside United States	41	0.7
Foreign Born	296	4.8
Naturalized citizen	214	3.5
Not a citizen	82	1.3

Source: U.S. Census 2000

HOUSEHOLD INCOME

The Township and the County have similar median household income levels, which is approximately \$10,000 higher than the State's income level. Hardyston's median household income is \$65,511. The major groups of household income are the ranges from \$50,000 to \$149,999, which represents approximately 55 percent of total households.

Table III-8 Households Income In 1999		
	Number	Percent
Total households	2,292	100
Less than \$10,000	87	3.8
\$10,000 to \$14,999	61	2.7
\$15,000 to \$24,999	127	5.5
\$25,000 to \$34,999	248	10.8
\$35,000 to \$49,999	331	14.4
\$50,000 to \$74,999	471	20.5
\$75,000 to \$99,999	383	16.7
\$100,000 to \$149,999	417	18.2
\$150,000 to \$199,999	72	3.1
\$200,000 or more	95	4.1
Median household income (\$) - Hardyston	65,511	N/A
Median household income (\$) - Sussex County	65,266	N/A
Median household income (\$) - New Jersey	55,146	N/A

Source: U.S. Census, 2000

SHELTER COSTS

Tables III-9 and III-10 show the gross rents for renter-occupied housing units and the monthly cost for owner-occupied housing units. Nearly 30 % of the renters spend over one third of their household income on rent. Over 40% of the owners spend less than 20% of household income for the cost of their monthly housing.

Table III-9 Gross Rent As A Percentage Of Household Income In 1999		
	Number	Percent
Less than 15 percent	54	12.8
15 to 19 percent	76	18
20 to 24 percent	72	17.1
25 to 29 percent	64	15.2
30 to 34 percent	12	2.8
35 percent or more	122	28.9
Not computed	22	5.2
Total renter-occupied housing units	422	100

Source: U.S. Census 2000

Table III-10 Selected Monthly Owner Costs As A Percentage Of Household Income in 1999		
	Number	Percent
Less than 15 percent	431	24.7
15 to 19 percent	291	16.7
20 to 24 percent	307	17.6
25 to 29 percent	200	11.5
30 to 34 percent	96	5.5
35 percent or more	407	23.3
Not computed	12	0.7
Total owner-occupied housing units	1744	100

Source: U.S. Census 2000

POVERTY STATUS

Of the 6,171 persons in Hardyston in 1999, 285 persons or approximately 5 percent lived in poverty. This compares to the County, which had 5,693 persons or 4 percent living in poverty. Of the 285 persons in Hardyston, 178 were aged between 18 and 65. Poverty status for the Township and the County are shown in Table III-11.

Table III-11				
Poverty Status				
	Township		County	
	Number	%	Number	%
1999 persons	6171	100	144,166	100
Total persons below poverty level	285	4.7	5,693	4
Persons aged under 18	72	25	1,642	28.8
Persons aged 18 to 65	178	63	3,286	57.7
Persons aged over 65	35	12	654	11.5

Source: U.S. Census 2000

EMPLOYMENT OCCUPATION GROUP

Table III-12 indicates the occupation categories of the residents of Hardyston in 2000. The major occupations of the employed civilian population are management, professional, and related occupations representing 36.1 percent, and sales and office occupations representing 26.5 percent. Service occupations and construction, extraction and maintenance occupations each represent 12.6 percent of the civilian labor force in the Township.

Table III-12		
Occupation		
	Number	Percent
Employed civilian population 16 years and over	3,213	100
Management, professional, and related occupations	1,160	36.1
Service occupations	409	12.7
Sales and office occupations	851	26.5
Farming, fishing, and forestry occupations	11	0.3
Construction, extraction, and maintenance occupations	404	12.6
Production, transportation, and material moving occupations	378	11.8

Source: U.S. Census 2000

CLASS OF WORKER

The majority of the workers in 2000 living in Hardyston are in the private wage and salary class. This category represents approximately 80 percent of workers. Government workers, comprising 15.4 percent of the total are the second largest category. The remainder of the workers are either self-employed workers or unpaid family workers.

Worker classes of the Township are similar to that of Sussex County. Private wage and salary workers comprised approximately 80 percent of the entire County population with Government workers as the second largest category.

The class of workers for 2000 in the Hardyston Township and the Sussex County are shown on Table III-13.

Table III-13				
Class of Worker				
	Township		County	
	Number	%	Number	%
Private wage and salary workers	2,533	78.8	58,806	79.6
Government workers	495	15.4	10,514	14.2
Self-employed workers	178	5.5	4,366	5.9
Unpaid family workers	7	0.2	227	0.3
Total	3,213	100	72,728	100

Source: U.S. Census 2000

COMMUTING TO WORK

As shown in Table III-14, approximately 87 percent of the workers who are 16 years old and over commute by automobile, most of whom drive alone. Mean travel time to work is 41.6 minutes for the Township.

Table III-14		
Commuting to Work		
	Number	Percent
Workers 16 years and over	3,126	100
Car, truck, or van		
Drove alone	2,699	86.3
Carpooled	284	9.1
Public transportation	43	1.4
Walked	30	1
Other means	8	0.3
Worked at home	62	2
Mean travel time to work (minutes)	41.6	N/A

Source: U.S. Census 2000





JOBS IN TOWNSHIP

In Hardyston Township, covered private sector employment increased from 446 job in 1997 to a total of 520 jobs in 2000, the latest year available. The Township's private sector covered employment has increased steadily except for 1999. In 1999 Hardyston experienced the lowest number of private sector jobs during the last four years.

Covered jobs in Sussex County as a whole however increased from 26,624 jobs in 1994 to a total of 29,801 in 2000, an increase of almost 12%. Table III - 15 indicates covered private sector employment for Hardyston Township and Sussex County from 1997 to 2000.

TABLE III - 15						
Private Sector Covered Employment, 1997-2000						
Hardyston Township and Sussex County						
Year	Township			County		
	Covered Jobs	Change		Covered Jobs	Change	
	Number	Percent		Number	Percent	
1997	446	-	-	26,624	-	-
1998	498	52	11.7	27,774	1,150	4.3
1999	452	-46	-9.2	28,242	468	1.9
2000	520	68	15	29,801	1,559	5.5

Source: N. J. Labor Department

RESIDENTIAL BUILDING PERMITS

Table III-16 details the residential dwelling units authorized by building permits since 1990. During the period between 1990 and 2001, there were a total of 789 permits issued or an average of 65.8 permits per year.

Table III-16	
Residential Building Permits	
Year	Number of permits
1990	65
1991	18
1992	19
1993	11
1994	32
1995	45
1996	73
1997	31
1998	32
1999	87
2000	173
2001	203
Total	789

Source: NJ Department of Labor

PREVIOUS MASTER PLANS : AN HISTORIC PERSPECTIVE ON LOCAL PLANNING

1979 MASTER PLAN

Shortly after the adoption of the MLUL in 1975, the Hardyston Township Planning Board adopted a Master Plan in 1979 that included sections on Development Objectives and included specific recommendations on development densities and environmental preservation.

The issues and objectives of the 1979 Plan included:

- Provide for a continuing moderate demand for new housing in the Township
- Provide a portion of that new housing to be at least cost
- Protect vulnerable environmental areas in the Township, particularly steep sloping, poorly drained and flood-prone lands
- Provide for business and industrial development in the Township
- Promote agricultural uses in Hardyston
- Land use and circulation should complement each other
- The intensity of development permitted along each road should be related to the road's traffic carrying capacity, and conversely priorities for road improvement should be based on existing and probable future development along the road, among other factors
- Provide for expanded recreation facilities, particularly in the western end of the Township
- Provide for permanent facilities for the Rescue Squad

The Development Objectives and Proposed Land Use Plan in the 1979 Plan asserted that the most important considerations in determining residential density, in the absence of public water supply and public sewerage systems, was the available groundwater supply and the soil capability for on-site septic effluent disposal based on an analysis of soil types and the underlying bedrock. The average density of development recommended for the Pre-Cambrian and Martinsburg geological formations was 3 to 4 acres per dwelling unit and the average density of development recommended for the limestone formations is one dwelling unit per acre for single-family housing. Any density-averaging development such as Clustering and Planned Unit Developments (PUDs) would require public water supply and sewerage. The 1979 Plan also recommended zoning ordinance and development regulation changes to provide protection of vulnerable environmental areas, including steep slopes, wetlands, surface water and flood plains.

The Land Use Plan supported the following land use categories; low-density residential, medium density residential, multi-family residential, commercial industrial and neighborhood commercial. The low-density residential zone was located primarily on the Pre-Cambrian and Martinsburg geological formations and would permit farming, conservation and housing at a density of 3 acres per dwelling unit. Density averaging provisions considered were Cluster development, PUDs, and lakeside development.

1983 MASTER PLAN REVISION

The 1983 Master Plan Revision reviewed the objectives of the 1979 plan and recounted the efforts made in the ensuing years to address them. The zoning ordinance was amended in 1980 to implement the 1979 Master Plan by providing four residential zones, including a single-family conservation district (R-1), a single-family rural residential district (R-2), a single family lakeside residential district (R-3) and a medium density residential district (R-4). The four residential districts were designed to accommodate some growth while recognizing the importance of low-density development to protect environmental resources. The Township moved to protect environmentally sensitive areas in a number of ways. The changes to the zoning ordinance included single-family residential development at densities at no less than one unit per acre. Flag lots were permitted in the R-1 and R-2 to promote very low-density development by requiring a minimum of 5 acres per lot. The subdivision ordinance was amended in 1980 to provide reduced densities in areas affected by a variety of environmental factors including steep slopes, seasonal high water table, shallow depth to bedrock, and floodplains. A detailed formula was created to apply to these areas, which resulted in fewer units being developed in these areas.

The 1983 Master Plan revision stated that there were no significant changes in the assumptions, policies and objectives, which form the basis for the Master Plan and development regulations from 1979 to 1983. There were, however, a number of requests from property owners and speculators regarding sand and gravel mining, planned developments, commercial shopping centers and higher density housing in various areas of the Township. These requests, as well as the availability of 1980 census data, prompted a revision of the 1979 Plan in 1983.





The 1983 Land Use Plan contained the previous open space and single-family detached housing pattern, but recognized a number of changes as well. In areas served by water and sewer service, a new zoning district (R-5) was recommended allowing the same uses as the R-2, rural residential zone, but a minimum lot size of 20,000 square feet for utility provisioned lots. Other areas were rezoned R-4 to permit higher density development in areas of water and sewer service and a large section along Route 94 was rezoned B-2 to allow for more retail development. A Manufactured Housing zone (T-1) was created to help the Township meet its Mount Laurel II indigenous housing obligation.

The intent of the 1983 Revision remained the same as the 1979 Plan to provide protection of vulnerable environmental areas, including steep slopes, wetlands, surface water and flood plains, by zoning the bulk of the Township in single-family detached housing densities of between 1 to 3 acres per dwelling unit depending on the environmental constraints. The 3-acres density was typical of the Hamburg Mountain area and 1-acre density was typical of the Walkkill Valley, consistent with the groundwater supply analysis in the 1979 Master Plan. Medium-density housing zones were located on the west side of Route 94 and single-family detached housing on 20,000 square foot lots was allowed if water and sewer service was available.

1988 MASTER PLAN REVISION

In 1988, Hardyston Township engaged in another, periodic Master Plan Re-examination effort. The 1988 Master Plan Revision reviewed the objectives of the 1983 plan and recounted the efforts made in the ensuing years to address them. The issues and objectives of the 1983 plan were the same as those in 1979 and much progress was documented.

Providing for moderate housing demand was successful with development of the R-4 and creation of the Commercial-Recreation zone. Much discussion in the 1988 Revision centered on the new Fair Housing Act and the establishment of the Council on Affordable Housing (COAH). The term “least cost housing” was no longer appropriate and all municipalities were now responsible for providing realistic opportunities for the construction of “affordable housing”. The Township’s commitment to preserving environmentally sensitive lands was reaffirmed; with firm adherence to the development ordinance’s “constraints formula” credited with ensuring development density was directly related to the physical characteristics and environmental constraints of each, specific property. One failing was the Township’s effort to secure adequate recreation facilities, with no additional acquisition of recreational space in the preceding five years.

The 1988 Master Plan Revision asserted that there were rather significant changes in the assumptions, policies and objectives with respect to land use policies. The most important of which was the adoption of the Fair Housing Act and the requirement of a housing plan element in the Master Plan by August of 1988 designed to address the fair share numbers determined by COAH. The second assumption in need of adjustment was the pace of residential development, once considered moderate, was then considered considerable. The MLUL requirements also expanded to include a Recycling Element.

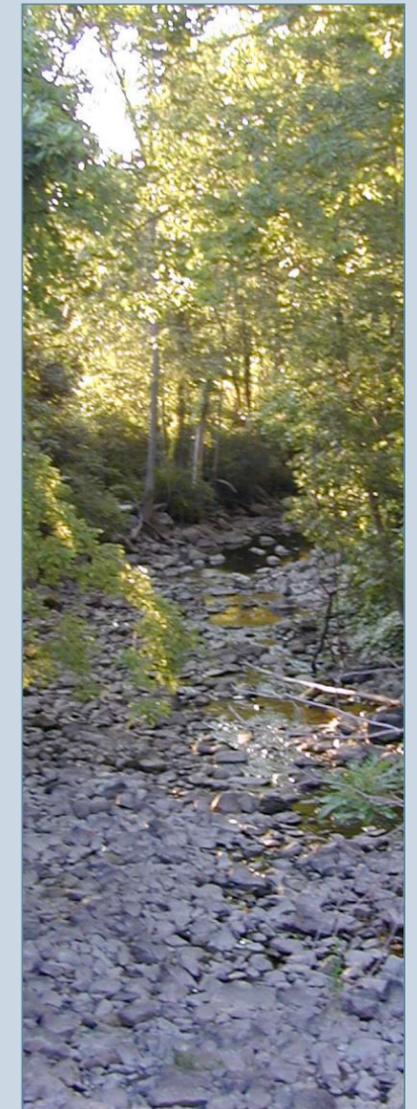
Recommended Land Use Plan changes included the creation of a new Planned Unit Development (PUD) zone intended to absorb the long-term future development in the Township. Envisioned on 600-acre tract, the PUD zone was intended to be a large scale, long-term development district with multiple uses including a mixture of housing types, commercial and office development, recreation and entertainment uses. The PUD would provide both a commercial center and a freestanding residential community. This PUD would enable most of the future development to avoid other environmentally constrained lands, preserving low-density development throughout other areas of the Township. The Land Use Plan recommended removing certain areas in the R-4 and placing them in the lower density R-2. Additionally, clustering as a development option for the R-2 was recommended. Clustering is a development design technique that concentrates residential buildings in specific areas of a site, preserving the remainder of the tract for recreation, common open space or preservation of environmentally sensitive areas without changing the net density of development in the zone or the type of land use.

1990 MASTER PLAN REVISION

The 1990 Master Plan Revision was unique, in-depth and accompanied by an ordinance creating a Minimum Impact Development District (MIDD). This plan and ordinance focused on southern Hardyston Township and was designed to specifically reduce development density and facilitate the protection of environmentally sensitive lands. These revisions were prepared because a number of significant changes occurred and affected the underlying assumptions that had formed the basis for the Township’s prior planning efforts. These factors included the preliminary State Development and Redevelopment Plan (SDRP), the adoption of the Freshwater Wetlands Act, Sussex County’s Regional Transportation Studies, and most importantly, the levels and patterns of growth in Hardyston Township.

The existing development policies and infrastructure oriented most of the intense development along State Highway 94 in the northern half of the Township. The 1990 Plan advocated the continued channeling of future higher intensity development into the more developable property in this area. The Plan promoted the efficient use of land and municipal services as well as the protection of the Township's most sensitive environmental resource, reduced sprawl and minimized impact on the existing rural road network.

The 1990 Master Plan Revision recommended that the southern portion of Hardyston Township, approximately 10,000 acres, be rezoned from the existing R-1 and R-2 designations to a new zoning district called the MIDD or Minimum Impact Development District. Retained in this larger MIDD would be the existing R-3 Lakefront Residential zone and the developed portions of the B-2 Business zone. This recommendation was based on the full spectrum of planning considerations and not based upon a determination of "carrying capacity" alone. The Plan advocated developing tracts with limited environmental constraints in accordance with the MIDD ordinance to achieve the detailed goals and objectives set forth in the plan.





LAND USE

INTRODUCTION

The Land Use Plan Element is intended to integrate the stated vision, planning assumptions, community goals and other master plan elements together into a comprehensive framework to guide the physical, economic, environmental and social development for the Township of Hardyston. The Land Use Plan element serves the community as a guide to the future. This Master Plan addresses specific land use issues that have changed or have appeared since the last Master Plan adoption. An additional function of this plan is to clarify the appropriate uses of each area before development pressures affect a serious change in the environment.

Much of the land in Hardyston is limited by environmental constraints. Wetlands, floodplains, steep slopes, natural species habitats, unsuitable soils, lack of utilities and other environmental concerns restrict development potential.

Many of the residential neighborhoods in the Township are centered around golf courses or lake communities. These housing arrangements attempt to cluster housing while at the same time protect environmentally sensitive lands. Most of the other development in Hardyston, including residential, commercial and industrial uses, exists in the Route 94 corridor. This existing development pattern can be used to focus development to avoid sprawl that would encroach upon natural resources and environmentally constrained areas. The preservation of natural resources in Hardyston is essential to the future generations of the Township.

EXISTING LAND USE

The existing pattern of development consists mostly of amenity-oriented neighborhoods such as golf course and lake communities and corridors of development, such as along Route 94. Residential, commercial, industrial, public, quasi-public and open space uses exist in the Township, along with significant areas of environmental constrained land and vacant properties. The patterns of these uses have evolved over many years.

Residential

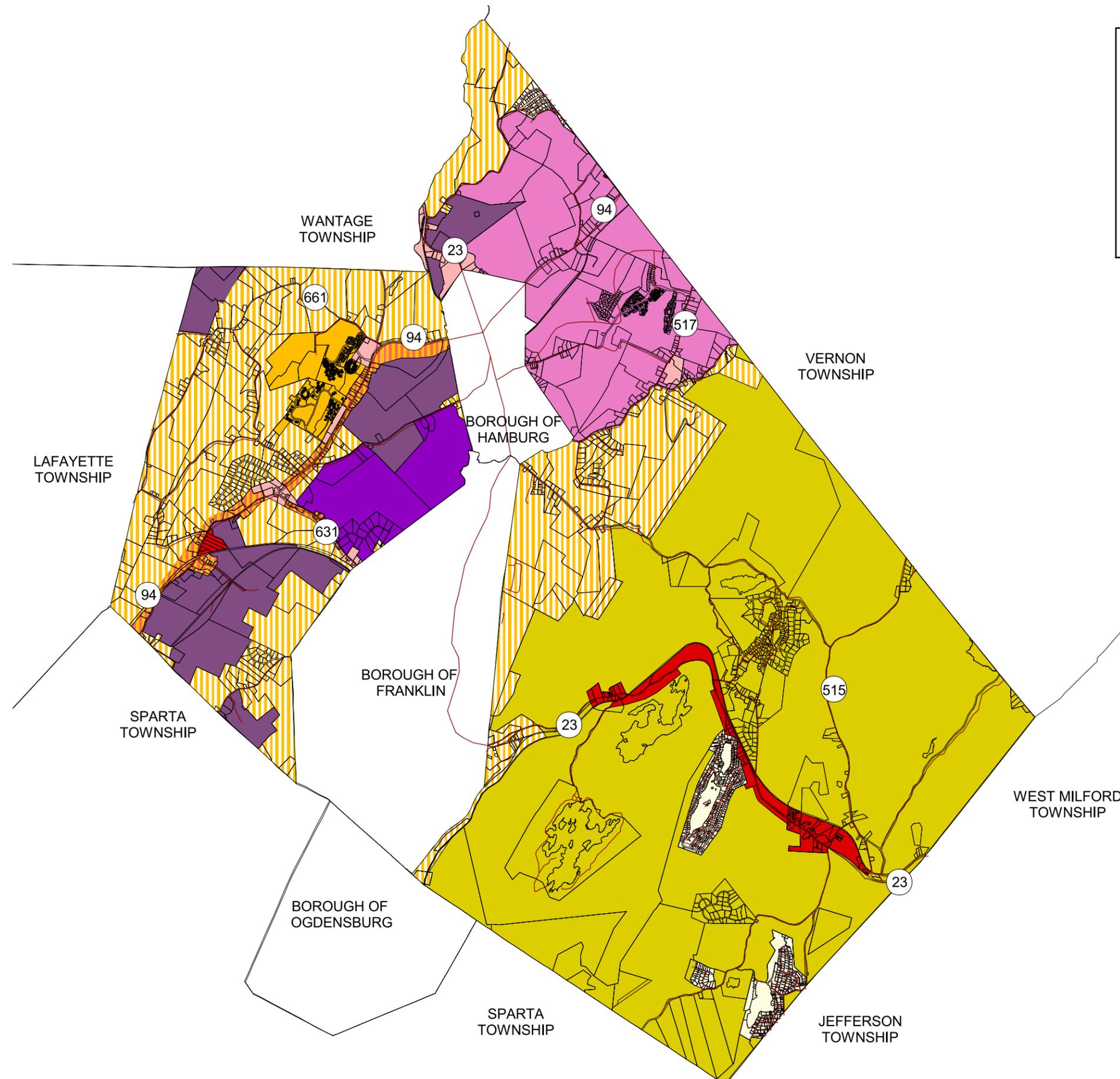
Single-family houses are the predominant type of residence in most of the Township. The areas of single-family residential homes are fairly stable and well established. A large amount of the residential development in Hardyston exists either in lake or golf course communities. The lake communities include: Lake Girard, Beaver Lake, Lake Stockholm, Tamarack and Summit Lakes, and Deer Trail and Fawn Lakes. The primary golf course community is Crystal Springs. The existing residential zones are: Minimum Impact Development District (1), Minimum Impact Development District (2), Lakeside Residential, Medium Density Residential, Commercial Recreation and Residential Commercial.

Commercial

Commercial land uses consist of a variety of retail commercial uses, restaurants, personal service establishments, wholesale businesses, and offices. There are four zone classifications that permit commercial uses: Residential Commercial, Commercial Recreation, Neighborhood Business and Highway Business. The Residential Commercial and Neighborhood Commercial zones include most of the Township's employment centers and commercial complexes.

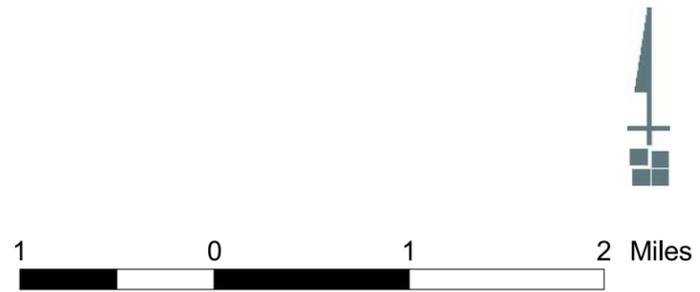
Route 23 contains a long highway business zone which contains businesses and some residences. Route 23 north of Hamburg contains a neighborhood business zone and a light industrial zone. Route 517 includes some development, mostly lower-density housing with a few commercial enterprises. Route 631 contains a residential/commercial zone and a neighborhood commercial zone that mirrors the development in Franklin along this road. Other residences and businesses are scattered throughout the Township on smaller roads.

Route 94 is an active State road with development pressures along its eastern portion heading into Vernon. The areas along Route 94 in northern Hardyston contain the uses that make up much of the built environment of Hardyston. Many residential areas are located in the corridor along Route 94. The appropriate development of the Route 94 corridor is essential to the Township's ability to maintain its commercial core and establish its role in the regional economy. The Township's land use plan calls for the proper development of this corridor as the commercial and civic center of Hardyston.



LEGEND

- MIDD-1 Minimum Impact Development District (1)
- MIDD-2 Minimum Impact Development District (2)
- R-3 Lakeside Residential
- R-4 Medium Density Residential
- R-C Residential Commercial
- C-R Commercial Recreation
- B-1 Neighborhood Commercial
- B-2 Highway Business
- I-1 Limited Industrial
- I-2 Medium Industrial

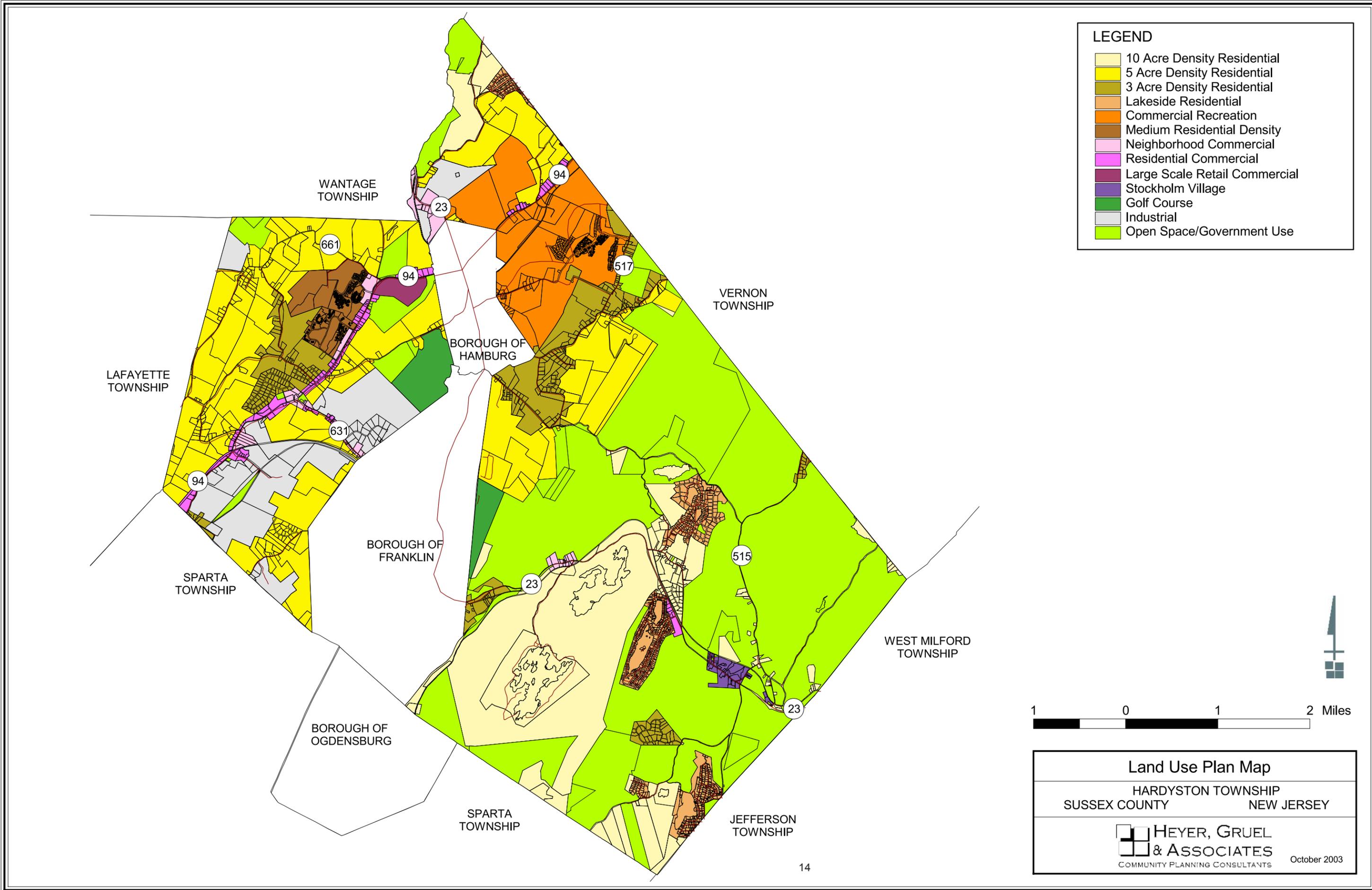


Existing Zoning Map

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

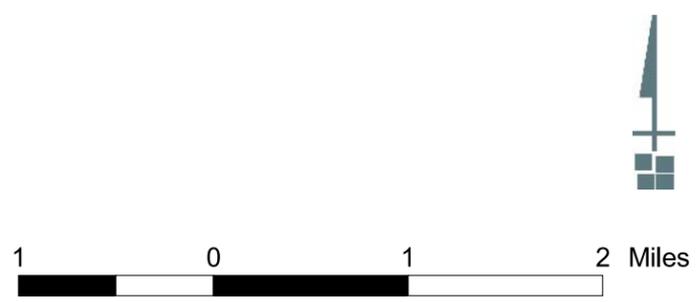
HEYER, GRUEL & ASSOCIATES
COMMUNITY PLANNING CONSULTANTS

October 2003



LEGEND

- 10 Acre Density Residential
- 5 Acre Density Residential
- 3 Acre Density Residential
- Lakeside Residential
- Commercial Recreation
- Medium Residential Density
- Neighborhood Commercial
- Residential Commercial
- Large Scale Retail Commercial
- Stockholm Village
- Golf Course
- Industrial
- Open Space/Government Use



Land Use Plan Map

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

**HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

October 2003

PROPOSED LAND USE

Due to the limits placed on much of the land due to environmental constraints, much of the future development of Hardyston will be primarily in the Route 94 corridor. The changes to residential uses include a new 10-Acre Density Residential Zone designed to limit density in areas on constrained lands. The recommended commercial uses of the Township are classified according to five main use types, including a new Large Scale Retail Commercial district and a new Stockholm Village district. A new open space/government use zone includes the extensive open space system, Newark Watershed lands and all public lands. The Land Use Plan Map shows the proposed uses for the Township.

Low-Density Residential

There are currently two low-density residential districts in Hardyston, the MIDD-1 and MIDD-2 zones. The basis for the MIDD zones was set forth in the 1990 Master Plan. While these zones are designed to preserve constrained lands, more efforts are required to safeguard constrained lands.

A revised zoning ordinance will protect natural resources and environmentally constrained lands through the creation of a new 10-Acre Density Residential district. The ordinance will be based on sound planning and will be directly related to the goals of this Master Plan. The ordinance will continue the Township's policy of natural resource protection while maintaining consistency with the State Plan. The creation of this district will enable the Township to avoid inappropriate development and protect natural resources and the Township's built environment. The new zone will allow flexibility through clustering and lot averaging techniques. Such techniques provide the opportunity to locate development on a site which maximizes the preservation of environmental features, accounts for other site conditions and maintains the Township's rural character.

The three low-density residential use categories proposed are: 10-Acre Density Residential, 5-Acre Density Residential and 3-Acre Density Residential. With the adjustments to the former MIDD zones, there are now seven proposed residential use categories: 10 Acre Density Residential, 5 Acre Density Residential, 3 Acre Density Residential, Lakeside Residential, Commercial Recreation, Medium Density Residential, and Residential Commercial.

10-Acre Density Residential

The new 10-Acre Density Residential district is intended to preserve much of the constrained lands in the Township. Many areas that are currently zoned MIDD-1 are proposed for this use category. In addition, some areas that were MIDD-2 are also proposed for this use designation.

The basis for the recommendation is discussed at length in the Conservation Element, however some of the principal reasons include the following:

- Consistent with Hardyston's long term planning efforts and the objectives of the State Plan, the Township has channeled its growth into its "center" along the Route 94 corridor.
- Hardyston's Land Use Plan can readily accommodate the Township's projected level of development without significant development in the "environs".
- Hardyston has effectively used its Wastewater Plan as a growth management tool. The Township's population growth will occur primarily in existing and proposed sewer service areas. The low density residential areas are not within sewer service areas.
- The Township has addressed its affordable housing obligation and has received substantive certification from the Council on Affordable Housing.
- The rezoning is consistent with local and regional open space initiatives. Many of the tracts included in the 10 acre density districts are within a matrix of substantial protected open space, including Hamburg Mountain and the Wallkill River.
- From an environmental perspective, the properties are some of the State's most environmentally sensitive lands with extensive areas of potable watershed, and wildlife habitat.
- Most of the area is in forest cover with very little intrusion from agriculture or development.
- The reduced density is consistent with the Resource Assessment and Conservation Analysis Values Analysis in the Highlands Study. Much of the area in Hardyston scored within the highest resource value.
- The rural character of the Township should be preserved.

5-Acre Density Residential

Much of the land proposed for 5-Acre Density Residential is currently zoned as MIDD-2. Some land near the border with Vernon that is currently zoned Commercial Recreation is proposed as 5-Acre Density Residential. Also, some of the lands around Wheatsworth Road that are currently zoned Limited Industrial are proposed as 5-Acre Density Residential.

3-Acre Density Residential

Of the lands that are proposed for 3-Acre Density Residential, most are currently zoned MIDD-2. Some lands along Route 517 that are currently zoned Commercial Recreation are proposed as 3-Acre Density Residential.





Lakeside Residential

The Lakeside Residential land use category identifies areas that either have been developed or should be developed for single-family detached housing on a minimum lot of 15,000 square feet. One of the primary purposes of this land use category is to maintain the density and character of the Township's existing single-family neighborhoods around the Township's lakes. Another of the primary purposes of this land use category is to support continued investment and maintenance in the Township's single-family housing stock.

Medium Density Residential

The sole location of the Medium Density Residential district is north of Route 94, just west of Route 661. This district is designed to acknowledge existing residential development and ensure its protection and maintenance. The existing development was previously approved under the Township's R-4 zoning.

Commercial Recreation

Commercial Recreation uses are oriented primarily towards golf course communities located between Scenic Lake Road, Route 517 and along Route 94. This district is designed to accommodate the Crystal Springs development and the surrounding uses. Along with the golf courses and residences that are the primary focus of this development, some commercial uses have developed in this district. The development of this zone included much of the recent development in Hardyston.

The C-R zone requires some adjustments. The boundaries of the C-R zone should be changed to reflect the existing sewer service area. All non-sewered areas zoned C-R are recommended for changes to 3-Acre Density Residential and 5-Acre Density Residential.

Residential Commercial

The Residential Commercial district allows a mixture of uses that include some businesses and retail alongside residences. The minimum lot size is 40,000 square feet. The purpose of the Residential Commercial designation is to provide an area for commercial development mixed with residential development. The Residential Commercial district is intended to handle the traffic, parking requirements, and lower level of pedestrian activity that are typical in such regional commercial corridors.

Neighborhood Commercial

The Neighborhood Commercial district is intended to provide a higher-density, mixed-use area that provides for the daily needs of the residents throughout the Township. The minimum lot size is 20,000 square feet.

The location of the Neighborhood Commercial districts should be limited to the central areas of Hardyston along Route 94, Route 631 and portions of Route 23. There is currently an area zoned for Neighborhood Commercial along Route 517. As no commercial establishments should be encouraged in this area without sewer access, all commercial and business uses should be avoided. The B-1 zone along Route 517 should be eliminated.

Large Scale Retail Commercial

Another commercial issue is the opportunity presented by the Pilz property. The Pilz property provides potential for economic development. The property has been approved for an industrial subdivision. There is a continuing need, however for new retail commercial development in the Township that is more regional in its appeal. An amount of land this large and the large floor area of commercial space that could be built there could serve the regional population. Large Scale Retail Commercial uses are designed to serve a regional population base and are often found in the form of large chain stores with a national presence. The development of new regional commercial development is also consistent with Hardyston's goals for a greater diversity of businesses, including some national chain stores. The minimum tract size proposed is 20 acres.

This site is recommended as the location of large-scale retail business uses. The location of this district in proximity to Routes 23 and 94 is sufficient to serve all of the Township's neighborhoods and regional business needs. A new land use and zoning category needs to be introduced to keep large-scale retail uses separate from other commercial uses. The Large Scale Retail Commercial category is proposed to consist solely of the Pilz property. The zoning should be created to allow for large scale retailing with appropriate design and parking standards. The site is somewhat constrained by wetlands, and this should be taken into account.

Stockholm Village

The Stockholm Village neighborhood contains many historic and natural resources that include concept plans reinforce the impact of the built environment on the visitor or resident. Stockholm Village is located along both sides of Route 23 in the southeastern area of the Township and includes Victoria's Restaurant. The present low density of businesses in this area is insufficient for pedestrian viability. The successful development of the Stockholm area will require the consolidation of commercial uses along Route 23 South.

Recreation-oriented commercial uses should be established in the neighborhood to coincide with the development of the new ice rink. These uses should include miniature golf, golf stores, indoor soccer, sports stores, batting cages, as well as accompanying uses such as coffee shops and restaurants. Infill development should be encouraged on the site of Victoria's Restaurant. A portion of the bus parking lot should be reorganized. A transit area plan should be prepared in order to take full advantage of the long term possible reuse of the New York Susquehanna and Western Railroad as a commuter rail line.

Most of the land surrounding this village district is owned by the Newark Watershed. These lands are not included as part of the village, and are designated as Open Space/Government. All the properties in this district are constrained by the same limitations and must therefore act together to create a viable, walkable mixed-use neighborhood with recreation-oriented niche commercial uses. In particular, this new zone should evaluate redevelopment opportunities, create pedestrian connections, reinforce interconnections among properties and establish standards that screen parking areas.





LAND USE

Most of the land surrounding this village district is owned by the Newark Watershed. These lands are not included as part of the village, and are designated as Open Space/Government. All the properties in this district are constrained by the same limitations and must therefore act together to create a viable, walkable mixed-use neighborhood with recreation-oriented niche commercial uses. In particular, this new zone should evaluate redevelopment opportunities, create pedestrian connections, reinforce interconnections among properties and establish standards that screen parking areas.

Industrial

The existing industrial uses are restricted to industrial parks and older industrial areas, and therefore do not unduly encroach on other surrounding uses. The industrial uses of the Township are not as intense or frequent as many other New Jersey towns, and therefore cause few problems. The industrial park on Route 631 is the only industrial park in county with remaining sewer allocation. This places the industrial park in an excellent position for future development potential. The minimum lot size is 3 acres.

Revisions are recommended to the I-1 zone at the municipal landfill. The lands south of the landfill should be reviewed for alternative uses given the lack of direct access and the environmental issues that hinder the site's development potential. The area is recommended for open space and rail uses, while the industrial zoning should be retained. The Day property, also zoned industrial, should be reviewed for possible uses, as either an economic development opportunity or possible open space.

There is an I-1 zone situated on the border with Wantage and Lafayette. The Walkkill River Macrosite Natural Heritage Priority Site encompasses part of this zone and therefore constrains some of these lands. The presence of wetlands and floodprone areas additionally restricts the development potential of this area. The quarry takes up part of this zone, and should retain its current use. This zone should be revised to include only the existing quarry operation. The rest is recommended for open space use.

Golf Course

A new land use designation is proposed as Golf Course. This designation is intended to protect existing golf courses, as they are an important means of recreation and tourism. This designation will consist solely of the Black Bear Country Club and the Ballyowen Golf Course. The Crystal Springs courses are not included in this zone, as they are already accommodated by the Commercial Recreation District.

Open Space/Government Use

Currently, all public lands, open space, community facilities, Board of Education facilities and Newark Watershed land are dispersed throughout the Township and are located in various zones. This new land use category would highlight the extent of public lands and open space in the Township, reinforce the "environs" principles and protect Newark Watershed lands consistent with State environmental policies. Approximately 4,200 acres of the Township of Newark Watershed lands are located in the Township. Principal permitted uses in the new zone would include public uses, Board of Education facilities, municipal, state and federal open space, and single-family residences on a minimum lot of 25 acres. If a rail station is established in Stockholm in the future, then use of a cluster option should focus any development in the Stockholm Village area.

CONSERVATION PLAN ELEMENT

INTRODUCTION

The Conservation Plan Element provides the environmental framework for the master plan. All of these plan elements are based on the Natural Resources Inventory, an open space inventory, a farmland inventory and a community vision for what the township should look like in the coming years and the values of the residents.

The Hardyston Master Plan Conservation Plan Element identifies environmental features such as wetlands, floodplains, steep slopes and watersheds that may place constraints on development. It is important to recognize the impact and value that natural areas and environmental features have on the overall quality of life in the community. It is one of Hardyston's objectives to preserve its open space and land areas that exhibit environmentally sensitive features.

Much of Hardyston is constrained by naturally occurring environmental conditions. The lands that are constrained offer opportunities for open space and passive recreation for the citizens of Hardyston. The permanent preservation of these lands will also help to maintain the rural character that gives Hardyston much of its identity. While much land is already permanently preserved, additional areas could be preserved.

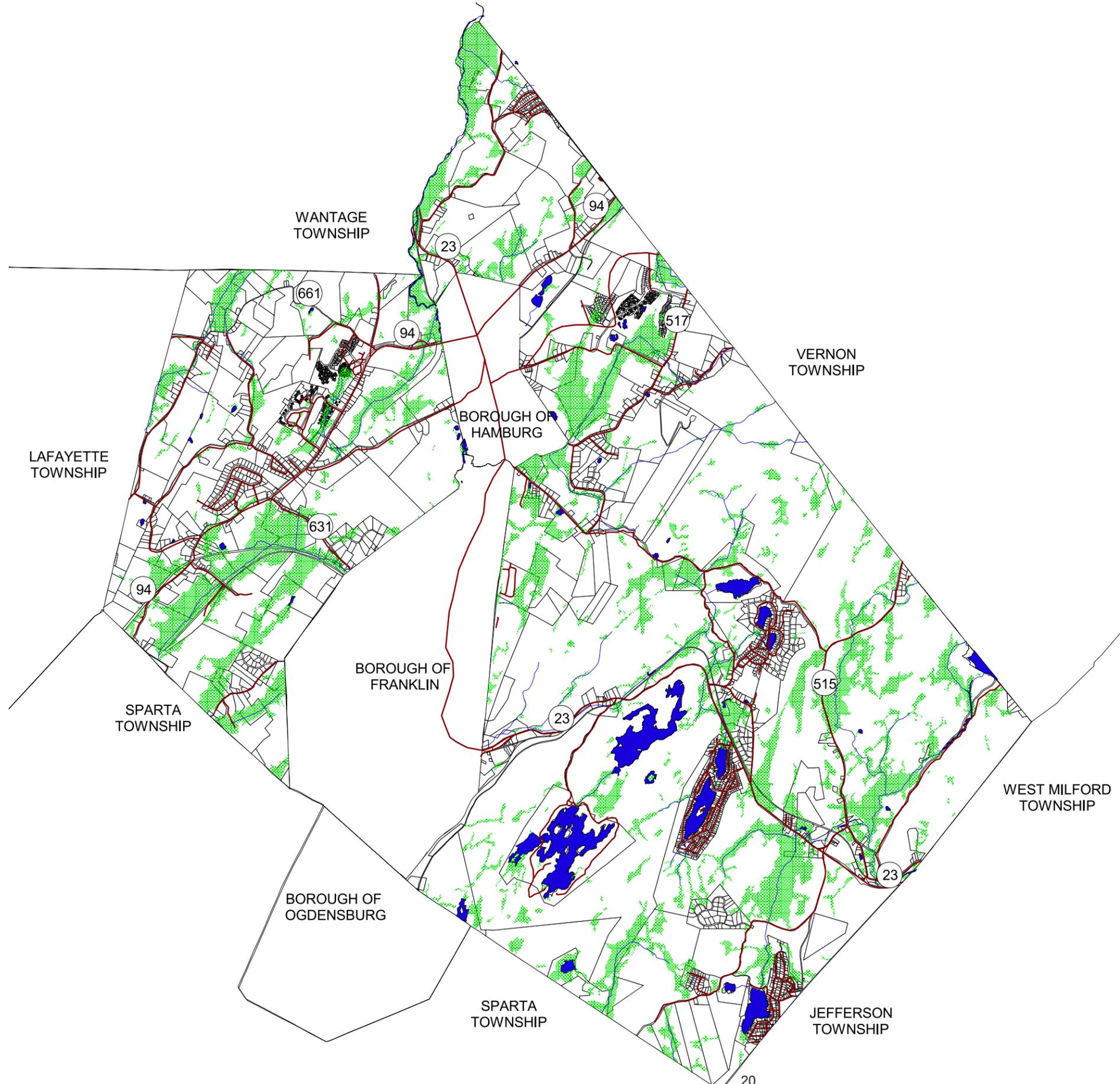
The Township of Hardyston contains extensive wetlands in various areas of the community. Wetlands are an important aspect of the hydrologic and hydraulic characteristics of the Township and serve several purposes. They support wildlife and distinct species of plant life. They also act as a retention basin for floodwaters and control various types of water pollution. Wetlands and their required transition areas are one of the most significant regulatory constraints to development.

The following table shows the acreage of wetlands by existing zoning district. The total acreage of wetlands in the Township is 3,954.5 acres, or 17% of the total land area. Some of these areas are better preserved either as open space or for very low-density development, as the constraints placed on the property by wetlands can severely hinder development potential. As identified in the table, the majority of the wetlands are located in the MIDD-1 and MIDD-2 zones.



CONSERVATION PLAN
ELEMENT

Prepared By Heyer, Gruel + Associates



LEGEND

-  Wetlands
-  Water

Source: NJDEP



1 0 1 2 Miles

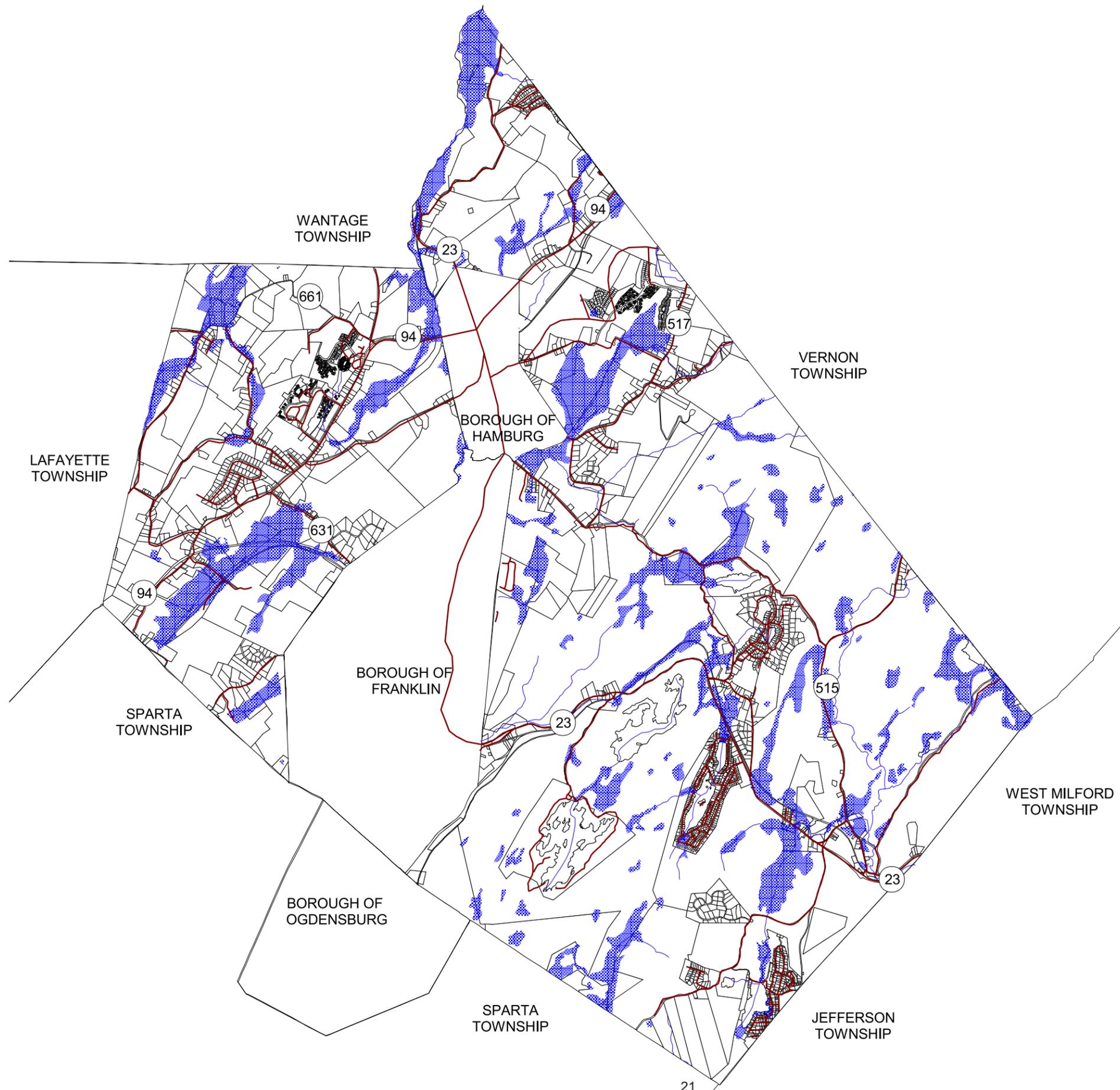
Wetlands Map

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY



**HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

October 2003



Source: NJDEP



Floodplain Map	
HARDYSTON TOWNSHIP SUSSEX COUNTY NEW JERSEY	
 HEYER, GRUEL & ASSOCIATES <small>COMMUNITY PLANNING CONSULTANTS</small>	October 2003



Acreage of Wetlands by Zoning District			
Zoning	Existing		Constrained Areas
	Acres	Acres	Percent
B-1	172.6	27.7	16%
B-2	309.9	81	26%
C-R	2202.7	405.9	18%
I-1	1380.2	398.4	29%
I-2	628.4	29.8	5%
MIDD-1	10,255.4	1,626.8	16%
MIDD-2	4,791.5	919.4	19%
R-3	422.6	18.1	4%
R-4	353.9	43.7	12%
R-C	264.8	43.7	17%
Total	20,782	3,594.5	17%

The 100-year floodplain boundary area has been established by the Federal Emergency Management Administration (FEMA) to denote floodwater impoundment areas. These are areas adjacent to streams, rivers, ponds and lakes. Development in these areas is highly restricted in order to avoid destruction of flood areas and the destruction of property that has been improperly located in the floodplain and therefore subject to flooding. The floodplain areas are dispersed throughout the Township; however, the vast majority of the floodplains are located in the MIDD-1 and MIDD-2 zones. The total areas in the Township located in a floodplain make up 2,637.6 acres, as shown on the following table.

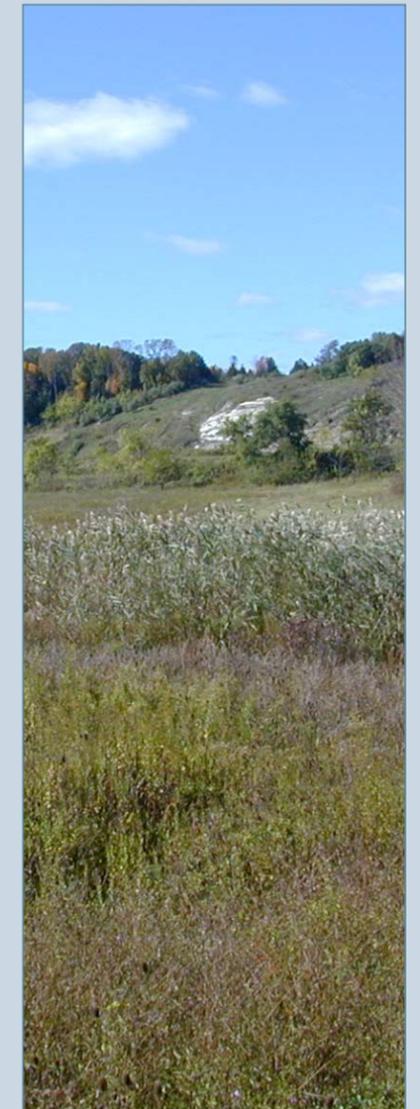
Acreage of Floodplains by Zoning District			
Zoning	Existing		Constrained Areas
	Acres	Acres	Percent
B-1	172.6	21.0	12%
B-2	309.9	76.5	25%
C-R	2,202.7	343.7	16%
I-1	1,380.2	348.9	25%
I-2	628.4	8.4	1%
MIDD-1	10,255.4	1,124.4	11%
MIDD-2	4,791.5	673.8	14%
R-3	422.6	24.1	6%
R-4	353.9	0.0	0%
R-C	264.8	16.8	6%
Total	20,782.0	2,637.6	13%

Slopes of 25 percent or greater are located throughout the Township. Severe slopes indicate environments with limitations on development in terms of run-off control, soil erosion, suitability of terrain for specific land uses, and potential for safe road access. Slopes of 25 % or more make up 12 % of the total area of the Township. A large amount of this acreage is located along Hamburg Mountain in the existing MIDD-1 and MIDD-2 zones.

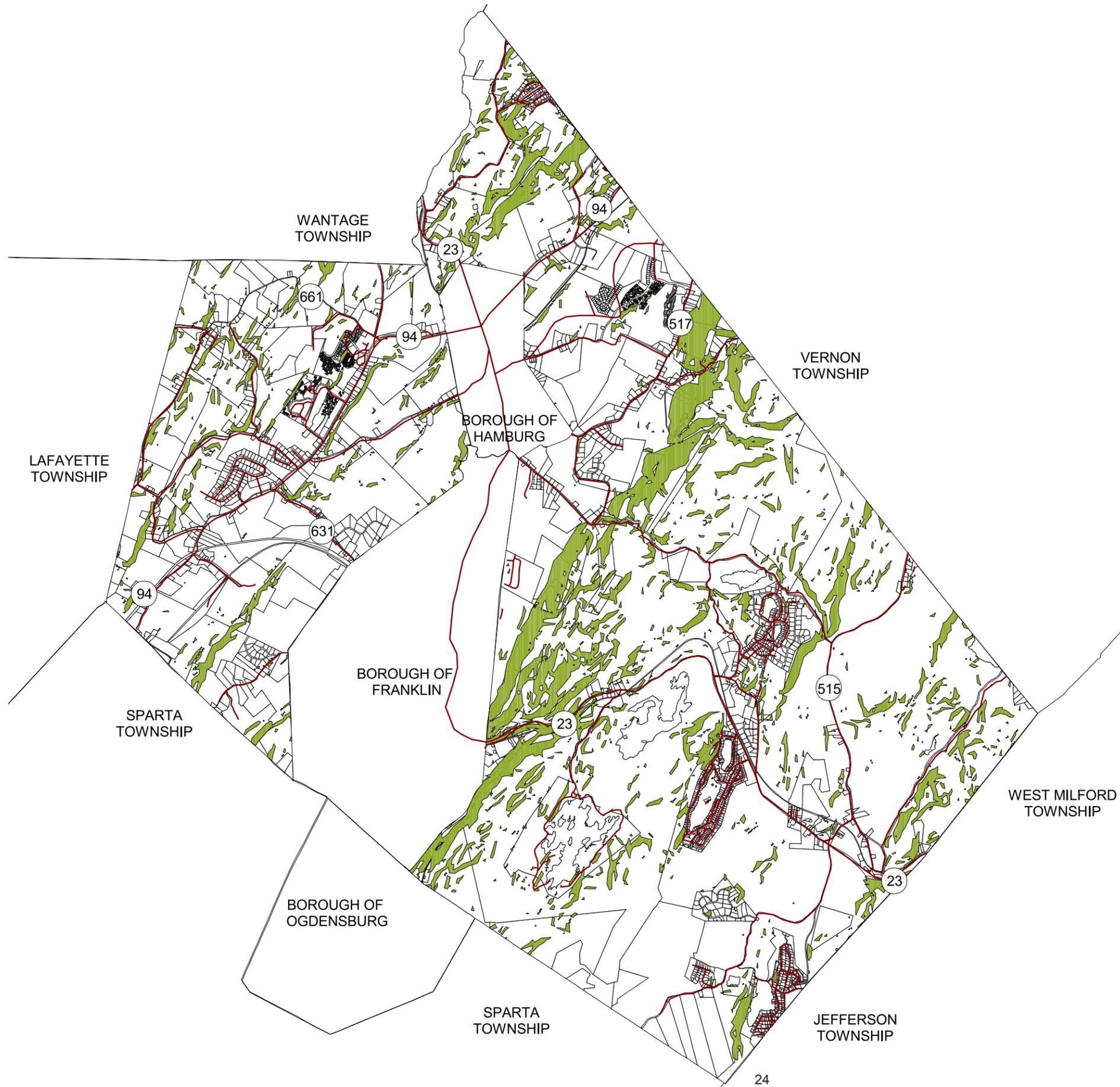
Zoning	Existing		Constrained Areas	
	Acres	Acres	Acres	Percent
B-1	172.6	13.8		7%
B-2	309.9	6.4		5%
C-R	2,202.70	323.9		15%
I-1	1,380.20	133.2		10%
I-2	628.4	36.2		6%
MIDD-1	10,255.40	1,285.9		12%
MIDD-2	4,791.50	729.8		15%
R-3	422.6	24.5		7%
R-4	353.9	13.8		3%
R-C	264.8	2.1		1%
Total	20,782.00	2,569.6		12%

The soils limitations designation determines septic tank suitability based on depth to bedrock, the depth of the water table, steep slopes and seasonal conditions. This soil analysis is based on the data provided by the New Jersey Department of Environmental Protection. Most of the Township is covered with soils of severe limitations. The total area of soils in severe condition in the Township is 16,07.7 acres or 81% as indicated in the following table. It is not surprising that 85% and 82% of the soils in the MIDD-1 and MIDD-2 zones are severely constrained.

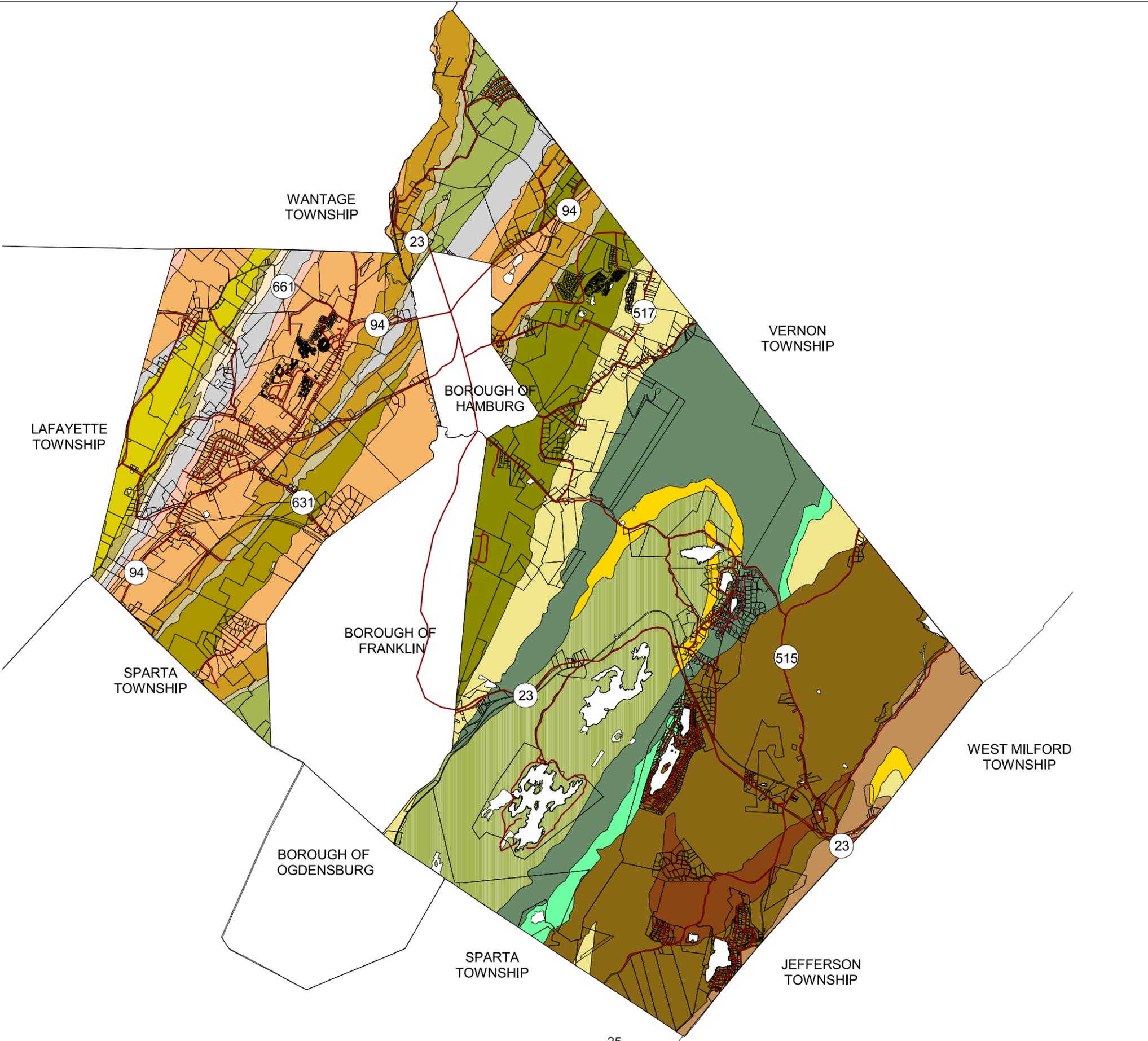
Zoning	Existing Total		Constrained Areas	
	Acres	Acres	Acres	Percent
B-1	172.6	120.5		70%
B-2	309.9	197		64%
C-R	2,202.70	1,719.6		78%
I-1	1,380.20	1,104.5		80%
I-2	628.4	354.2		56%
MIDD-1	10,255.40	8730		85%
MIDD-2	4,791.50	3,951.6		82%
R-3	422.6	273.5		65%
R-4	353.9	249.4		70%
R-C	264.8	207.5		78%
Total	20,782.00	16,907.7		81%



CONSERVATION PLAN
ELEMENT

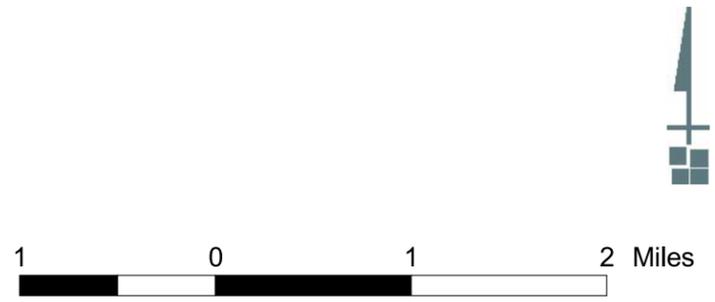


Steep Slopes Map(25% and over)	
HARDYSTON TOWNSHIP SUSSEX COUNTY NEW JERSEY	
 HEYER, GRUEL & ASSOCIATES COMMUNITY PLANNING CONSULTANTS	October 2003



LEGEND

[Orange]	Alentown Dolomite
[Yellow]	Amphibolite
[Light Orange]	Beekmantown Group, Lower Part
[Light Yellow]	Beekmantown Group, Upper Part
[Dark Brown]	Biotite-Quartz-Feldspar Gneiss
[Light Green]	Epidote Gneiss
[Light Tan]	Hardyston Quartzite
[Dark Green]	Hornblende Granite
[Light Brown]	Jacksonburg Limestone
[Orange]	Leithville Formation
[Yellow]	Martinsburg Formation
[Dark Green]	Microcline Gneiss
[Light Brown]	Pyroxene Gneiss
[Light Green]	Quartz-Oligoclase Gneiss
[Dark Green]	Syenite Gneiss
[Light Green]	Swamp and Marsh Deposits
[Light Grey]	Unkown Geology
[Dark Brown]	Hypersthene-Quartz-Oligoclase Gneis



Bedrock Geology Map

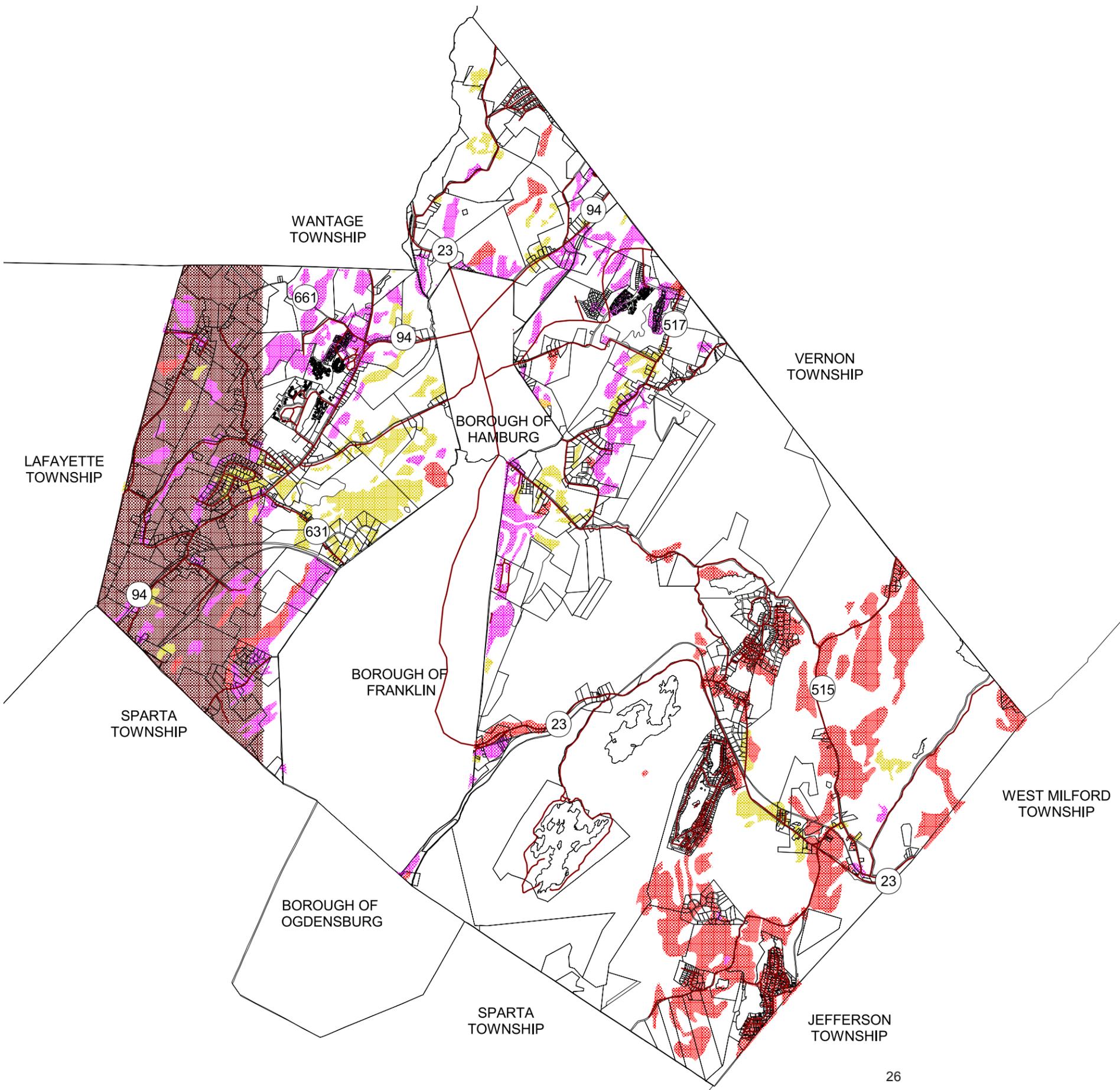
HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

**HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

October 2003

LEGEND

- Severe
- Severe to Moderate
- Moderate
- Moderate to Slight
- Slight
- Unknown



Soils Limitation Map
HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

October 2003

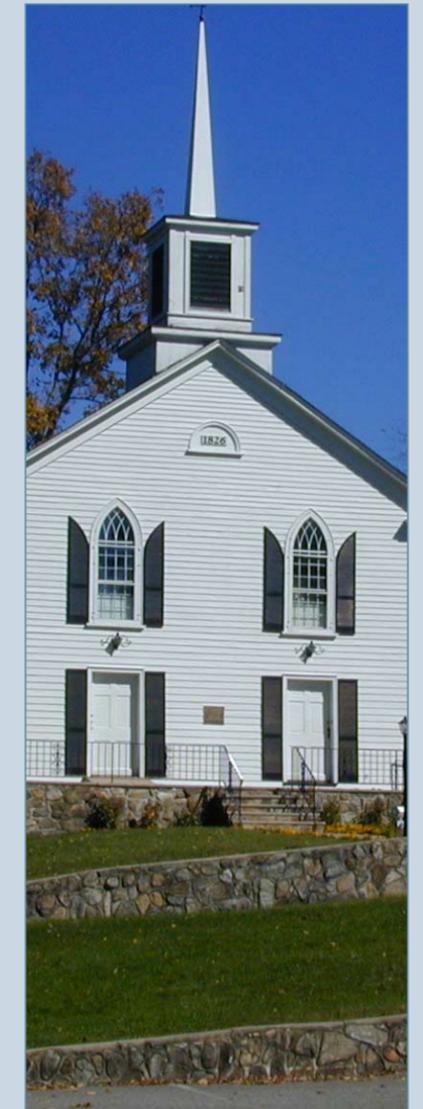
The Township has five Natural Heritage Priority sites (NHRS) that indicate that rare species and/or natural communities may be present in a given area based on historical records of sightings or identification of an area as a probable habitat for rare or endangered species. The priority sites are located along the western and eastern boundaries of the Township, along Route 94 in the northwest part of the Township, and along the border with Sparta. These areas cover approximately 5,900 acres or 28% of the total land area of the Township.

Acreage of Priority Sites by Zoning District			
Existing Total		Constrained Areas	
Zoning	Acres	Acres	Percent
B-1	172.6	87.4	51%
B-2	309.9	13.8	4%
C-R	2,202.70	143.8	7%
I-1	1,380.20	1,012.1	73%
I-2	628.4	8.5	1%
MIDD-1	10,255.40	1,949.6	19%
MIDD-2	4,791.50	2,125.4	44%
R-3	422.6	0.0	0%
R-4	353.9	348.4	98%
R-C	264.8	188.6	71%
Total	20,782.00	5,877.6	28%

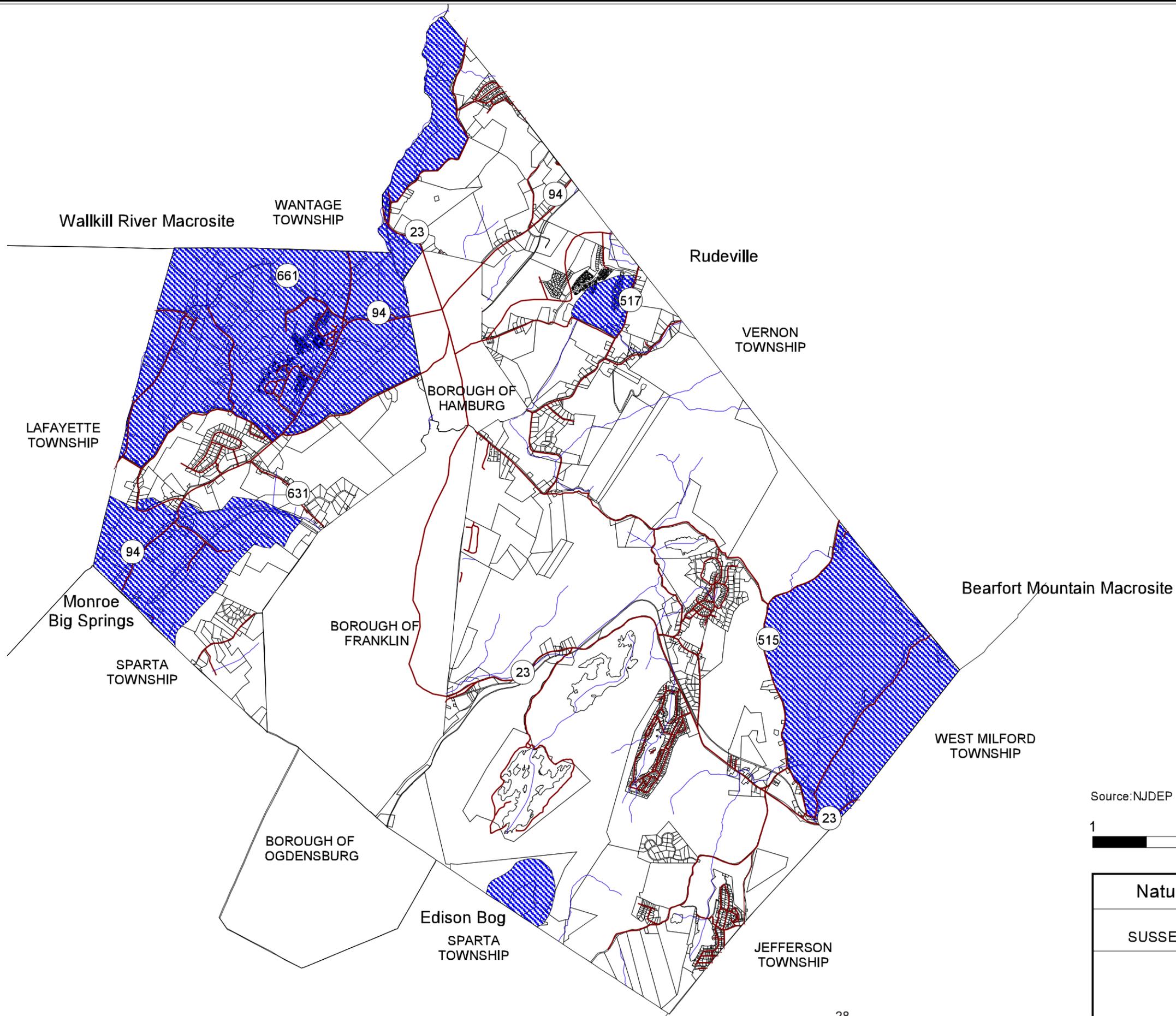
The Township contains six areas that are constrained due to water supply wellhead protection. Wellhead Protection Areas (WHPA) in New Jersey are mapped areas calculated around a Public Community Water Supply (PCWS) well that delineates the horizontal extent of ground water captured by a well. These wells pump at specific rates over a two, five, and twelve-year period of time. Approximately 95% of the citizens of Hardyston get their drinking water from a well. The Safe Drinking Water Act Amendments of 1996 (P.L. 104-182) established the need for each State to have a Source Water Assessment Program (SWAP). Ground water is vulnerable to contamination and once polluted, it is difficult and costly to clean up. Contaminated ground-water supply areas often are abandoned and replaced by more costly surface-water supplies.

Major Wellhead Protection Areas in the Township are located just east of Route 94 around the Crystal Springs area, the Route 94 South area, and the area around Lake Tamarack. Smaller areas also exist on Franklin's eastern border near Ogdensburg, the eastern border with Vernon and West Milford, and the area around Lake Stockholm. These conditions further constrain these lands and inhibit development. As seen in the following table, these protection areas make up over a quarter of the land in the Township.

Acreage of Wellhead Protection by Zoning District			
Existing Total		Constrained Areas	
Zoning	Acres	Acres	Percent
B-1	172.6	102.3	59%
B-2	309.9	70.3	23%
C-R	2,202.70	1,441.4	65%
I-1	1,380.20	421.9	31%
I-2	628.4	289.8	46%
MIDD-1	10,255.40	1,497.9	15%
MIDD-2	4,791.50	1,109.0	23%
R-3	422.6	64.5	15%
R-4	353.9	348.4	98%
R-C	264.8	155.5	59%
Total	20,782.00	5,501.0	26%



CONSERVATION PLAN
ELEMENT



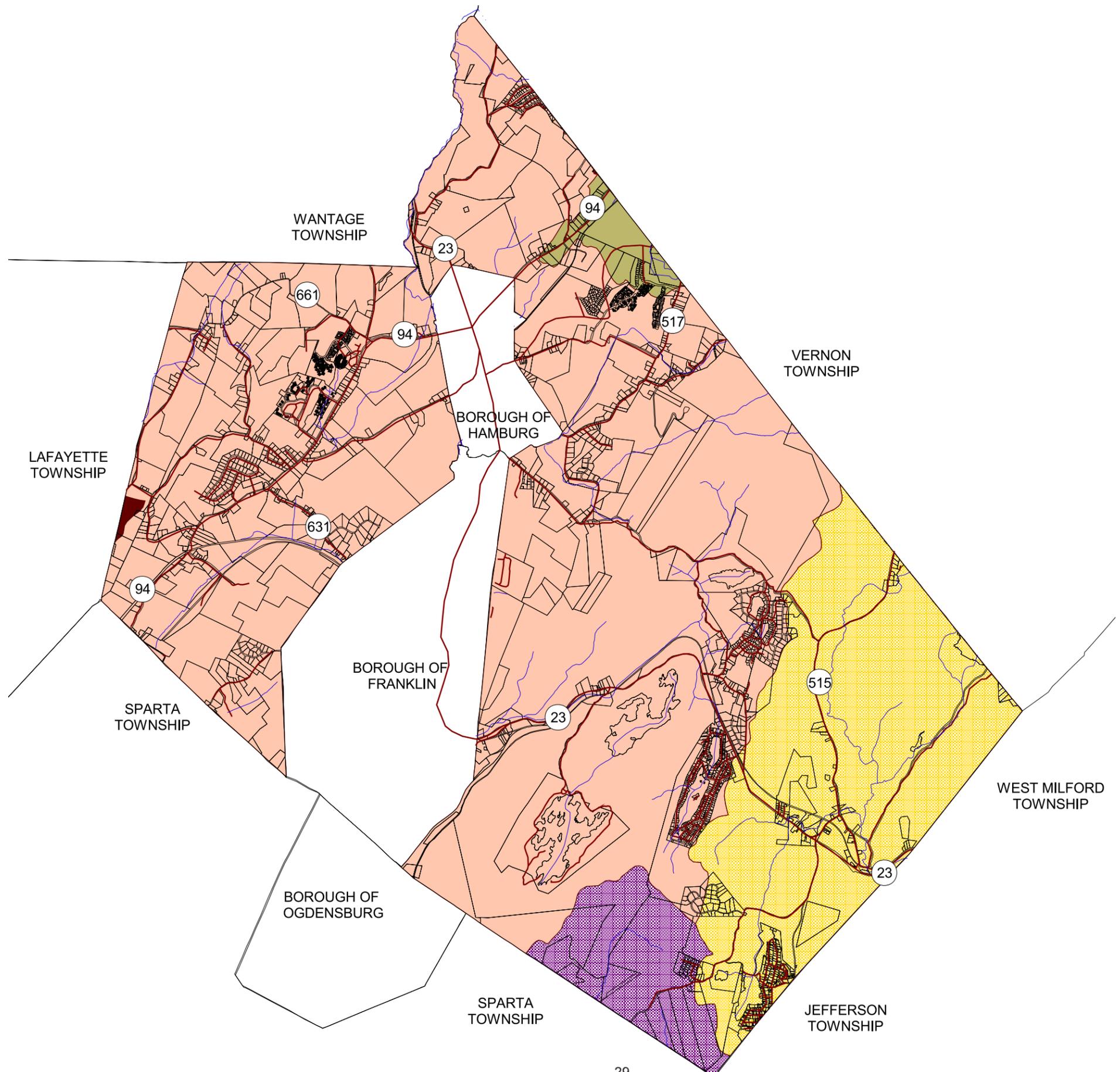
Source: NJDEP



Natural Heritage Priority Sites Map	
HARDYSTON TOWNSHIP SUSSEX COUNTY NEW JERSEY	
HEYER, GRUEL & ASSOCIATES COMMUNITY PLANNING CONSULTANTS	October 2003

LEGEND

- Paulinskill River
- Pequannock River
- Pochuck Creek
- Rockaway River
- Walkill River



Source: NJDEP



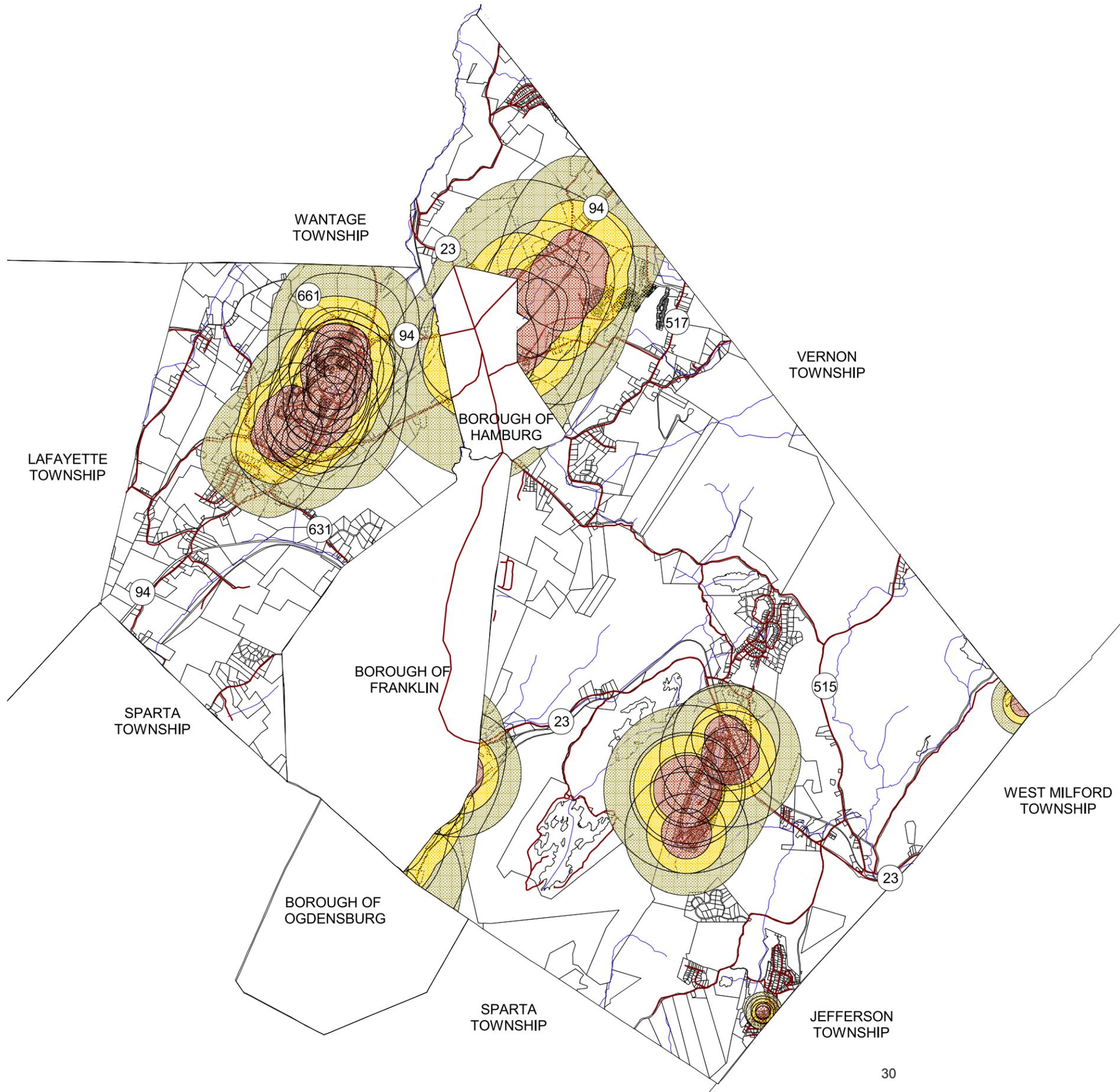
Watersheds Map
HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

HEYER, GRUEL & ASSOCIATES
COMMUNITY PLANNING CONSULTANTS

October 2003

LEGEND

-  Two years
-  Five Years
-  Twelve Years



Source: NJDEP



Water Supply Wellhead Protection Areas Map

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

 **HEYER, GRUEL & ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

October 2003

The Highlands Regional Study

The U.S. Department of Agriculture Forest Services Northeastern Area State and Private Forestry Division released its Highlands Regional Study Update in December of 2002. The 2002 study was an update of the 1992 study and was a collaboration between state, federal and university scientists examining the impacts of development in the area and the steps necessary to maintain ecological function in the region.

From the Report:

"The initial study of the New York – New Jersey Highlands (Michaels and others 1992) described the area as one of national significance. The study called for the protection of the Highlands as a greenbelt because the forests and farms were at risk of being changed by a growing population, urban decline, and suburban sprawl. These projected changes were likely to adversely affect drinking water quality, wildlife habitat, recreation opportunities, the agriculture and forest products industries, and historic and cultural sites.

The 1992 study report presented an alternative vision for the Highlands that could be achieved by assisting private landowners in managing their natural resources, helping communities manage growth, and preserving the most critical watersheds, wildlife habitats, and forest areas. The report identified conservation strategies, based on the following goals:

1. Manage future growth
2. Maintain an adequate supply of quality water
3. Conserve contiguous forests
4. Provide appropriate recreational opportunities
5. Promote economic prosperity that is compatible with goals 1-4.

The purpose of the 2002 study update is to...

1. Reassess the condition of natural resources in the Highlands region
2. Analyze land cover change and potential land use
3. Identify significant areas to be conserved and protected
4. Develop strategies to protect the long-term integrity of the region.

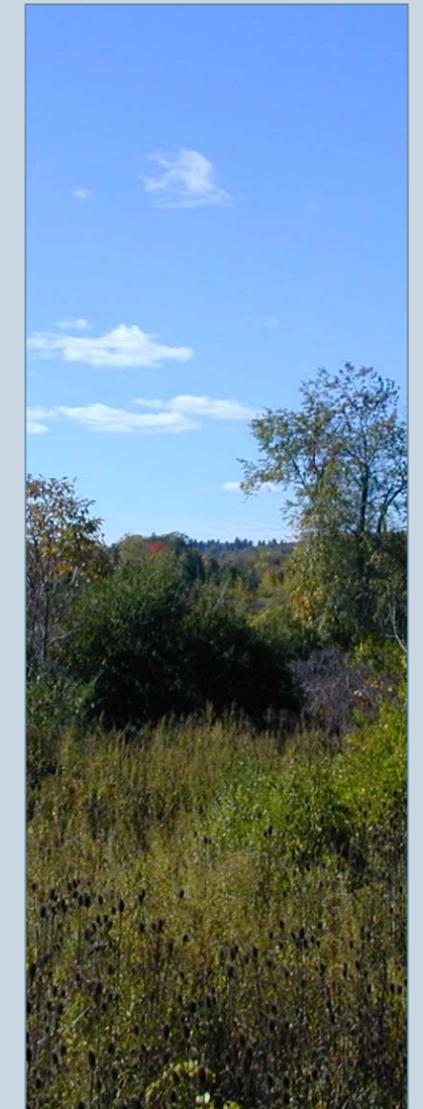
This update was guided by the 1992 study in regard to the vision and goals for the Highlands region. The resource assessment and subsequent analyses were expanded, however, taking advantage of the availability of spatial data and improved analytical techniques using Geographic Information System (GIS) technology. GIS allowed for more specific identification of significant land areas in need of protection and provided a more detailed description of future change than were identified in the earlier study.

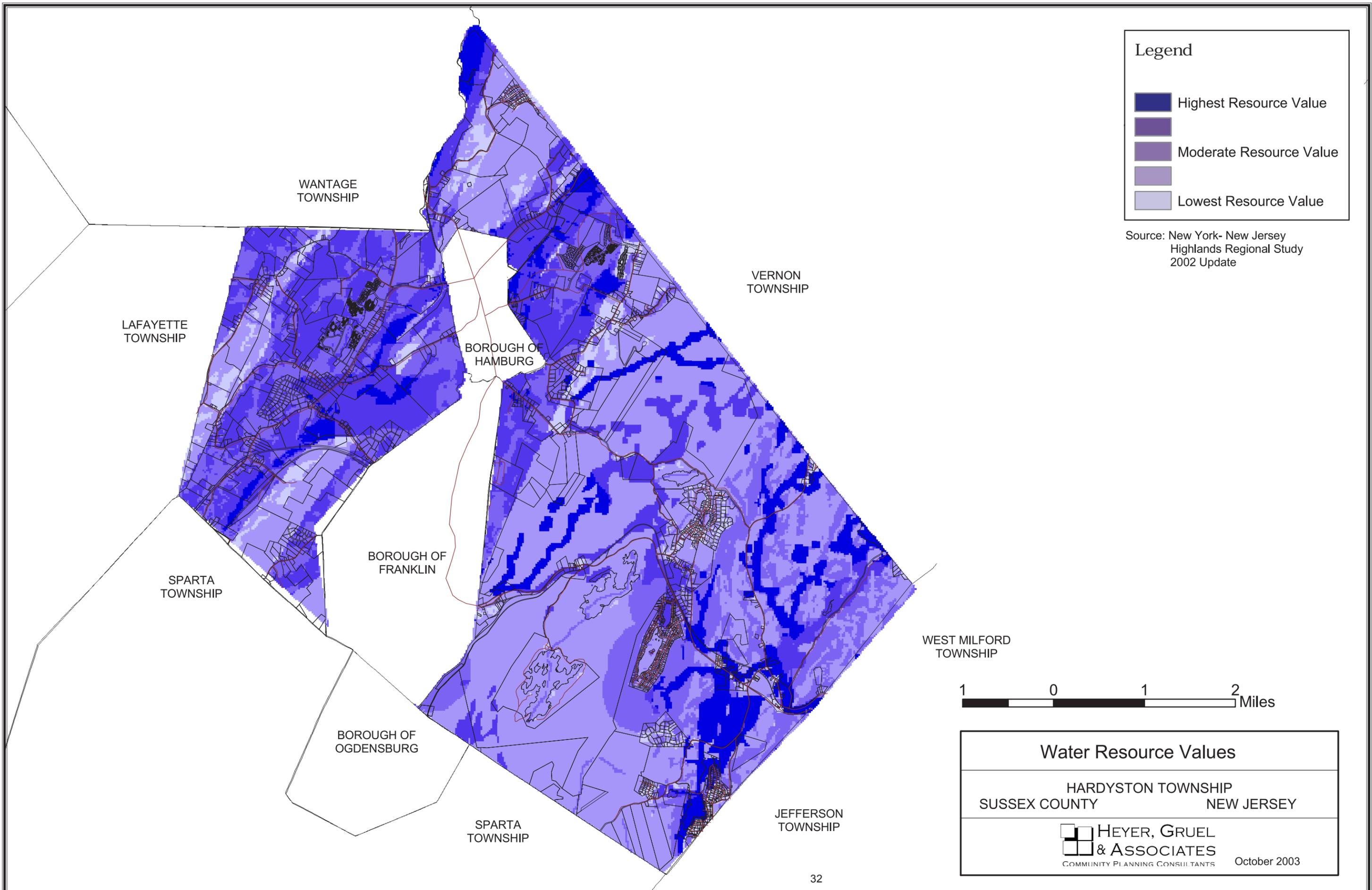
The study was coordinated by the USDA Forest Service, Northeastern Area State and Private Forestry, and was carried out in cooperation with the State Foresters of New York and New Jersey, with Rutgers University, the U.S. Geological Survey, and the Regional Plan Association. As a direct result of the Congressional appropriation, the Forest Service was able to fund various components of the study, including planning assistance, linkage among study participants, and public outreach and involvement.

A 14-person study team guided the process and provided the technical services and skills needed to conduct the study and prepare the report. Members of the study team frequently communicated and shared information about the status of the resource assessment, mapping, and analyses. A 120-person work group was established including individuals from both New York and New Jersey, who represented a range of resource interests. Work group members ensured a regional perspective, guided the study process, and commented on draft material as potential users of the study results.

This updated study report builds on the foundation established by the 1992 study. This update focuses on the location and priority of regional natural resources that are most critical, and on strategies that can be implemented by public and private sectors in the stewardship of the Highlands.

Section 2, Resource Assessment and Conservation Values, briefly describes how data on natural resources were collected and provides key findings for five resource types: water, forest, biodiversity, farmland, and recreation. It shows their distribution and provides a range of their conservation values across the region."





Legend

- Highest Resource Value
- Moderate Resource Value
- Lowest Resource Value

Source: New York- New Jersey
Highlands Regional Study
2002 Update

WANTAGE
TOWNSHIP

VERNON
TOWNSHIP

LAFAYETTE
TOWNSHIP

BOROUGH OF
HAMBURG

SPARTA
TOWNSHIP

BOROUGH OF
FRANKLIN

WEST MILFORD
TOWNSHIP



BOROUGH OF
OGDENSBURG

SPARTA
TOWNSHIP

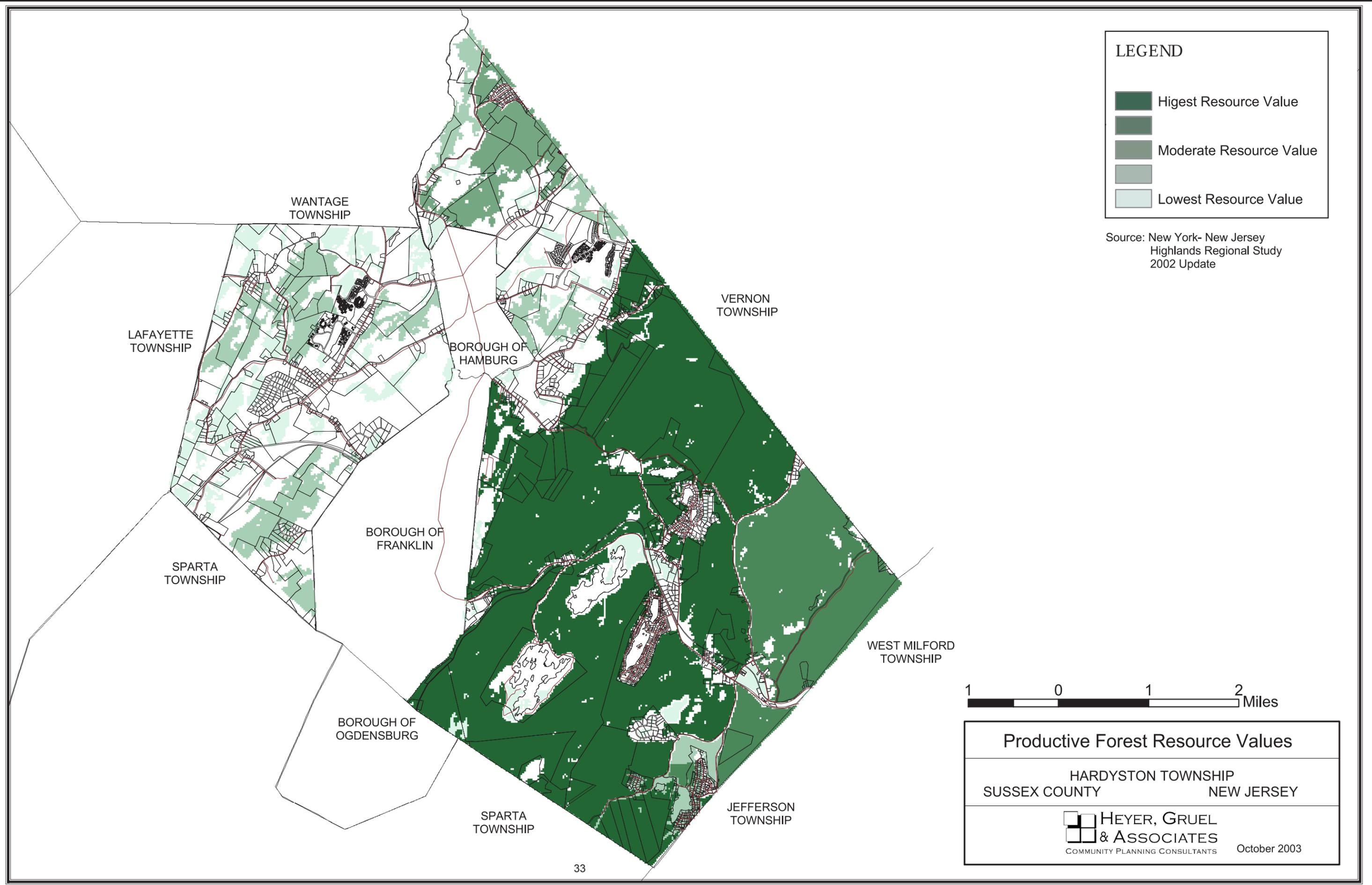
JEFFERSON
TOWNSHIP

Water Resource Values

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

**HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

October 2003



LEGEND

- Highest Resource Value
- Moderate Resource Value
- Lowest Resource Value

Source: New York- New Jersey
Highlands Regional Study
2002 Update

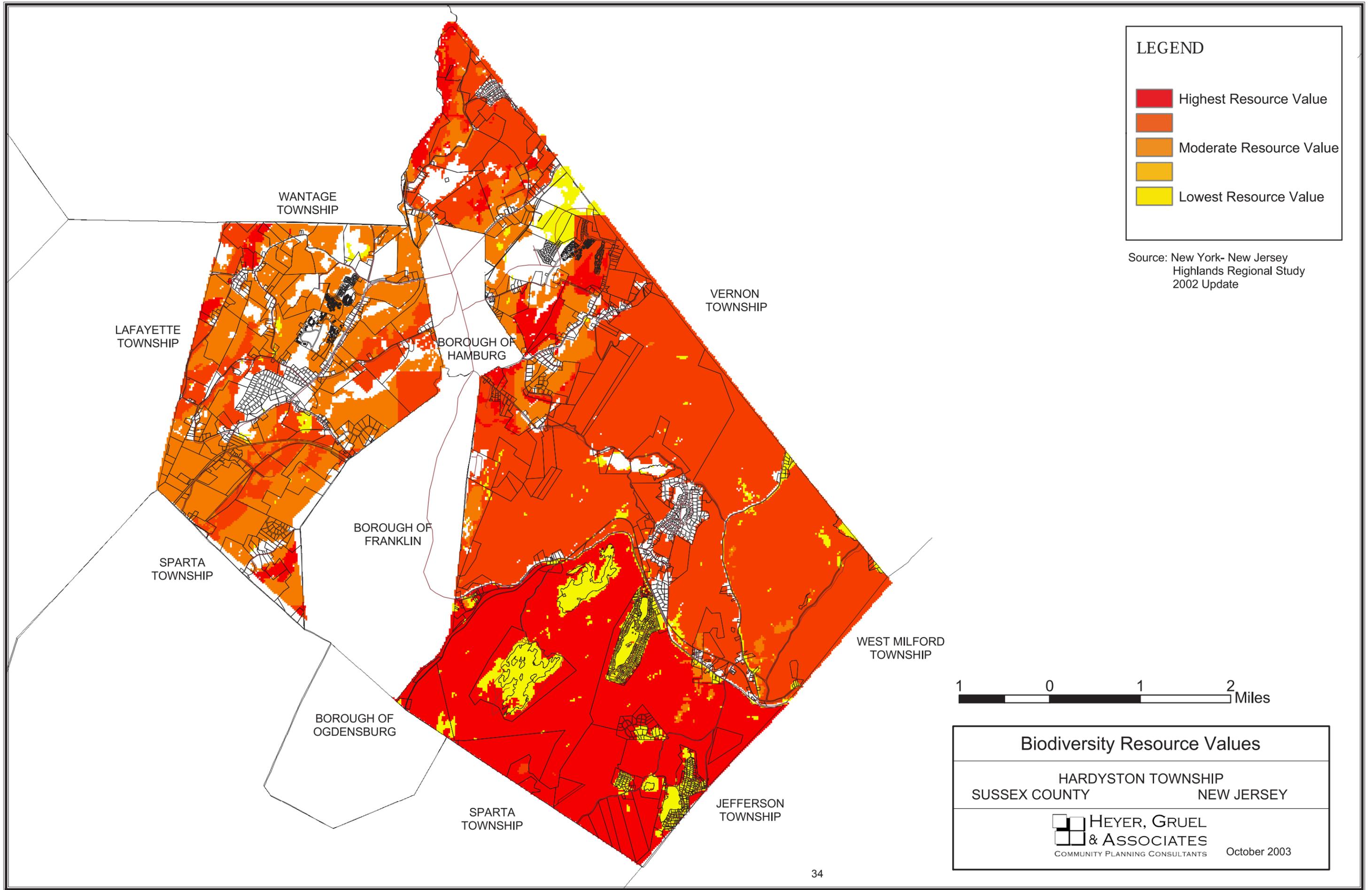


Productive Forest Resource Values

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

**HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

October 2003



LEGEND

- Highest Resource Value
- Moderate Resource Value
- Lowest Resource Value

Source: New York- New Jersey
Highlands Regional Study
2002 Update

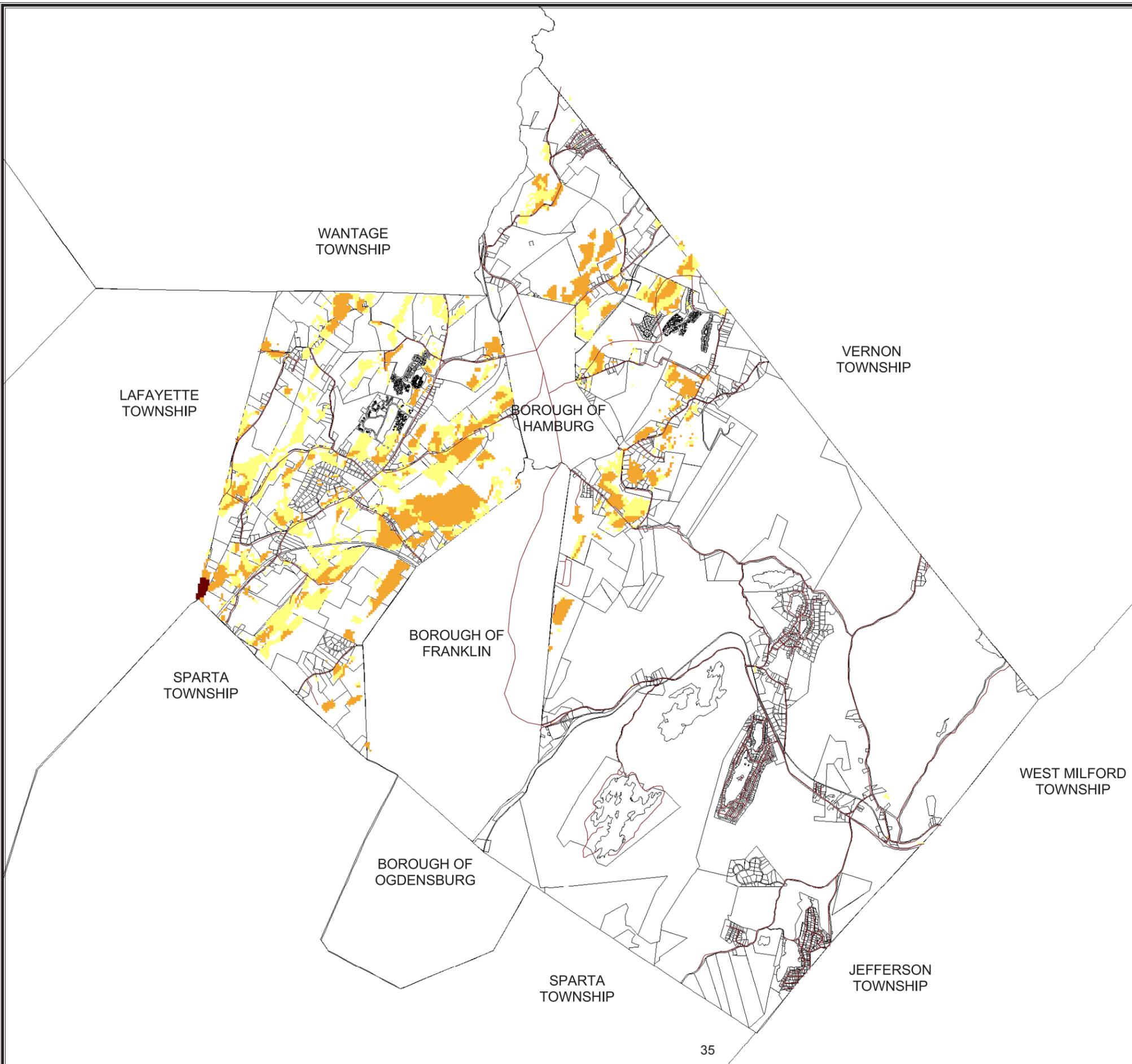


Biodiversity Resource Values

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

**HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

October 2003



LEGEND

- Highest Resource Value
- Moderate Resource Value
- Lowest Resource Value

Source: New York- New Jersey
Highlands Regional Study
2002 Update

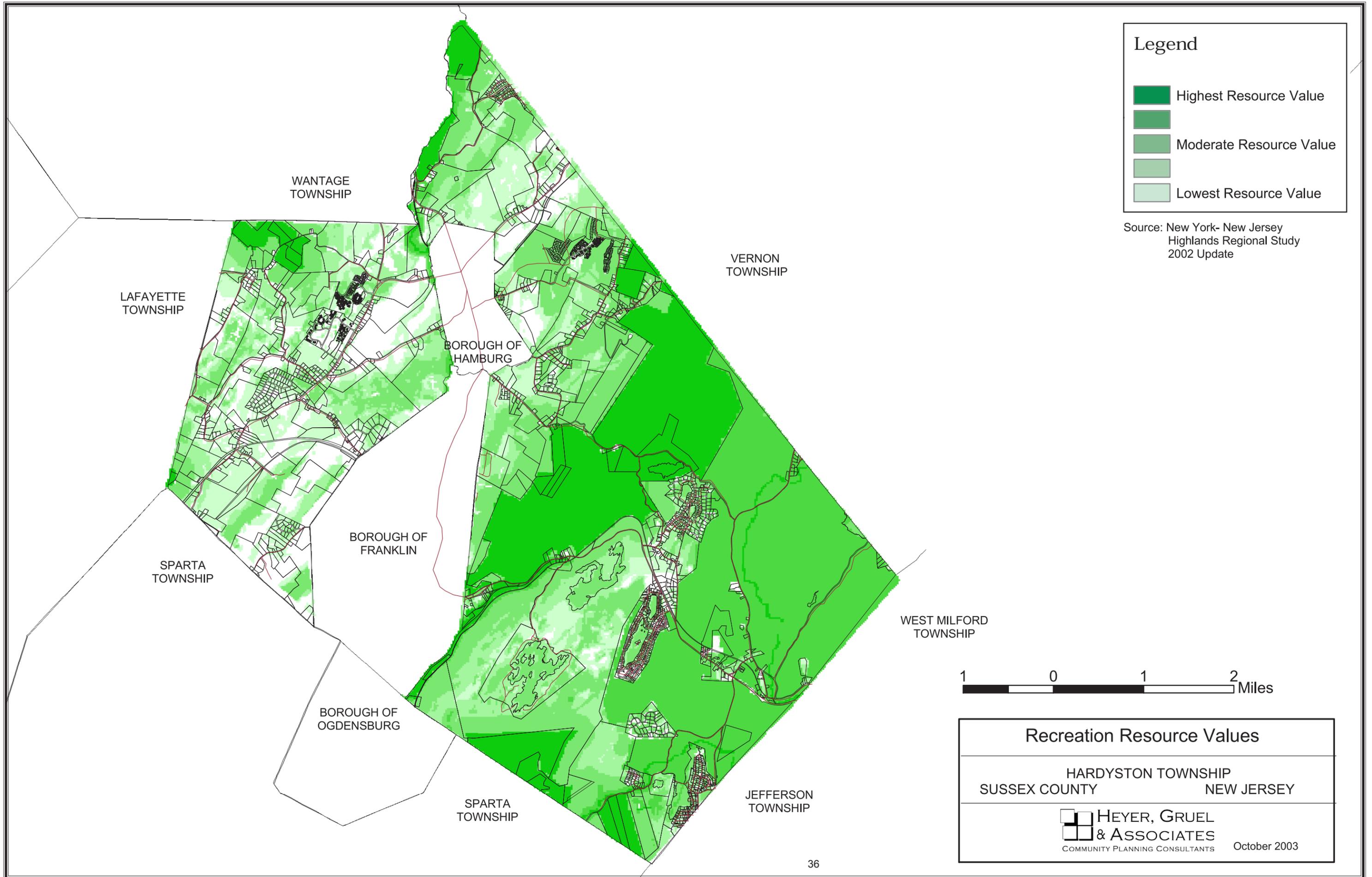


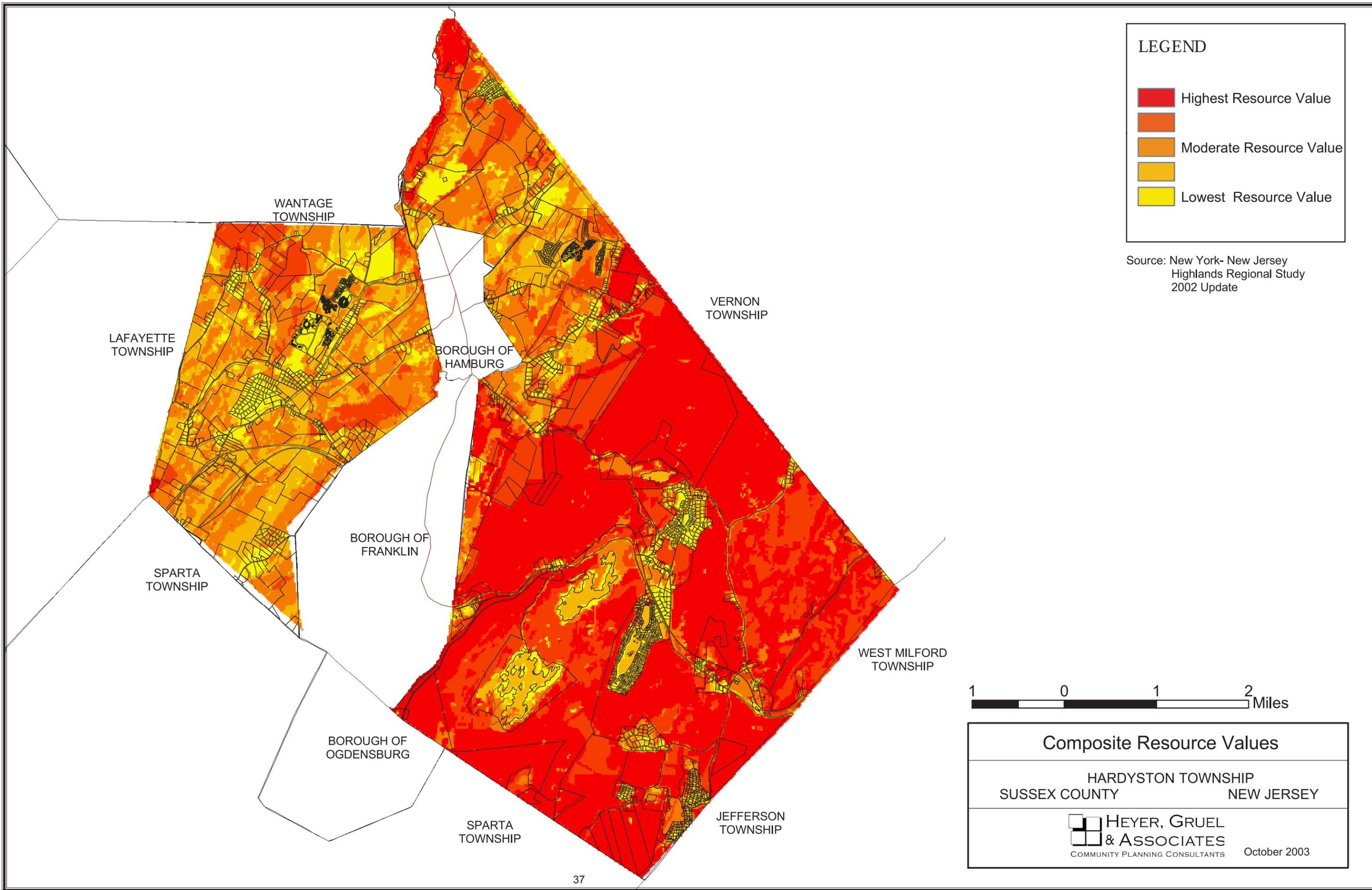
Agricultural Resource Values

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY



October 2003





LEGEND

- Highest Resource Value
- Moderate Resource Value
- Lowest Resource Value

Source: New York- New Jersey
Highlands Regional Study
2002 Update



Composite Resource Values

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

**HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

October 2003



This Resource Assessment and Conservation Values analysis serves in part as a basis for large lot zoning in Hardyston. The Highlands Regional Study Update produced a series of maps and accompanying data sets that can be rescaled to show the ranking of the resource assessments at the local level.

From the Report:

“The GIS-based Conservation Values Assessment model weighed the conservation value of these various resources in two ways. First, the model was based on achieving the following goals for each of the five general resource types:

- Maintaining an adequate supply of high quality water;
- Conserving productive forestlands;
- Conserving areas of high biodiversity and habitat value;
- Conserving productive agricultural land; and
- Providing adequate recreational opportunities for natural, historic and cultural resource-based uses.

Second, individual resources within each of the five general resource areas were assigned a value ranging from 0 to 5 (highest value) based on the following rules:

1. The greater degree to which conservation of the landscape would directly protect a resource or reduce the likelihood of negative impacts was ranked higher.
2. Lands that protect human health (e.g., drinking water) were ranked higher than lands that protect ecosystem health (e.g., trout production waters), which were ranked higher than lands that provide a resource for human use (e.g., trout maintenance waters).
3. Lands for which a significant public investment (e.g., publicly owned park land) has been made were ranked higher than lands for which no public investment has been made.

Values for all five resource types were mapped together to determine where the resource values overlap, that is, where the values for the different resources are the same. For example, areas with the highest resource value are where all the resources have a conservation value of 5.”

The accompanying maps clearly demonstrate Hardyston’s low density areas are generally within the highest resource values.

The majority of Hardyston was found to have water quality resource values of moderate to high, with only isolated areas with low to moderate resource values. In the MIDD-1 and MIDD-2 zones proposed for larger lot zoning the water quality resource values were found to be predominantly moderate. Most of Hardyston was found to have some forest resource value. The southern half of the Township is classified entirely at the highest resource value, however there are few, isolated areas with no to moderately low resource values, particularly in the developed lakefront communities and along the developed commercial corridors. In the MIDD-1 and MIDD-2 zones proposed for larger lot zoning the forest resource values are ranked moderately high to the highest value.

The Biodiversity resource values for Hardyston were predominantly moderate to high. There were few, isolated areas with no to moderately low resource values, particularly in the developed lakefront communities and along the developed commercial corridors. In the MIDD-1 and MIDD-2 zones proposed for larger lot zoning the biodiversity resource values were consistently either moderately high or of the highest value. There were few areas of the Township that were classified as either low or moderate value for Agricultural resource value. The majority of Hardyston was classified as no agricultural resource value at all, including those areas of MIDD-1 and MIDD-2 zones proposed for larger lot zoning, due to the extensive forest cover. There were few, isolated areas with low to moderate agricultural resource value. Recreational resource values ranged from none to highest across the Township. Those areas with no or low recreational resource values tended to occur along the developed commercial corridors. Large areas, including the MIDD-1 and MIDD-2 zones proposed for lower gross density zoning, were ranked as moderate to highest resource value for recreation.

The final analysis combines the previous five into a composite resource value evaluation. By combining water quality, productive forest, Biodiversity habitat, agricultural lands and recreation lands, a composite resource value that examined the additive effect of these resources was created. The areas of MIDD-1 and MIDD-2 zones proposed for larger lot zoning were overwhelmingly valued at the highest resource value. Low to moderate resource values occurred in the developed lakefront communities and along the developed commercial corridors. Southern Hardyston was nearly entirely ranked at the highest resource value, while Northern Hardyston was more diversely ranked with areas of low to moderately low and other areas from moderate to highest resource value.

OPEN SPACE AND RECREATION PLAN ELEMENT

A large part of Hardyston is currently preserved as open space. The open space and natural resources of the Township are the foundation of the rural character that distinguishes Hardyston. This open space is essential to the quality of life of the citizens of Hardyston. Much of the existing open space lies in southern Hardyston, concentrated in Hamburg Mountain and in the Newark Watershed land holdings. Open space in northern Hardyston is scattered, and consists of areas such as golf courses and publicly owned lands.

Existing open space in Hardyston exists under many forms of ownership. Every level of government and quasi-public organization own land in Hardyston. The largest landowner in the Township and the largest owner of open space is the Newark Watershed Conservation and Development Corporation (NWCDC). The United States Government and Sussex County also own large tracts of open space. The lands protected by these entities are shown in the accompanying Existing Open Space Map.

New strides are being made constantly towards the protection of more open space in Sussex County. Federal grants have been received in order to preserve land in the sensitive Highlands Region. In January of 2003 the DEP purchased a large amount of land on Hamburg Mountain in Vernon from the IntraWest Corporation for its permanent preservation as open space. Part of this land was purchased with Green Acres money and part of it was donated by IntraWest as part of the agreement.

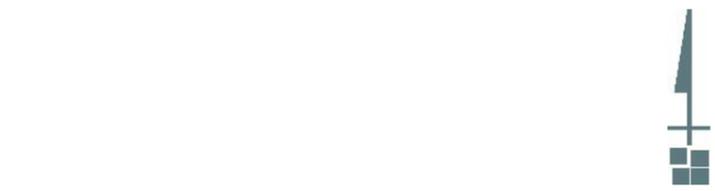
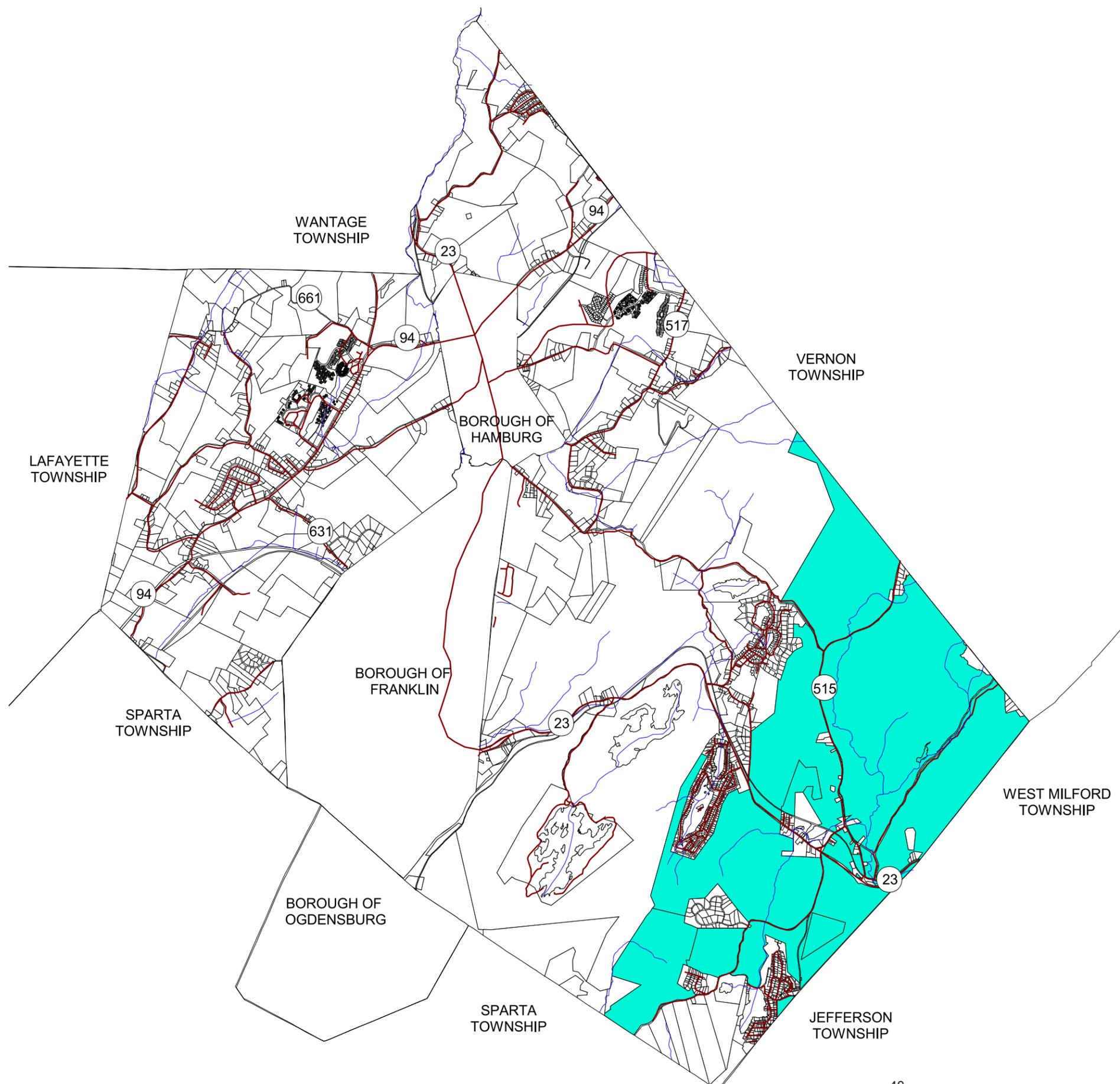
Newark Watershed Properties

A significant section of Southern Hardyston is owned by the Newark Watershed Conservation and Development Corporation. The lands owned by the NWCDC make up approximately 35,000 acres in the region in 3 counties and several municipalities. The land within Hardyston itself constitutes 4,274 acres. This land constitutes the main potable water supply for the City of Newark. These lands are under moratorium by the State. No development can occur on these lands at this time. These lands can be seen in the accompanying Newark Watershed Properties Map.

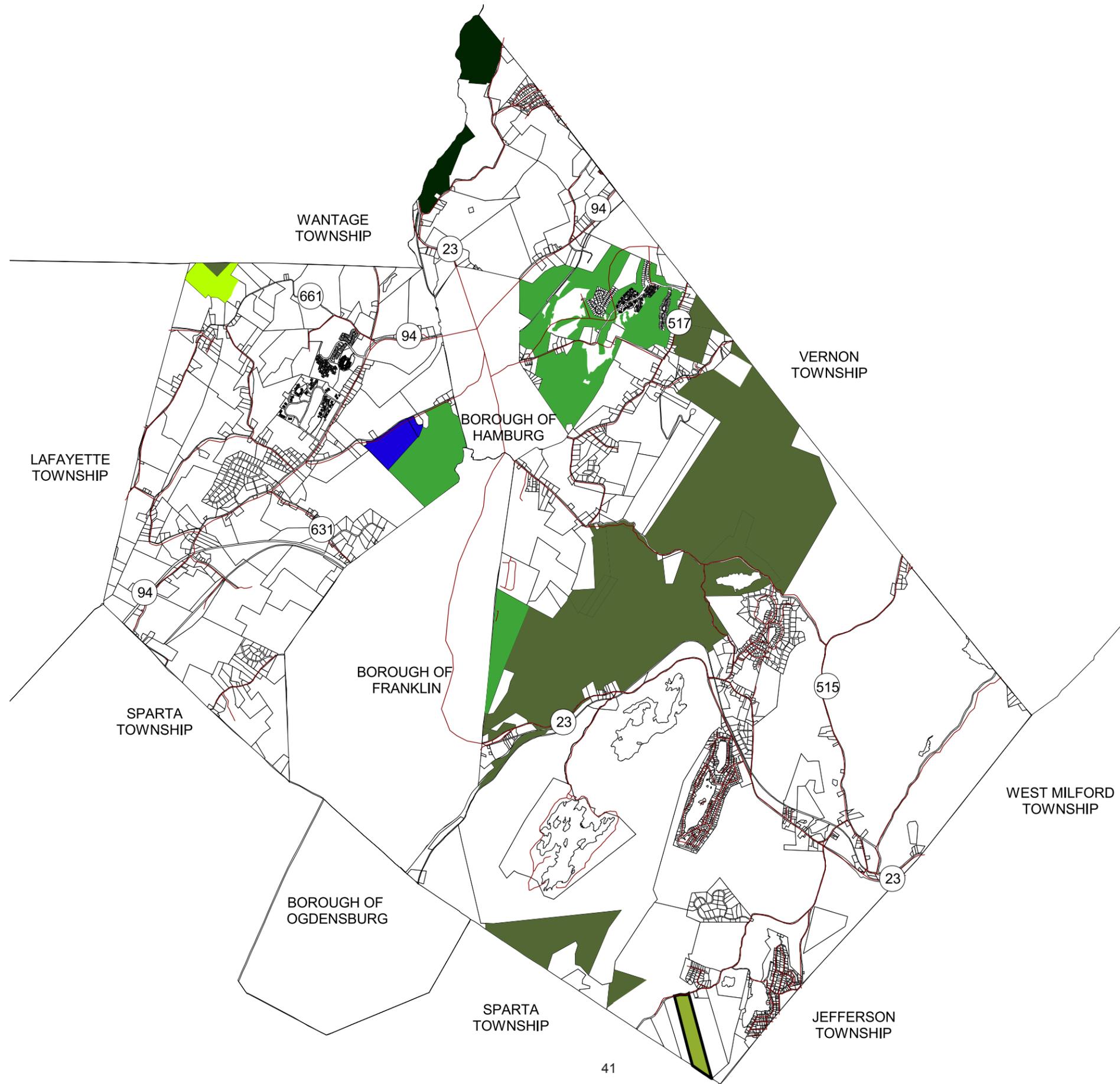
Some amount of recreation does occur on this land. Currently, the NWCDC grants a limited number of permits for hiking, hunting, horseback riding, fishing and boating. The limits are placed in order to protect these natural resources and avoid too much human interference. There is a fee related to these permits which helps to pay for the recreational programs and part of the property taxes.



OPEN SPACE &
RECREATION PLAN

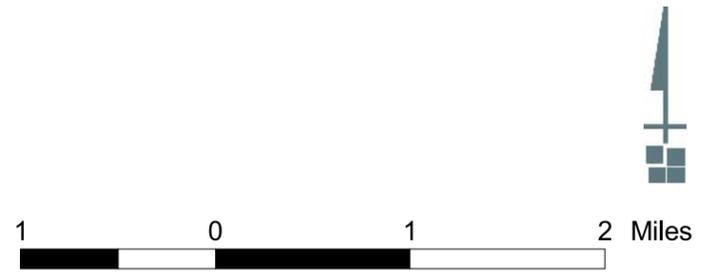


Newark Watershed Properties Map	
HARDYSTON TOWNSHIP SUSSEX COUNTY NEW JERSEY	
	October 2003



LEGEND

- USA
- NJ DEP
- New Jersey Natural Land Trust
- Russia Brook Sanctuary (Green Acres)
- Golf Courses
- Sports and Recreation Complex



Existing Open Space Map

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

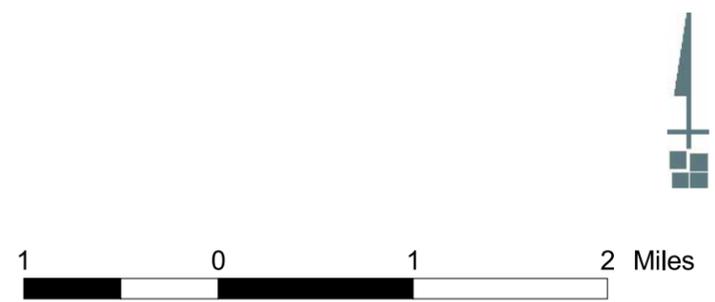
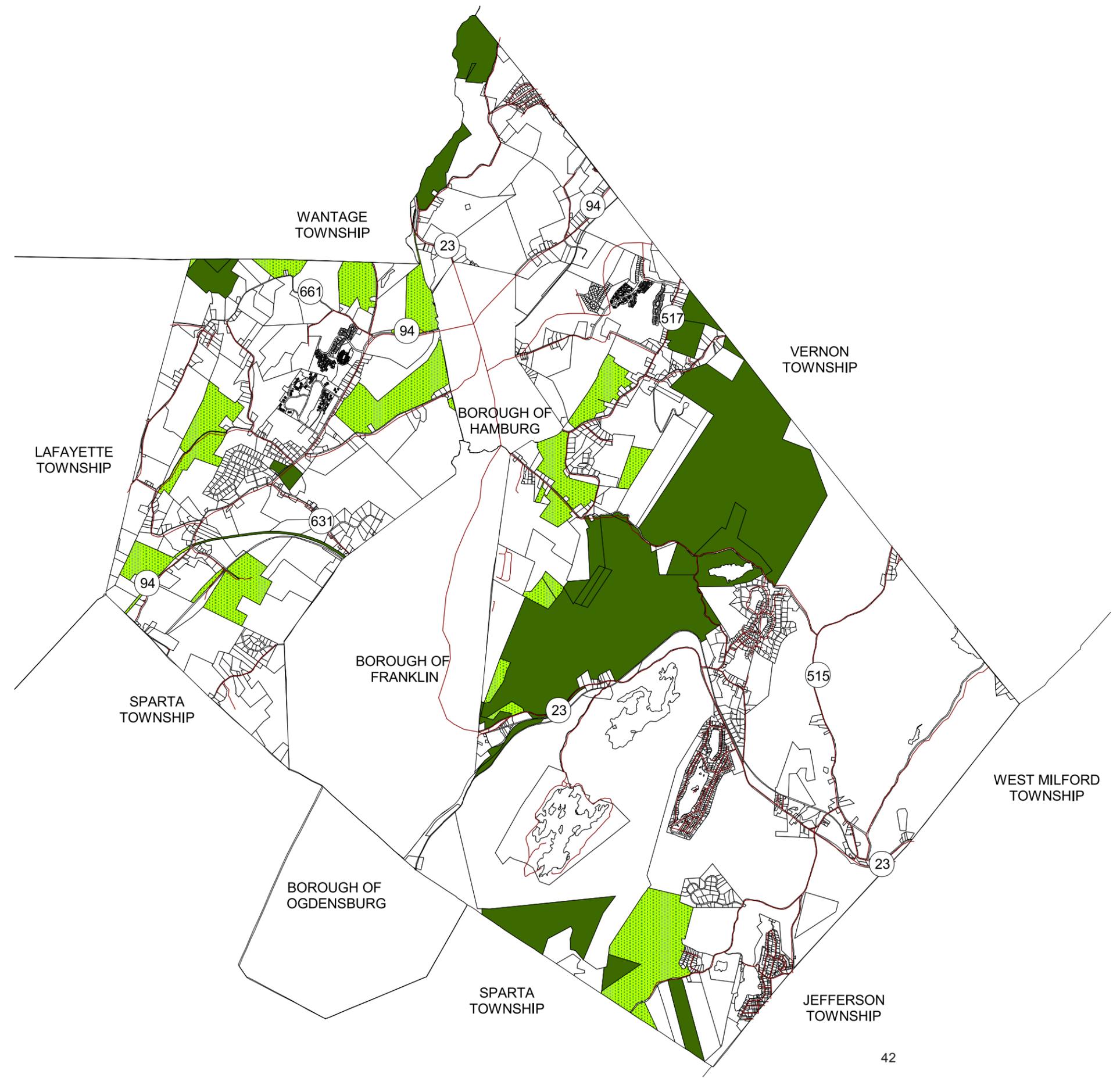


**HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

October 2003

LEGEND

- Open Spaces
- State Open Space Acquisition Offerings



State Open Space Acquisition Offerings Map

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

**HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

October 2003

State Open Space Acquisition Offerings

The New Jersey Department of Environmental Protection (DEP) is constantly searching for possible additions to the already large amount of permanently preserved open space in the State. The DEP actively pursues land that might be appropriate for preservation. To that end, the DEP makes acquisition offerings. These offerings are not always accepted, and only some of these properties will be immediately preserved as open space.

The accompanying map, the State Open Space Acquisition Offerings Map, shows existing open spaces in the Township, the lands owned by the NWCDC, and the DEP offerings for acquisition. The Township should attempt to aid the State in the acquisition of some of these properties. Most often these lands will benefit the community immensely. However, the Township should balance the land use needs of the community against the acquisition attempts of the State and ensure that the appropriate lands are being preserved.

Proposed Open Space

In addition to the land acquisition offered by the State, this plan proposes other properties to be acquired and preserved as permanent open space. These properties might be purchased as part of a Green Acres program. These properties might be purchased with federal dollars granted for the protection of natural resources. The Township should explore every possible funding sources to aid in the permanent preservation of this land.

Many of these properties can be acquired in an attempt to create a green infrastructure of parks, open space, recreation and trails that will connect and adjoin the different neighborhoods and business centers in the Township. The creation of interconnected biking and hiking trails would be a great asset to the Township. With these trails connecting all of the open space in Hardyston and the region, this area can truly become a destination for Eco-tourism.

Recreation and Open Space Inventory (ROSI)

The Recreation and Open Space Inventory (ROSI) is designed to identify lands permanently held for open space purposes. The municipality, the county, or non-profit organizations, may own these lands. The Township's ROSI currently contains one property. This property, the Russia Brook Sanctuary, consists of 105 acres and is located on Rock Lodge Road. The Passaic River Coalition, a non-profit group, owns the Russia Brook Sanctuary.

EXISTING PARKS AND RECREATION FACILITIES

The Recreation Department, located at the Littell Community Center in the Borough of Franklin, is another of the many shared services between the Township and the Borough. Since 1998 the Township and Borough have jointly operated the Littell Community Center through the auspices of the joint Hardyston/Franklin Recreation Department.

The two communities lease the community center (Franklin Armory) from the New Jersey Department of Military and Veteran's Affairs. The facility is available to non-profit organizations from Hardyston and Franklin on a reservation basis. A gym, all purpose recreation room, partial kitchen and several meeting rooms make up the facility. In addition, Township/Borough sponsored recreation programs are held each month including teen dances, roller skating, crafts, magic shows, senior citizen movie afternoons, etc.

The Township of Hardyston and Borough of Franklin also jointly operate a summer day camp, which runs in July of each year.

In mid 2001, the Township opened its park facility, "The Hardyston Township Sports and Recreational Complex" on Wheatsworth Road. The property, owned by the Board of Education and leased by the Township, provides active recreational opportunities for the citizens in a central location. The facility contains four soccer fields, four Little League Baseball fields, two football fields, basketball courts, a playground and a concession stand.

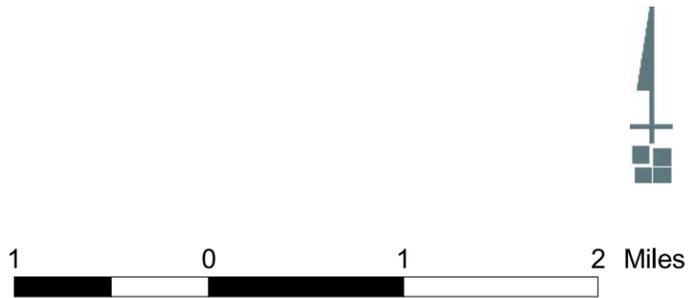
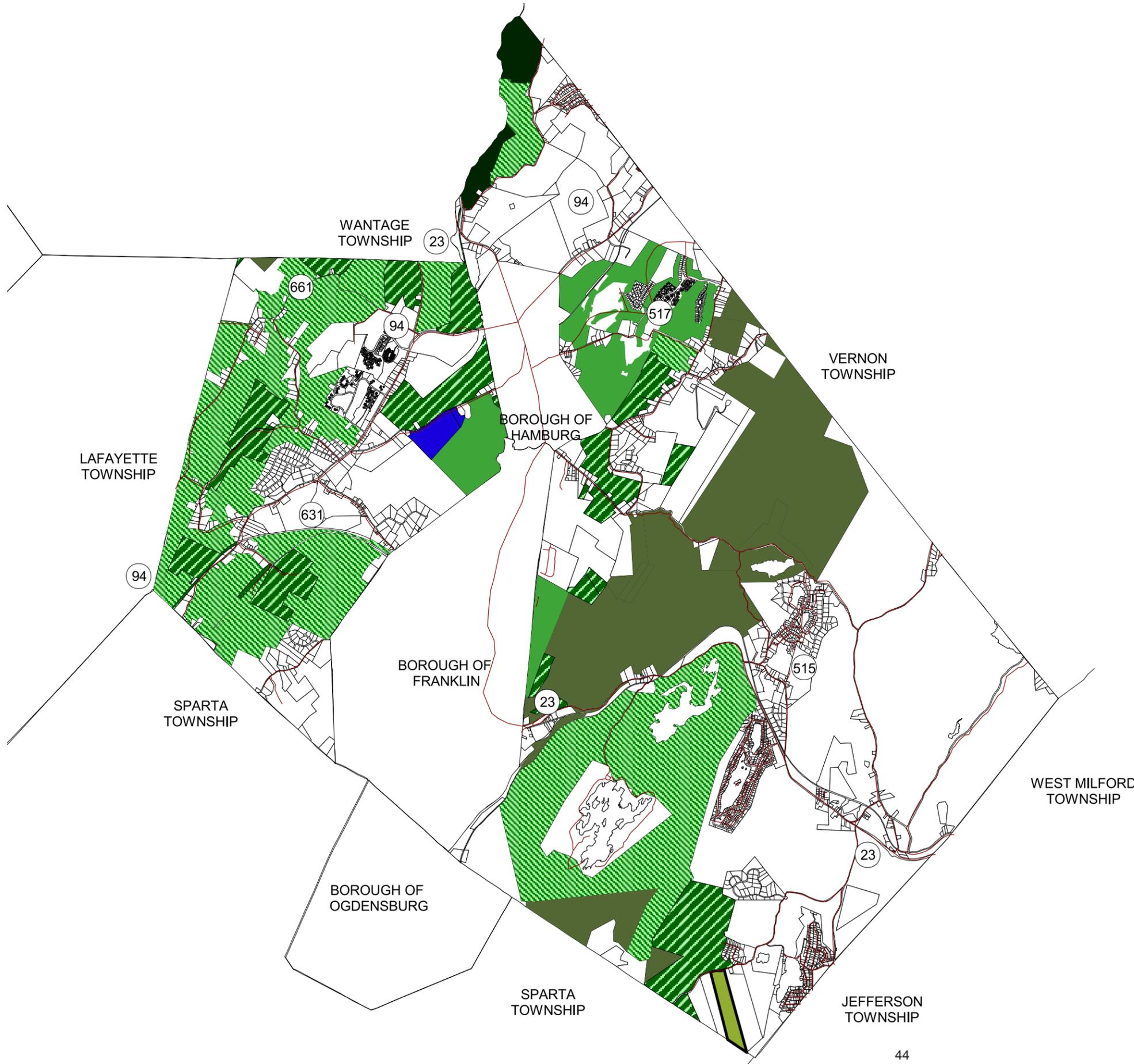
There are six sports programs in the Township including Hardyston Soccer Club, Walkkill Valley Traveling Soccer Club, Mens Baseball, Walkkill Valley Youth Football League, Walkkill Valley Youth Cheer League, Hardyston Mens Softball League.



OPEN SPACE & RECREATION PLAN

LEGEND

-  State Open Space Acquisition Offerings
-  Potential Open Space
-  USA
-  NJ DEP
-  Russia Brook Sanctuary (Green Acres)
-  Golf Courses
-  Sports and Recreation Complex



Proposed Open Space Map

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

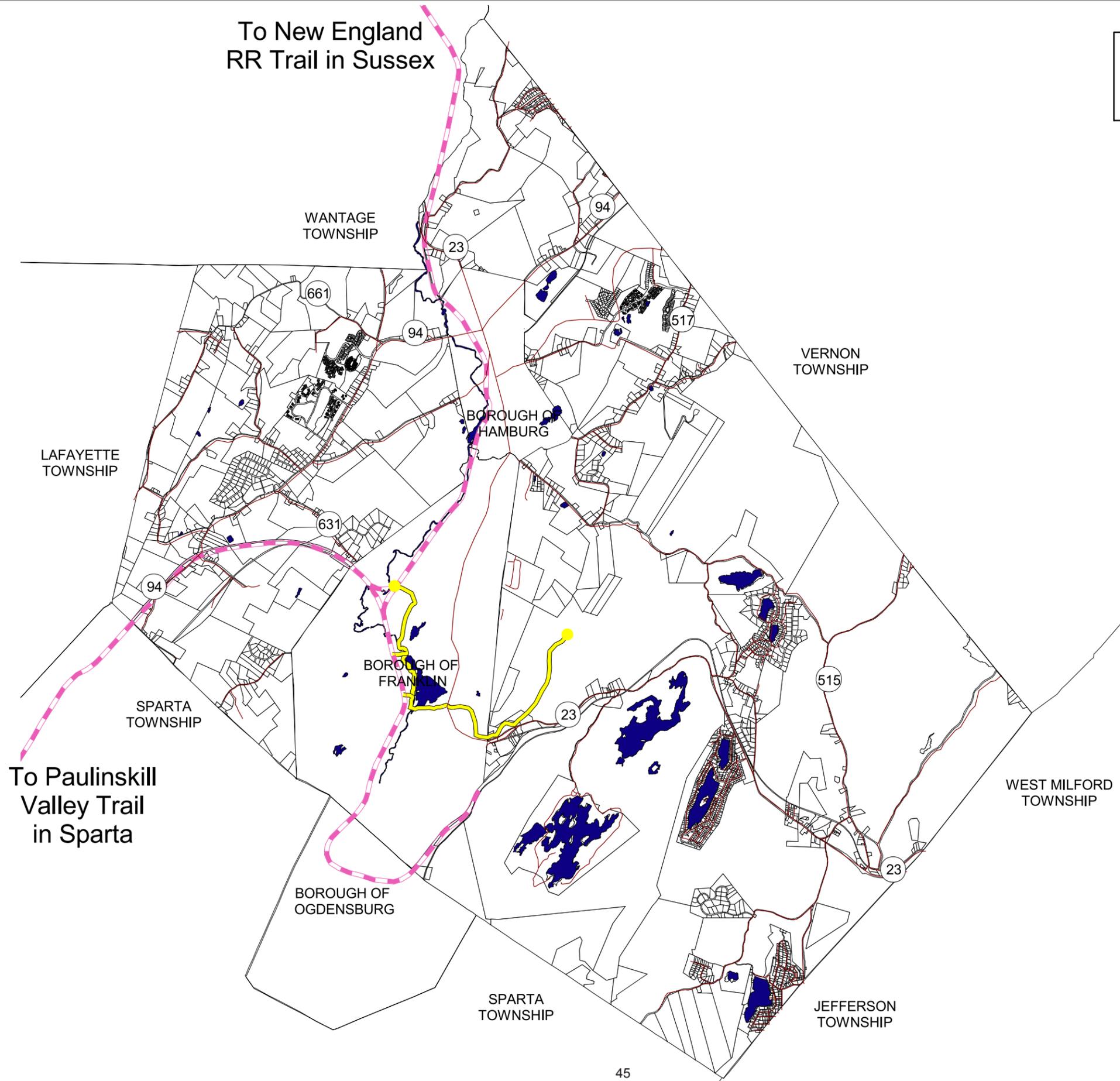
 **HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

October 2003

To New England
RR Trail in Sussex

LEGEND

-  Proposed Walkkill Valley Heritage Trail
-  Proposed Zinc Mine/Hamburg Mountain Trail



To Paulinskill
Valley Trail
in Sparta



Proposed Trails Map
HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

 **HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

October 2003



PROPOSED RECREATION TRAILS

The Master Plans of the Township of Hardyston and the Borough of Franklin are working together to create a harmony among the various recreation and open space assets of each municipality. While there exists much open space in both municipalities, these resources are detached and do not create a synergy. One recommendation for bringing these resources together is the creation of recreational trails that will serve as the backbone to this system of green infrastructure.

One of the most important trails will be the Wallkill Valley Heritage Trail. A Rails-to-Trails project, the Wallkill Valley Heritage Trail will connect to the New England Railroad Trail in the Borough of Sussex and the Paulinskill Valley Trail in Sparta Township. The proposed Wallkill Valley Heritage Trail will follow the abandoned right-of-way of the Midland Railroad, built in 1871-72. This trail holds the potential to connect a thematic community of heritage resources, including: significant geologic formations and features; Natural Heritage Priority Sites; many historic sites related to Franklin's mining history; Franklin's downtown and recreation facilities; and various open space and recreation amenities.

Another proposed trail is the Zinc Mine/Hamburg Mountain Trail. This trail will run from the historic Zinc Mine Site in Downtown Franklin, past the open-cut mine, past the Franklin Pond, through the Hardyston School, and up to the top of Hamburg Mountain. Due to this trail's origin, it will be connected with the Wallkill Valley Heritage Trail.

The location of these trails can be seen on the Proposed Trails Map. The connection of these trails to neighboring communities will guarantee attention from recreation-seekers throughout the region. These trails will help to connect the various elements of the vast green infrastructure of the Township: DEP owned lands, State preservation areas, school properties, Newark Watershed Properties, and the proposed open space additions. The connection of these elements can be seen in the Public Lands, Open Space and Trails Map. More connections will eventually be made to cement these greenways as a prominent feature in the natural landscape that is Hardyston's most valued asset.

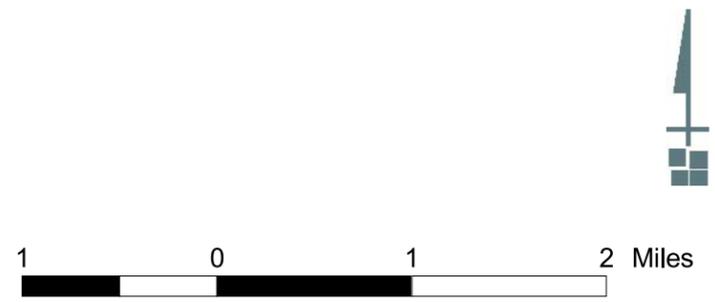
To New England
RR Trail in Sussex



LEGEND

- United States of America
- New Jersey DEP
- Sussex County
- Russia Brook Sanctuary(Green Acres)
- Potential Open Space
- Open Spaces in Franklin
- Newark Watershed Properties
- Passaic River Coalition
- North Hardyston Cemetery Association
- New Jersey Natural Land Trust
- Golf Courses
- Walkkill Valley Regional High School
- Other Quasi-public
- Churches
- Hardyston Board of Education
- Borough of Ogdensburg
- Other Lands
- Proposed Walkkill Valley Heritage Trail
- Proposed Zinc Mine/Hamburg Mountain Trail

To Paulinskill
Valley Trail
in Sparta



Public Lands, Open Space and Trails Map

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

**HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

October 2003



COMMUNITY FACILITIES PLAN ELEMENT

INTRODUCTION

Community facilities, which include municipal and emergency services, and recreational facilities are critical to the quality of life of any community. Hardyston Township provides a good level of recreational, municipal and emergency services for residents. Community facilities are scattered throughout the Township as seen on the Community Facilities Map.

MUNICIPAL AND EMERGENCY SERVICES

MUNICIPAL COMPLEX

The existing Municipal Building is located at 29 Stockholm-Vernon Road. The building which contains approximately 7,650 gross square feet is a two-story structure with a basement. The complex currently houses the Township's Administrative Offices, Township Clerk, Tax Assessor, Finance and Building Departments, Municipal Court, Police Department and Health Department.

Administrative Offices are located on the second floor while the municipal court offices and council/courtroom chamber are located on the first floor. The Police department occupies the basement and parts of the first floor. Onsite parking spaces are not enough for the facility's current needs and the facility is leasing a portion of the adjacent Newark Watershed property for additional parking. As these facilities are becoming crowded, the Township is searching for a new site on which to build a new municipal complex.

Three possible locations have been identified for a new municipal complex; two on Wheatsworth Road and one on Route 94. In the summer of 2002, the Township commissioned an architectural firm to study the possible locations and to help determine the most appropriate place for a new municipal complex. The existing facility has been evaluated in terms of its size and the functional and physical relationships of various municipal departments.

The needs assessment for a new municipal complex recommends an administrative wing, municipal court, police department and an Emergency Management facility. In addition, a future First Aid Squad might be added to the new complex, which could be connected to the Emergency Management facility. Another possibility is that the Department of Public Works might be located on the site adjacent to a First Aid facility.

The Township has determined that the new complex should be located in a centralized area, provide ample space for any future expansions and should be an example of the best building design standards in the Township. The building is proposed to contain 25,000 square feet of floor area. The Township has determined that the most appropriate site for the new municipal complex is on Wheatsworth Road, next to the Township's Recreation Complex in the activity hub of the Township. With the municipal

complex and existing recreational facilities, this area can become the new Civic Center for the Township. It is anticipated that construction will begin during 2004.

The current municipal building on Stockholm-Vernon Road should be retrofitted to a use that will continue to provide life and energy to Stockholm Village. One possibility is that the current municipal building could be reused as a community theatre.

POLICE DEPARTMENT

The Police Department, with headquarters in the existing Municipal building, provides 24-hour police coverage and is equipped with a modern 911 telecommunications center. All dispatchers are certified as 911 Telecommunicators and Emergency Medical Dispatch personnel.

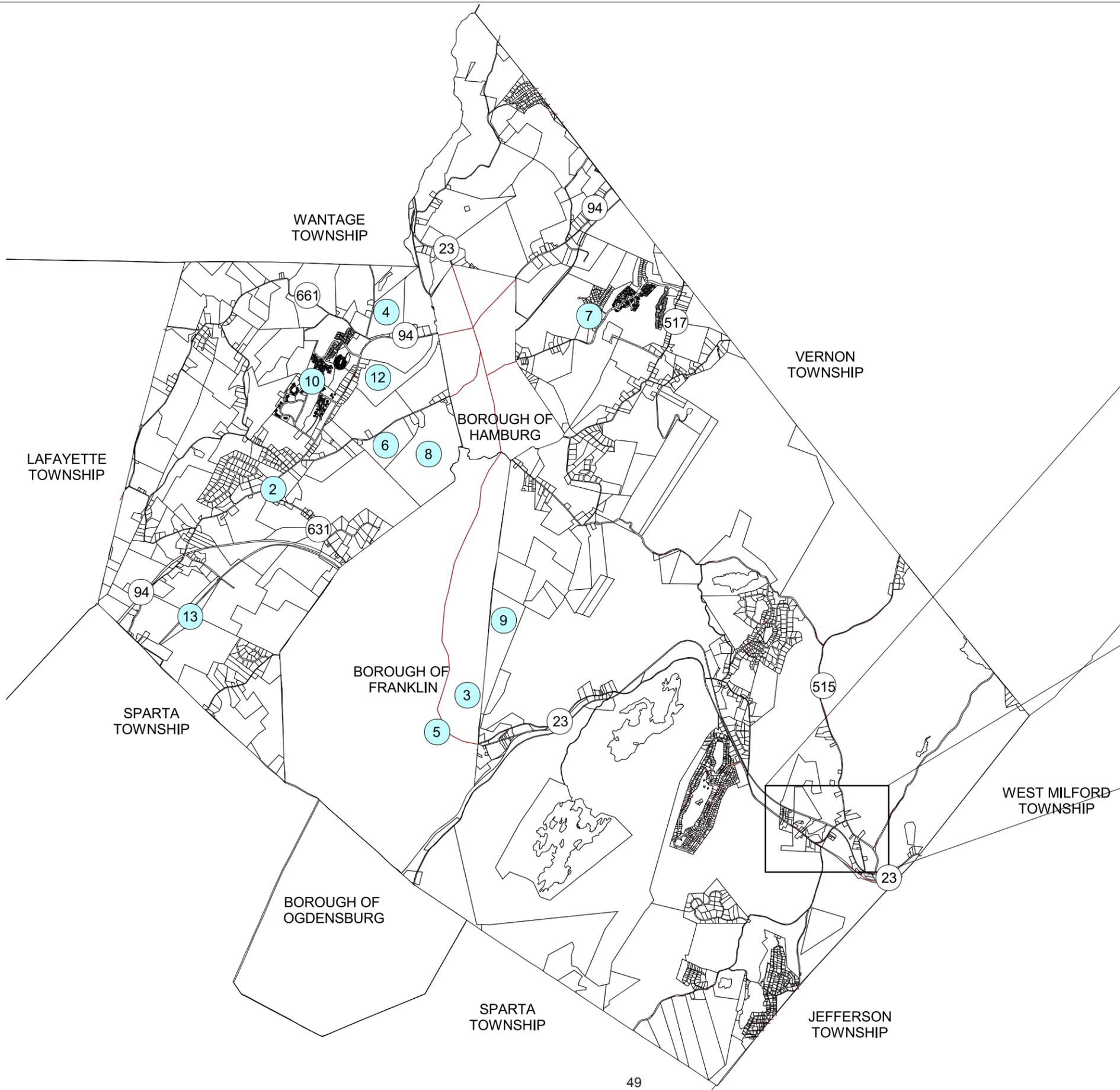
HEALTH DEPARTMENT

Health services is one of several services shared by the Township of Hardyston and the Township of Sparta. The Township of Hardyston has been a participant in the Sparta Health system since 1997. The Department is located in the Sparta Township Municipal Building. Other participants include the Borough of Franklin, the Borough of Ogdensburg and the Borough of Stanhope. The Township of Hardyston also participates in the Sparta Regional Animal Control program. While the Health and Animal Control programs are contracted separately, animal control services are part of the Sparta Health Department. Services include environmental, health and welfare and animal control.

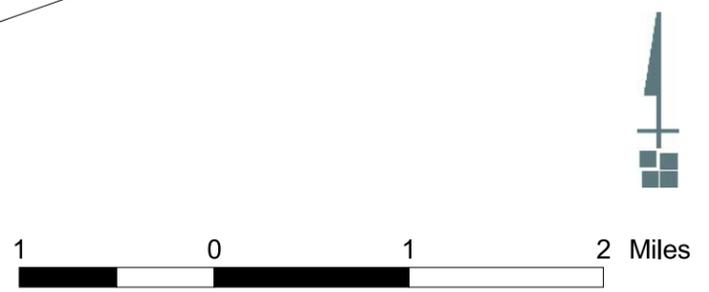
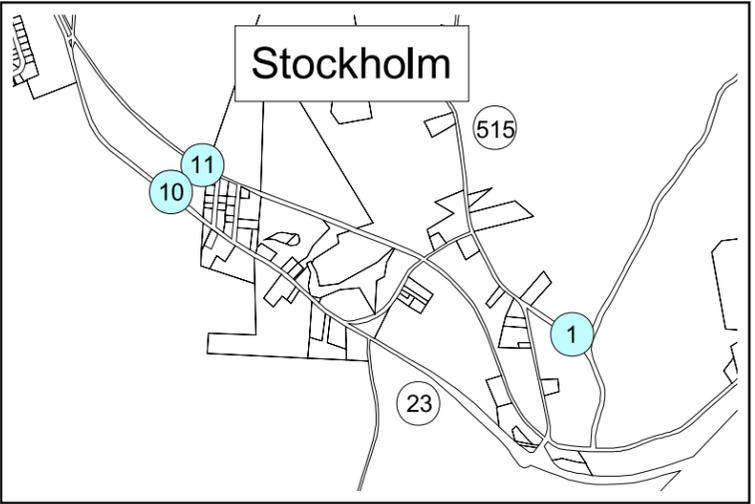
The Department works to protect the health and well being of Hardyston's citizens and the environment. The sanitarian inspects food establishments, camps, bathing places, and the installation of septic systems to insure compliance with applicable state and local regulations. Private and public water supplies are monitored for potability. All complaints regarding noise, solid waste, water, and air pollution are processed for investigation and enforcement activities. The Public Health Nurse plans and implements various screening clinics such as childhood immunizations, SMAC blood tests, influenza immunizations and blood pressure clinics.

FIRE DEPARTMENT

The Hardyston Township Fire Department has two stations. One is located on Wit's End Road, north of Route 94 and the other one is located on Colson Terrace in Stockholm. The Department currently has 29 active volunteer members, 2 brush trucks, 4 pumpers and 1 tanker.



- LEGEND**
- 1: Municipal Building
 - 2: Department of Public Works
 - 3: The Hardyston School
 - 4: Wallkill Valley Regional High School
 - 5: Littell Community Center
 - 6: Sports and Recreation Complex
 - 7: Crystal Springs Golf Courses
 - 8: Ballyowen Golf Course
 - 9: Black Bear Golf Course
 - 10: Volunteer Fire Squads
 - 11: First Aid Facility
 - 12: Sussex County Municipal Utilities Authority
 - 13: Municipal Landfill



Community Facilities Map

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY


**HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

October 2003



FIRST AID SQUAD

The Hardyston Township First Aid Squad headquarters is located on Colson Terrace in Stockholm. A satellite office is located in the Department of Public Works building on Route 94. The First Aid Squad has four ambulances, one of which was renovated in 1999.

PUBLIC WORKS

The Department of Public Works is located at the Intersection of State Highway 94 and County Route 631. There is also a Public Works Director's office in the Municipal Complex. The Department of Public Works is responsible for the repair and maintenance of over 40 miles of Township roads and for the upkeep of street and traffic signs. Snow and ice control operations of these roads is a major function. Maintenance of Township buildings is also provided by the Department. It is recommended that the facilities be moved to Wheatsworth Road as part of the new Civic Center. The current property could be sold for economic development.

SCHOOLS

Hardyston Township has one Elementary/Middle School, Hardyston School, that is located on Route 23 in Franklin Borough and provides education for grades Pre-K through 8. The regional High School, Walkkill Valley Regional High School, is located on Grumm Road in Hardyston. The new Hardyston Middle School is currently under construction and expected to be completed in Fall 2003. It is located on Weathsworth Road in Hardyston Township.

HARDSYTON SCHOOL

The K to 8 grades are housed at Hardyston School. As shown in the following table, enrollment at both the elementary school and the middle school have increased from 1996-97 to 2002-03.

Overall student population has also increased by 60 students since the 1996-97 school year.

GRADE AND FUNCTIONAL CAPACITY		
Hardyston Township		
Middle School (under construction)	6 - 8	N/A
Hardyston School	K - 8 (existing)	782

Source: Hardyston School, 2003

STUDENT ENROLLMENT 1996-2003							
Hardyston Township							
	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003
Hardyston School							
K	82	72	73	66	77	69	93
1	78	87	77	85	80	95	74
2	79	75	81	72	81	79	84
3	92	82	75	84	77	78	97
4	72	92	82	81	82	80	82
5	77	70	92	84	79	88	90
6	69	87	73	97	80	82	83
7	73	69	87	80	102	84	96
8	69	73	69	83	80	104	86
SE	31	22	25	29	22	17	N/A
TOTAL	722	729	734	761	760	776	782

Source: Whitehall Associates, Inc. April 2000, Hardyston School, 2003

The table below shows the projected school enrollments from 2003 through 2005 in Hardyston Township. The projections are made by the use of linear regression.

STUDENT ENROLLMENT PROJECTIONS 2003-2005		
Hardyston Township		
Elementary/Middle School	2003-2004	2004-2005
K	85	89
1	88	93
2	92	84
3	104	93
4	71	106
5	84	72
6	80	90
7	93	81
8	87	93
SE	31	32
TOTAL	816	832

Source: Whitehall Associates, Inc. April 2000

WALKKILL VALLEY REGIONAL HIGH SCHOOL

Walkkill Valley Regional High School is located on 10 Grumm Road in Hardyston Township on a 70 acre site. The original school building was built in 1982. A new addition which contains 7 classrooms, 2 science labs, and a lecture hall was constructed in 2003.

The table below shows the student enrollments for the High School from 1997 through 2002. Student enrollments have increased from 667 to 761 students between 1997 and 2002.

STUDENT ENROLLMENT 1997-2002					
Walkkill Valley Regional High School					
	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002
High School					
9	193	172	188	232	205
10	160	160	158	196	209
11	167	133	150	180	194
12	147	144	130	172	173
SE	-	85	83	-	-
TOTAL	667	694	710	780	781

Source: Long Term Facilities Plan, December 2000

The table below shows the grade and functional capacity of the High School.

GRADE AND FUNCTIONAL CAPACITY					
Walkkill Valley Regional High School					
School	Acres	Grade	Functional Capacity	Current Enrollment	Remaining Capacity
Walkkill Valley Regional High School	70	9 - 12	791	761	30

Source: Long Term Facilities Plan, December 2000

Currently, 288 students are residents of Hardyston Township. In 2003-04 school year 326 students are projected to be residents of Hardyston Township.

CAPITAL EQUIPMENT REPLACEMENT

The Township maintains a 20-year schedule for the replacement of capital equipment. The Fire Department, First Aid Squad, Road Department, Administration and Police Department all have vehicles on the schedule. Vehicles are listed by year, make and model. The vehicles are designated in excellent, good, fair or poor condition. Altogether, the budget to be spent on the replacement of capital equipment over the next ten years will be about \$2.75 million. The budgets for individual years range from \$65,000 to \$715,000. These costs are necessary to maintain the services provided by the Township. The careful planning of this schedule and budget is an example of the high level of fiscal responsibility shown by the Township of Hardyston.





UTILITIES

INTRODUCTION

The Utilities Element of the Master Plan analyzes the current levels of service and the needs of the residents. As an essential requirement for most types of development, utilities are useful in implementing the land use recommendations through restriction or expansion of services.

SUSSEX COUNTY WIDE WASTEWATER MANAGEMENT PLAN

The purpose of the County Wastewater Management Plan (WMP) is to provide a comprehensive wastewater management strategy for Sussex County. The plan has been submitted to the New Jersey Department of Environmental Protection (NJDEP) for approval so that it may be incorporated into the Sussex County Water Quality Management Plan via the plan amendment procedure. (N.J.A.C.7: 15)

The 1972 amendments to the Clean Water Act included provisions for development of Area-wide Water Quality Management Plans (WQMP) referred to as "208 Plans". The Sussex County Waste Water Management Plan was adopted in April 1979 by the Sussex County Board of Chosen Freeholders, the designated 208 agency. In 1998, the NJDEP provided a grant to the County to develop a County-wide WMP, which would essentially combine the adopted Wastewater Management Plan's and provide planning for municipalities without adopted plans.

The Sussex County Wastewater Management Plan encompasses all municipalities within the Sussex County Water Quality Management Planning Area. The area includes the entire County of Sussex, plus portions of four municipalities within the Musconetcong River Drainage Basin: Netcong Borough, portions of Jefferson Township, Mount Arlington Borough and Roxbury Township. In addition, Hardyston has its own Wastewater Management Plan.

HARDYSTON TOWNSHIP WASTEWATER MANAGEMENT PLAN

The Amended Wastewater Management Plan for Hardyston Township dated in October 1998, was revised in December 1998 and February 2000. The Sussex County Municipal Utilities Authority (SCMUA) prepared the Wastewater Management "201" Facilities Plan for the Hardyston Regional Pumping Station Portion of the Upper Wallkill Valley Water Control Project. This plan was approved by the N.J.D.E.P and U.S.E.P.A. In 1984 SCMUA prepared the 'Amended Upper Wallkill Valley 201 Wastewater Management Facilities Plan which was later corrected in 1985.

The planning area for the Hardyston Township Wastewater Management Plan is the entire Township. The Township, however, is divided into three areas for sewer services: the Upper Wallkill Valley River Watershed, the Pequannock River Watershed and Pochuck Creek Watershed.

One purpose of the Wastewater Management Plan for Hardyston Township was to amend the Upper Wallkill Valley Water Pollution Control Plant allocations as approved by the NJDEP to those proposed by SCMUA in their 1984 report and presently being allocated by SCMUA. These allocations by SCMUA were endorsed by all participating municipalities using the Upper Wallkill Valley Water Pollution Control Plant and submitted to the NJDEP as the accepted allocations. This was agreed to at a joint meeting of the representatives of SCMUA, the Sussex County 208 Planning Group and the Hardyston Township Municipal Utilities Authority held October 1987.

There is no proposal to construct, expand or abandon any treatment plant. New sewers and pumping stations are to be provided for those developments in Hardyston receiving sewage allocations. These developments are listed as follows: Wallkill Sewer Company, Indian Field (formerly known as Forest Hill Village), Crystal Springs, Pilz, Crystal Springs-Phase II (from Franklin Borough), North Church Technical Center, and Wallkill Valley Regional High School.

In addition to these developments, the Hardyston Township MUA has placed a deposit with Franklin Borough to purchase 125,000 gallons per day of sewage allocation from Franklin Borough. This allocation is planned to be used in areas designated as existing and future sewer service areas. There is no consideration to abandoning any existing sewers or pumping stations.

EXISTING WASTEWATER DISPOSAL FACILITIES

DOMESTIC WASTEWATER TREATMENT FACILITIES

Upper Wallkill Valley Water Pollution Control Facility (U.W.U.P.C.P.)

This existing wastewater treatment facility (NJPDES Permit No.NJ0053350), located on Route 94 North in Hardyston Township, serves Hamburg Borough, Franklin Borough, Hardyston Township, Vernon Township (Vernon Sewage Transmission Company), the Wallkill Sewer Company, Wallkill Valley Regional High School, the Borough of Sussex, and leachate from the SCMUA Landfill. The service area has been expanded to accommodate wastewater generated by the Sparta Town Center development and a small section of Wantage Township. The current annual average flow for this facility is approximately 1,400,000 GPD. The future projected flow is estimated at 3,000,000 GPD. The treated wastewater, classified as FW2-NT, is discharged to the Wallkill River. This facility is owned and operated by the Sussex County Municipal Utilities Authority. The planning agency for sewers in Hardyston Township is the Hardyston Township Municipal Utilities Authority and the agency for sewage disposal is SCMUA.

ON-SITE WASTEWATER DISPOSAL SYSTEMS

Several sections of Hardyston are currently served by a sewage collection system. These include developments known as Indian Field (formerly Forest Hill Village), Crystal Springs, and Carlton/Walden Village. The remaining portion of the Township, which is presently undeveloped is to be served by the Upper Wallkill Valley Pollution Control Plant (U.W.V.P.C.P). The remaining developed portions of the Township rely upon on-site wastewater disposal facilities. The 1985 "201 Plan" states that the non-sewered population in the Township will continue to rely on these On-Site facilities.

SEWER ALLOCATIONS IN HARDYSTON TOWNSHIP

The total allocation for Hardyston Township is 520,000 GPD of which 365,000 GPD is administered by the Hardyston Township MUA and 155,000 GPD is a direct allocation from SCMUA to serve the Wallkill Sewer Company franchise area. Sewer allocation represents a definite limit on development in Hardyston. Areas without allocation are restricted to low-density development.

Sewer allocations in the Township are described as follows:

- *Wallkill Sewer Company*

It was originally formed to serve the residential and commercial development known as Carlton/Walden Village and a proposed hospital. It was formed prior to the establishment of the HTMUA and has allocation directly from SCMUA.

- *H.F.H. Development Corporation*

This corporation is the one that is developing the residential community and adjacent commercial area known as Indian Field. Municipal approval was given in 1986.

- *Crystal Springs*

This large residential development located in the north central portion of the Township was approved in 1987. Allocation for this project was given by the Hardyston MUA. Phase II proposes the construction of additional golf courses, housing and a conference center. Allocation for this project will be given by Franklin Borough.

- *Pilz*

This property along Route 94 is proposed for commercial development.

- *North Church Technical Center*

A 20-lot industrial subdivision located on North Church Road, acquired allocation from Franklin Borough. Since this is the only industrial park in the County with sewer allocation, it is invaluable to the economic development of Hardyston.

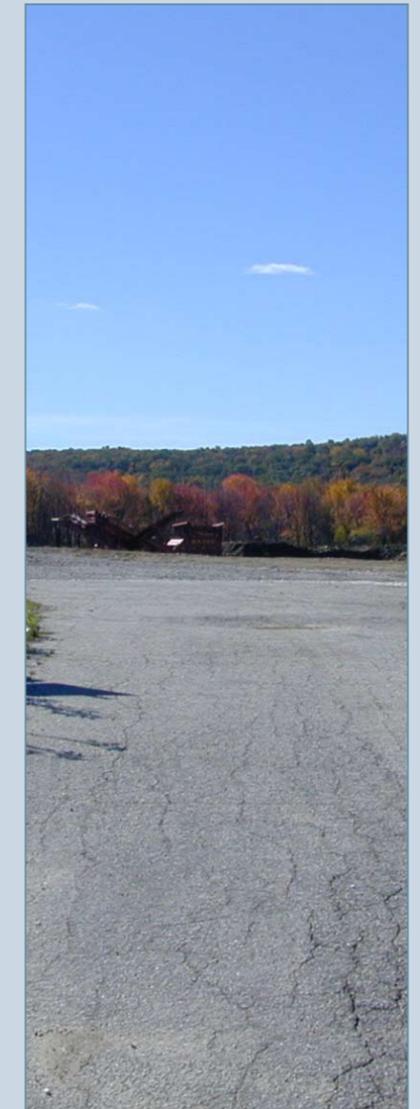
- *Wallkill Valley Regional High School*

This site is located along Grumm Road. The school has acquired a 25,000 GPD allocation from Franklin Borough.

WATER SYSTEMS IN HARDYSTON TOWNSHIP

There are several public community water systems in the Township. These include Lake Stockholm, Lake Tamarack, Summit Lake, Crystal Springs, Indian Field and Carlton/Walden Village. Crystal Springs and Indian Field systems are owned and operated by the MUA. Crystal Springs has a permit to pump 6.63 million gallons per month. There are two wells with a maximum capacity of 700 gallons per minute combined. Indian Field has a water allocation of 4.7 million gallons per month. There are 4 wells that have a permit to pump a maximum of 265 gallons per minute combined.

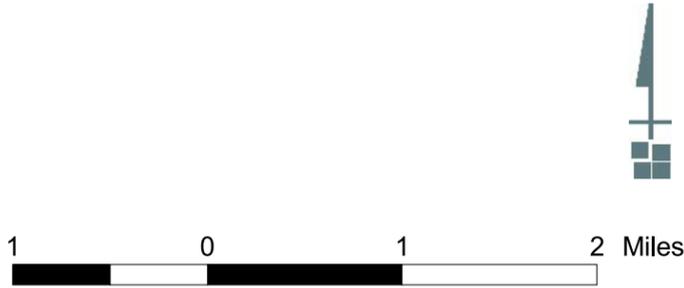
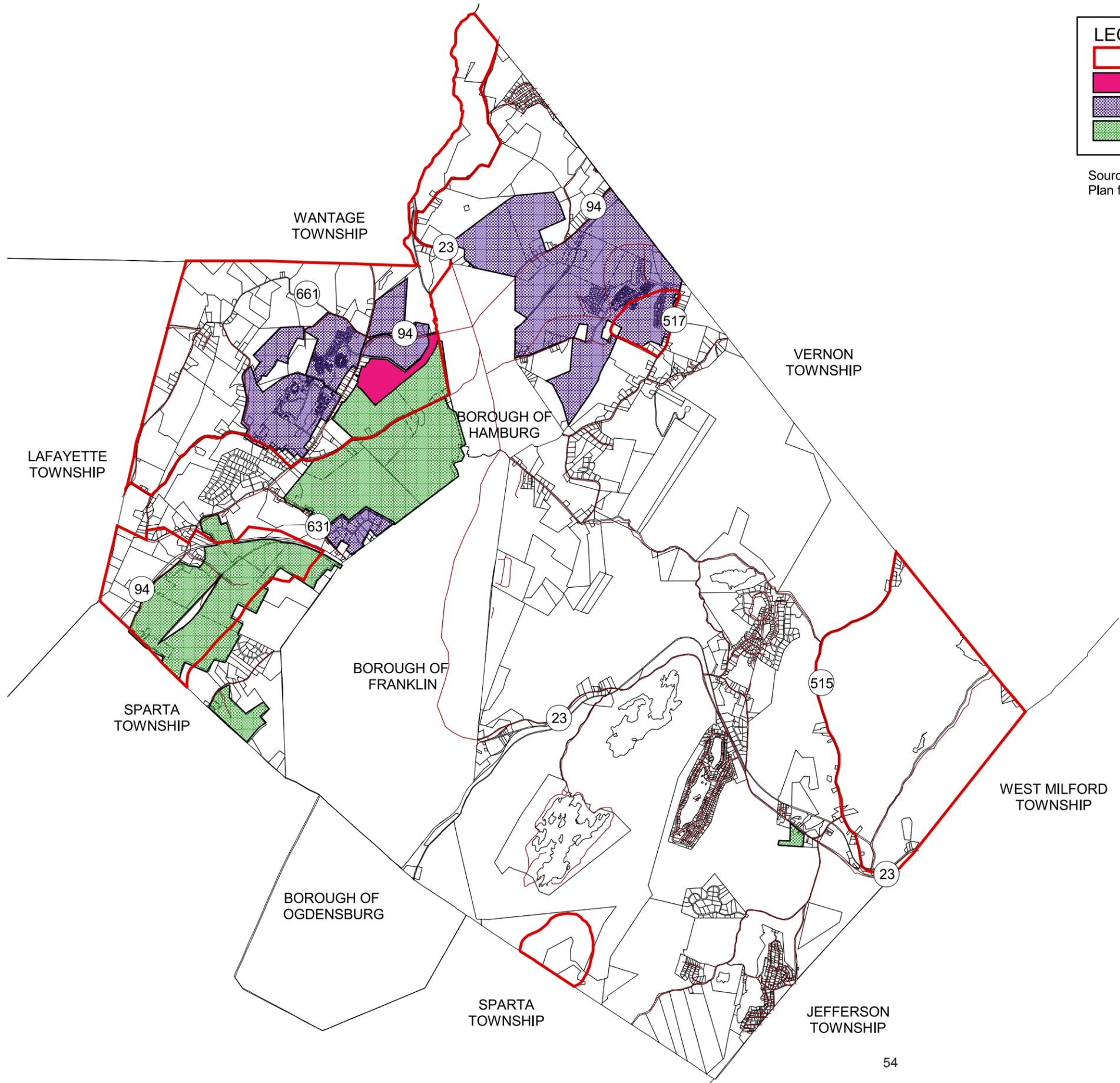
Wallkill Valley Water Company owns and operates the water system in Carlton/Walden Village, Sparta Township owns and operates the Summit Lake water system, the Lake Tamarack Association owns and operates the Lake Tamarack water system and the Lake Stockholm Association owns and operates the Lake Stockholm water system.



LEGEND

-  Natural Heritage Priority Sites
-  Existing Point Source Discharge
-  Future Sewer Service Areas
-  Future Discharge to Groundwater Under 20,000 G.P.D.

Source: The Amended Wastewater Management Plan for Hardyston Township Revised February 2000



Existing/Future Sewer Service Areas Map

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

 **HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

October 2003

CIRCULATION PLAN ELEMENT

INTRODUCTION

The circulation patterns in Hardyston are designed to facilitate traffic on several main roads and many smaller streets throughout this large, rural township. Growth in Vernon is placing increased development pressure on parts of Hardyston, especially on the Route 23, Route 517 and Route 515 corridors. The circulation patterns must balance the needs of the increased traffic and development pressures with the desire to maintain the natural resources that give Hardyston its rural character.

FUNCTIONAL ROADWAY CLASSIFICATION NETWORK

The following section contains the various roadway classifications and their location within the Township. A brief description of the function and present traffic conditions for each major roadway is included. The accompanying Functional Roadway Classification Map shows the location and classification of each of these roads.

Principal Arterials

The only Principal Arterial in the Township is Route 23. Route 23 is the principal means of circulation for Hardyston, Franklin and Hamburg. The land uses along Route 23 vary from residential to industrial and commercial. The density of uses also varies from rural open space to higher densities of residential and commercial areas.

Minor Arterials

There are two Minor Arterials in the Township: Route 94 and Route 515. Route 94 is a north-south corridor in northern Hardyston that intersects Route 23 in Hamburg, while Route 23 is the southern terminus of Route 515, which extends north into Vernon. Routes 23 and 94 have historically served as the principal corridors of development in Hardyston. The Route 94 corridor contains some of the highest intensity development in Hardyston with a mix of residential, open space and commercial land uses. The Stockholm area along Route 515 contains the Stockholm United Methodist Church and the current Township municipal offices. The remainder of Route 515 is surrounded by Newark Watershed properties.

Major Collectors

The most important Major Collector in the Township is Rudetown Road, also known as Route 517. The southern terminus of this roadway is Route 23 in Hamburg. The roadway extends north into Vernon. As development occurs in Vernon, pressure will be placed on this roadway both as a path to and from Vernon, and as a corridor with increased development potential. The appropriate land use controls placed on this corridor now will ensure the proper amount of development in the future as growth occurs in Vernon. The importance and sensitivity of this corridor will only increase in time.

Another Major Collector is North Church Road, Route 631. With its northern terminus at Route 94, this roadway extends south into Franklin. As a main connector with Route 23 and downtown Franklin, North Church Road remains an important collector. Also, the Township's industrial park is located along this road near the border with Franklin. The significance of this corridor is expected to remain the same in future years.

Minor Collectors

There are two Minor Collectors in Hardyston. Silver Grove Road is a small loop that starts and ends on Route 23 south of Franklin. This road is also known as Old Route 23 (Silver Lake Road). This road acts as an extension of the development along Route 23 and connects this to the residential developments surrounding Deer Trail Lake and Fawn Lake. This road is expected to remain important to the immediate area, with little impact on the overall Township.

Beaver Run Road, also known as Route 661, extends from the Lafayette border to Route 94, and is also a Minor Collector. This roadway is secondary to Route 94 in its ability to connect Lafayette and Hardyston. Because of the lesser significance of this roadway, development is not likely to expand here. This roadway will remain of minor importance.

ROADWAY JURISDICTION

Roadways are presided over by different agencies depending on the extent of influence of the road on nearby and distant areas. There are no federal roads in Hardyston. The State of New Jersey Department of Transportation (NJDOT) operates two roadways in Hardyston: Routes 23 and 94. Sussex County maintains several roadways in Hardyston: Route 515, Route 517, Route 631, Route 661, and Route 673 (Grumm Road). The remaining roadways are presided over by the Township. These roadways and their jurisdiction is shown on the accompanying map.

TRAFFIC COUNTS

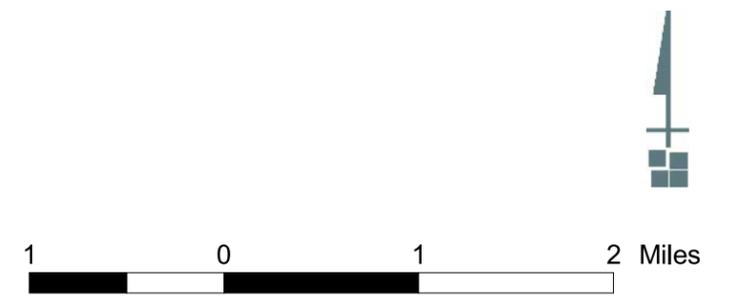
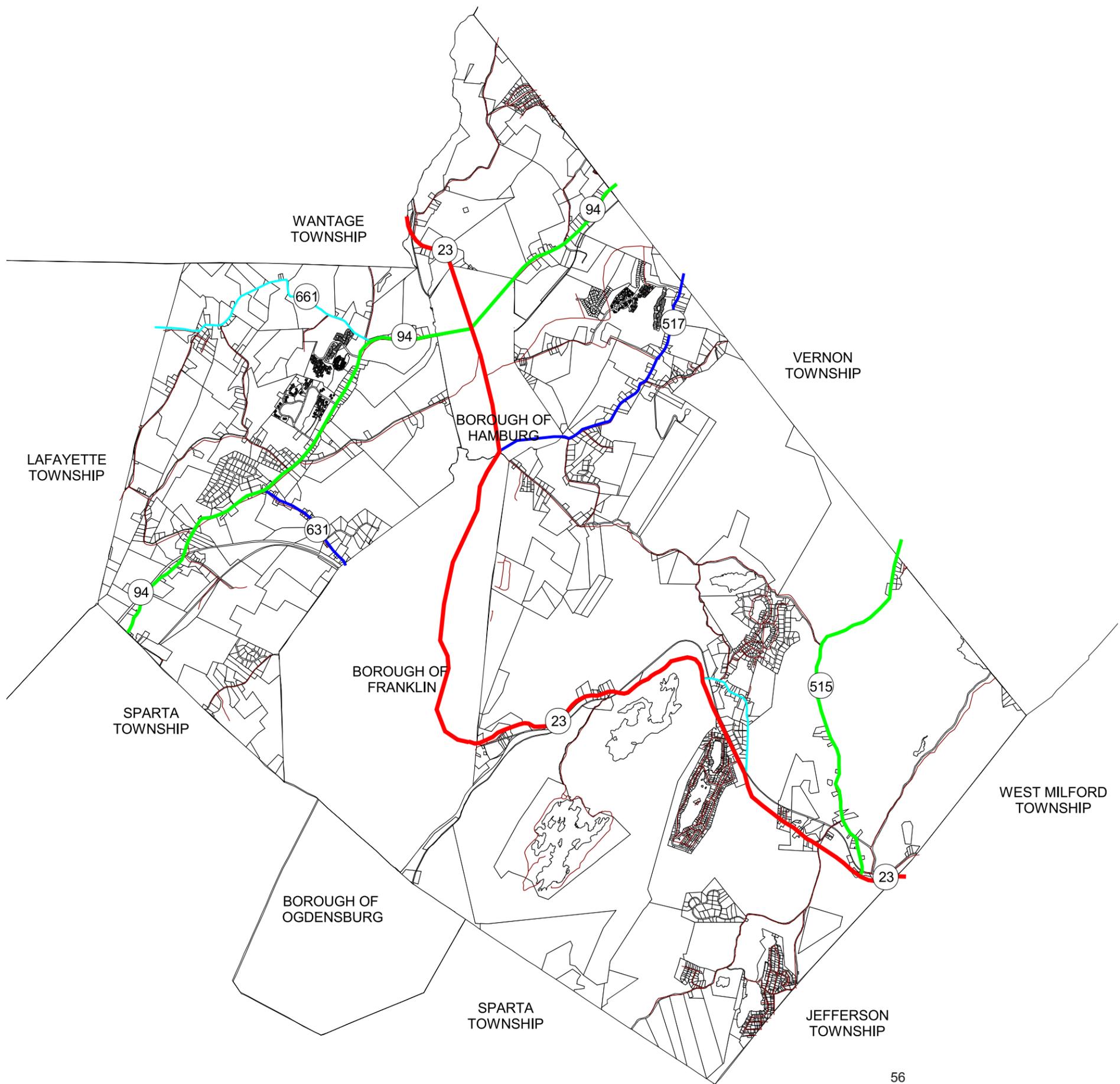
The New Jersey Department of Transportation, as well as the Sussex County Department of Engineering and Planning, periodically conduct traffic studies to determine the traffic volumes of individual roads compared to their intended capacity.



CIRCULATION PLAN ELEMENT

LEGEND

-  Principal Arterial
-  Minor Arterial
-  Major Collector
-  Minor Collector



Road Hierarchy Map

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

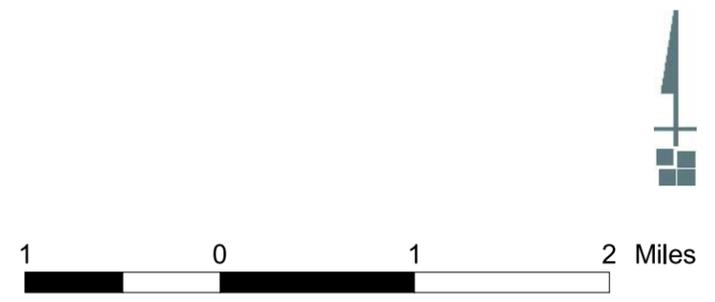
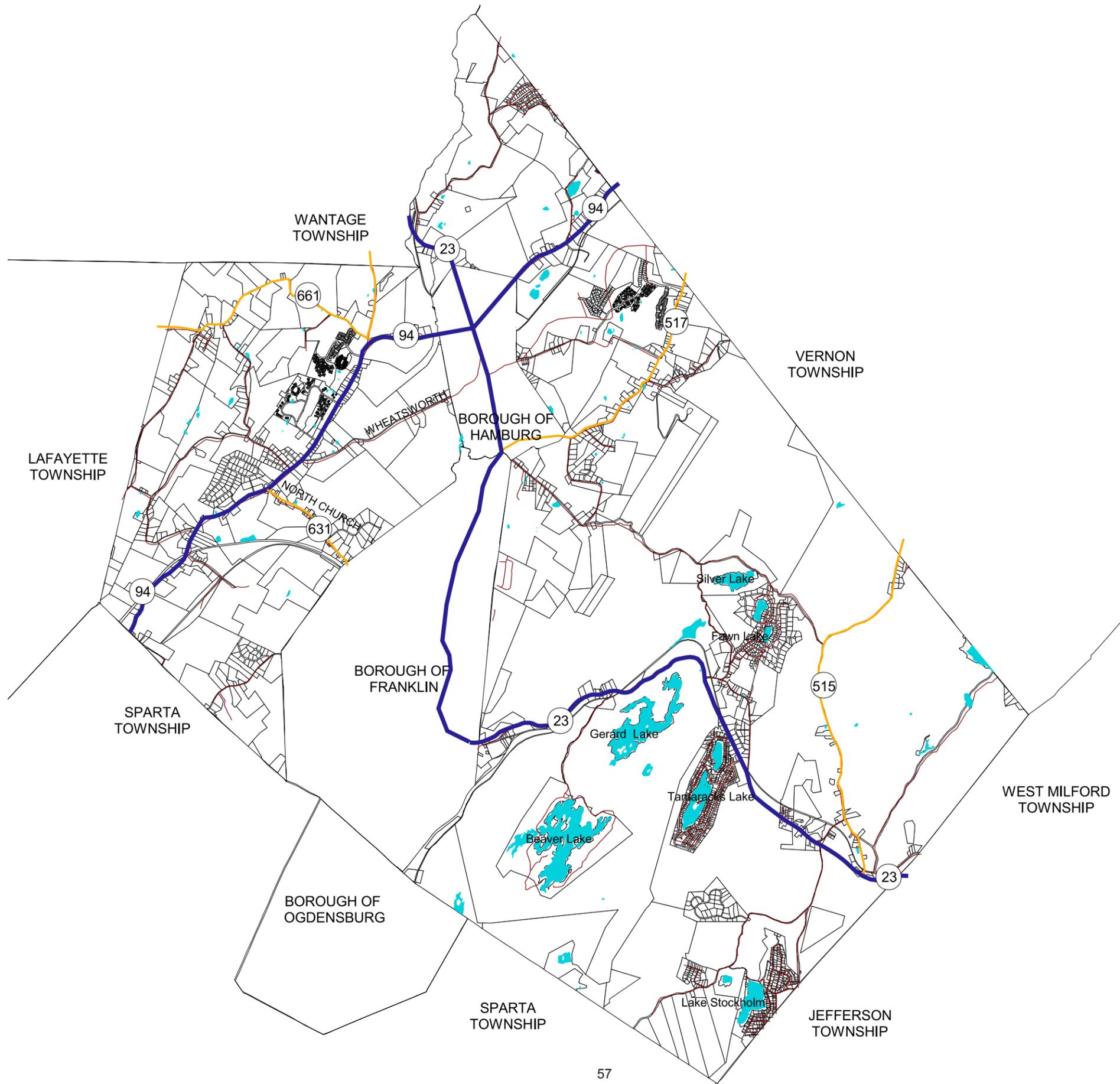
 **HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

October 2003

LEGEND

 State Roads

 County Roads



Road Jurisdiction Map

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

 **HEYER, GRUEL & ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

October 2003



The study of the capacity of Route 23 requires the study of traffic counts not just in Hardyston itself but also in Franklin and Hamburg. This road, an essential route in this part of the county, provides many commuters egress to the south into Morris County and points east. The road also serves as the backbone of circulation for much of these three municipalities. The intersection of Routes 23 and 94 in Hamburg is extremely vital to circulation patterns in Hardyston. The study of these traffic counts and counts for other major roads in Hardyston are important to understanding traffic flow and the circulation patterns that have evolved in order to address traffic congestion.

Route 23

The most recent traffic counts taken along Route 23 in southern Hardyston were taken in October of 2001. These counts were taken by DOT at the intersection with Holland Mountain Road. This particular count was a 12-hour count, not intended to determine average daily traffic (ADT) counts, but to establish peak hour counts. Traffic counts were taken from 7 a.m. to 7 p.m. The majority of automobiles head south out of the County in the morning and return heading north in the evening.

Peak periods were between the hours of 6 a.m. and 9 a.m. in the morning and 4 p.m. and 7 p.m. at night. The peak hourly rate heading south in the morning was 953 cars from 7 to 8 a.m. The peak hourly rate heading north in the evening was 1,076 cars from 4 to 5 p.m. The evening rush hour had a slightly higher concentration of cars than the morning rush hour.

Previously, traffic counts were taken along Route 23 in this area of Hardyston in August of 1999. These counts were taken by DOT just south and just north of the intersection with Stockholm-Vernon Road, Route 515. In these counts, the morning rush hour had a higher concentration of cars.

Traffic counts taken just south of the 515 intersection were as follows: One-way ADT's on Route 23 were just under 11,000 cars (10,826 north and 10,974 south.) The peak hourly rate heading south in the morning was 1709 cars from 6 to 7 a.m. The peak hourly rate heading north in the evening was 1558 cars from 5 to 6 p.m.

Traffic counts taken just north of the 515 intersection were as follows: One-way ADT's on Route 23 were about 8,000 cars (7,936 north and 8,216 south.) The peak hourly rate heading south in the morning was 1,209 cars from 6 to 7 a.m. The peak hourly rate heading north in the evening was 1,009 cars from 5 to 6 p.m.

Traffic increased on this part of Route 23 from 1999 to 2001. Traffic counts taken just north of Route 515 in 1999 can be compared to those taken at Holland Mountain Road in 2001 because there are no intersecting streets between these locations which are one-tenth of a mile apart. The two-way 12 hour traffic counts just north of Route 515 from 7 a.m. to 7 p.m. in 1999 were 12,873. The two-way traffic counts at the intersection of Holland Mountain Road from 7 a.m. to 7 p.m. in 2001 were 14,689. This 14% increase is typical of roads in this area, due to increased development in the last few years. These increases in traffic are expected to continue.

The traffic counts taken in 1999 just south of Route 515 are heavier than those taken just north of the intersection. The difference between these ADT's is 5,648 cars. This indicates the importance of Stockholm-Vernon Road as a traffic corridor from Vernon heading south out of the County. This road deserves more study due to these high volumes and the environmental constraints that exist in the areas bordering this road. Much of this land is Newark Watershed property, and this land needs to be preserved to guarantee water quality.

In May of 2000, traffic counts were taken along Route 23 in Franklin between Main and Mabie Streets. Two-way weekday ADT's were 18,507. The counts, being larger in Franklin than south in Hardyston, are due to the traffic interior to the Boroughs of Franklin and Hamburg. Daily trips within the Boroughs account for a significant amount of this traffic. Through-traffic south out of the County only accounts for a portion of this traffic, and therefore the road must function for both purposes.

In September of 1999, traffic counts were taken along Route 23 in Hamburg between Gov. Haines Road and Oak Street, which becomes Crystal Springs Road in Hardyston. Two-way weekday ADT's were 16,799.

In August of 2001, traffic counts were taken along Route 23 just south and just north of Route 517. Two-way weekday ADT's were 25,169 just south of 517 and 19,708 just north of 517.

In April of 2002, traffic counts were taken just north and just south of Ginger Bread Castle Road. Two-way weekday ADT's just south of Ginger Bread Castle Road were 19,542 and just north of this road were 18,729. The counts taken just south of Ginger Bread Castle Road in 2002, just north of Route 517 in 2001 and the counts taken in 1999 can be compared because there are few intersecting streets along the seven-tenths of a mile among these three count locations. This indicates that the traffic counts along this stretch of Route 23 grew by just under 3,000 cars in the two years between the 1999 and 2001 counts, and fell slightly by 2002.

Route 94

In April of 2000, traffic counts were taken along Route 94 both south and north of the intersection with Route 661. These counts were taken 1.12 miles apart. Two-way weekday ADT's were 9,507 south of 661 and 8,184 north of 661.

In April of 2002, traffic counts were taken along Route 94 just south and just north of the intersection with Wheatsworth Road. Two-way weekday ADT's were 12,168 just south of Wheatsworth Road and 12,065 just north of Wheatsworth Road. The counts taken south of Route 661 in 2000 and the counts taken just north of Wheatsworth Road in 2002 can be compared because there is only one intersecting street along the three-tenths of a mile between these count locations. The increase in traffic along this section of Route 94 is about 2,500 cars. This volume is typical of other increases in the area.

In June of 2001, traffic counts were taken along Route 94 just south and just north of the intersection with Route 517 in Vernon. Two-way weekday ADT's were 8,438 just south of 517 and 11,998 just north of 517.

Route 517

In June of 2001, traffic counts were taken along Route 517 in Hamburg, Hardyston and Vernon at various points between Routes 23 and 94. Two-way weekday ADT's were 6,284 just south of Heritage Lane in Hamburg and 3,819 just south of Route 94 in Vernon. Clearly, residents along Route 517 in Hardyston head south more than north, many commuting south out of the County.

Route 631

The most recent traffic counts that were taken along Route 631, also known as North Church Road, were in April of 1998. These were taken throughout the Borough of Franklin and at the border of Franklin and Hardyston. Route 631 had two-way ADT's of 9,761 in Franklin just north of Davis Road and 6,818 in Hardyston just north of Park Drive. These numbers imply that more vehicles access the industrial park along Park Drive through Route 23 in Franklin rather than through Route 94 in Hardyston. However, these numbers are somewhat unreliable since the study was made several years ago, and there have been significant developments in both municipalities since 1998. Another traffic study may be necessary to determine present and future traffic needs along this route.

Route 661

Traffic counts were taken along Route 661, also known as Beaver Run Road, in Hardyston and Lafayette in 1992 and 1993. The two-way weekday ADT's were around 700 just north of Route 15 in Lafayette and 5,292 just south of Route 94 in Hardyston. However, these numbers have most likely increased greatly since the counts were taken ten years ago, and cannot be the basis for any significant conclusions.

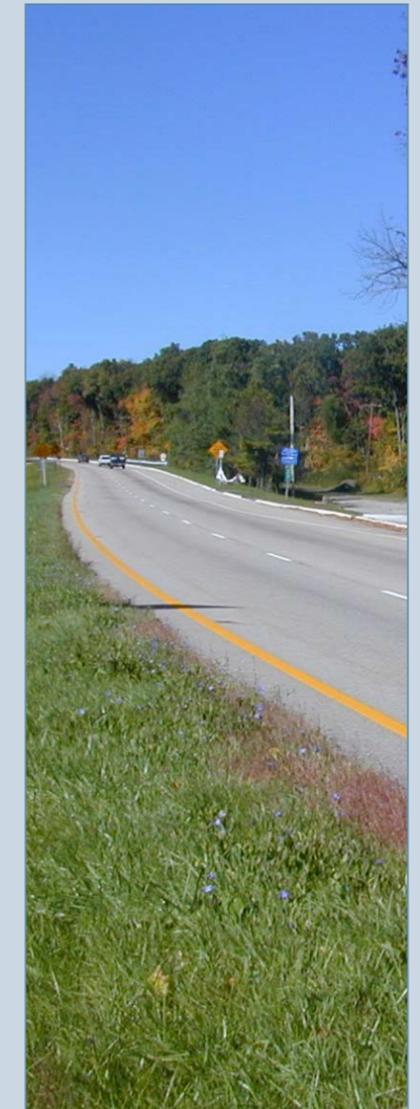
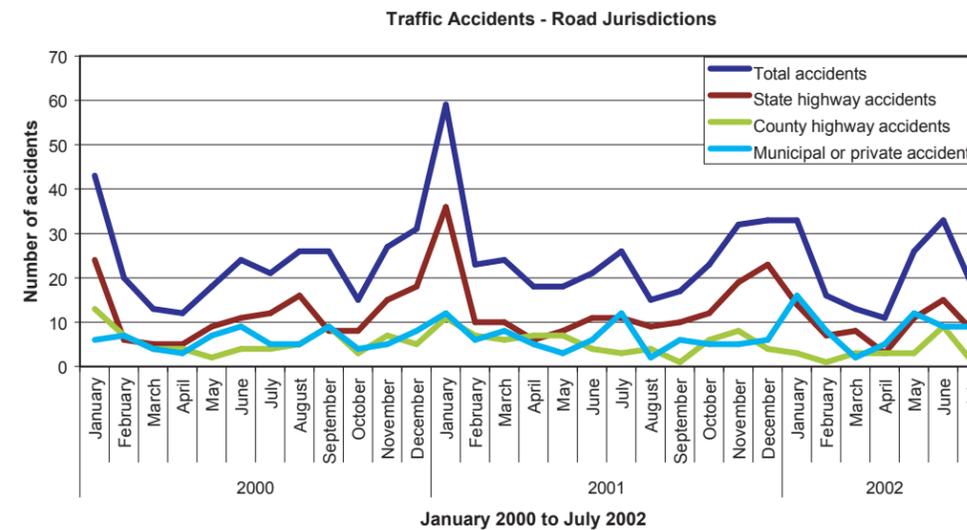
Wheatsworth Road

The most recent traffic counts along Wheatsworth Road were taken in April of 2002. ADT's along Wheatsworth Road were 1,288. This number has likely increased since the opening of the Sports and Recreation Complex along this road.

TRAFFIC ACCIDENTS

Traffic remains a problem throughout the Township, especially on Routes 94 and 23. Associated with these large amounts of traffic are high accident rates. While county roads also carry a large volume of traffic, the amount of accidents is significantly lower. The amount of accidents on municipal and private roads is somewhat comparable to those on county roads. The Hardyston Township Police Department maintains a monthly log of accidents indicating many types of accidents, including one car accidents, multi car accidents, injuries, fatalities and the jurisdiction of the road on which the accident occurred. Between January 2000 and July 2002, 735 total accidents occurred.

As seen in Figure 1, accidents on county roads tend to stay between 1 and 10 each month. Accidents on Routes 94 and 23 tend to stay between 5 and 15 each month, while showing a steep rise in the months of December and January. This rise in accidents can be attributed to the hazardous conditions caused by the presence of snow and slush.





Other Modes of Transportation

While automobiles are the primary method of transportation, there are other methods of transportation that require analysis. Often these alternative methods of transportation allow more choices to the citizen and relieve some of the intensity of traffic congestion.

Mass Transit

There is currently no passenger rail in Hardyston. NJDOT has developed long range plans for a commuter rail line that would connect commuters with points east. The commuter rail line would run along an existing freight rail line, the New York Susquehanna and Western Rail line. The line would branch off from the New Jersey Transit main line in Hawthorne just north of the Passaic River, and then move west through Bergen, Passaic and Morris Counties before ending in Sussex County. Hardyston would be near the end of the line, with the terminal destination planned in Sparta. A station stop in Stockholm is a possibility.

Another possibility would be to use land in northern Hardyston near the current municipal landfill as a rail yard for this line. This commuter service would share the line with existing freight rail service. Exact volumes and schedules of freight or commuter schedules cannot be predicted at this time, due to the relationship of time allotment that will be necessary for this commuter service to be used on this line.

The line remains a key route for double-stacked freight rail. The line is used for both local and full-length trips. Currently, full-length trips run about every-other day, while local trips are taken more often. The key issue with sharing the track involves the amounts of local and full-length trips that will be needed. Full-length trips can co-exist with commuter service easily and simply run in between commuter trips. However, local trips tie up the tracks and require large amounts of time in between commuter schedules. Because of the large amount of local traffic, this shared line will require ample planning. This project is a long-term goal of NJDOT, NJ Transit and all the municipalities involved, and has no immediate schedule for implementation.

Bus Service

There is no bus service in Hardyston. The largely rural nature of the Township makes bus service infeasible from an economic standpoint. Any bus routes that would be created would most likely be planned along Routes 94 and 23. While these routes might be beneficial from the perspective of regional transportation, it is anticipated that the automobile will remain the primary mode of transportation in Hardyston.

Airports

Two small, primary airports are located in Sussex County. The Sussex airport serves only small planes and is not intended for national commercial use. A small secondary airport also exists in Newton. Most air travel for both passengers and freight from Sussex County is handled through Newark International Airport. This is the nearest major hub airport and is located about 45 miles away. Newark Airport is accessible via several regional highways.

Freight and Goods Movement

Sussex County had at one time an intermodal network of freight and goods movement consistent with its manufacturing and extractive industries. With the decline of industry, the usefulness of freight rail facilities diminished, and currently abandoned rail lines exist throughout Hardyston. Hardyston's freight rail system has been in a state of decline for decades. The remnants of the age of rail in the Township can be found primarily along Route 94, where tracts of industrial uses once existed, and were dependant on rail service.

Portions of the Township adjacent to existing rail lines are afforded freight rail service. This service will continue to provide opportunities for the businesses of Hardyston. This network provides connections to destinations throughout the region, and elsewhere in the U.S. The connection to the Ports of Elizabeth and Newark allows goods to be placed on container ships for transport anywhere in the world.

Today Hardyston's business community primarily takes advantage of the highway network to provide for freight and goods movement in and out of the Township. Hardyston has access to a number of regional highways that are designated truck routes to accommodate freight and goods movement. Truck routes within the Township then provide access to the U.S. 287, U.S. 280, U.S. 78, the New Jersey Turnpike and the Garden State Parkway. The designated Truck Routes in Hardyston are Routes 94, 23 South, 515 and 517. Route 23 North is accessible to smaller trucks, but is not eligible for 102"/53' & double-bottom trailers. This makes heavily-traveled corridors like Routes 23 and 94 attractive locations for commercial, warehouse and distribution, and light industrial uses.

Bicycle and Pedestrian Circulation

Hardyston does not have a highly developed bicycle path or pedestrian system. Improvement to the streetscapes, including improvement of sidewalks, is needed along a number of the Township's commercial district roadways. More sidewalks, signage, and more visible crossings would better serve the community. It is therefore recommended that the Township evaluate several pedestrian and bikeway alternatives. A long-term goal would be to extend sidewalks, pathways and bicycle trails around the Township throughout the various neighborhoods and conservation areas. This goal can be achieved through the use of development guidelines that will require that sidewalks and recreational trails be created as part of any new major subdivision or development. This would protect and enhance the value of the natural resources as a recreational and community resource for future generations.

Coordination with the County, State and regional Bicycle Plans for providing added bicycle routes is strongly recommended. As the Township experiences more traffic from existing development pressures, these otherwise generally quiet roadways are expected to take on a much more functional use, and may not be able to co-exist with bicycle traffic without creating safety issues. The establishment of a bicycle route is recommended along the roadways that connect the main commercial areas of the Township and could be marked and stripped or otherwise signed for bicycle use. The establishment of a bicycle route alongside of the existing major roadways is recommended, possibly constructed of embossed asphalt or concrete, labeled for bicycle use, providing bicyclists equal access to the natural resource conservation areas that give Hardyston its natural rural character.

The State has endorsed a plan to provide for 2,000 miles of bike trails by the year 2010, making the commitment to providing the funding for new trails through New Jersey a likely reality. Particular attention to the conversion of abandoned rail lines through the "Rails to Trails" program should be investigated to provide additional pedestrian and bicycling opportunities. To this end, the Township has a planned Rails-to-Trails route, which should receive funding for a portion of its length along an old rail line for acquisition. The proposed route of the Walkill Valley Heritage Trail extends from the Paulinskill Valley Trail in Sparta to the New England railroad Trail in Sussex. These trails are an asset that deserve more attention and more awareness through better signage and promotion.

GATEWAYS

Hardyston, because of its location, has a limited number of transportation connections to adjacent municipalities and the region. There are, however, several gateway locations where various regional and local roads enter the Township. Gateways are entrance points into a municipality that function as the "front door" to a community. Gateways can also be key intersections within the Township. Thousands of travelers, many of them non-residents, pass through these gateways each day. Gateways have the potential to enhance the image of the Township. They have the potential to help the Township develop a unique identity and convey an image as an attractive place to live, work and visit. They can also facilitate circulation by clearly delineating routes to major destinations in the Township.

Hardyston has nine significant gateways into the Township. The outer gateways include the Route 23 South Gateway, Route 23 North Gateway, Route 94 West Gateway, Route 94 East Gateway, and the Route 517 Gateway. The central gateways include the Route 23 South – Franklin Gateway, the Route 94 West – Hamburg Gateway, the Route 94 East – Hamburg Gateway and the North Church Road Gateway. Priority should be given to upgrading the Route 23 South, Route 94 West and Route 94 East Gateways first since they have high visibility and are high-volume traffic locations.

There are numerous methods to enhance gateway locations including attractive and informative way-finding signage, landscaping and streetscape improvements and the promotion of desirable land uses. Where signage exists, it should be placed in a location that affords high visibility surrounded by green space, if possible. A combination of signage with landscaping – shrubs, flowers – possibly maintained by a local club, is recommended. The redevelopment of underutilized and unattractive uses, combined with code enforcement where appropriate, is also recommended in some of these locations. In all cases, an attractive welcome sign is suggested, if not already in place. A combination of these methods is recommended for the major gateway locations, as indicated below.

Route 23 South Gateway

The Route 23 South Gateway is located at Hardyston's border with Jefferson Township in Morris County and West Millford Township in Passaic County. The Route 23 South Gateway is a prominent entrance into the Township. This area contains established land uses. The Route 23 South Gateway provides opportunities to provide signage, landscaping and streetscape improvements. Improvements planned by DOT to this portion of Route 23 will greatly enhance this gateway, one of the most important gateways in the Township. This area needs to remain pedestrian-friendly while still allowing the free flow of traffic.





Route 23 South – Franklin Gateway

The Route 23 South – Franklin Gateway is located along Route 23 on the eastern edge of Franklin. Along with other improvements, this gateway might benefit from the Franklin Mine/Hamburg Mountain Trail that is proposed near this section of Route 23, as discussed in the Community Facilities and Recreation Element of this Master Plan.

Route 23 North Gateway

The Route 23 North Gateway is located along Route 23 between Hamburg and Wantage. The Route 23 North Gateway is a prominent entrance into the Township. This area contains established land uses.

Route 94 West Gateway

The Route 94 West Gateway is located where Route 94 heads southwest into Sparta. The Route 94 West Gateway is a prominent entrance into the Township.

North Church Road Gateway

The North Church Road Gateway is located along the western edge of Franklin. The North Church Road Gateway provides opportunities to provide signage and landscaping. Since this area contains established land uses, a combination of signage, landscaping and streetscape improvements is recommended. The redevelopment of underutilized uses, combined with code enforcement where appropriate, is also recommended. Incorporation of welcome signage is recommended to correspond with signage promoting the industrial park located here. Large traffic volumes enter this industrial park through Franklin, and this gateway therefore requires special attention.

Route 94 West – Hamburg Gateway and the Route 94 East – Hamburg Gateway

The Route 94 West – Hamburg and Route 94 East – Hamburg Gateways are located on the western and eastern edges of Hamburg. These gateways provide opportunities for the redevelopment of underutilized uses, combined with code enforcement where appropriate to help enhance this gateway.

Route 94 East Gateway

The Route 94 East Gateway is located along the border with Vernon Township. The Route 94 East Gateway is a prominent entrance into the Township. This gateway will be a principal element in the attraction to Hardyston of visitors to the IntraWest development. This gateway is a key point in the promotion of retail, restaurants and services that are key niche markets for the dollars spent by eco-tourists and recreation-seekers. The redevelopment of underutilized uses, combined with code enforcement where appropriate, is also recommended.

Route 517 Gateway

The Route 517 Gateway is located along the border with Vernon. The Route 517 Gateway is a prominent entrance into the Township. This gateway is also important for the promotion of eco-tourism and the accompanying niche markets. As a secondary entrance from Vernon, this gateway also connects visitors to the Crystal Springs Golf Courses. The redevelopment of underutilized uses, combined with code enforcement where appropriate, is also recommended for this area.

Route 515 Gateway

The gateway at the entrance of Route 515 from Vernon is not of major importance, but does still play a part in the promotion of the appropriate image of the Township. This road is heavily traveled in the morning and the evening by residents of Vernon commuting south out of the County. While most of the land along this road is owned by the Newark Watershed CDC, this gateway can still support the right image of Hardyston, especially because the attractive open space that exists here. This road connects to Route 23 at the southern entrance to Hardyston, which is a very important gateway.

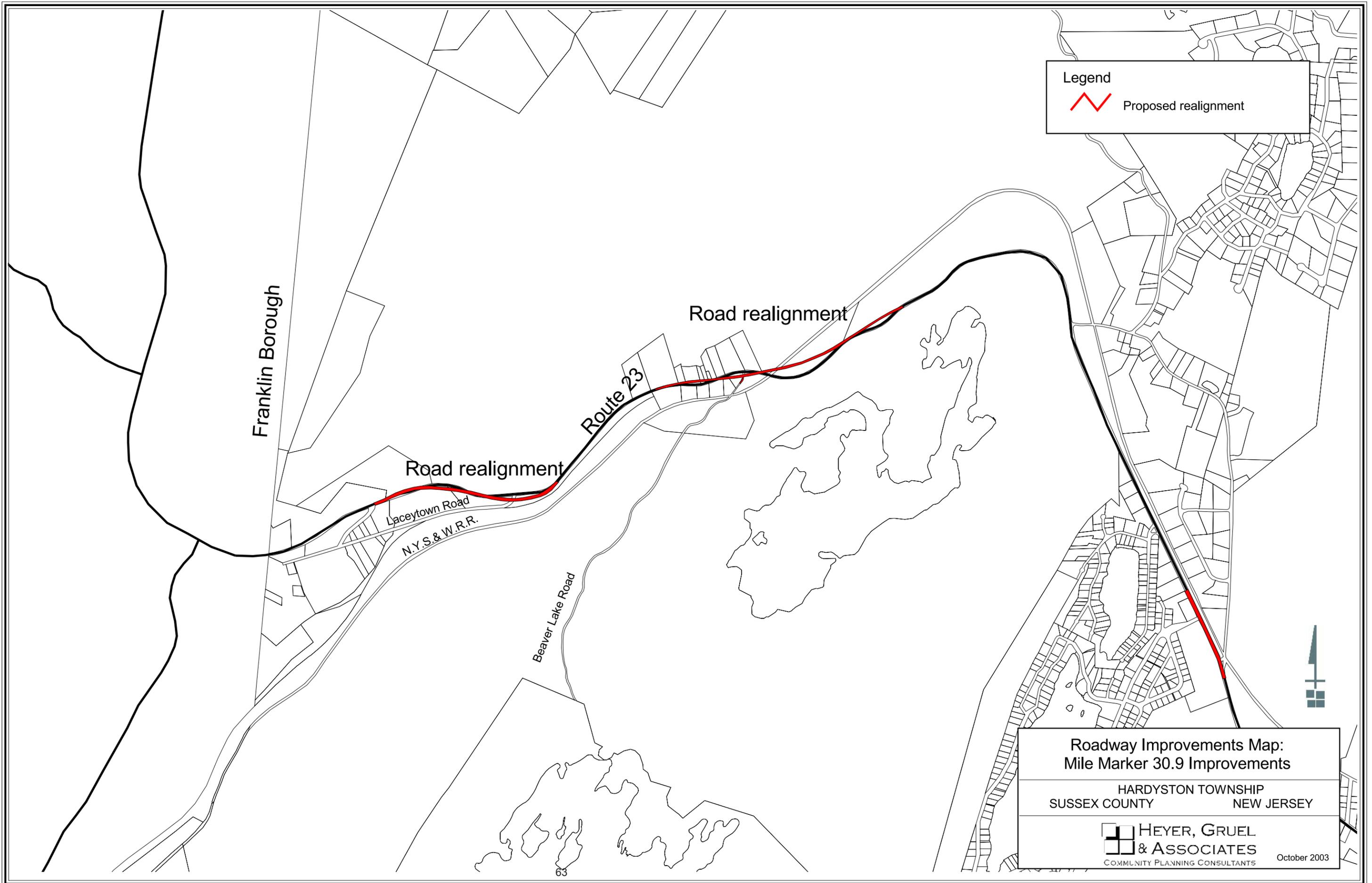
CIRCULATION PLAN IMPROVEMENTS

Proposed roadway circulation improvements include various projects. Some transportation projects by NJDOT are considered in Hardyston and the surrounding area in the immediate future. Two key projects for Hardyston are improvements to Route 23 in Stockholm and improvements to the intersection of Routes 23 and 94 in Hamburg. Improvements to Route 23 in the Stockholm area are planned, with road straightenings and better intersections planned at several points, including improvements to other intersecting roads and a bridge replacement. Improvements to the intersection of Routes 23 and 94 are already underway, and these improvements are important to all of Sussex County. Many of these projects can be accomplished only through State and County participation, and sometimes Federal aid. The Township of Hardyston supports these changes in full. There are no planned improvements by the County in the near future. The County does periodically apply to the State for monies for improvements to roads such as Route 517, but at this time no monies have been allocated.

Route 23 Improvements

Proposed improvements and a new alignment are planned for Route 23. Improvements near Lake Shore Road and Silver Grove Road are planned. Improvements to Holland Mountain Road, a realigned intersection with Snufftown Road and Route 23, and a bridge replacement are also planned.

Improvements to Route 23 will take place near mile marker 30.9. The proposed alignment attempts to alleviate substandard features in the area. Shoulders will be added to each outer lane, while still retaining the three existing lanes, the center of which is a climbing lane in the southbound direction. A significant shift of alignment to the east in this area will improve the horizontal alignment of the road. The improvements will run from the bridge over Franklin Pond Creek to Lacytown Road.



Legend

 Proposed realignment

Franklin Borough

Road realignment

Road realignment

Route 23

Laceytown Road

N.Y.S. & W.R.R.

Beaver Lake Road

**Roadway Improvements Map:
Mile Marker 30.9 Improvements**

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

 **HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

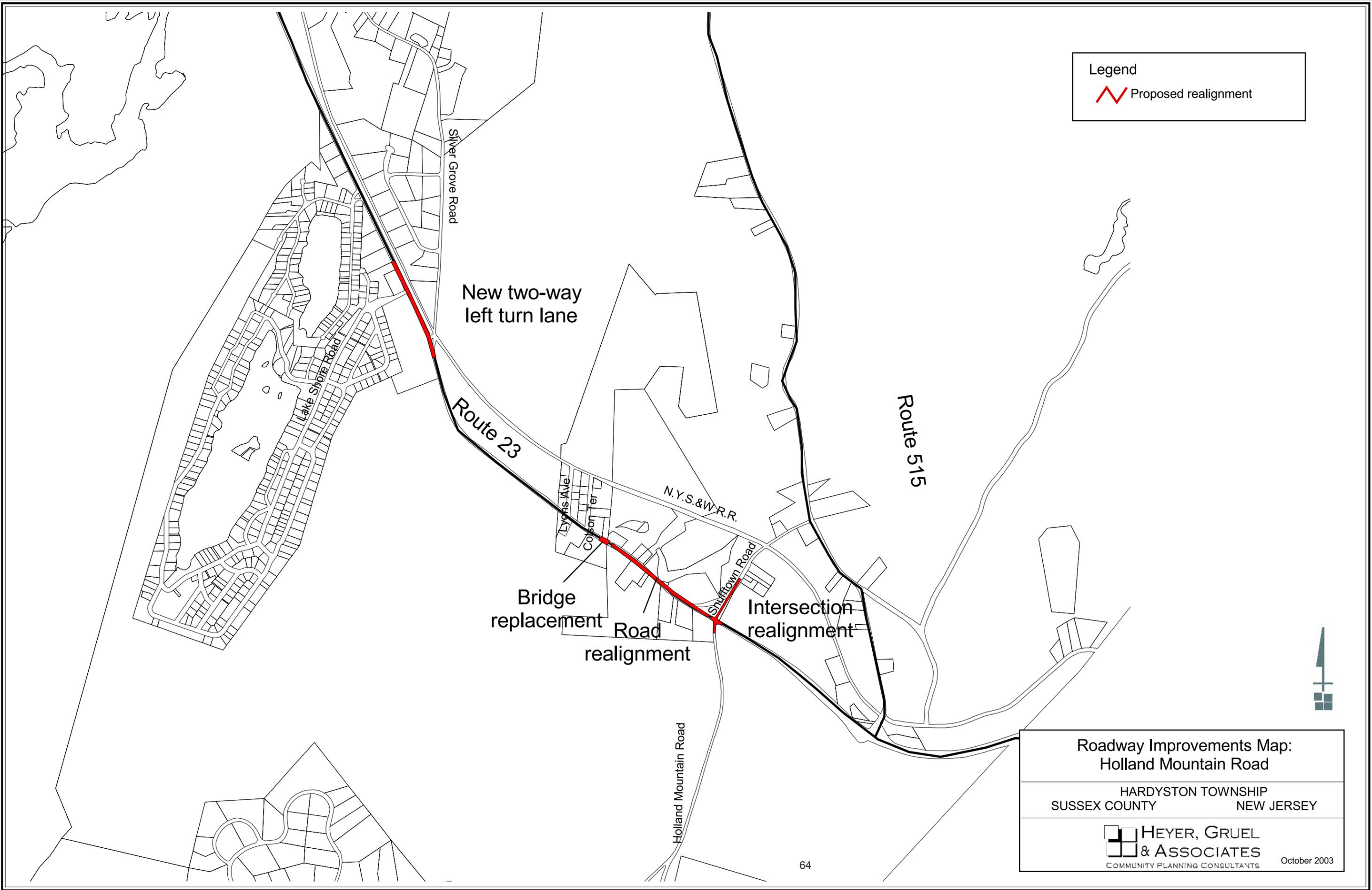
October 2003



Legend



Proposed realignment



New two-way
left turn lane

Route 23

Route 515

Bridge
replacement
Road
realignment

Intersection
realignment

**Roadway Improvements Map:
Holland Mountain Road**

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY



**HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

October 2003

Further improvements to Route 23 will occur near Lake Shore Road and Silver Grove Road. A two-way left-turn lane is proposed by DOT to alleviate traffic congestion in this area. Also, this lane will provide left turn slots for turns onto Silver Grove Road and Lake Shore Road. Access to businesses and the St. John Vianny Church will require traffic control measures, but without signalized intersections.

There will be significant improvements in the area of Holland Mountain Road to address the high accident rates and poor levels of service in this area. The center of this focus will be on a new intersection of Route 23, Holland Mountain Road, and a newly realigned Snufftown Road. Left turn slots will be provided for access to Holland Mountain Road and Snufftown Road. A two-way left-turn lane will be provided between mile markers 27.35 and 27.7 to serve existing businesses. Alignment changes are also proposed along Route 23 between mile markers 27.1 and 27.8. Consistent shoulder widths of 10 feet will be provided along this stretch. A large part of this project will be the replacement of the bridge over Pacock Brook at mile marker 27.63. These improvements are intended to increase the levels of service of the Route 23 corridor and the intersecting streets.

Intersection of Route 23 and Route 94 Improvements

The two most important corridors in Hardyston, and the only two state roads, intersect in the center of the Borough of Hamburg. This intersection is a key hub in the circulation patterns in this part of the County. Circulation improvements have been planned here for quite some time and are currently being constructed. One constraining factor to these improvements is the need to keep the intersection open most hours of the day.

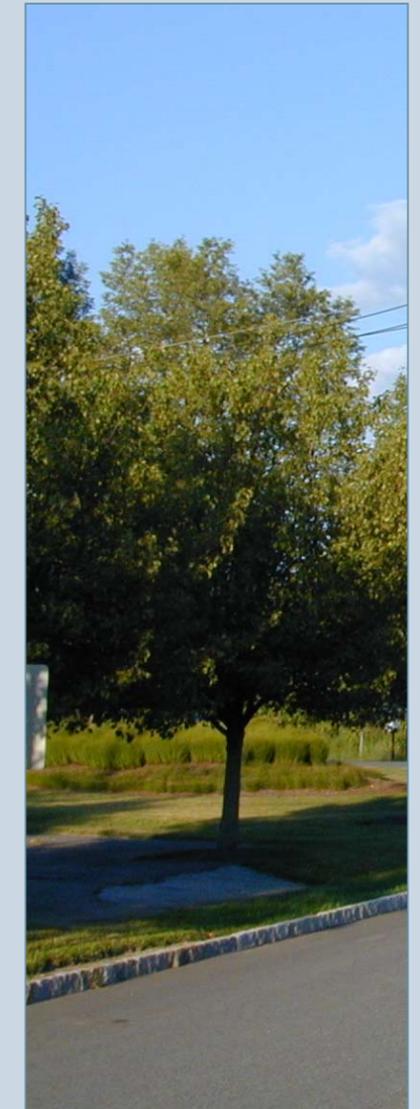
The improvements are designed to accommodate large volumes of traffic as well as ensure the continuance of the central business area in the Borough. A total of .21 miles of the approaches to Route 94 and .19 miles of the approaches to Route 23 are planned for realigning, widening and resurfacing of the existing roadways. The existing curb radii will be increased to allow for better movement and circulation. The key purposes of these improvements are to increase intersection capacity as well as increase safety for drivers and pedestrians. More efficient movement of Route 23 traffic will be enabled by the addition of left-turn lanes. Improvements to the intersection traffic signals are also planned. These improvements will also include a proposed extension of Orchard Street. The completion of these improvements will aid in efficient traffic flow for the entire Township of Hardyston and the County as a whole.

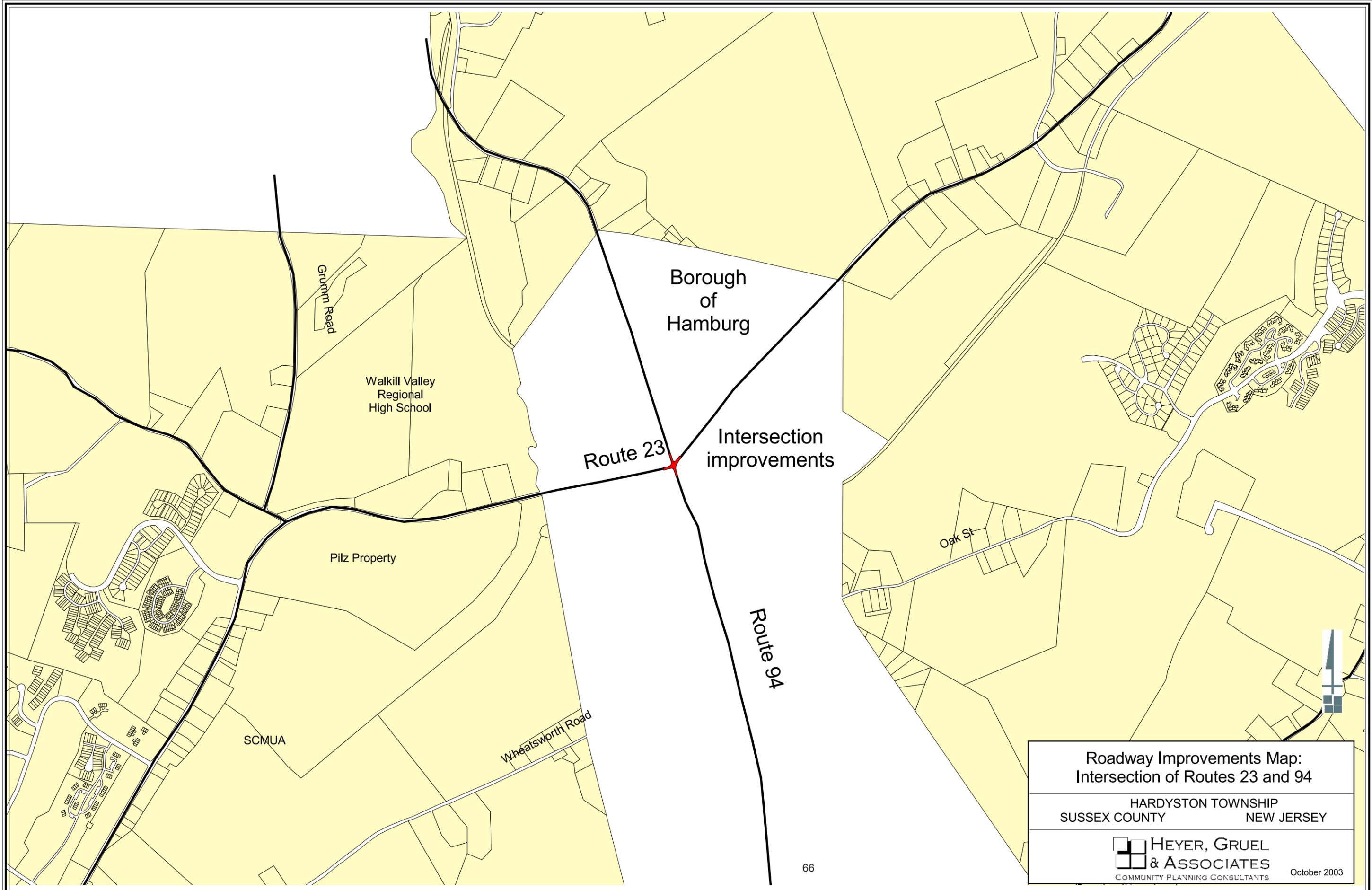
Route 94 and Wheatworth Road

Route 94 is the civic and commercial center of the Township. The intersection of Wheatworth Road and Route 94 should be studied for potential realignment to encourage easy access and high visibility.

Bridges

There are two bridges in the Borough of Hamburg that directly affect circulation in Hardyston. These one-lane bridges are located on roads that run from Hamburg into Hardyston. Clearance is minimal. Though these bridges are located in Hamburg, they have a significant impact on Hardyston and there should be a concerted effort to resolve these issues. The Township of Hardyston should encourage the Borough of Hamburg and the County to take action to remedy the problems caused by these bridges, possibly including the rebuilding of these bridges with two lanes and greater clearance.





Borough
of
Hamburg

Walkill Valley
Regional
High School

Gurnm Road

Pilz Property

SCMUA

Wheatsworth Road

Route 23

Intersection
improvements

Route 94

Oak St

Roadway Improvements Map:
Intersection of Routes 23 and 94

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

HEYER, GRUEL
& ASSOCIATES
COMMUNITY PLANNING CONSULTANTS

October 2003

ECONOMIC PLAN ELEMENT

INTRODUCTION

The purpose of the Economic Plan Element is to evaluate the economy of the Township of Hardyston and identify trends, strengths, opportunities and constraints. The Economic Plan Element evaluates the potential for the community's continued economic growth in order to ensure that non-residential land use policies provide sufficient areas of future employment and ratable growth. The Economic Plan Element also addresses the issues that are central to developing a viable, diversified and sustainable economic base. The most notable of these issues is the desire to keep taxes low. Important goals include preserving the existing commercial and industrial base, coordinating infrastructure investment with development plans and targeting sectors of the economy where the Township has a competitive advantage for further development.

Development pressure from Vernon's Intrawest development is providing new opportunities for commercial development throughout Hardyston. This development creates large numbers of tourists on the weekends, especially during winter months. Hardyston should attempt to capitalize on the Township's competitive advantages for economic development including its location, transportation and utility infrastructure, comfortable rural feel, stable labor force, low crime rate and quality of life. The Township should work with the County and neighboring municipalities, especially Franklin and Hamburg, to develop an economic development strategy that promotes investment, employment growth and increased tax ratables on a regional scale.

Due to the large amount of environmental constraints, there is little developable land in Hardyston. Much of the developable land has already been built upon. These environmental constraints will always be a factor in the economic development activities that take place in the Township. Another issue is the existence of sewer service. Infrastructure is costly and difficult to maintain, especially in a rural area like Hardyston. Development should therefore be concentrated to reduce the areas to be served by sewer. This has been a constraint on development in Hardyston for some time. In addition, sewer capacity is capped, and development can only take place in areas with available sewer allocation. These issues require the careful planning of commercial and industrial development.

EXISTING CONDITIONS

Commercial development in the Township is primarily concentrated along the Routes 23, 94, 631 and 517 corridors. Other commercial businesses and industries are scattered through the Township.

- Route 94 is the most significant commercial and industrial corridor in the Township. It contains many different types of businesses along its entire length.
- Route 23 south of Franklin contains businesses mixed with residences, between large expanses of undeveloped land.
- Route 23 north of Hamburg contains a neighborhood business zone and a light industrial zone.
- Route 631 contains commercial zones along its entire length, and this commercial corridor extends into Franklin, connecting with the downtown area.
- Route 517 contains scattered commercial areas.

There are several types and scales of commercial development. Highway businesses serve not only Township residents, but also residents of other towns and commuters traveling through Hardyston. Neighborhood Commercial businesses are designed to serve only local residents within short distances and provide only a limited range of services. Such uses as cleaners, laundromats, beauty salons, groceries, variety stores, and banks are the services most needed on a regular basis, and therefore these occupations make up a significant portion of the job base. The Township is lacking certain regional commercial enterprises such as big-box retailers and national chain restaurants.

The Township's economy has been transformed by structural changes resulting from the decline of agriculture and manufacturing and the expansion of services. Declining industries, such as manufacturing, are experiencing relatively weak market demand as well as significant domestic and international competition. Another adjustment is now needed to reposition the Township for a role in New Jersey's 21st Century economy. In the future, the majority of employment growth is expected to occur in the service sector rather than manufacturing or agriculture. In New Jersey and throughout the U.S., the service industry has recently been a major growth generator, creating sizeable numbers of new jobs that span the range of educational attainment. Such uses as cleaners, laundromats, beauty salons, groceries, variety stores, and banks are the services most needed on a regular basis, and therefore these occupations make up a significant portion of the job base.





**ECONOMIC PLAN
ELEMENT**

To maximize the effect of the growth of the service industry, the economic development strategies for the Township include focusing growth and development into existing commercial areas throughout the Township. Also, preserving the existing commercial and industrial base, coordinating infrastructure investment with development plans and targeting sectors of the economy where the Township has a competitive advantage for further development are important goals.

Hardyston has unique economic development assets that distinguish it from other municipalities in the state and region. The Township will continue to encourage new commercial development and the expansion of existing businesses; provide areas for light industry, research, and warehouse distribution uses; and create cultural outlets and recreational opportunities to attract visitors to the Township. The new direction for economic development will be in service industry jobs related to recreation and eco-tourism. Development pressure from Vernon's IntraWest development is providing new opportunities for commercial development throughout the Township in these areas.

One of the goals of economic development in Hardyston is to maintain a comfortable, rural character. The combination of a pleasant rural atmosphere, key transportation corridors and abundant natural resources will allow Hardyston to gain a large share of the eco-tourism and recreation dollars that will be generated around the IntraWest development. These new opportunities, combined with the retention of existing businesses and an increased share of regional retail dollars, will propel Hardyston into a position of importance in the region in the 21st Century.

EMPLOYMENT

The unemployment rate of Hardyston is routinely lower than that of the County and the State. The rate does rise and fall along with County and State levels, but maintains a positive position in relation to the unemployment rates of other municipalities. The unemployment rate of the Township, the County and the State all dropped from relatively high levels in 1992 to much lower levels in 2000, before beginning to rise again in 2001. These figures can be observed in the employment and labor force tables in the Demographics section of this Master Plan.

VISION AND STRATEGY

Efforts are now required to organize and enhance the economic development of these areas. Concentration of efforts for economic development is essential, but it raises issues related to how to assign priorities. It is difficult to address all neighborhood commercial districts simultaneously. With only one overall strategy for all commercial enterprises in the Township, resources would be diluted to the point where it would be impossible to make a visible difference in any one district. Priorities should be assigned based on the vision of the Township and realistic economic development opportunities. The Township should work with the County and neighboring municipalities, especially Franklin and Hamburg, to develop an economic development strategy that promotes investment, employment growth and increased tax ratables on an area-wide basis.

In moving forward with economic development, there should be a vision about the nature of the economic development evolution that should occur. The vision should be shared. A shared vision can help to set a direction and tone in addition to prioritizing actions and funding resources to accomplish that vision. The vision of providing better-paying jobs that are accessible to residents, along with the focus on growing them in a rural setting provides an economic initiative that focuses specifically on meeting the needs of the citizens of Hardyston. Eco-tourism and recreation jobs maintained in a rural setting will help give Hardyston an economic boost while still staying true to the spirit and character of the Township.

The Township should focus economic activity in the Township's major economic centers, especially the older village areas. The Township should recognize the unique character of each area and promote development that will strengthen and reinforce market niches. The Township should attempt to target corridors for uses that complement existing businesses rather than compete with them.

Any jobs that are generated should, to the maximum extent possible, be accessible to Hardyston residents. Critical services should be concentrated near homes and jobs. The true success of a commercial district comes from the increased density of shops and businesses. These coherent districts also create opportunities for community interaction. Good retail areas contain civic, religious, recreation, and cultural uses that help bring people to the shopping area. The Township should concentrate time, attention, and financial resources on selected high-profile projects that will have visible economic results, and be easily promoted. Larger projects like these require land assembly and are more time-consuming to pursue, but they will have a greater impact on the Township and the region, and help create identity designed by the vision.

COMMERCIAL AREAS

Hardyston's commercial streets lack continuity and stores do not benefit from the synergy associated with concentrated business activity. Retail stores are randomly located throughout the Township with little critical mass found on any one street or at any particular intersection. Route 94 acts as the main commercial corridor in the Township, but its commercial uses are scattered and stretched along the entire length of the road.

Commercial enterprises in the Township consist of a variety of retail commercial uses, restaurants, personal service establishments, wholesale businesses, and offices. Small neighborhood commercial uses are scattered throughout the Township. Neighborhood Commercial businesses are designed to serve only local residents within short distances and provide only a limited range of services. Highway businesses serve not only Township residents, but also residents of other towns and commuters traveling through Hardyston. The commercial enterprises that do exist conform to the character of Hardyston as a rural community with neighborhoods and corridors of development. The quality of life in Hardyston is somewhat dependant upon the connection of commercial establishments with residential areas. The Township is under-represented in several commercial industries including entertainment and restaurants.

INDUSTRY

The Township has a well-developed transportation network consisting of highways and freight rail that are essential to the manufacturing industry. However, industrial uses in the Township are not as intense or frequent as many other New Jersey towns. Existing industries are limited to industrial parks and older industrial areas. Future growth in industry will most likely be limited. For the Township's industrial job base, the primary issues are the preservation of existing industrial operations and the retention of existing firms. The Township should pursue environmentally-friendly green industries that use high technology in production processes.

LARGE SCALE RETAIL

There is a continuing need for new retail commercial development in the Township that is more regional in its appeal. The Township should develop regional economic engines that support local economic development objectives. The development of new regional commercial development is also consistent with Hardyston's goals for a greater diversity of businesses, including some national chain stores. Large Scale Retail Commercial uses are designed to serve a regional population base and are often found in the form of large chain stores with a national presence. For the recruitment of big-box retailers, the Township should highlight the transportation network in relationship to development sites for easy access, truck traffic impact and affordability. The ideal location for such new commercial development is along major transportation corridors and hubs within the Township. The Township has sufficient locational and market advantages to capture a large share of economic activity in the services and retail related to this economic anchor.

Few large parcels in the Township are cleared or able to handle this scale of development. Costly site assembly, clearance, and development costs for big-box retailers means high rents and therefore fewer possibilities for development. The Pilz property provides definite potential for this type of economic development. The location of this district in proximity to Routes 23 and 94 is sufficient to serve all of the Township's neighborhoods and the regional business needs. The approach recommended for this site is that it should be the primary location of large-scale retail businesses in Hardyston.

The zoning ordinance should be examined and supplemented in relation to large scale retailers. Parking should be one of the main concerns addressed with regard to big-box retailers. While big-boxes do require substantial tracts of parking, it is possible to create this parking in a manner that is less detrimental to the physical fabric of the town. The ordinance should recommend parking on the side of the main building, instead of out front, smaller setbacks and proper landscaping for these retailers. With the appropriate design guidelines, the rural character of Hardyston can be maintained around a large scale retailer.

RESIDENTIAL CONSTRUCTION

Hardyston's population continues to rise. The prospects for future growth in Hardyston's construction industry are somewhat positive because of the amount of development that this increased population will bring in the coming years. Subdivisions of homes with features and amenities to accommodate today's families continue to draw middle- and upper-income families away from older neighborhoods with higher densities. To ensure economic development success and proper land use patterns, the Township should identify any possible locations for future residential developments. The construction jobs created due to this increased population can aid in the economic stability of the Township.

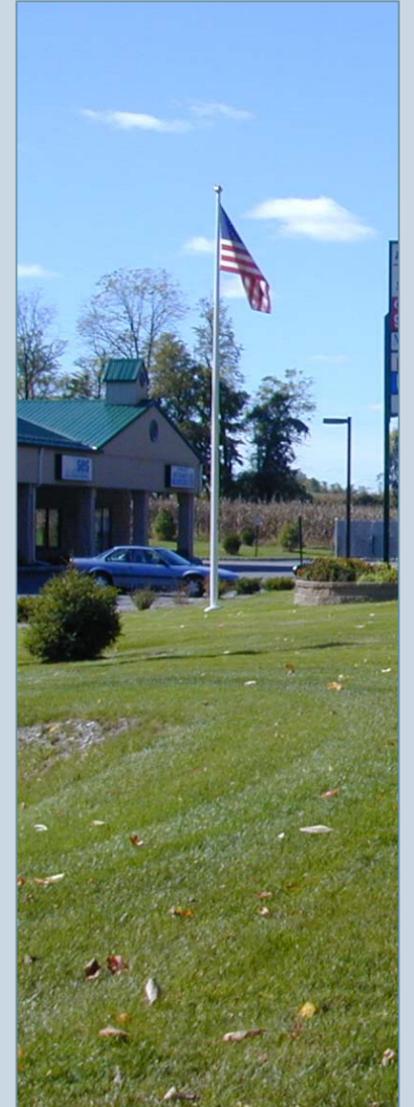
Unfortunately, the benefits of the construction industry are moderated by the industry's cyclical and seasonal character, the uncertainty of the development process and the short-term duration of most construction projects. The construction industry is dependent upon economic activity in other industries that require new buildings, equipment and infrastructure. The construction industry is not a suitable target of economic development efforts because of its limited role in the local economy. However, in-fill development, redevelopment of vacant/underutilized buildings and business turnover may produce additional employment, tax ratables and economic activity.

ECO-TOURISM

In Hardyston today, the most exciting economic development opportunities are in attracting specialized businesses oriented to the niche markets surrounding eco-tourism. The Township should attempt to preserve and promote the unique rural-residential character of Hardyston and at the same time capitalize on the weekender and vacationer population that will come for the great outdoors and bring their checkbooks. The Township should attempt to accommodate new economic development in an environmentally sensitive and responsible manner that preserves the quality of environmental resources including air, water and open space. These niche markets surrounding eco-tourism provide the best way to preserve Hardyston's natural resources and promote economic development at the same time.

The Township should constantly look for ways to increase recreation opportunities for residents and visitors. The Township should create new areas for expanded recreational opportunities. Hardyston should create active and secure open spaces. The Township should ensure ready access to open space in compactly-developed places. Hardyston should adopt a green infrastructure plan; create a network of trails and greenways; and connect walkways, parking lots, greenways and developments.

Along with the efforts to capitalize on these economic development opportunities, the Township should attempt to conserve private lands, especially Newark Watershed lands. The Township should expand the use of innovative financing tools to facilitate open space acquisition and preservation. The Township should partner with nongovernmental organizations to acquire and protect land.





EXISTING ASSETS

New commercial development should not come at the expense of the existing local businesses that serve community needs. The Township should attempt to preserve and strengthen existing businesses. The Township should create economic incentives for businesses and home owners to locate in areas with existing infrastructure. Sites, buildings, and infrastructure that are suited to the needs of these businesses must be identified and made available. Economic development efforts should target the retention of existing firms as well as assistance necessary to support modernization of their equipment and expansion.

The Township should adopt a “fix-it-first” policy that sets priorities for upgrading existing facilities before building new ones. The Township should adopt special rehabilitation building codes to regulate the renovation of existing structures. Targeted investment of public and private funds for building rehabilitation, facade improvements, streetscape upgrades and increased parking is encouraged. The Township should encourage adaptive reuse of historic or architecturally significant buildings. Hardyston should facilitate programs to encourage home renovation and rehabilitation in existing neighborhoods. The Township should implement a program to identify and dispose of or reuse vacant and abandoned buildings. The Township should attempt to restore abandoned environmentally contaminated properties.

DESIGN STANDARDS

The Township should require architectural standards to guarantee a unity among the diverse uses and structures that make up each commercial district. Design enhances the visual appearance, attractiveness and traffic management of business districts. Distinct standards should be created for each commercial district. This program will attract new businesses to the area and will offer shoppers an attractive, clean and safe business district, increasing sales and economic development potential in these districts. Design helps to define communities and neighborhoods with visual cues.

Street trees should be planted and protected. The Township should plant trees throughout all communities and preserve existing trees during new construction. Along commercial storefronts, large, inviting windows will be encouraged in the first floor facades in order to create transparency oriented to the pedestrian. Street furniture should be designed to enhance the cohesive character of the Township. Ample public seating and other street furniture should be provided, most specifically in each of the business districts.

PEDESTRIAN TRAFFIC

A small population lives within walking distance of some commercial areas and provides a stream of customers throughout the day, if the appropriate pedestrian amenities are present. The Township should enhance and promote pedestrian access to commercial shopping areas to ensure the rural,

small town character of Hardyston. The goal is to create a more consistent, “user-friendly” shopping area with an emphasis on pedestrian safety. The creation of pedestrian-friendly areas occurs with relatively smaller businesses. Efforts can be made and money invested to create a more pleasant pedestrian environment. The Township should require building design that makes commercial areas more walkable. The Township and the developer should identify economic opportunities that stimulate pedestrian activity.

Street improvements will be needed to enhance the pedestrian character. The Township should adopt design standards for sidewalks. The Township should require sidewalks in all new developments. The Township should ensure that existing and future walkways are beautified and maintained. The Township should provide grants or other financial assistance to neighborhoods to retrofit existing streets and sidewalks to promote more walkable communities.

CIRCULATION

The Township should create linkages to and enhance existing connections to the regional transportation system. Parking is a major issue affecting most commercial districts. The Township should collaborate with employers and provide information and incentives for programs to minimize or decrease rush-hour congestion impacts. The Township should plan and permit road networks of neighborhood scaled streets (generally two or four lanes) with high levels of connectivity and short blocks. The Township should require traffic-calming measures where traffic speed through residential neighborhoods is excessive. The Township should preserve scenic vistas through the appropriate location of telecommunication towers, and improved control of billboards.

PROMOTION

Hardyston should attempt to capitalize on the Township’s competitive advantages for economic development purposes including its location, transportation and utility infrastructure, comfortable rural feel, stable labor force, low crime rate and quality of life. The Township should continue to promote communication and cooperation between businessowners, property owners, employees, and the Township government to ensure that Hardyston continues to be a good place to do business. The Township should aggressively promote and market Hardyston as a place to do business. Promotion involves marketing an enticing image to shoppers, investors, residents, and visitors. Because marketing is costly and time-consuming, many communities choose to concentrate their time and resources on reaching out to so-called “target industries” that are likely to be compatible with the characteristics of the area. The Township should target niche markets surrounding eco-tourism and recreation as the primary objectives of any promotional campaign. By establishing public/private partnerships to encourage development of restaurants and retail establishments in the area, the Township could help attract visitors to Hardyston. The Township should create a sense of pride and ownership among the residents. This pride and ownership will be synonymous with adjectives like rural, recreational, dynamic and peaceful.

HOUSING PLAN ELEMENT

The Township of Hardyston last adopted a Housing Element and Fair Share Plan on March 30, 1996. This Plan received substantive certification by the Council on Affordable Housing on April 14, 1998. This Housing Element and Fair Share Plan remains in effect for the Township. While the plan will eventually need to be updated, no such update is required at this time. This Master Plan recognizes the existing Housing Element and Fair Share Plan.



HOUSING PLAN
ELEMENT



HISTORIC PRESERVATION ELEMENT

INTRODUCTION

The Historic Preservation Plan Element identifies Hardyston's existing historic resources and identifies new initiatives for the continued preservation and protection of the Township's historic and cultural resources. The Township's historic resources provide a connection with history and a guide to the future development of the Township. The Township Master Plan has been designed to build upon the area's past in shaping the vision of the future.

HISTORY

In the 19th Century, Hardyston was a large, rural municipality. Franklin, Hamburg and Stockholm were the three main villages in the Township. These villages contained the business cores of the area, while most of Hardyston was made up of rural environs. Due to Franklin's mining activities and industrialization, many new jobs were created, fueling a surge in the population. The mine acted as an incubator of life and business. By the Civil War, Franklin's mines and the Main Street area were booming. Due to the development of business centering on the zinc mine, Franklin became a separate entity within Hardyston. Franklin and Hamburg were eventually incorporated as separate boroughs.

The area began to change over time. The once-rural Hardyston became the focus of sparse development as beautiful lakes and recreational opportunities held the attraction that once was held by jobs available in mining. The catalyst for the boom in Hardyston's population was the suburbanization of the nation that followed World War II. This trend intensified as private automobile ownership increased and new highways were constructed throughout the area. These key transportation corridors absorbed most of the growth in the Township, along with the various lake communities. New businesses opened up and others relocated to Routes 23 and 94 to take advantage of the passing motorists.

HISTORIC SITES

Hardyston has retained many individual pieces of its rural heritage. There are several sites and buildings in the Township that deserve examination for possible historic merit. The Township of Hardyston currently has the following three properties listed on the State and National Registers of Historic Preservation.

- The Lawrence Mansion on Route 94.
- The Old Monroe Schoolhouse on Route 94.
- The Stockholm United Methodist Church on Route 515 across from the municipal building.

These properties were placed on the State and National Registers in the 1970's. Since then no properties have been given an opinion of eligibility by the State Historic Preservation Office. Some areas, such as Stockholm, may contain significant historic resources and as a whole may be eligible as a historic district. However, not all of the older buildings in the Township can or should be saved. Some of these resources are well preserved and will continue to serve the community for years to come.

RECOMMENDATION

The Township should evaluate other potential historic sites and districts for possible nomination to the State and National Registers.

RECYCLING

INTRODUCTION

The New Jersey Statewide Mandatory Source Separation and Recycling Act of 1987 requires that municipal master plans include a recycling plan element that incorporates State Recycling Plan goals for the collection, disposition and recycling of materials designated in the Township's Ordinance. This legislation recognizes that the disposition of solid waste has become an increasing problem and one of the most serious problems facing each municipality in the State.

The statute stipulates the following municipal obligations:

- Designate a recycling coordinator,
- Provide for a collection system of recyclable materials,
- Adopt a municipal recycling ordinance,
- Revise the municipal Master Plan which shall include provisions for the collection, disposition and recycling of recyclable materials,
- Revise the Land Use Ordinance requiring site plans and subdivisions to conform to the recycling ordinance.

Municipal recycling plans must also be consistent with and be coordinated with the County District Plan (DRP). Each DRP is required to include designation of recovery targets in each municipality to achieve the maximum feasible recovery of recyclable materials from the municipal solid waste stream that shall include following schedule:

- The recycling of at least %15 of the prior year's total municipal solid waste stream by the end of the first full year succeeding the adoption and approval by the department of the district recycling plan; and
- The recycling of at least %25 of the second preceding year's total municipal solid waste stream by the end of the second full year succeeding the adoption and approval by the department of the district recycling plan.

The State of New Jersey and the Department of Environmental Protection (DEP) regulate recycling and solid waste through many statutes. The Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., the New Jersey Statewide Mandatory Source Separation and Recycling Act, N.J.S.A. 13:1E-99.11 et seq., and recycling regulations as per N.J.A.C. 7:26A-1 et seq., govern the management, collection and disposal of solid waste and recyclable materials. These efforts ensure the preservation of natural resources, savings of various energy types and the reduction in pollution.

The New Jersey Solid Waste Management Act designated all 21 Counties and the Hackensack Meadowlands District as Solid Waste Management Districts and mandated the Boards of Chosen Freeholders in each of the Counties to develop comprehensive plans for waste management in their district. In response to this, the Sussex County amended its Solid Waste Management Plan to adopt a countywide district-recycling plan and require certain materials to be recycled. In order to meet State and district mandates and achieve the goals and benefits of the State Law for its citizens, the Borough adopted a mandatory recycling ordinance.

RECYCLING IN HARDYSTON TOWNSHIP

The Township recognizes that separating recyclable materials from the solid waste will extend the life of existing landfill facilities, conserve energy and valuable natural resources, and increase the supply of reusable raw materials for industry. The Township also recognizes that reduce demands on resource recovery facilities which will, in turn, result in significant cost-savings in the planning, construction and operation of these facilities.

The essential features of the Ordinance are as follows:

- Creates the position of Recycling Coordinator who, along with the Sanitation Department, is responsible for the enforcement of the ordinance.
- Requires that yard waste, newspapers, glass, aluminum cans, tin and bi-metal cans, white goods, and plastic containers be recycled by all property owners.
- Requires that, in addition, all business, institutions, industries and organizations recycle corrugated and high-grade paper.
- Provides for curbside collection of materials on a scheduled basis. Residents and property owners may also drop off materials at the Sussex County Municipal Utilities Authority recycling center on Route 94.
- Businesses and other non-residential institutions shall provide for the recycling of designated items according to the following provisions:
 - If a business contracts with the Township Sanitation Department for solid waste collection, the Township shall collect recyclable materials at no additional fee other than the existing fee schedule for solid waste collection;
 - If a business contracts with a private hauler in order to recycle items, the business or other non-residential institution shall provide written documentation of compliance with the recycling plan to the Township upon demand.
 - All of the recyclable materials must be separated. The ordinance specifies the manner in which each type of material must be contained, tied, packaged and labeled or otherwise identified.





The Township's recycling program is as follows:

- Monthly curbside collection of recyclable materials is provided to all Hardyston residents.
- Residents in the Stockholm area of the Township (including Laceytown Road and all areas south along State Highway 23) have their recyclables picked up on the first Friday of each month.
- All other homes receive collection services on the third Friday of each month.
- Comingled glass bottles, aluminum cans, tin cans and plastic bottles (milk jugs, soda bottles, detergent bottles) should be placed out at the roadway in a rigid container (such as a trash can or plastic recycling container) the evening prior to scheduled collection. If multiple containers are placed out, no single container should exceed 32 gallons in size.
- Cardboard should be flattened, bundled and placed neatly next to, or on top of, the recycling container.
- Newsprint is not included within the Township's collection program. Residents interested in curbside newspaper recycling should contact their contracted garbage hauler.

Hardyston Township also has a Bulky Waste Collection program. White goods, televisions, furniture, carpets/rugs, metal sheds, lawn furniture, non-riding lawn mowers, small auto parts, books, bookcases, barbecue grills, small appliances, toys, clothing, tools, home accessories, door/windows, pools, hot water heaters and small fixtures are among the acceptable materials. Unacceptable materials that are not included to the program are as follows: Paint cans, pesticides, herbicides, paint thinners, driveway sealant, riding mowers, auto batteries, leaves, pool chemicals, photo chemicals, junk cars/trucks, tree stumps, food waste, motor oil, furnaces, fuel tanks, demolition material, recyclable materials, gas/propane canisters and construction debris.

RELATIONSHIP TO OTHER PLANS

The Municipal Land Use Law requires that all municipal master plans consider the relationship of their master plan to plans of contiguous municipalities, county plans and the New Jersey State Development and Redevelopment Plan (SDRP). This section reviews the plans and zoning ordinances of the municipalities bordering Hardyston Township, as well as the Sussex County Master Plan, the State Development and Redevelopment Plan and its relationship to the Highlands Region.

STATE DEVELOPMENT AND REDEVELOPMENT PLAN

The Hardyston Master Plan is generally consistent with the plans and policies of the New Jersey State Development and Redevelopment Plan (SDRP), adopted in 2001. The Hardyston Master Plan promotes the preservation and enhancement of an existing, long-established residential community; promotes Hardyston's natural resources, particularly its wetlands, wellheads and water bodies and promotes the preservation of its historic, scenic, and recreational assets.

The State Plan Policy Map of the SDRP divides the State into five Planning Areas, each of which has specific policy recommendations associated with it. As shown on the State Planning Areas Map, Hardyston Township lies in three planning areas;

- The southwest corner of the Township is located in Planning Area 4, Rural Planning Area;
- An area in the western portion of the Township bordering the Borough of Franklin and Hamburg extending into Lafayette and Sparta Townships is identified as Planning Area 4B and
- The remaining parts of the Township are located in Planning Area 5, Environmentally Sensitive Planning Area.

According to the State Plan, the Rural Planning Area contains most of the State's prime farmland with potential for long-term agricultural viability. It includes wooded tracts, lands with one or more environmentally sensitive features and rural towns and villages. It also includes economic activities such as fishing and mining, support and service businesses and scattered commercial, industrial and low density residential uses. The State Plan also seeks to protect environmentally sensitive features that may be found within a Rural Planning Area.

The Environmentally Sensitive Rural Planning Area 4B is meant to identify productive farmland that also contains valuable ecosystems or wildlife habitats. These areas are supportive of agriculture and other related economic development efforts. Any development or redevelopment planned in this area should respect the natural resources and environmentally sensitive features of the area. The policy objectives of Planning Area 4 should be applied to agricultural activity in Planning Area 4B, but non-agricultural activity in Planning Area 4B should be subject to the Policy Objectives of Planning Area 5.

Planning Area 5, Environmentally Sensitive Planning Area, which covers most of the Borough, contains large contiguous land areas with valuable ecosystems, geological features and wildlife habitats that have remained somewhat undeveloped or rural in character. These areas are characterized by watersheds of pristine waters, trout systems and drinking water supply reservoirs, recharge areas for potable water aquifers, habitats of endangered and threatened plant and animal species, coastal and freshwater wetlands, prime forested areas, scenic vistas and other significant topographical, geological or ecological features. These resources are critically important for residents in the State not only for the residents of these areas. New developments in the Environmentally Sensitive Planning Area should be consistent with Statewide Policies. Existing centers within this area have been and often remain the focus of residential and commercial growth and public facilities and services for their region, as well as supporting the recreation and tourism industries.

The Township of Hardyston, the Borough of Franklin, the Borough of Ogdensburg and the Borough of Hamburg are currently in the center designation process. (See Proposed Regional Center map)

SUSSEX COUNTY MASTER PLAN

The Sussex County Master Plan, which was prepared in 1977, is outdated and no longer reflects the direction of development activities taking place in the County. There has been no updating or revision of the County Plan since it was prepared. In 2000, the County received a Smart Growth Grant from the Office of State Planning to prepare a Strategic Growth Management Plan that is intended to update the existing Master Plan. Since the County is in the process of preparing the draft plan, a comparison of this plan to the County's plan is not viable.

SURROUNDING COMMUNITIES

Hardyston is bordered on its east by Jefferson and West Milford Townships, on the north by Vernon and Wantage Townships, on the west by Lafayette Township and on the south by the Borough of Ogdensburg and Sparta Township. The Township is also bordered by the Boroughs of Hamburg and Franklin.



RELATIONSHIP TO
OTHER PLANS



Borough of Franklin

The Borough of Franklin has adopted a new Master Plan concurrent to this Master Plan. Upon completion of both Master Plans, a third document will be written to reflect an analysis of common issues between the municipalities related to:

- Open space, parks and recreation
- Pedestrian/bike linkages
- Shared circulation issues
- Common infrastructure issues
- Border issues

As the Zoning Ordinances of Franklin and Hardyston are modified to conform to the Master Plans that will be adopted, the compatibility of these zoning ordinances will occur naturally. With the concurrent adoption of Master Plans and Zoning Ordinances, these two municipalities will maintain compatible land uses.

Borough of Ogdensburg

The Borough of Ogdensburg is located south of Hardyston. Ogdensburg lands along this section of Hardyston Township are located in two zones. These zones consist of Public Conservation (PC) and R-100 Residential zone. The R100 and PC zones are compatible uses with Hardyston Township's proposed 10 acre Density Residential zone.

Borough of Hamburg

The Borough of Hamburg is located in the central portions of Hardyston Township. The lands in the Hamburg along this section of Hardyston are located in six zones; Highway Commercial zone (HC), RR Residential/Medium Density zone, I Light Industrial zone, PD Planned Development zone, CR Commercial/Recreational zone and PR Planned Residential/High Density zone. These zones are compatible with Hardyston's Neighborhood Commercial, Golf Course, Residential Commercial, Commercial Recreation, 3,5 and 10 acre Residential zones.

Sparta Township

Sparta Township is also located south of Hardyston. Sparta lands along this section are located in four zones: RR, Rural Residential, RC-2, Rural Conservation/Residential and R-3 Residential zones and C-1H, Commercial/Historic zone. These zones are compatible with Hardyston's proposed 10 acre Density Residential zone and C-1H Commercial/Historic zone.

Wantage Township

Wantage Township is located north of Hardyston. Wantage lands along this section are located in only one zone: R1 Residential zone. This zone is compatible with Hardyston's proposed 10 Acre Density Residential zone and Neighborhood Commercial zones.

Vernon Township

Vernon Township is also located north of Hardyston Township. Vernon lands along this section of Hardyston are located in six zones: LI Light Industrial, CR Commercial/Residential, P Public Land, C Conservation District, R-3 Medium Density Residential and PLC Private Lake Community Residential. These zones are compatible with Hardyston's Commercial Recreation zone, 3,5 and 10 Acre Density Residential zones and Highway Commercial zone.

Jefferson Township

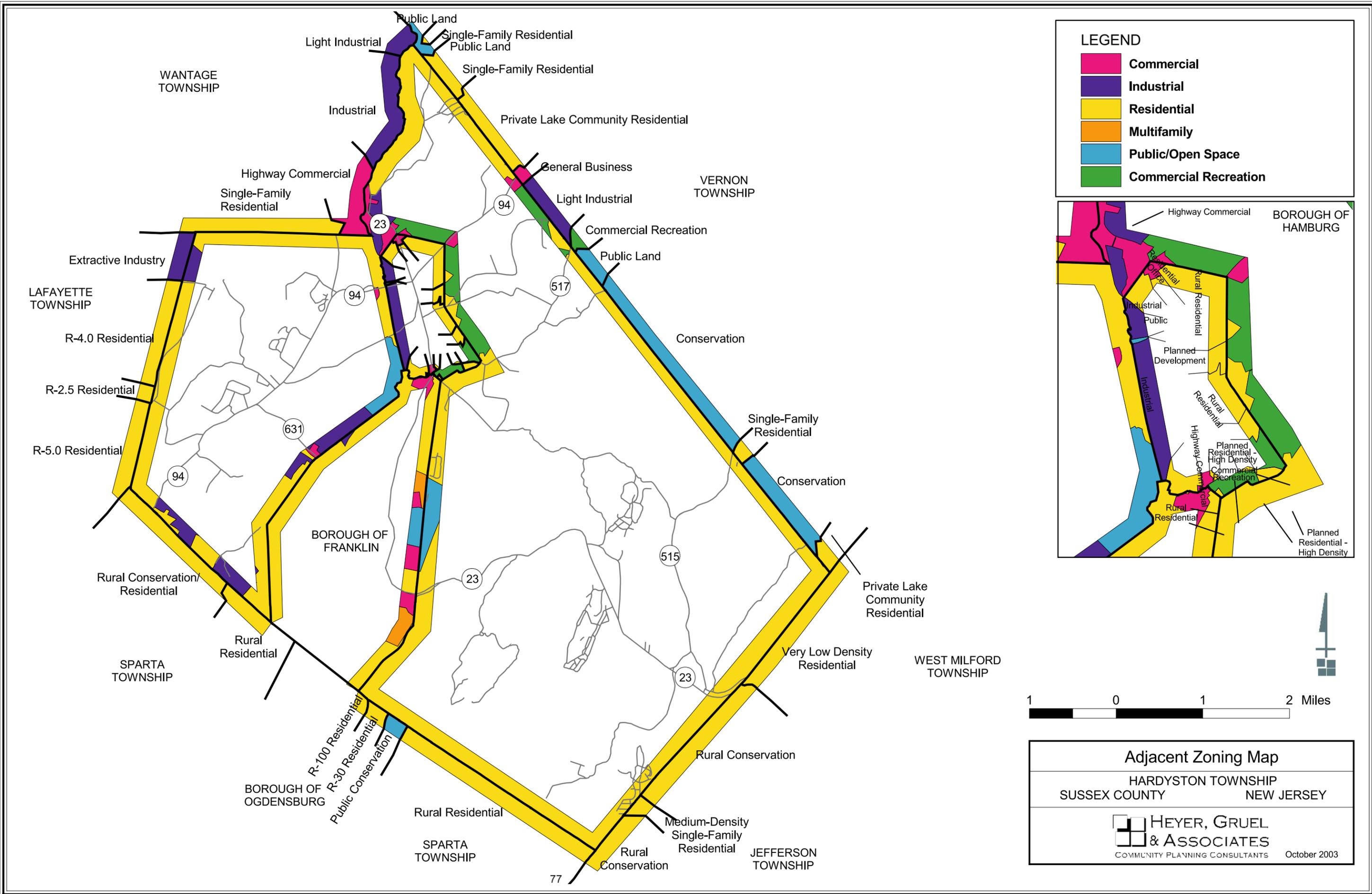
Jefferson Township is located east of Hardyston. Jefferson lands along this section of the Township are located in three zones: C-Conservation, R30 and RR Residential zones. These are compatible with Hardyston's Lakeside Residential and proposed 10 acre Density Residential zones.

West Milford Township

West Milford Township is located east of the Township. West Milford lands along this section of Hardyston are located in only one zone; Low Density Residential. This zone is compatible with Hardyston's proposed 10 acre Density Residential zone.

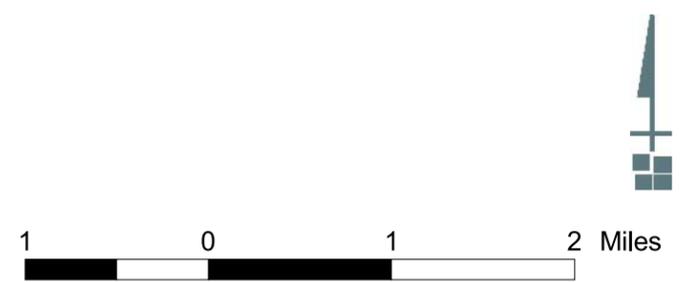
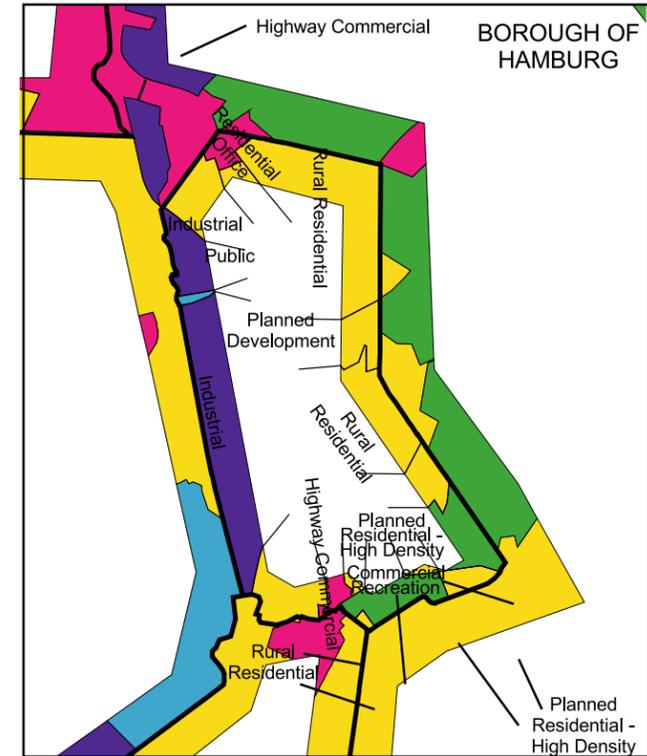
Lafayette Township

Lafayette Township is located west of Hardyston. Lafayette lands along this section of the Township are located in four zones: R-5.0, R-4.0 and R-2.5 Residential zones and EI Extractive Industrial zone. These are compatible with Hardyston's Industrial and proposed 10 acre Density Residential zones.



LEGEND

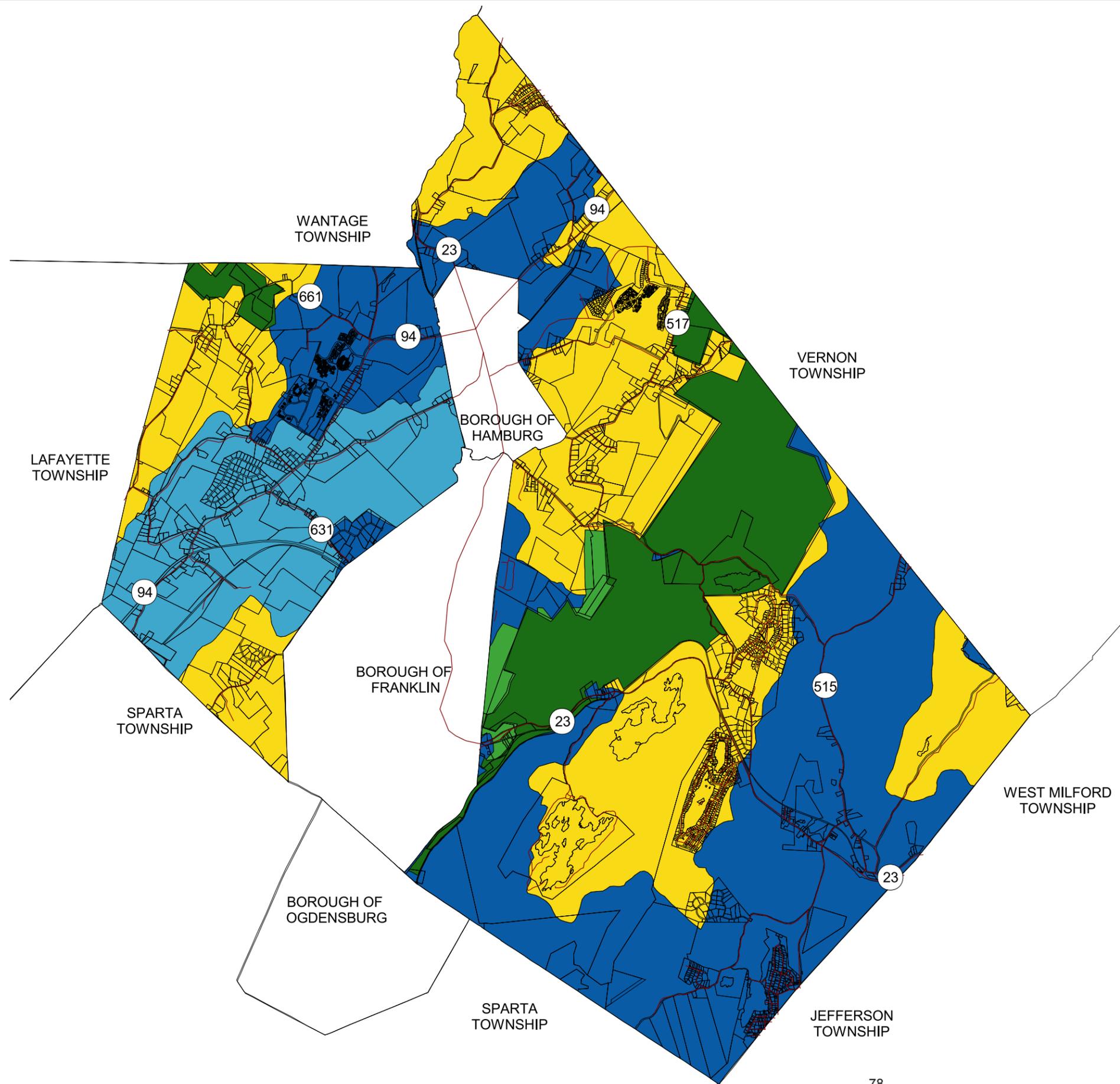
- Commercial**
- Industrial**
- Residential**
- Multifamily**
- Public/Open Space**
- Commercial Recreation**



Adjacent Zoning Map

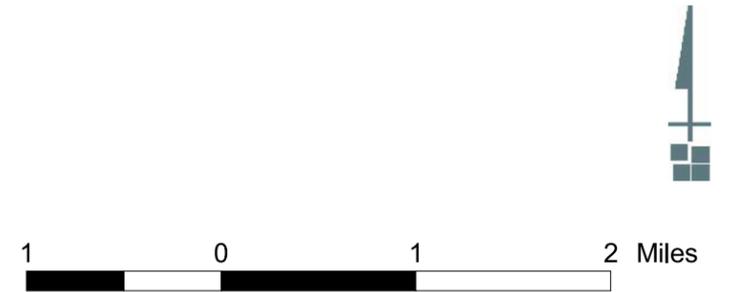
HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

**HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS October 2003



LEGEND

- PA4 - Rural
- PA4B - Rural Environmentally Sensitive
- PA5 - Environmentally Sensitive
- Park
- State Park



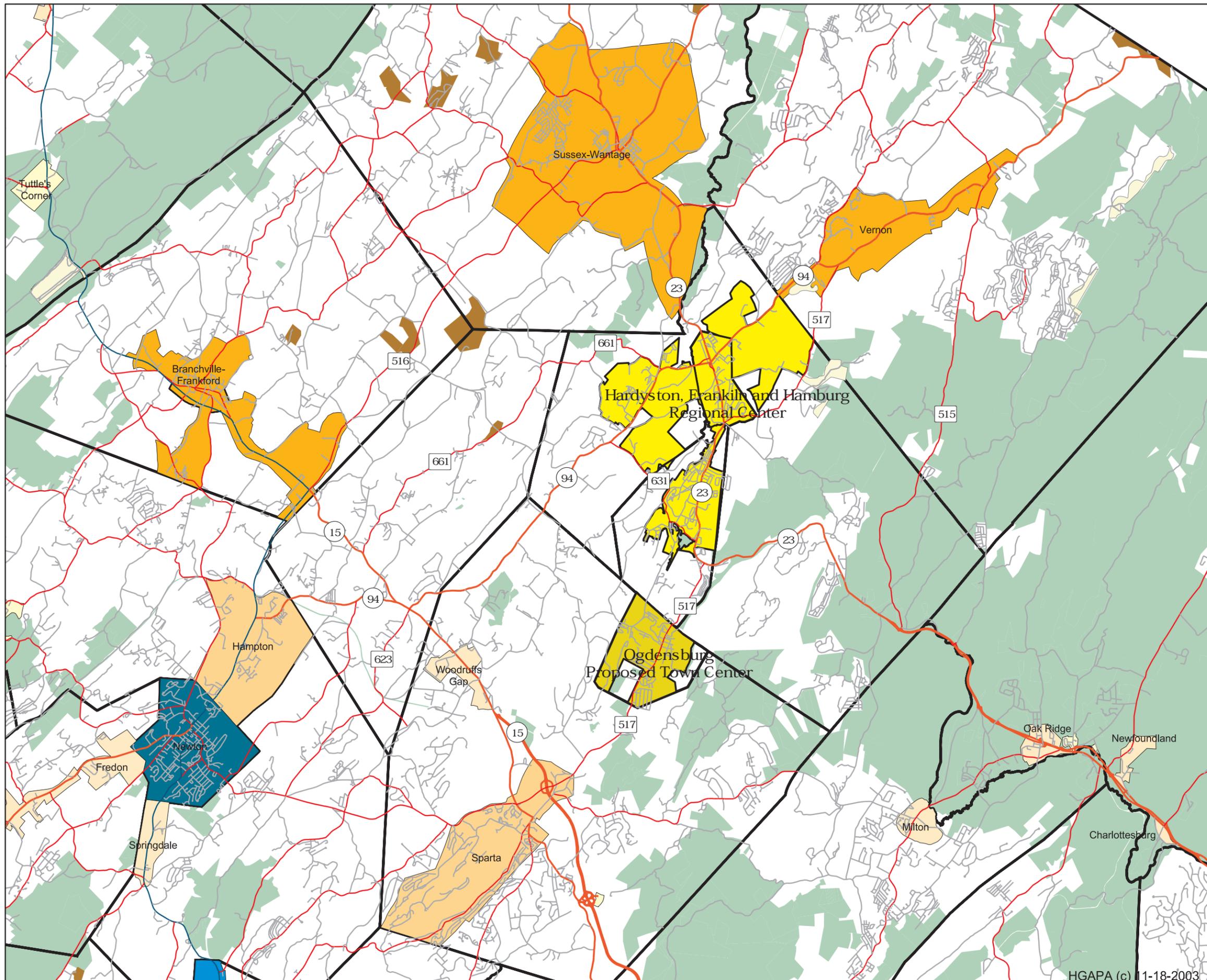
State Planning Areas Map

HARDYSTON TOWNSHIP
SUSSEX COUNTY NEW JERSEY

**HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

October 2003

Walkkill Valley Town Center Designation Sussex County, New Jersey Regional Context with Designated and Proposed Centers



- Walkkill Valley Regional Center Designation Areas**
- Hardyston, Franklin and Hamburg Regional Center
 - Ogdensburg Proposed Town Center
- Existing Center Types**
- Designated Regional Center
 - Designated Town
 - Designated Village
 - Designated Hamlet
 - Proposed Regional Center
 - Proposed Town
 - Proposed Village
 - Proposed Hamlet
 - Urban Center
 - Critical Environmental and Historic Sites
- Preserved Land Designations**
- Preserved Farmland
 - Preserved Open Space
- Road Types**
- County Routes
 - Local Roads
 - State Routes

Miles
0 1 2 3

**HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

HGAPA (c) 11-18-2003



HIGHLANDS REGION

The Highlands Special Resource Area includes seven counties and 90 municipalities all or partly within the Highlands physiographic province used to delineate the Highlands Region. While a region can be defined on physical features alone, the distribution of plant and animal populations may transcend the strictly physical boundaries of physiographic regions. Furthermore, the boundaries of physiographic regions do not necessarily conform to economic regions or political boundaries. Hardyston Township is located in this region, which covers more than two million acres in Northwestern Connecticut, the lower Hudson River valley, northern New Jersey and east-central Pennsylvania. It covers about 1,000 square miles or 1.3% of the State's land area.

The Highlands Coalition prepared a Draft New York/New Jersey Highlands Regional Study, dated March 2002, which identifies numerous challenges and opportunities for this region. Special values of the Highlands Region are as follows:

- A preponderance of sensitive environmental features;
- Sole source groundwater for more than 600,000 Highlands residents;
- Potable water supply for more than 3 million people in metropolitan New Jersey;
- Greenbelt or Environs for the metropolitan areas;
- Extra-regional impacts of local decisions on water resources;
- Amenity value of natural, scenic, historic, cultural and recreational resources

The Hardyston Master Plan is consistent with the goals of the Highlands Regional Study.

RECOMMENDATIONS

- Consider land use policies in light of their impact on the region.
- Promote the designation of Hardyston, Hamburg, Franklin, and Ogdensburg as a "Regional Center".