

IX. CONSERVATION PLAN

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INTRODUCTION

Vernon Township contains an abundance of environmental characteristics that should be protected or given strong consideration during the development process. Its quality of life and unique character are greatly enhanced by its natural resources. The Township has 1,579 acres of the Wallkill National Wildlife Refuge and twelve miles of the Appalachian Trail within its borders. In addition, Vernon's open fields, wooded areas, agricultural lands, and scenic views offer the Township's residents and visitors an undisturbed natural presence within the Township's built environment. Preservation of Vernon's natural assets is one of the primary goals of this Plan.

CONSERVATION PLAN

A brief inventory of the Township's natural resources is provided, followed by specific recommendations to implement the Conservation Plan. Sources of information include the Vernon Township Natural Resources Inventory, the draft Conservation Element prepared by the Township Environmental Commission, the Sussex County Planning Department and the New Jersey Department of Environmental Protection Wetland Regulations. The major natural resources of the Conservation Plan are shown on Map IX-1.

Topography

Topography describes the surface elevations of a place. Vernon's topography is characterized by three topographic types: valley floors, ridges, and plateaus. Valley floors have an elevation of approximately 400 feet. Vernon Valley is the Township's foremost valley, running basically north to south through the Township's center along the Black Creek. Vernon's other major valley is the Wallkill River Valley. The Wallkill River, which is also the Township's western boundary, is the center of this valley. Ridges are long and narrow strips of land that are at a constant elevation, and plateaus are land areas which are elevated above the adjacent land. The

Wawayanda Mountains create the ridge and plateau areas east of Vernon Valley; the Pochung Mountains create similar features in the western portion of the Township.

Vernon's variety of topographic characteristics create an aesthetic beauty distinct to the Township. Some believe that hilly terrain is a more pleasant and attractive living environment than a flat area. Unfortunately, sloping terrain limits land use. It is advisable to make the proper match between land use and slope to avoid costly damage to the environment or to structures and utilities. Detailed knowledge of the soil, bedrock, and drainage, as well as the degree of slope are all factors that should be considered during the subdivision review process. The most severe slope areas have been mapped and included in this element. Their development should be limited by the use of cluster subdivision development.

Vernon Township currently has a critical areas ordinance which excludes environmentally sensitive areas, such as flood hazard areas and steep slopes, from lot and floor plan calculations. However, critical area ordinances similar to Vernon's have been ruled invalid. In response, many New Jersey municipalities have adopted steep slope ordinances that comply with the Manalapan decision. Vernon Township should adopt such an ordinance. A detailed mapping of the Township's slope areas has been completed, which will aid this effort.

Soils

Soil characteristics determine the development suitability and potential land uses. Soil characteristics include slopes, depth to bedrock, depth to seasonal high water and building site development limitations. Major development constraints include soils with a shallow depth to water table and soils severely restricted for septic systems. Vernon Township has a wide variety of soil types all of which are listed in the Township's Natural Resources Inventory.

Soil mining has been, and remains, a prevailing activity which affects the Township's soil quality. Sand, gravel, humus and clay are the main mining products. The Township's clay resources demand special attention and management. The Township's Environmental

Commission recommends that the site plan ordinance be amended to encourage the reclamation of soil mining sites. The Commission also recommends the adoption of an ordinance which regulates clay mining operations in the Township.

Prime Agricultural Land / Farming

The United States Department of Agriculture defines prime farmland as land that is best suited to producing food, feed, forage, fiber, and oilseed crops. Prime farmland produces the highest yield while requiring minimal amounts of fertilizers.

Vernon Township has a long history of farmland operations. Agricultural uses still comprise approximately 5,708 acres or 13 percent of Vernon Township's total land area. The majority of the agricultural land is located in the Vernon Valley floor area, north of the central business district near Route 94. According to data provided by the Township's farming community, the 15 largest of Vernon's active farms produce \$4.4 million of agricultural products annually.

Preservation of the Township's farmland should be a priority. Vernon Township recently began participating in the County's farmland preservation program. Four landowners applied to the Sussex County Agriculture Development Board (SCADB) for evaluation for 1996 funding. The Board selected one of these four to proceed. If this venture is successful, it could be the beginning of a new preservation movement in Vernon. The State makes the final decision on funding for farmland preservation. Several factors are used by the State when ranking farms for funding priority. These include, but are not limited to, soil type, tillable acreage, buffers and boundaries, size of the site, local commitment and adjoining land uses.

Other owners of agricultural properties in Vernon should be encouraged to participate in Sussex County's Farmland Preservation program as it has great potential. Currently, 626 acres of farmland in Sussex County are permanently preserved within the Farmland Preservation Program. The bulk of this land (505 acres) is in Wantage Township, and the remaining 121 acres

are located in Green and Andover Townships. In addition, a 330 acre application in Wantage Township has been approved but a closing has not yet occurred.

The Farmland Preservation Program provides four preservation options to owners of agricultural land. The most popular of the four options is the Easement Purchase Program. This program allows a landowner to voluntarily agree to sell his or her development rights. A permanent deed restriction is placed on the property, which ensures that the property will only be used for agricultural purposes. Property owners of land that is permanently deed restricted continue to pay property taxes. The state, county, and in many instances, the municipality, share the cost of purchasing the easement. Municipalities in Sussex County do not contribute towards purchasing the easement.

The Eight Year Municipally Approved Farmland Preservation Program (MAFPP) and the Eight Year Farmland Preservation Programs are the second and third programs. Property owners accepted into these programs are required to keep their farms in active agriculture for eight years. In return, they may apply for farm management benefits, such as a 50 percent cost sharing on conservation projects approved by the New Jersey Soil Conservation Committee. The land owner may reapply to the program after the initial eight years has expired. Both of these programs provide the property owner with greater protection from eminent domain takings as well as additional "right to farm" protection in situations involving conflicts between farmland and adjacent conflicting land uses. The fundamental difference between these two programs is that the MAFPP requires a municipal ordinance endorsing the landowners enrollment in the program.

The fourth program is the Fee Simple Purchase, in which the farm is sold outright to the state. The state then places permanent deed restrictions on the property to prevent future non-agricultural development. The property is then resold. This is the least frequently used option within the state's Farmland Preservation Program.

The Sussex County Farmland Preservation Program creates an opportunity for Vernon Township and its residents. The Township should encourage more landowners to participate and, perhaps, assist them with the process.

The Township should also recognize the many positive benefits that agricultural activity provides to the Township. They foster Vernon's rural character and provide the town with a different form of open space. Farms are aesthetically pleasing and provide scenic vistas which enhance the Township's charm.

Scenic Vistas

The scenic vistas in Vernon Township are unique and in part establish the rural image and character of the Township. Preservation of the Township's farmland and wooded areas is necessary to maintain these important views.

A scenic vista is a visual panoramic experience from a public area which helps maintain the image of a community by protecting its visual and aesthetic characteristics. Scenic vistas generally include areas with characteristics of community importance such as mature woodlands, historic or cultural resource landmarks or landscapes, unique topographic features, long views and panoramic vistas of a natural or built environment. Vernon's important vistas include its many acres of farmland and the tree line along the Wawayanda and Pochuck Mountains. The Master Plan proposes to preserve these scenic vistas by encouraging easement purchases and cluster and lot averaging development.

Vernon's Zoning Ordinance should be updated to encourage, or in some cases, require these techniques in an effort to maintain the Township's important rural views. The updates should include diagrams of proposed developments to clearly demonstrate the Ordinance's intention. Another possible amendment to the Zoning Ordinance includes increasing the setback requirements for developments on farmland so that the construction occurs farther back from the road, thus leaving the rural view readily visible. Lastly, tree clearing along the ridge line should

be limited so that this tree line, which is one of the Township's most impressive rural views, remains intact. It is recommended that the Township adopt a ridge protection ordinance which would achieve the objectives outlined herein.

Wetlands

A significant amount of the land in Vernon Township contains wetlands. Wetlands are described as land area containing three characteristics: the presence of usually shallow water on the land surface all or part of the year; the presence of distinctive soils which often have a high organic content and are clearly different from upland soils; the presence of vegetation composed of species adapted to wet soils, surface water, and/or flooding.

Wetlands are an important aspect of the hydrologic characteristics of the Township and serve several purposes. They act as a retention basin for floodwaters and prevent various types of water pollution. They support wildlife and distinct plant life species. They also have extreme water recharge potential. In New Jersey, the Department of Environmental Protection regulates wetlands and has mapped their location. The New Jersey Wetlands Protection Act distinguishes three types of wetlands: exceptional value, intermediate value, and ordinary value. Depending on the resource value of the wetland, buffers of 50 to 150 feet are required.

Vernon Township is characterized by a number of wetland areas, identified in the Palustrine Lake (lacustrine), and river (riverine) ecological systems. A major wetland area, locally known as the Vernon Flats, is located within the Black Creek basin. This is an area where the natural resources limit the development potential. The Township may wish to examine the zoning regulations for this area to determine if they are appropriate based on the wetlands in the area.

Flood Plains

Flood plains are low, flat areas located on the sides of a stream channel. They are prone to frequent flooding. Flood plains typically contain either hydric soils (wetlands) or soils with a high water table. Development in flood plains should be limited because of the potential for

flood damage. The master plan delineates flood plains as mapped by the Federal Emergency Management Agency (FEMA).

Water - Surface & Ground Resources

Surface and groundwater resources are a function of geology and topography. Vernon is equally divided between the Highlands Province and the Ridge and Valley Province. The Black Creek Valley provides a rough boundary between these entities. The portion of Vernon in the Highlands Province is comprised of upland ridges and narrow, steep-walled valleys while the Valley and Ridge Province is characterized by gently sloping ridges and wide valleys.

Surface Water Management/ Drainage

Vernon Township is occupied by portions of four watersheds. Theoretically, under natural conditions, a portion of the precipitation which falls in a watershed is eventually routed either as an overland flow or subsurface flow to the surface water bodies which drain the area. The portion of precipitation which does not get routed to the drainage surface water bodies is transferred back to the atmosphere by evaporation.

Surface streams and rivers within the northeastern United States, including Vernon Township, are sites of groundwater recharge. The surface water bodies occupy low points in the land surface and are kept flowing by discharging groundwater and precipitation. Groundwater flows from higher recharge zones, such as Hamburg and the Pochuck Mountains, into lower discharge zones, such as the Wallkill River and the Black Creek. Wetlands and lakes which are also located in lower areas may either be discharge zones or act as flow-through zones in which the wetlands or lake water surface is simply a window into the actual groundwater table surface.

Watershed management is an important aspect of land use planning. Activities which artificially transfer groundwater and surface water from one watershed to another should not be conducted without adequate study of the impacts of such transfers. Proposed development within Vernon should be viewed within the context of the particular watershed where the project is located, the

quality of the receiving waters, and the impact the project would have on downstream property owners and recreation facilities, such as the lake communities.

Vernon Township should monitor development to protect the Flats area and the Wallkill Valley Wildlife Refuge. In addition, the use of Stormwater Quality Detention Facilities and utilization of natural drainage patterns whenever appropriate which would reduce potential non-point source pollution into the surface water bodies, including the lake communities, can be utilized to enhance environmental protection within the Township. Consideration should be given to the utilization of non-structural methods of drainage control such as infiltration trenches and sedimentation basins during construction activities.

Surface Water Supply

Highland Lakes and Lake Wallkill are the Township surface water bodies which provide a water supply for public consumption. Captured precipitation and run-off are the sources of this water. The water supplies from Highland Lakes and Lake Wallkill are reported seasonally and provide approximately 42,900 and 36,300 gallons per day, respectively.

Groundwater Supply

Aquifers are geological formations that contain significant quantities of saturated permeable materials and yield water to wells and springs. Aquifer recharge areas are porous soil or rock formations where water can percolate from the surface into the aquifer as shown on Map IX-2. Protection of aquifer recharge areas assures that the aquifer can continue to yield adequate quantities of water and remain free of contamination.

Any changes in the surface environment, especially those involving land use activity, affect groundwater in some way. In Vernon, groundwater exists in aquifers composed of unconsolidated stratified glacial materials (the Vernon Valley Aquifer) and fractured Precambrian crystalline gneiss (upland regions) and carbonate (low lying valley floors) bedrock. Kame deposits, which also occur in Vernon, are glacial materials and are a less common type of

unconsolidated aquifer characterized by material of coarse sand and gravel suitable for mining. These deposits occur on mountain flanks and act as rapid groundwater recharge zones.

Bedrock aquifers in Vernon can be subdivided into the fractured crystalline and carbonate bedrock aquifers. Groundwater storage and movement in bedrock aquifers are controlled by the occurrence of fractures. Fractures in the crystalline bedrock, which occupies the upland areas, are typically smaller than fractures in the more soluble carbonate bedrock that is typically located on the valley floors. In general, the stratified glacial and carbonate bedrock aquifers are capable of yielding more water, and are more susceptible to contamination than the fractured crystalline aquifer.

The Vernon Valley aquifer is the Township's single source of water. It was declared a sole source aquifer because of its sensitivity to groundwater contamination. The Hamburg, Wawayanda, and Pochuck Mountains are the aquifer recharge zones where rainfall replenishes the groundwater. Based on these sensitive environmental characteristics, the development potential of the Vernon Valley aquifer and its recharge zones should be examined. Special care must be exercised with regard to land use policy and development to avoid contamination of the groundwater supplies upon which the Township depends. Open space maintenance, cluster development and low density zoning are land use policies which could be implemented to protect aquifer recharge areas. In addition, since many areas of Vernon contain soils which pose constraints to septic tank development, it is important that zoning be sufficient to mitigate potential contamination from leakage, as well as from other impacts of development such as surface runoff, pesticides, etc. High density uses or industrial uses should ideally be served by utility systems.

Another method of protecting surface water from pollutants is to require conservation easements along stream corridors. This recommendation is discussed further in the Open Space Element as a method of establishing a greenway system in the Township.

Woodlands & Trees

Woodlands serve many beneficial purposes, including shelter and habitat for wildlife and soil stabilization. In addition, woodlands, vegetation, and trees are necessary to prevent both noise and air pollution as well as prohibiting the pollution of wetlands, streams and rivers from erosion runoff. Vernon Township is comprised of a variety of natural vegetation habits. The mesic upland forest, which is primarily located in the Newark Watershed region, the Wallkill Valley and the Pochuck Mountains, covers the majority of the Township. Removal of the Township's forested areas could result in severe vegetation loss and soil erosion.

The Township Environmental Commission proposed the following recommendations to preserve and protect woodland and forestry resources in the Township.

1. The Township's critical area ordinance needs to be modified. The amended ordinance should limit disturbance on steep slopes. Unmonitored development and subsequent loss of the forests will produce rapid stormwater runoff and severe erosion along with habitat loss. The preservation of the vegetation holding the thin soil cover on the steep slopes is also vital to prevent soil erosion. Special consideration must be used in the commercial/recreation zones where campsites and other recreational activities can negatively impact vegetation and cause severe stormwater runoff.
2. The Township could adopt a Woodland Protection Ordinance which would strictly limit tree removal in residential subdivisions and prohibit significant tree removal without appropriate Township approvals. The Landscaping and Buffers section of Vernon's current Land Use Ordinance provides basic regulations for landscaping on site plan and subdivision developments. However, the regulations are vague and imprecise. For example, the tree planting requirements are only for the open space areas; there are no requirements for subdivisions constructed on farmland or other unforested areas. Developers of such subdivisions should be required to plant trees natural to the area as part of the required landscaping. In addition, the ordinance states that efforts should be made to preserve existing

vegetation and trees. However, developers are not required to preserve a certain percentage of a wooded area.

3. Tree planting along the sides of roads should be encouraged as such enhancements strengthen the Township's rural character. Street trees should be required in all new residential developments at a minimum of 30 - 35 feet from the center of the road. It is recommended that the roadside trees be deciduous hardwoods and meet specific criteria: these trees be cast moderate to dense shade in the summer, be long lived and tolerant of heat and pollution, require little maintenance, not require irrigation for at least two years after establishment, and be of native origin.
4. Tree cutting along roadways should be limited to preserve the wooded view from the roadway unless a traffic safety issue is involved. Tree clearing for utility installations should be kept to a minimum. A maximum clearing width of 10 feet from utilities is recommended and can be implemented through modification of the existing site plan and subdivision ordinances.

Wildlife

Vernon's forest and wetland areas provide a vast range of habitats, which, in turn, promote excellent living conditions for an abundance of wildlife, including rare and threatened or endangered species. Rapid growth of adjacent areas and deterioration of the forest and wetland areas will impact the forest, wetlands and water and hence the balance of the wildlife.

Vernon is also home to resident and migrating birds. The Township's many acres of open fields, including agricultural lands, wetlands, and woodlands encourage a resident bird population. Farm fields and the edges of field shrub habitats provide excellent feeding and breeding areas. Vernon Township also plays a key role in the migration route linking North America to wintering areas of South America. The Wallkill Refuge is a sanctuary for migrating birds as well as endangered and threatened species. The Refuge is discussed in greater detail in the Open Space and Recreation Element.

It is recommended that development applications before the Township Planning Board or Zoning Board of Adjustment provide Natural Heritage data in the Environmental Impact Statement (EIS) on the presence or proximity of rare, threatened and endangered species. The Board members should carefully consider the consequences of waiving the EIS requirement during the review process. In addition, as part of the zoning revision to implement the Master Plan, the EIS requirements should also be reexamined and strengthened where necessary. Where appropriate, specific information should be requested from the New Jersey Department of Environmental Protection and the United States Fish and Wildlife Service .

X. ECONOMIC PLAN

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INTRODUCTION

The purpose of the Economic Plan element is to evaluate the economic stability of a community and determine job and/or industry deficiencies. In order to provide a comprehensive view of the present and future economic development of Vernon Township, county-wide and township-wide economic trends are analyzed. Specifically, employment categories and occupational characteristics were reviewed and commuting patterns are discussed. Future employment projections are also presented. A brief review of current tax revenues is also discussed.

EMPLOYMENT TRENDS AND LABOR FORCE

Vernon Township's labor force commutes to employment centers in Sussex and Morris County and beyond. While the labor force in 1990 consisted of 11,055 persons, the private sector covered employment in the Township consisted of 2,189 jobs. Since 1980, there had been modest growth in this sector with a 284 job increase or 15 percent gain. Further employment growth, therefore, is dependent to a large extent on new job formation in Sussex, Passaic and Morris counties, and other employment centers.

Commuting Patterns

In order to determine future employment sources for the Township labor force, the employment commuting patterns of Sussex County were analyzed. The data indicates that of the total Sussex County labor force 27,667 commuted within Sussex County, 18,619 commuted to Morris County, 4,149 to Essex County and 3,927 to Bergen County.

A review was also undertaken of the Vernon Township workers 16 years and over residing in Vernon but working outside the home by workplace and destination by County. This data was provided by the New Jersey Department of Transportation and indicated the following totals for counties or other political jurisdiction. Within each county the places receiving a number of

employees from Vernon has also been shown. The total labor force commuting from Vernon Township was 10,070.

Table X-1

COMMUTING PATTERNS OF
VERNON TOWNSHIP LABOR FORCE

<u>County or Political Jurisdiction</u>	<u>Number of Employees From Vernon Township</u>
<i>Bergen County</i>	<i>1,443</i>
Mahwah	83
Montvale	77
Paramus	87
Ramsey	83
Teaneck	87
<i>Essex County</i>	<i>679</i>
Fairfield	142
Newark	133
<i>Hudson County</i>	<i>159</i>
Jersey City	83
<i>Morris County</i>	<i>1,428</i>
Butler	68
Dover	73
Hanover	81
Jefferson	136
Lincoln Park	70
Morristown	77
Parsippany-Troy Hills	215
Riverdale	71
<i>Passaic County</i>	<i>1,524</i>
Bloomingdale	80
Clifton	110
Paterson	107
Totowa	122
Wayne	539
West Milford	219

<u>County or Political Jurisdiction</u>	<u>Number of Employees From Vernon Township</u>
<i>Sussex County</i>	<i>3,770</i>
Branchville	101
Byram	161
Franklin	281
Hamburg	231
Hardyston	102
Newton	168
Sussex	603
Vernon	1,755
Wantage	82
New York State	756
Manhattan	333
Warwick	141
Wallkill	23

It is apparent from Table X-1 that the sources of employment for the Vernon Township workforce are well distributed although Sussex, Passaic, Morris and Bergen counties have the more significant commuter share. Excluding Manhattan and vicinity commuters, about 350 persons from Vernon Township commuted to places of employment in southern New York State.

Sussex, Passaic And Morris Counties Employment Projections

The employment projections for the three Counties are provided in Table X-2. The State Department of Labor projects an annual employment growth rate of 1.5 percent from 1990 to 2005 for Sussex County and 1.2 percent for this period for Morris County.

Table X-2

SUSSEX COUNTY¹ INDUSTRY EMPLOYMENT PROJECTIONS
BY MAJOR INDUSTRY SECTOR, 1990-2005

SIC	Industry	Employment				Change: 1990-2005		
		1990	Percent	2005	Percent	Number	Total	Annual
	Total Non-Agricultural	31,800	100	39,500	100	7,700	24.3	1.5
10-14	Mining	300	1.0	300	0.8	0	-2.9	-0.2
15-17	Construction	1,700	5.3	1,900	4.8	200	12.5	0.8
20-39	Total Manufacturing	3,100	9.8	2,800	7.1	(300)	-10.5	-0.7
	Nondurable Manufacturing	2,100	6.6	1,900	4.7	(200)	-11	-0.8
	Durable Manufacturing	1,000	3.2	900	2.4	(100)	-9.6	-0.7
40-49	Transport, Comm., Utilities	1,500	4.7	1,800	4.5	300	18.3	1.1
50-59	Trade	7,500	23.6	9,300	23.6	1,900	24.7	1.5
50-51	Wholesale Trade	1,000	3.1	1,400	3.4	400	35.7	2.1
52-59	Retail Trade	6,500	20.4	8,000	20.2	1,500	23	1.4
60-67	Finance, Insurance & Real Estate	2,300	7.3	3,100	7.8	800	33.3	1.9
70-89	Services	8,500	26.8	12,800	32.3	4,300	49.9	2.7
91-93	Government, Except Education	2,500	7.8	2,500	6.4	100	2.9	0.2
	Education, Public & Private	4,400	13.7	5,000	12.6	600	14.3	0.9

¹ Source: New Jersey Department of Labor, Division of Labor Market and Demographic Research
Projections 2005 Volume 1 Industry and Employment
Projections for New Jersey: Year 2005, September 1994

Table X-3

MORRIS COUNTY¹ INDUSTRY EMPLOYMENT PROJECTIONS
BY MAJOR INDUSTRY SECTOR, 1990-2005

SIC	Industry	Employment				Change: 1990-2005		
		1990	Percent	2005	Percent	Number	Total	Annual
	Total Non-Agricultural	249,200	100	298,000	100	48,900	19.6	1.2
10-14	Mining	400	0.2	400	0.1	0	-8.9	-0.6
15-17	Construction	9,400	3.8	10,800	3.6	1,400	14.8	0.9
20-39	Total Manufacturing	43,500	17.4	40,500	13.6	(2900)	-6.8	-0.5
	Nondurable Manufacturing	24,100	9.7	24,900	8.4	800	3.4	0.2
	Durable Manufacturing	19,400	7.8	15,600	5.2	(3800)	-19.4	-1.4
40-49	Transport, Comm., Utilities	20,300	8.2	24,900	8.4	4,600	22.5	1.4
50-59	Trade	50,800	20.4	63,900	21.5	13,200	25.9	1.5
50-51	Wholesale Trade	15,400	6.2	24,000	8.1	8,600	56.1	3
52-59	Retail Trade	35,400	14.2	39,900	13.4	4,500	12.8	0.8
60-67	Finance, Insurance & Real Estate	24,300	9.8	31,600	10.6	7,300	30	1.8
70-89	Services	65,700	26.4	90,500	30.4	24,800	37.7	2.2
91-93	Government, Except Education	17,500	7	16,800	5.6	(700)	-3.8	-0.3
	Education, Public & Private	17,300	6.9	18,600	6.2	1,300	7.6	0.5

¹ Source: New Jersey Department of Labor, Division of Labor Market and Demographic Research
Projections 2005 Volume I Industry and Employment
Projections for New Jersey: Year 2005, September 1994

The top five Sussex, Passaic and Morris County Industries in terms of employment by the year 2005 are expected to be wholesale trade; services; finance, insurance, real estate; transportation, County utilities. The biggest declines are expected in the manufacturing segment. This is similar for Passaic County which received the second largest share of Vernon Township commuters, as shown in Table X-4.

Table X-4

PASSAIC COUNTY
INDUSTRY EMPLOYMENT PROJECTIONS
BY MAJOR INDUSTRY SECTION, 1990-2005

SIC	Industry	Employment				Change: 1990-2005		
		1990	Percent	2005	Percent	Number	Total	Annual
	Total Non-Agricultural	195,400	100	207,600	100	12,300	6.3	0.4
10-14	Mining	-	-	-	-	-	-	-
15-17	Construction	8,100	4.2	8,600	4.1	500	5.6	0.4
20-39	Total Manufacturing	52,100	26.6	43,100	20.8	(9,000)	-17.2	-1.3
	Nondurable Manufacturing	30,000	15.4	23,900	11.5	(6,200)	-20.5	-1.5
	Durable Manufacturing	22,000	11.3	19,200	9.3	(2,800)	-12.7	-0.9
40-49	Transport, Comm., Utilities	6,500	3.3	6,600	3.2	0	0.4	0
50-59	Trade	47,500	24.3	53,800	25.9	6,300	13.3	0.8
	Wholesale Trade	15,000	7.7	17,500	8.4	2,400	16.1	1
	Retail Trade	32,500	16.6	36,300	17.5	3,900	12	0.8
60-67	Finance, Insurance & Real Estate	10,600	5.4	11,100	5.4	500	4.8	0.3
70-89	Services	43,900	22.5	55,300	26.6	11,400	26	1.6
91-93	Government, Except Education	13,200	6.8	14,300	6.9	1,100	8.2	0.5
	Education, Public & Private	13,300	6.8	14,800	7.1	1,500	11.1	0.7

Occupations And Employment In Vernon Township

The following two tables present the 1990 Census information on occupations and employment by industry for Vernon Township residents.

Table X-5
OCCUPATIONS, VERNON TOWNSHIP, NJ 1990¹

Employed persons 16 years and over	10,507
Executive, administrative and managerial occupations	1,717
Professional specialty occupations	1,513
Technicians and related support occupations	451
Sales occupations	1,327
Administrative, support occupations, including clerical	1,702
Private household occupations	32
Protective service occupations	251
Service occupations, except protective and household	729
Farming, forestry, and fishing occupations	145
Precision production, craft, and repair occupations	1,495
Machine operators, assemblers, and inspectors	374
Transportation and material moving occupations	433
Handlers, equipment cleaners, helpers, and laborers	338

¹ Source: U.S. Census 1990

Review of the table indicates that the largest occupational groups were executives and managers numbering 1,717, administrative and support occupations were a close second with 1,702 while professional specialty occupations were 1,513, and precision production, craft and repair followed with 1,495.

Table X-6

EMPLOYMENT BY INDUSTRIAL CLASSIFICATIONS¹
VERNON TOWNSHIP, NJ 1990

Employed persons 16 years and over	10,507
Agriculture, forestry, and fisheries	174
Mining	26
Construction	891
Manufacturing, nondurable goods	847
Manufacturing, durable goods	960
Transportation	517
Communications and other public utilities	418
Wholesale trade	552
Retail trade	1,683
Finance, insurance, and real estate	840
Business and repair services	574
Personal services	237
Entertainment and recreation services	208
Health services	728
Education services	899
Other professional and related services	535
Public administration	418

¹ Source: U.S. Census 1990.

The retail trade led this employment classification with 1,683 jobs followed by manufacturing (durable goods) 960, education 899, construction 891 and manufacturing nondurable goods 847.

Employment Growth In Vernon

Both tables indicate that Vernon Township has a skilled labor pool which should be a positive factor in attracting prospective industries for the industrial zone. This labor pool presently commutes to Sussex and Morris County jobs. It is recommended that the Economic

Development Committee promote this labor resource of the Township in an effort to attract technical industries and professional office centers to the areas so designated in the Master Plan.

Tax Base Analysis

The majority of the Township tax base is residential as shown in Table X-7. This is logical given the Township residential growth over the last 30 years. The next largest category is commercial with a Tax value of \$129,565,466 which would also include the commercial recreation facilities. Vacant land with a tax value of 94,181,800 and farms (regular) with a tax value of 25,562,000 also indicated a significant contribution.

Table X-7

AGGREGATES OF TAXABLE PROPERTY

Real Property Classification Summary

		<u>Items</u>	<u>Tax Value</u>
1.	Vacant Land	3,239	94,181,800
2.	Residential	9,661	1,124,110,000
3A.	Farm (Regular)	154	25,562,000
3B.	Farm (Qualified)	211	1,640,010
4A.	Commercial	284	129,565,466
4B.	Industrial	20	7,762,400
4C.	Apartment	3	1,117,700
	Total Class 4A, 4B, 4C		138,445,566
	Total All Classes		1,383,939,376

Table X-8
REAL PROPERTY CLASSIFICATION SUMMARY
Vernon Township

	1990 <u>Line Items</u>	<u>Tax Value</u> (In Dollars)	<u>% of</u> <u>Total</u>	1995 <u>Line Items</u>	<u>Tax Value</u> (In Dollars)	<u>% of</u> <u>Total</u>	1990-1995 <u>Increase (%)</u>
1. Vacant Land	3,816	53,980,302	7.50	3,239	94,181,800	6.80	57.3
2. Residential	9,146	572,362,462	79.57	9,661	1,124,110,000	81.23	50.9
3. Farm (3A & B)	355	15,542,086	2.16	365	27,202,010	1.97	57.1
4A. Commercial	276	73,606,151	10.23	284	129,565,466	9.36	56.8
4B. Industrial	18	3,798,300	0.53	20	7,762,400	0.56	48.9
4C. Apartments	3	<u>488,000</u>	<u>0.01</u>	3	<u>1,117,700</u>	<u>0.08</u>	43.6
		719,277,301	100		1,383,939,376	100	

Source: Vernon Township Tax Assessor

A comparison was also conducted of the changes in the tax base from 1990 to 1995. This is shown in Table X-8. As indicated, there has been an increase in the number of items and tax value for all real property classifications since 1990, except for vacant land which declined in line items but increased in tax value. The largest increase in tax value occurred in the residential category followed closely by the commercial category.

The aggregate of taxable property value was then compared to a percent of total taxable property as shown in column 3 and 6 of Table X-8. For the current decade from 1990 to 1995, the percent distribution of tax value by land category indicated that residential has continued to be the largest contributor to the tax base with 81.23 percent and commercial and the second largest contributor with 9.36 percent. Also, the residential category increased slightly at a rate of 0.33 percent per year or from 79.57 percent in 1990 to 81.23 percent in 1995.

This distribution remained constant because the community continued to experience residential growth during the 5 year period but the commercial section also grew with eight new line items and an increase assessed value of \$55,959,315. As a general rule, commercial development will usually follow population growth and given the Township's rapid population growth during the last 20 years, retail and office professional services are now entering Vernon Township in response to this population growth.

The Master Plan recognizes this trend and has retained the office professional zone and the C-2 zone which still has ample room for additional development. Also, both C-2 zones have been included in the "center" designation in accordance with the State Plan regulations which would permit utility expansion into these areas which should foster further commercial development. The Master Plan encourages the growth of industrial, commercial and office professional growth in order to provide for jobs and services and also to contribute a larger proportion of ratables to the tax base of the community.

**XI. HISTORIC
PRESERVATION PLAN**

XI. HISTORIC PRESERVATION PLAN

INTRODUCTION

Vernon Township has a rich history, consisting of prehistoric activity, Native American settlements, mining operations and colonial settlements. On November 19, 1792 the New Jersey State Legislature approved the separation of Vernon Township from Hardyston Township. The act became effective on April 8, 1793.

THE HISTORY OF VERNON TOWNSHIP

The exact dates of the first settlements in the Vernon area are unknown. However, Vernon also has its share of evidence of prehistoric human activity found within geologic formations, such as caves, sink holes, mine shafts, and caverns. Native American populations inhabited some of the older caves and it is believed that the more recent caves may be attributable to the limestone quarrying operation which occurred in McAfee in the nineteenth century.

NATIVE AMERICAN SETTLEMENTS

The Native Americans who inhabited the Vernon Valley area were nomadic tribes. They traveled through the region following their food source in order to survive. Remnants of their existence, such as arrowheads, pottery and cemeteries are still present in the Township, although the specific locations of these objects may not reflect their origin due to movement of artifacts by flood water activity.

Vernon Township's Planning Board should be cognizant of the location of these geologic sites within the Township. The historic sites map which locates these significant remains of human activity are included for use by the Planning Board. The subdivision and site plan ordinances should be amended so that these areas are preserved during the development process; perhaps these sites could one day be included in the open space network.

LIME, LIME KILNS, AND THE LIMESTONE INDUSTRY

Lime manufacturing was an important industry in Vernon as there was plenty of lime in the region. At one time, every farm in Vernon had a lime kiln. The largest commercial lime kiln operation was located in the village of McAfee behind the McAfee Church.

Lime is a soft material and can be obtained by using a drill or a chisel and hammer. When the limestone is broken into smaller pieces, it is brought to a nearby kiln. Kilns were typically built into the hillside so that the apex was readily accessible. Workers were then able to drop the limestone into the kiln along with wood and brush for a hot fire.

The early residents used lime for a variety of tasks. It decreased the acid in the soil where manure had been used, it was used to whitewash buildings, and it was used in the tanning process. The quarrying and burning of limestone became big business in 1872, a year after the railroad was established in McAfee.

THE IRON MINES

Iron mining was also a major industry in Vernon. Between 1700 and 1900, approximately 400 underground iron mines were opened in New Jersey. Fifteen of these mines were located in Vernon Township. During the 1880's the iron market experienced a boom which greatly increased prospecting for iron ore. In fact, many of Vernon's farms were explored. However, some of the sites categorized as mines yielded little or no ore.

New Jersey was a main iron ore producer for the region until 1900 and this mining activity led to economic prosperity for the region. However, the demand for iron ore declined at the beginning of this century, and many of Vernon's mines were closed and abandoned by 1900. A remnant of the iron mining era exists in Wawayanda State Park. A well preserved stone iron ore furnace which was built by the Ames Brothers in 1846 is located in the park.

EARLY SETTLEMENTS

Vernon Township's early settlements were comprised of scattered, self-sufficient hamlets and villages. Many of these settlements disappeared over time although their names remain familiar. For example, Wawayanda was originally a mining community known as Double Pond. It is believed that Wawayanda is an Indian word which means "winding way". Another example is the Pochuck settlement, which was named in honor of a local Indian chief.

However, some of Vernon's early settlements prospered and grew over the years. In particular, Glenwood, McAfee, and the village of Vernon prospered and survived more so than the others. Further detail is provided on these three communities to provide a historical overview of Vernon.

Glenwood

Some of Glenwood's earliest deeds date back to 1764. The first schoolhouse was built in 1795, and the first mill was built in the early 1800's. Jacob Dodder constructed a sash and blind factory and built a planing mill in 1830.

A Methodist and Baptist Church were present in Glenwood by the mid nineteenth century. A schoolhouse, grist mill, turning shop, saw mill, wagon shop, two blacksmith shops, creamery, general store and a distillery were also present during this time period.

McAfee

McAfee's earliest deeds date back to 1826; the village was known as West Vernon at that time. In 1845 Dr. Allen, a physician, settled in the village. In 1851 Stephen Smith built a tavern. In 1860 William Simpson rebuilt the blacksmith shop. Mr. Simpson also constructed a store across the road from the blacksmith shop in 1856. A shoe shop, a wheelright shop, a harness shop and a cooper shop were also present during this time. Then, in 1873, Mr. Simpson built a hotel.

Eventually McAfee became the end of the Warwick Valley and the Sussex Railroads. Both rail lines maintained a depot and a station in the village.

The White Rock Lime and Cement Company was established in 1882. One year later the McAfee kilns were producing 35 barrels of lime per day for chemical and manufacturing uses, and 25 bushes for agricultural uses.

The Village Of Vernon

The initial settlement of the village is unclear. By 1840 it was home to 200 residents and contained three stores, two blacksmith shops, two wheelright shops, a grist mill and two cheese factories.

HISTORIC SITES

Vernon's history began in prehistoric times. Thus, the Township has many historic sites, remnants and landmarks. However, the Barrett Farm is Vernon's only site that is on the New Jersey and National Registers of Historic Places. It is recommended to catalogue the historic places and prioritize the need for preservation.

Vernon Township's 1970 Master Plan promoted an evaluation of all historic sites as well as recommendations of those most deserving preservation, which, in turn, prompted the completion of a historic sites survey. In 1992, the historic sites survey was updated and expanded to a list of 50 historic sites recommended for preservation. This list is provided in the Historic Element which Dorram Associates, Inc. prepared but was not adopted by the Vernon Township Planning Board. The Historic Element prepared by Dorram Associates also provided a listing of 116 sites in the Township. These lists may be useful references for the Township in its historic preservation efforts. Map XI-1 shows the location of these 116 historic sites and Map XI-2 shows the location of the Township's 103 historic homes. The maps show that these historic treasures are evenly located throughout the Township thus providing Vernon with a historic flavor and character.

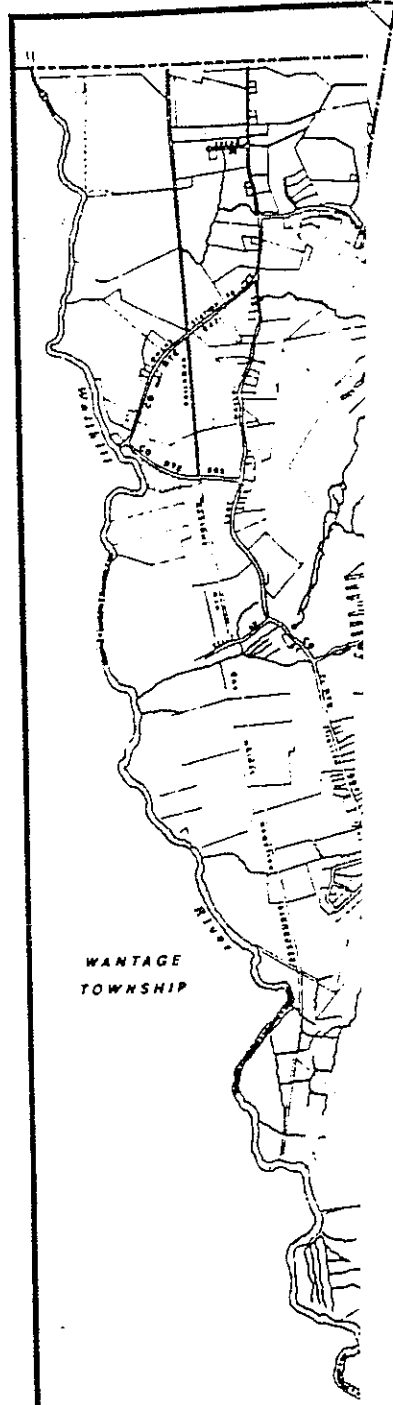
The following list of seventeen sites are those most in need and deserving of identification and evaluation by a Historic Commission. The location of these sites is depicted on Map XI-3.

1. **Glenwood Store/ Post Office:** Block 22, Lot 3/ Route 565. This structure was used as a post office from 1868 until July 26, 1975, when a post office was established in North Vernon.
2. **Glenwood Grist Mill:** Block 22, Lot 1.01/ Route 565. This is the only remaining operable grist mill in the Township although this property currently serves as a private dwelling and an antique shop. This mill was built in 1805.
3. **Edsall-Drew Homestead:** Block 31, Lot 9/ Prices Switch Road. The slave quarters from this homestead remain in the basement.
4. **Edsall Homestead:** Block 32, Lot 6/ Prices Switch Road. Richard Edsall built the rear section of the homestead, which contains one room and a loft, circa 1731. These rooms have been maintained in their original condition.
5. **School House:** Block 33.01, Lot 11. This school museum was the last one-room school used in Sussex County. This school was originally located on Route 94.
6. **Wawayanda Iron Furnace:** Block 101, Lot 1. Ames Brothers built the furnace in 1846-1847. Green Acres owns this structure, which is the only remaining furnace in the Township.
7. **Kampe Post Office:** Block 150.17, Lots 2-12/ Cherry Ridge Road and Canistear Road intersection. This property, which may date back to the 1700s, was used as a general store, post office and boarding house.
8. **Sea Captain's House:** Block 145, Lot 2/ Route 515. Sea Captain William Vibbert built this house in 1817. Captain Vibbert unfortunately drowned off Sandy Hook, New Jersey in a ship wreck on December 22, 1819. Ross Winans invented a miniature steam engine on the

third floor of this house. Dr. Edward Livingston, who co-authored a book on cancer with Dr. Pack, also lived here.

9. **First Stage Coach Stop:** Block 145, Lot 4. This building was constructed around the time of the Revolution. This was the Township's first stage coach stop, inn, and tavern and served as the Township's first post office. The stage coach stop was originally known as the White Horse Inn.
10. **Boyd Family Homestead:** Block 145, Lot 6/ Routes 94 and 515. This property was Vernon's first library and is now a legal office.
11. **Railroad Station:** Block 140, Lot 6/ Vernon Crossing Road. The station was built in 1880-1881. The Wawayanda Railroad Company acquired the property on March 15, 1880.
12. **St. Thomas Episcopal Church:** Block 148, Lot 4. Located on Route 94, this is the oldest church standing in the Township although not the first built in the Township.
13. **Perry Homestead:** Block 183, Lot 15/ Route 94. Joseph Perry constructed this house in 1740. This remains one of the oldest houses in Vernon although it is not the first house that was constructed in the Township.
14. **Lime Kilns:** Block 231, Lot 1 (approximately)/ Intersection of Routes 94 and 517. The kilns are located in the rear of the McAfee Union Church in McAfee.
15. **Crabtree Corners:** McPeck Road and Route 517 intersection. This property has gained considerable attention as a result of reported "hidden treasures" there. Tradition has it that a British officer hid his gold here and never returned to claim it. A wheelright was located at this property, which dates back to pre-Revolutionary Times.
16. **Trading Post:** Block 171.17, Lot 6/ Route 565. This building, which was built in 1760, was said to have been used as a trading post.

MAP XI-3



Legend

1. Glenwood Store/Post Office
2. Glenwood Grist Mill
3. Edsall-Drew Homestead
4. Edsall Homestead
5. School House
6. Wawayanda Iron Furnace
7. Kampe Post Office
8. Sea Captain's House
9. First Stage Coach Stop
10. Boyd Family Homestead
11. Railroad Station
12. St. Thomas Episcopal Church
13. Perry Homestead
14. Lime Kilns
15. Crabtree Corners
16. Trading Post
17. Sleepy Hollow Complex

Source: - Dorram Associates, Inc. - 1992.
Historic Sites Survey by:
J. Sweetman & C. Ryerson Jr. - 1978 & 1992.

**Historic Sites for
Preservation**

Vernon Township
SUSSEX COUNTY, NEW JERSEY
Prepared by: Moskowitz, Heyer & Gruel, PA - 1995

- BASE MAP PREPARED BY DORRAM ASSOC
- REVISED BY MOSKOWITZ HEYER & GRUEL
- REVISIONS BASED ON TOWNSHIP TAX MAP

17. **Sleepy Hollow Complex:** Block 171.01, Lot 1/ Sleepy Hollow Road and Lake Wallkill Road. The homestead on this property was constructed circa 1786. The former carriage house and mills still remain.

HISTORIC PRESERVATION COMMISSION

The Municipal Land Use Law provides the procedure for the establishment of a Historic Preservation Commission and details the commission's responsibilities. Vernon does not have a historic preservation commission although it does have the Vernon Historical Society. The Township Administration and Committee may wish to discuss the establishment of a Vernon Historic Preservation Commission to further the Township's preservation efforts.

XII. RECYCLING PLAN

XII. RECYCLING PLAN

INTRODUCTION

As the State's landfills are reaching capacity, solid waste collection, processing and disposal in New Jersey have reached a critical stage. While landfill technology has made advances in recent years, the environmental problems associated with landfills, such as leachate, methane gas and water contamination still pose problems. Alternatives to landfills, such as incineration, also have significant environmental impacts. New landfills are difficult to locate because of strong community opposition and they are expensive to finance because of costly environmental mitigation requirements. Recycling of solid waste materials is essential to reducing the solid waste stream to landfills and preserving the environmental quality of the State.

In response to these environmental concerns, the New Jersey Statewide Mandatory Source Separation and Recycling Act was passed in 1987. Furthermore, the Municipal Land Use Law mandates that municipalities include a Recycling Element in their Master Plans. This element incorporates the State's recycling goals for solid waste.

RECYCLING IN VERNON

Vernon Township adopted a recycling ordinance in March of 1988 which established a mandatory program for the separation of designated materials for collection, disposal and recycling. The ordinance sets forth the type of material to be recycled and the method of removal. All recyclable materials are either brought to the recycling center or deposited through private collection services.

Recyclables are collected at the recycling depot on Church Street. The Township collects newspapers, magazines, junk mail, glass, cardboard, tin and bi-metal cans, office paper, dairy jugs, leaves and, on Saturday only, used motor oil. An informational pamphlet which details the

Township's recycling services is available at the Municipal Building. The Township also has a designated recycling coordinator.

SOLID WASTE COLLECTION

Solid waste in Vernon is collected by private haulers contracted by individual homeowners, businesses and lake communities. The waste is hauled to the Sussex County Municipal Utilities Authority (MUA). The landfill at the Sussex County MUA is expected to reach capacity by the year 2014.

RECOMMENDATIONS

In addition to municipal recycling ordinances, localities are also required to adopt regulations which guarantee that future development is designed to accommodate the recycling of solid waste. As required by the Municipal Land Use Law, Vernon Township's site plan and subdivision ordinances should be amended to require development applications for construction of 50 or more single family units or 25 or more multi-family should provide for the collection, disposition and recycling of recyclable materials. Similarly, commercial or industrial development application for construction of 1,000 square feet or more of building space should provide for the collection, disposition and recycling of recyclable materials.

XIII. COMPARISON WITH OTHER PLANS

INTRODUCTION

The Municipal Land Use Law requires that all municipal master plans consider the relationship of the master plan to plans of contiguous municipalities, county plans, and the New Jersey State Development and Redevelopment Plan (SDRP). The intent is to coordinate planning and land use activities among communities and to reduce potential conflicts. This element reviews the zoning ordinances of the municipalities bordering Vernon Township, as well as the Sussex County Land Use Plan and the SDRP.

COMPARISON TO ADJACENT MUNICIPALITIES

For the most part, the Vernon Township Master Plan is substantially consistent with the land use patterns in adjacent municipalities. This section compares the zoning of municipalities that are adjacent to Vernon Township with this edition of the Vernon Township Master Plan. West Milford, Wantage, and Hardyston Townships are the New Jersey municipalities which are contiguous to Vernon. Warwick Township in New York State borders Vernon to the north.

West Milford Township

Generally, the land uses recommended in this Master Plan are consistent with West Milford's zoning. The bulk of the land in Vernon along the West Milford border is either in the Wawayanda State Park or the Newark Watershed. The land in the park will never be developed and this Master Plan recommends that the land in the watershed be rezoned to a very low density residential use. The most recent update to the West Milford Zoning Ordinance was in 1994. The zoning map which was also updated at that time indicates that the majority of the land in West Milford is zoned R-4, which is a very low density residential use and is consistent with the corresponding land uses in Vernon Township.

A small area in Vernon along the West Milford border is neither located in the park nor in the Newark watershed. This area is recommended for a low density residential use in the Land Use Element of this Master Plan. This area generally conforms to the permitted land uses in the corresponding area in West Milford. In West Milford, the corresponding area contains three zone districts. The first district is the R-4 low density residential zone. The second district is the R-2 zone, which permits moderate density residential development. In addition, the R-2 zone has a special overlay district in which moderately priced housing or least cost housing is permitted. Lastly, a small area along the border is also zoned for NC, which is a neighborhood commercial use.

Wantage Township

The Wallkill River and the Wallkill River National Wildlife Refuge form the common boundary between the two municipalities.

Hardyston Township

Hardyston Township borders Vernon to the south. The portion of Vernon along the municipal border is mostly residential or an environmentally sensitive region that requires conservation. In general, the land uses proposed in the Vernon Township Master Plan conform to the existing zoning in Hardyston Township. The portion of Hardyston adjacent to the Newark Watershed is in a Minimum Impact Development District (MIDD). This zone is consistent with the low density use recommended for the watershed area. There is a very small area west of the MIDD zone that is zoned R-2, which is a rural residential zone. This, too, conforms to the corresponding residential use in Vernon.

Route 94 in both Hardyston and Vernon Townships is zoned for commercial use. The area of Hardyston west of Route 94 is primarily zoned R-2; this is consistent with the low density use proposed in Vernon Township. Both municipalities also have lake communities in this area. The area immediately east of Route 94 is zoned for industrial use in both municipalities. The Hamburg Mountain Wildlife Management Area, which is located in both Vernon and Hardyston,

is east of the industrial areas. This portion of Hardyston is zoned for Commercial Recreation (CR) use. The CR zone is basically an R-2 zone in which specific commercial recreation uses are permitted. Like the CR zone in Vernon, the permitted recreational uses are limited as are the possible sites appropriate for commercial recreation use. The limited nature of the CR zone supersedes any need for concern over conflicting land uses in the CR zone and the wildlife management area.

Warwick Township

Warwick Township borders Vernon to the north. Some of the land in Vernon along the border is State or Federal parkland. This Master Plan proposes that the remainder of the land in Vernon along the border be zoned for low density residential use. Specifically, three acre minimum lot sizes are recommended. This is consistent with Warwick's current zoning. The area in Warwick along the Township's border is also zoned for low density residential use. Minimum lot sizes range from two to four acres. Lastly, agricultural uses are also permitted in Warwick on certain areas along the border.

Highland Lakes

The Highland Lakes Country Club Association, a private lake community in Vernon Township, has prepared its own Master Plan. The Municipal Land Use Law does not require that a municipality compare its Master Plan to private communities' plans such as Highland Lakes. However, the Planning Board recognizes the effort made by Highland Lakes to compile their plan and it has been utilized when preparing policy statements pertaining to Highland Lakes, and in a broader sense, the other lake communities. For example, Vernon's Master Plan recommends the creation of a new zone district for the Township's lake communities. Currently, the lake communities are in zone districts that are more suited to conventional housing. As a result, many of the properties are nonconforming in nature and variances are often required for simple improvements. Creating a zone that has bulk regulations more suited to the types of homes in lake communities will reduce the number of nonconforming properties and, likewise, variances.

In addition, this Master Plan stresses conservation of the Township's natural resources. Policy recommendations have been regarding development in critical areas, such as wetlands, steep slopes and aquifers. The Highland Lakes community is aware of the possible negative effects of such development and has expressed these concerns in its Master Plan. This information was utilized while preparing Vernon Township's Master Plan. Therefore, the Vernon Township Master Plan is consistent with the Highland Lakes Master Plan.

SUSSEX COUNTY MASTER PLAN

The Sussex County Planning Department is in the process of preparing a new County Master Plan which will be completed in 1996. The current Sussex County Master Plan was prepared in August of 1977. It is difficult to determine the level of consistency between the Vernon Township Master Plan and the Sussex County Master Plan since the County Plan is almost 20 years old.

Plate 14 of the 1977 Sussex County Master Plan details the 1990 future land use plan. This map shows the Wawayanda State Park and the Newark Watershed as recreation and conservation areas. In addition, the exhibit shows most of Vernon as having either rural development or suburban development.

NEW JERSEY STATE DEVELOPMENT AND REDEVELOPMENT PLAN (SDRP)

Vernon Township's Master Plan is substantially consistent with the plans and policies of the SDRP. The SDRP was adopted on June 12, 1992. The plan's preparation process compared the planning policies among various government levels with the purpose of attaining compatibility among local, county, and State plans.

Centers

The SDRP emphasizes center-oriented development patterns that create "communities of place." Centers are compact forms of development to which growth and development should be geared. They deplete fewer natural resources compared to typical sprawl development. Each center

should have a core of services and an area surrounding the core defined as a "Community Development Boundary," which is the geographic limit of planning for development of the Center. Land outside the Centers' community development boundaries contains the environs of the Centers. The SDRP recommends that the environs be protected from development and any negative effects it may have.

The philosophies of the SDRP reflect the goals and objectives of the Vernon Township Master Plan. Specifically, Vernon's Master Plan promotes the conservation of natural resources, retaining the Township's rural character, and recognizing existing growth areas.

The SDRP identified 16 existing Centers in Vernon. One is classified as an existing Regional Center, four are classified as existing Villages, and eleven are classified as existing Hamlets. A description of these Center classifications as well as a listing of the Centers in Vernon are as follows.

Regional Centers

According to the State Plan, Vernon itself is an existing Regional Center. In rural areas, Regional Centers often are population cores and county seats. While Vernon is obviously not Sussex County's seat, it does have small business districts that serve its residents, another trait of Regional Centers. Having the entire community designated as a regional center is inconsistent with the goals and policies of the State Plan. Therefore, the Master Plan recommends two centers as follows: The Vernon Center which would be a community commercial and town center and a two core regional center containing the regional commercial recreation facilities and the McAfee mixed use center.

Villages

Villages are compact communities that provide basic consumer services for their residents and nearby residents. Villages are primarily residential in use and typically do not provide regional

shopping or employment services. The SDRP identified Glenwood, Highland Lakes, McAfee, and Sussex Hills as the existing Villages in Vernon Township.

Hamlets

Hamlets are the smallest sites eligible for Center designation. Many existing hamlets are found in rural communities, often at crossroads. Hamlets are chiefly residential, but they have a small core where limited services are available. The SDRP identified Barry Lakes, Cliffwood Lake, Drew Lakes, High Breeze, Lake Conway, Lake Glenwood, Lake Panorama, Lake Wallkill, Pleasant Valley, Tall Timbers, and Vernon Valley Lakes as the existing Hamlets in Vernon Township.

The SDRP recommends that municipalities formally designate centers in their communities. As was discussed in the Land Use Element of this Master Plan, two centers are proposed for designation in Vernon Township: the McAfee Center and the Vernon Center. The proposed locations of the two centers have been delineated on the Land Use Element map.

Center Designation Process

The SDRP recommends that municipalities formally designate centers in their communities. Any interested party, such as a municipality, private organization or concerned citizen, can apply to the State Planning Commission for formal Center designation. As was discussed in the Land Use Element of this Master Plan, two centers are proposed for designation in Vernon Township: the McAfee two core Center and the Vernon Center. The proposed location of the two centers have been delineated on the Land Use Element map. It is recommended that Vernon Township proceed with the designation process.

Planning Areas

The SDRP allocates land into five main categories known as Planning Areas. Vernon Township contains two different planning areas, including the Rural Planning Area (PA4), and the Environmentally Sensitive Planning Area (PA5). In addition, Vernon contains the Rural

Environmentally Sensitive Planning Area (PA4B), a "subplanning area". Map XIII-1 identifies the planning areas for Vernon Township. The type of low density residential uses as well as the attempts to conserve land and maintain rural character is consistent with the planning area designations that the SDRP assigned to Vernon Township.

Planning Area 4

Planning Area 4 contains most of the State's farmland with potential for long term agricultural viability. It may also include lands related to other economic activities such as fishing and mining. The intent of PA4 is to maintain large masses of prime agricultural farmland interspersed by sparse residential, commercial and industrial development; wooded tracts and rural towns and villages. Within PA4 is a "subplanning area" identified as Planning Area 4B which is the Environmentally Sensitive Rural Planning Area. This subplanning area is meant to identify productive farmland which also contains valuable ecosystems and wildlife habitats. Land area in subarea 4B is considered part of PA4 until the land changes from an agricultural use and is developed at which time it becomes part of PA5.

Planning Area 5

Planning Area 5 has large contiguous land areas with valuable ecosystems and wildlife habitats. These lands have remained somewhat undeveloped and rural in character. They are characterized by watersheds of pristine waters, trout streams and drinking water supply reservoirs, recharge areas for potable aquifers, habitats for endangered or threatened plant or animals species, coastal and freshwater wetlands, prime forested areas, scenic natural landscapes, and other significant topographical, geographical, or ecological features. These resources are critically important not only for the residents of Vernon Township, but for all New Jersey citizens. The future environmental and economic integrity of the State rests in the protection of these irreplaceable resources. Therefore, the main intent of the PA5 Environmentally Sensitive Planning Area is to protect these critical natural resources and maintain the balance of ecological systems while providing for beneficial growth.

Lastly, the Appalachian Trail, the Wallkill River Wildlife Refuge, the Hamburg Mountain Wildlife Management Area and the Wawayanda State Park are identified as parks on the Planning Areas Map.

In general, the SDRP recognizes the environmentally sensitive nature of the land areas along the West Milford border. These areas consist of the Newark Watershed lands and the Wawayanda State Park which are all in PA5 and PA8. The portions of the Township that either have a public water and sewer system or have been the subject of recent residential development are in PA4.