

OPEN SPACE & RECREATION PLAN

HOPEWELL TOWNSHIP Cumberland County, New Jersey



Prepared by:

**Hopewell Township
Environmental Commission**

**Final
October 2011**



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PUBLIC MEETINGS

All regular meetings of the Hopewell Township Environmental Commission and are open to the public. This Open Space and Recreation Plan (“OSRP”) was discussed at numerous Environmental Commission meetings beginning in October 2009 and continuing through October 2011. The original draft OSRP and all subsequent revised versions of the OSRP have been available for public review and comment on the Hopewell Township website throughout the review process.

An advertised public meeting was held in conjunction with the Hopewell Township Planning Board meeting on July 21, 2010, during which the draft OSRP was presented and public input was sought (Draft #1). The Action Plan items in the OSRP were discussed during the Planning Board meeting on August 18, 2010 and revisions to the Action Plan items were suggested by the Planning Board. A revised version of the OSRP Executive Summary (including the Action Plan items) was distributed to the Planning Board Plan prior to the September 15, 2010 meeting (Draft #2). Approximately 20 public participants attended the September 15, 2010 meeting and provided further input and suggestions.

A complete revision of the OSRP addressing all prior comments and suggestions was distributed to the Planning Board prior to the October 20, 2010 meeting (Draft #3). Several members of the public provided additional comments at the October 20th Planning Board meeting, mostly reiterating comments previously provided since they had not reviewed the prior incorporated revisions.

The two most vocal public participants provided marked-up pages and suggested deletions to a member of the Township Committee in mid-January 2011. Although these specific written comments may not represent the majority of Township residents, the Environmental Commission reviewed these comments and incorporated a number of revisions into the April 2011 revised draft OSRP (Draft #4). A written response to the formal comments was prepared and distributed with Draft #4 of the OSRP.

A second advertised public meeting was held in conjunction with the Hopewell Township Planning Board meeting on September 21, 2011, during which the revised draft OSRP (Draft #4) was presented and public input was again sought. Minor editorial comments were provided by a couple members of the Planning Board. Several public participants again raised questions regarding potential impacts of the OSRP and its recommendations for preservation/protection of critical environmental resources on farming operations within the Township. The Planning Board reiterated for public participants that the Township Master Plan clearly recognizes the importance of farming within the Township and that any future development ordinances potentially impacting farming operations would be subject to public review and comment in accordance with New Jersey Municipal Land Use Law (NJSA 40:55D-1 et. seq.).



Final revisions to the OSRP suggested at the September 2011 public meeting were incorporated into the document by the Environmental Commission and the revised document posted to the Township website in early October 2011. Following the public notices required by Municipal Law Use Law (NJSA 40:55D-13), a final public meeting was held on October 19, 2011. This Open Space and Recreation Plan was subsequently adopted by the Hopewell Township Planning Board as an element of the Township's Master Plan on October 19, 2011.



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SECTION 1: EXECUTIVE SUMMARY

Hopewell Township, Cumberland County, is a large municipality, 30 square miles of principally farmland, with a medium density residential area adjacent to the City of Bridgeton. It is bounded on its' eastern border by the Cohansey River, and the western border by Mounce Creek watershed, the border with Greenwich, and by Shiloh Borough and Stow Creek Township. Like many other rural, New Jersey towns, Hopewell Township is experiencing increased pressure for residential and commercial development. Hopewell Township has been successful at maintaining a rural, undeveloped character because of its strong agricultural base, current zoning, remote location, its relative distance from employment centers, and the lack of development pressure in the region. Since 2006, however, the Township has witnessed several surges in development activity. Development of an Open Space and Recreation Plan ("OSRP") is essential to maintain the community's character and to preserve and improve the quality of life for its residents. A comprehensive, proactive approach is necessary to protect the Township's environmentally sensitive areas and provide parks and recreation for Township residents.

Of the almost 19,000 acres in the township, 75% are qualified farmland. Of the 14,000+ acres of farmland, 3,312 acres are permanently preserved. Residences occupy 10% of the acreage. Wetlands associated with the tidal portion of the Cohansey River are approximately 5% of acreage. Various public and exempt properties are 6%. By any standard, Hopewell Township is an area whose primary characteristic is one of farms and open areas. All residents value that characteristic and would like it to remain dominant.

The Hopewell Township Environmental Resource Inventory ("ERI") describes, in maps and text, the environment of the Township's land, water, life forms, and atmosphere. The majority of land in Hopewell Township has been cleared for agricultural use and less than 10% of the Township remains as forest habitat. Forested areas and trees are, therefore, one of the most precious natural resources in the Township.

Hopewell Township lies completely within the watershed of the Cohansey River. The Cohansey River Corridor is exceptionally important for fish and other aquatic organisms, birds including bald eagles, wildlife, water supply and human recreation. Preservation/protection of the wetlands and stream corridors associated with the Cohansey River and its tributaries is critically important to protect water quality, remaining forest, and valuable wildlife habitat.

The southern portion of the Township also contains an environmentally sensitive and ecologically important area known as the Burden Hill Forest Complex. This Complex is important for protection of groundwater resources and preservation of the forested habitat is critically important for many species of threatened birds and plants.

This OSRP for Hopewell Township outlines open space and recreational goals that are consistent with other county, state and regional plans; inventories open space and recreational resources; assesses open space and recreational needs; makes recommendations on priorities for additional preservation/protection; and establishes a list of actions necessary to meet Township goals. A



summary of the open space and recreation needs is provided in Section 5.3.

The inventory of active recreation area and facilities indicates that there are currently three parks in Hopewell Township, two of which border the City of Bridgeton boundary – Mary Elmer Lake and Piney Point. Both parks are located partially in the City of Bridgeton and are entirely managed and operated by the City. The third park is Bostwick Lake Park, which is located primarily in Upper Deerfield Township. The only publicly-owned recreational facilities are located at Hopewell Crest School and are available only during non-school hours.

The active recreation needs analysis indicates that, although Hopewell residents may use facilities in adjacent municipalities at Cumberland Regional High School or within the City of Bridgeton, to provide for the present and expected population growth within Hopewell Township, additional and improved recreational facilities are required. The existing facilities are also underutilized and could benefit from increased support.

As indicated by the inventory of open space resources, approximately 4,975 acres of Hopewell Township, or 26.5 percent, is “preserved” through public ownership or by deed restrictions. Excluding those parcels that are tidal marsh and only accessible by boat, only about 790 acres (4.2%) of the upland property within the Township is available for active recreational or outdoor use by the public. The majority of this publicly accessible upland is state-owned wildlife management area without any public access improvements.

The open space and passive recreation analysis indicates that the portion of preserved lands and recreation open space should be increased to maintain and improve the quality of life for Township residents. There is a significant lack of publicly-accessible areas and facilities to allow passive recreational activities such as hiking, bird watching, or enjoyment of the Cohansey River scenic vistas. In addition, many of the environmentally sensitive areas so critically important to maintenance of water quality in tributaries to the Cohansey River, protection of groundwater resources, preservation of remaining forest cover, and protection of wildlife resources remain unprotected and vulnerable to future development pressure. This OSRP recommends that Hopewell Township increase the availability of land open for passive recreational activities and, in conjunction with these efforts, focus on preservation and protection of environmentally sensitive areas that can made accessible to the public for enjoyment of the Township’s ecological treasures.

Section 6 of this OSRP contains specific recommendations and actions to address the deficiencies identified by the inventory and needs assessment. Based on public input and professional guidance, the Hopewell Township Recreational Committee recommends that the Township pursue development of additional recreational facilities including a walking/running trail, baseball fields, softball fields, soccer fields, a volleyball court, tennis courts, and field hockey fields. It is estimated that approximately 13 acres of additional land will be required for this facilities (excluding the linear trail). Recommended target areas and potential locations for these additional active recreation facilities are provided in Section 6.1.

Section 6.2 contains specific recommendations to address the identified open space and outdoor recreation needs. General recommendations for Hopewell Township include adoption of this



OSRP as an element of the Hopewell Township Master Plan to establish planning objectives and to serve as a guide for future planning decisions within the Township.

It is also recommended that the Township consider establishment of a Local Purpose Tax dedicated to open space, farmland preservation, environmental, and recreational purposes. A Local Purpose Tax would provide a stable source of funding to match other grants.

Many of the open space and recreation needs have overlapping objectives, and preservation/protection of the environmentally sensitive “Target Areas” will satisfy multiple needs. A detailed discussion of the priority Target Areas and how the preservation/protection of these areas will satisfy Hopewell Township needs is provided in Section 6.2 of this OSRP. Identified Target Areas include: the Barretts Run Corridor, the Cohansey River Access Target Area, the Upper Cohansey River Corridor, the Mounce Creek Corridor, the Elk Lake-Sheppard’s Mill Pond Area, Other Cohansey River Tributary Corridors, and the Burden Hill Forest Area. Discussions of these Target Areas generally include a list of tax parcels within the identified area that should be considered to satisfy the stated objective.

Section 6.3 contains an Action Plan that Hopewell Township should pursue to implement this OSRP and satisfy Hopewell Township’s open space and recreation needs. The Action Plan items are listed again below for ease of reference:

NOTE: THE PRESENCE OF A PARTICULAR PROPERTY ON LISTS IN THIS OSRP INDICATES ONLY THAT THE PROPERTY FALLS WITHIN THE RECOMMENDED AREA, AND THAT THERE ARE SOME ENVIRONMENTAL OBJECTIVES RELATIVE TO THE PROPERTY. SUCH OBJECTIVES CAN BE ACHIEVED THROUGH A VARIETY OF METHODS, INCLUDING DIRECT ACQUISITION, CONSERVATION EASEMENTS, LAND ORDINANCES, AND/OR GOOD STEWARDSHIP BY LANDOWNERS. ANY ACQUISITION WOULD REQUIRE A WILLING SELLER.



ACTION PLAN

First Year

- A. Adopt the Open Space and Recreation Plan as an Element of the Hopewell Township Master Plan.
- B. Submit the OSRP to the Cumberland County Department of Planning and Economic Development as source material for their development of an OSRP for the County.
- C. Submit the final OSRP to the New Jersey Green Acres Program for participation in the state's Planning Incentive Program.

Within Three Years

- D. Hopewell Township Committee and representatives to consider options for enhancing use of existing open space and recreational areas (e.g, Elk Lake Wildlife Management Area, West Cumberland Little League, and etc.)
- E. Consider a ballot item for voter approval establishing a local purpose tax dedicated to open space, farmland preservation, historic preservation, and recreation. Work with the Environmental Commission, Recreation Committee, and the Agricultural Advisory Board to educate residents on the need for and benefits of such a tax, including the financial benefits.
- F. Hopewell Township Recreation Committee to develop and present formal recommendations for consideration by the Township Committee for the additional recreational facilities recommended by this OSRP.

Within Five Years

- G. Hopewell Township Environmental Commission to develop and present formal recommendations for consideration by the Township Committee regarding additional development ordinances to protect the Upper Cohansey River Corridor and the Burden Hill Forest Complex.
- H. Hopewell Township Environmental Commission to develop and present formal recommendations for consideration by the Township Committee regarding the feasibility of a walking trail within the Barretts Run Corridor.
- I. Consider opportunities for improved public access to the Upper Cohansey River Corridor. As opportunities arise, the Hopewell Township Committee and representatives should work with Upper Deerfield Township, Cumberland County, New Jersey's Green Acres program, private developers, and other interested parties to develop improved and maintained public access points for fishing, canoeing and kayaking.
- J. Hopewell Township Committee to consider the recommendations of the Hopewell Township Recreation Committee regarding the additional recreational facilities recommended by this OSRP.



Ongoing

- K. Hopewell Township Agricultural Advisory Board to consider special environmental attributes and Target Areas identified in this OSRP in decisions regarding priority for farmland preservation funding.
- L. Hopewell Township Committee and representatives to consider working with the New Jersey Green Acres Program and other non-profit land preservation organizations to secure public access to the Cohansey River within the designated Target Area. Hopewell Township should take advantage of any other opportunities that may arise during future development proposals to secure public access and pursue grant money or other sources of funding to develop public access facilities (e.g. parking, trails, observation platforms, and etc.).
- M. Hopewell Township Committee and representatives to consider working with the NJDEP to expand the Cohansey River WMA and preserving additional parcels within the Mounce Creek Corridor for proper protection of this important habitat.
- N. Consider targeting the Elk Lake - Sheppard's Mill Pond Area for additional preservation and protection. Hopewell Township Committee and representatives should work with Greenwich Township, the NJDEP, the Girl Scouts, and other non-profit land preservation organizations to explore opportunities to preserve the area as a multiple-use recreation area available to the public.
- O. Hopewell Township Committee and representatives to consider concentrating additional open space preservation/protection efforts within the stream corridors throughout the Township that should be protected for water quality, wildlife habitat, rural character, and recreational uses.
- P. Hopewell Township Committee and representatives to consider coordinating with the New Jersey Green Acres Program and other conservation organizations interested in protecting or preserving parcels within the Burden Hill Forest Complex.

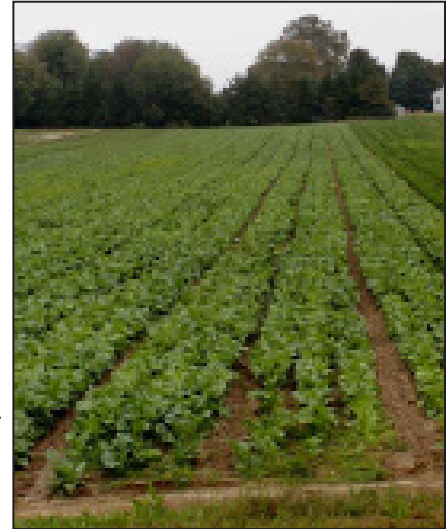
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SECTION 2: COMMUNITY RESOURCES

2.1 INTRODUCTION

Hopewell Township, Cumberland County is an agriculturally viable, environmentally important, and highly developable community. Hopewell lies in the heart of one of New Jersey's most active and productive agricultural areas. Nearly 75% of the Township is assessed for agricultural production. The farmers of Hopewell owe their success to adequate water, excellent soils, favorable climate, nearby markets, and local agricultural support businesses. In addition to agriculture, Hopewell Township is defined by the Cohansey River which bounds the Township completely on two sides of its triangular form. The river and its associated wetlands provide important wildlife habitat, mitigation of flood waters, and recreational opportunities. One of the largest and most stable nesting populations of Bald Eagles is located along the Cohansey River wetland/upland interface in Hopewell. According to the United States 2010 census, Hopewell has a population of 4,571 persons and a land area of 30.9 square miles. With less than 150 people per square mile in a state where average population density is >1,000 persons per square mile, Hopewell can be characterized as one of the most rural communities in New Jersey.



Like many other rural, New Jersey towns, Hopewell Township is experiencing increased pressure for residential and commercial development. Hopewell Township has been successful at maintaining a rural, undeveloped character because of its remote location, its relative distance from employment centers, and the lack of development pressure in the region. There are signs that this is changing. In the past couple of years, the Township has witnessed a surge in development activity. In 2004, a large NJ real estate developer contracted to purchase over 500 acres of land in the Township for development. And major subdivisions were again filed in 2005 and 2006. Neighboring communities are also experiencing new construction. Upper Deerfield Township, which borders Hopewell Township to the northeast just across the River, has over 800 pending residential units, including single family, multi-family and age-restricted developments.

The Hopewell Township Environmental Resource Inventory ("ERI) describes, in maps and text, the environment of the Township's land, water, life forms, and atmosphere. It can be accessed on the Hopewell Township website at: <http://hopewelltwp-nj.com/ERI/Adopted%20version%20ERI%20with%20Maps.pdf>. Some highlights of the Environmental Resource Inventory that may affect open space needs and goals in Hopewell Township are provided in the following sections.



2.2 NATURAL RESOURCES

Land Use/Land Cover

Hopewell Township is a large municipality, 30 square miles of principally farmland, with a medium density residential area adjacent to the City of Bridgeton. It is bounded on its' eastern border by the Cohansey River, and the western border by Mounce Creek watershed, the border with Greenwich, and by Shiloh Borough and Stow Creek Township (**Figure 1**).

As illustrated in **Figure 2** and **Table 1**, Over 74% of the land area Hopewell Township is assessed for agricultural production. The main commodities produced are vegetables, field crops, fruit orchards and nursery crops. The rest of the land is forested, wetlands, or open water. Most of the urban development is adjacent to the City of Bridgeton where infrastructure and employ-

Table 1. Hopewell Township - Summary of Acreage by Property Class¹

Lots	Property Class	Class	Acreage	Percent
1445	Residence	2	1,842	9.8%
192	Farm residences	3A	172	0.9%
483	Qualified farmland	3B	14,174	75.4%
49	Various Commercial	4a	119	0.6%
199	Vacant lot	1	598	3.2%
74	Various public and exempt	15A-F	463	2.5%
32	Cohansey River (Tidal Wetlands)	1R	1,146	6.1%
7	Parkland		202	1.1%
13	Elk Lake Area		87	0.5%
Total Acreage			18,803	100.0%

¹ Based on current tax list (11/2009)

ment have been historically available.

The majority of land in Hopewell Township has been cleared for agricultural use and less than 10% of the Township remains as forest habitat. Forested areas and trees are, therefore, one of the most precious natural resources in the Township. A small finger of the Burden Hill Forest Complex extends into Hopewell Township. This area is an important groundwater recharge area with very high infiltration rates, some as high as 10-15 inches per year (**Figure 3**). The ridge vegetation consists of pineland, forested headwaters and native vegetation of the coastal plain. In addition, a large stand of Atlantic White Cedar exists adjacent to Elk Lake. The other remaining forested areas in the Township are located primary along stream corridors and are forested wetlands.



Approximately 12% of Hopewell Township is classified as wetlands, most of which are associated with the Cohansey River, its tributaries, and the tidal estuary of the Delaware River. Brackish tidal wetlands fringing the Cohansey River comprise approximately 5% of the acreage. These wetlands create important habitat for birds, fish and wildlife. In addition, there is high recreational value to the community and the region through fishing, crabbing, boating and bird watching.

Residences occupy 10% of the acreage. Residential development is concentrated around public infrastructure in the central portion of the Township, bordering the City of Bridgeton. This central area is bisected by Shiloh Pike (Route 49), which is zoned for commercial uses and has incurred a low density of retail and office development. Various public and exempt properties comprise about 6% of the Township's acreage and are discussed below in Section 4.

Geology

Hopewell Township is located in the New Jersey Coastal Plain which is part of the larger Atlantic Coastal Plain physiogeographic province. The Atlantic Coastal Plain stretches along the Atlantic and Gulf Coasts from Long Island to Mexico and contains one of the most prolific systems of aquifers in the country. In New Jersey, the Coastal Plain covers about 4,200 square miles from the Fall Line to the Atlantic Ocean. Most of the land is less than 50' above sea level. The Coastal Plain is surrounded by brackish or salt water and is bound by the Delaware River to the west, Delaware Bay to the south and the Atlantic Ocean to the east. The Coastal Plain surface is divided into drainage basins which contribute runoff to a specific stream and its tributaries. Hopewell lies in the Cohansey River Drainage Basin.

Hopewell Township's geology is made up of predominantly tertiary sands of the Cohansey Sand Formation and to a very small degree the Shiloh Marl Member along the edges of the Cohansey River. The Cohansey Sand is typically light colored quartzose sand with lenses of silt and clay. The Cohansey Sand is exposed throughout most of the outer part of the Coastal Plain and attains a maximum thickness of about two hundred fifty feet (250').

Soils

All soils with a similar profile including similar color, texture, structure, reaction, consistency, mineral and chemical composition are classified as a soil series. In Hopewell Township there are 35 specific soil mapping units representing 19 different soil series. Only 6 of the soil series comprise 84% of the total soils in Hopewell Township. These major soil series are Matapeake 31%, Chillium 16%, Downer 13%, Sassafrass 12%, Appoquinimink 6%, and Mattapex 5%. All are prime agricultural soils except Appoquinimink and Mattapex.



Hopewell Township soils are excellent for agricultural production. Over 82% of the soils are classified as Prime agricultural soil. The moderate rainfall, approximately 42 inches per year, leaches much of the bases and carbonates from the soil leaving many of the soils very acidic unless limed. Hopewell's soils are also excellent for



building and development as very few of the soils are limiting for septic effluent.

Groundwater

Approximately 40% of the potable water in New Jersey comes from ground water. The residents of the Coastal Plain, including Hopewell Township, are even more heavily dependent upon ground water for their drinking water. No economically viable alternative source exists to supply drinking water for most of Hopewell Township. The New Jersey Coastal Plain Aquifer System, consisting of five principal aquifers, supplies more than 75% of the fresh water to the Coastal Plain region.

Hopewell Township relies entirely upon the Kirkwood-Cohansey portion of the aquifer system. The Kirkwood- Cohansey system is a water table aquifer which underlies an area of approximately 3,000 square miles. This system is composed of the Kirkwood geologic formation, the Cohansey Sand and to some extent the Beacon Hill Gravel, the Bridgeton Formation, and the Cape May Formation.

Natural recharge to the New Jersey Coastal Plain Area occurs primarily through direct precipitation on the outcrop area of the geologic formations (**Figure 3**). A smaller component of natural recharge to the deeper layers of the system occurs by vertical leakage from the upper layers. The Kirkwood-Cohansey aquifer system is an uppermost, or surficial aquifer layer, existing at land surface throughout Hopewell Township. The southern portion of the township is the location of the uplifted end of the Kirkwood-Cohansey aquifer. It is known as the Burden Hill formation and is characterized by sandy soils and a deciduous and evergreen forest cover. The Environmental Commission believes this is an important and environmentally sensitive area in need of preservation.



Surface Water

Hopewell Township lies completely within the watershed of the Cohansey River. The scale and connection to the river largely define the environment of township. The Cohansey is nearly 30 miles long, draining 105 square miles of land to the Delaware Bay. The area is relatively flat which results in a number of small tributaries. Sunset Lake in Bridgeton and Mary Elmer Lake are among 20 lakes and ponds in the drainage basin.



Hopewell Township lies within watershed management area 17, WMA 17, which encompasses almost 561,000 acres across southern New Jersey. WMA 17 includes a number of the state's most valued waterways including the

Cohansey River. A total of approximately 2,871 miles of streams have been identified throughout the watershed. The Cohansey River is exceptionally important for fish and other aquatic



organisms, birds including bald eagles, wildlife, water supply and human recreation. Another recognition of the Cohansey's importance is its inclusion as part of a Cohansey Conservation Zone in the New Jersey Wildlife Action Plan, issued in February 2007 by the NJDEP Endangered and Nongame Species Program. The Cohansey River corridor has also been designated as one of New Jersey's 122 Important Bird Areas by New Jersey Audubon. A portion of the upper Cohansey River from the Dam at Seeley Pond to the power line above Sunset Lake, Bridgeton is a trout stocked water without closed in-season stocking dates.

The overall water quality of the Cohansey River has been historically quite good. Surface water quality measured between 1980 and 2000 has indicated very few significant water quality impairments. A number of the tributaries to the Cohansey River within Hopewell Township, including Barretts Run and Mounce Creek, however, have impaired water quality due to elevated nitrates, phosphorus, and fecal coliform bacteria. The important tributaries to the Cohansey River within the Township are shown in **Figure 4**.

Wetlands and Vernal Pools

Approximately 12% of Hopewell Township is classified as wetlands, most of which are associated with the Cohansey River, its tributaries, and the tidal estuary of the Delaware River (**Figure 4**). These wetlands create important habitat for birds, fish and wildlife. In addition, there is high recreational value to the community and the region through fishing, crabbing, boating and bird watching. Preservation/protection of these wetlands and stream corridors serves to protect water quality, remaining forest, and valuable wildlife habitat. As discussed in the Hopewell Township ERI, it also avoids development in flood hazard areas.

Another type of "temporary wetland" is called a vernal pool. A vernal pool is usually a shallow, natural depression in level ground, with no permanent above-ground outlet, that holds water seasonally. They are dry most of the year and fill up in the spring from rains, snow melt and rising ground water. Possibly the largest, most pristine vernal pool in the area exists abutting Elk Lake. This pool is located within an Atlantic White Cedar swamp, a particularly unique and important habitat area within Hopewell Township.



2.3 HISTORICAL RESOURCES

Hopewell Township is one of the oldest municipalities in Cumberland County. Originally included within its boundaries were the Third Ward of Bridgeton, which succeeded in 1848, and the village of Shiloh, which was later incorporated into a borough. The earliest settlement in Hopewell Township occurred in the historic village of Roadstown, which was settled by the British in the early 17th century. Later, Quakers migrated to the Hopewell area and brought with them their brick laying skills for housing construction. One of these patterned brick houses still remains in Roadstown. Other than the village of Roadstown, Hopewell Township was primarily



an agricultural community with a large population of German and Irish immigrants. Relatively little development occurred in the Township after the settlement of Roadstown until the mid-20th century. In the 1950s and 1960s, housing developments were constructed in the Township near the Bridgeton City border.

The local history of Hopewell Township has been well documented by the Hopewell Township Historical Society through a publication entitled: *Hopewell Township A Brief Early History to Celebrate the 250th Anniversary of Its Formation as a Precinct of Cumberland County January 19, 1748*.

Sites of historic interest in Hopewell Township have been identified and are mapped and labeled by block and lot in the Hopewell Township ERI. Appendix 5 to the ERI also contains a list of significant historical sites within the Township (<http://hopewelltpw-nj.com/Environmental%20Commission/Historical%20Sites/Hopewell%20Township%20Sites%20of%20Historical%20Interest%2001132008.pdf>).

Historic interest and importance should be one of the factors considered in ranking parcels for preservation as open space or recreational areas.

2.4 DEMOGRAPHICS AND ZONING

Hopewell Township is approximately 30 square miles and as of 2010 consisted of 1,741 housing units according to the US Census. A breakdown of housing units is not available for 2010, but in 2000, approximately 89% of these units consisted of single-family detached and two-family units (twins and duplexes). Single-family attached (townhouses) and units with 3 or more units made up 10% of the total housing stock. Housing units in buildings containing 5 or more units (apartment buildings) comprised 9% of all the housing units in 2000, of which the majority, 128 units, were in buildings of fifty or more units.

The population of Hopewell Township as of 2010 was 4,571 persons, an increase of 8.5% from 1990, according to the US Census. This is slightly less than the 13.7% growth experienced by Cumberland County during the same time period. Assuming a modest population growth rate of about 10% over the next 20 years, the population within the Township in 2030 could be approximately 5,030. This projected increase of 459 persons translates into 177 new housing units, using the 2010 average household size of 2.59.

As discussed below in Section 3.2, Hopewell Township officials are pursuing the creation of a transfer of development rights program (“TDR”) in accordance with State Transfer of Development Rights Act, NJSA 40:55D-137. Although it does not set a time frame, the proposed Development Transfer Plan Element of the Township’s Master Plan contemplates much greater growth than discussed above, with up to an additional 1950 housing units in the TDR receiving area alone.



Land use in Hopewell Township closely follows its underlying zoning. There are four categories of zoning in the Township: agriculture, residential, commercial and open space, which are further divided into the following zoning districts:

- R-1, R-2, R-3 and V (Village) Residential Districts
- HCB, and PR Commercial Districts
- A Agriculture
- P Parks

Descriptions of these zoning districts are provided in the Hopewell Township Master Plan. Zoning should be one of the factors considered in ranking parcels for preservation as open space or recreational areas

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SECTION 3: GOALS OF THE OSRP

3.1 GOALS AND POLICES

Preservation of open space and recreational areas must be planned just like any municipal infrastructure, such as roadways, sewers, or schools. Development of an Open Space and Recreation Plan, and the township governing body's commitment to carry out the Plan, are essential to maintain a community's character and to preserve and improve the quality of life for its residents.

A comprehensive, proactive approach should be taken to protect the Township's environmentally sensitive areas and provide parks and recreation for Township residents. In addition to the existing passive and active facilities, the Township should identify lands for future parks and/or open space to protect environmentally sensitive areas and to provide recreation for existing and future residents.

The Hopewell Township Environmental Commission has outlined the following Open Space Goals for the Township. These goals and policies will guide the recommendations of the Open Space and Recreation Plan:

- **Preserve areas vital to the environmental health of the township, such as both ground and subsurface water supplies.**
- **Encourage preservation of open space by programs such as Farmland Preservation, Green Acres, etc, in areas where the townships' residents are best served.**
- **Encourage the township residents to recognize the many assets of the township and approve a Township open space acquisition tax to enhance our ability to set aside valuable resources for farmland, environmental, and recreational purposes.**
- **Encourage planning for improving the recreational opportunities for residents of all ages.**
- **Coordinate plans with adjacent municipalities and with the County**
- **Give guidance to Farmland Preservation decisions and other open space and recreational decisions.**
- **Give guidance to recreational facilities planning in the township**



3.2 MUNICIPAL, COUNTY, REGIONAL & STATE PLAN CONSISTENCY

It is the intention of the Hopewell Township Environmental Commission and the Hopewell Township Recreation Committee that this Open Space and Recreation Plan will become an amendment to the Master Plan. Therefore, consistency between the documents is important.

Hopewell Township Master Plan

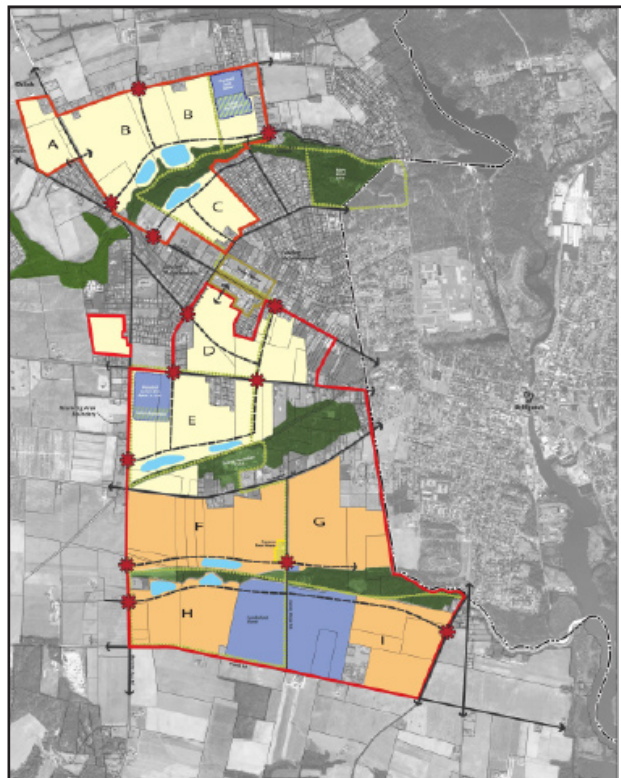
The Hopewell Township Master Plan identifies the following goals to broadly govern the direction of future land use activity within the Township:

- Support agriculture and preserve critical masses of farmland
- Maintain the Township's rural character
- Accommodate a variety of housing types, styles and affordability
- Protect the Township's environmental resources
- Direct growth to areas within close proximity to infrastructure
- Prevent sprawl patterns of development
- Provide a safe, healthy environment to live, work and visit.

The goals and policies of this proposed Open Space and Recreation Plan are consistent with the existing Hopewell Township Master Plan.

The increasing development pressure has recently prompted Hopewell officials to re-evaluate its vision and planning documents. The consensus was that additional land use tools would be needed to protect farmland as the residential real estate market increased and Hopewell Township officials are pursuing the creation of a transfer of development rights program ("TDR") in accordance with State Transfer of Development Rights Act, NJSA 40:55D-137. Such a program will complement local, regional and state investments in the Township's farmland preservation program and is consistent with regional planning initiatives to direct growth in and around areas served by the Township's public infrastructure. The implementation documents will include several land use ordinances, including zoning standards, design guidelines and administrative procedures.

If Hopewell Township is successful in implementing a TDR program, the following addi-



**Hopewell Township Proposed
TDR Primary Receiving Area Tracts**



tional planning objectives will expound upon the Township's land use goals:

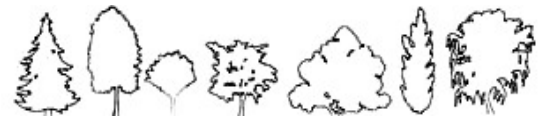
- Balance the need to accommodate future residential growth with the need to protect farmland, open space and environmentally critical lands – all of which contribute to the unique character and economy of Hopewell Township.
- Encourage compact development patterns in areas with access to existing or future utilities and infrastructure. Limit the extension of public water and sewer facilities to established neighborhoods and the receiving area.
- Encourage the use of innovative planning and design techniques that result in the development of new neighborhoods that are compatible with the character of Hopewell Township.
- Encourage a variety of housing sizes and styles for all ages and income levels and provide for the Township's fair share of the regional need for low and moderate income housing.
- Implement a zoning approach to farmland preservation that protects landowner equity through the assignment of development credits.
- Minimize the reliance on the motor vehicle and shorten vehicular trips by improving pedestrian connections and decreasing the distance between residences, retail and service businesses, schools and civic facilities.
- Provide a vision for the physical development of Hopewell by identifying the desired quality and amenities of new development in community design principles and design guidelines.
- Encourage the creation of walking and cycling trails that connect residences with scenic, recreational, civic and commercial facilities.
- Encourage the protection of environmentally sensitive lands included wetlands, stream corridors, unique vistas, wildlife habitats and the Cohansey River corridor.
- Encourage the creation of a compact, mixed-use center along Route 49 that functions as Hopewell's town center.

If Hopewell Township is successful in implementing a TDR program, the goals and policies of this proposed Open Space and Recreation Plan will remain consistent with the required revisions to the Hopewell Township Master Plan.

Municipal Plans

Hopewell Township is bordered by seven municipalities: Alloway Township, City of Bridgeton, Greenwich Township, Fairfield Township, Shiloh Borough, Upper Deerfield Township, and Stow Creek Township. The City of Bridgeton and Borough of Shiloh are developed communities situated at either end of Shiloh Pike, or Route 49. The City of Bridgeton's low and medium residential density zones border Hopewell Township's residential zone. The uses along both municipal borders are compatible. Shiloh Borough is zoned for medium residential density and agriculture in the limited area that borders Hopewell Township at Shiloh Pike. The zoning plans of both of these municipalities are compatible with Hopewell Township's goals for preservation of open space and recreational areas.

The five remaining municipalities surrounding Hopewell Township are zoned for agriculture and low density residential uses, similar to the existing land uses in Hopewell's Agricultural Zoning District. While the density of the uses vary to some degree, all of the Townships share common



goals to protect agriculture and the rural character of their communities. For this reason, any additional open space or recreational areas created in Hopewell Township would be compatible with the land uses of the surrounding municipalities.

NJ State Development and Redevelopment Plan

The State Plan was developed to promote “sustainable economic growth” in a way that balances development with the need to protect open space. The Plan is “designed to improve the quality of life and community value through coordinated design techniques that promote efficient land use patterns.” These efficient land use patterns consist of core areas, or centers, with access to public infrastructure and surrounded by natural resources, farmland and environmentally sensitive lands. To achieve these new patterns of development and preservation, the Plan identifies five planning policies associated with the physical and spatial characteristics of geographical areas. Two of these planning areas are designated primarily for farmland preservation and environmental protection programs. The creation of additional open space or recreational areas would be entirely consistent with the State Plan.

West Cumberland Strategic Plan

The Cumberland Development Corporation adopted the West Cumberland Strategic Plan (WCSP) in 2005 for the purpose of guiding future economic development policies in the County. The WCSP is currently being updated by the Cumberland Development Corporation. The Plan focuses on twelve municipalities in the western and southern region of Cumberland County, including Hopewell Township, and addresses the need to balance economic development with environmental protection. The Hopewell Township OSRP shares common goals and objectives with the WCSP with regard to preservation of open space and recreation areas.

Cumberland County Planning Board

In 2002, the Cumberland County Planning Board assembled 13 planning documents in a report entitled, *Planning for the Future: A Summary of Cumberland County, Planning Initiatives*. The report establishes the County’s strategic plan for recommending future land use policy and growth management strategies. There are three major themes in the report: infrastructure, environment and economic development.

A number of the planning documents relate to environmental, open space, and recreational issues:

- Cumberland County Delaware Estuary Study (1993)
- Recommendations for Managing Land Use Along the Lower Cohansey River (1998)
- Comprehensive Management Plan and Environmental Impact Statement for the Maurice National Scenic and Recreational River (2001)
- Cumb. Co. Farmland Preservation, Open Space, Parks & Recreation Trust Fund Plan (1996)
- Cumberland County Open Space and Recreation Master Plan (2011)

The policies contained in the above environmental reports stress the importance of open space and farmland preservation, as well as environmentally responsible land use strategies. The Hopewell Township OSRP mirrors these policies with its emphasis on farmland preservation and the protection of the Cohansey River corridor.



SECTION 4: INVENTORY OF OPEN SPACE RESOURCES

This section of the Open Space and Recreation Plan describes the inventory of the open space lands within Hopewell Township. The acreage numbers within this section of the report come from the property lists in Appendix A. **Figure 5** shows the parcels that have been permanently protected.

4.1 PUBLIC LAND

Parks and Recreation

Parks and open space play an important role in the quality of life for people of all ages. People naturally enjoy the outdoors, scenic views, and both passive and active recreational activities (**Table 2**). There are currently three parks in Hopewell Township, two of which border the City of Bridgeton boundary – Mary Elmer Lake and Piney Point. Both parks are located partially in the City of Bridgeton and are entirely managed and operated by the City. They also have pavilions for picnicking and Mary Elmer Lake is a state-stocked fishing lake. The third park is Bostwick Lake Park, which is located primarily in Upper Deerfield Township. Bostwick Lake historically was also a state-stocked fishing lake and offered camping and picnicking facilities.

Township recreational facilities are located at the West Cumberland Little League ball fields on Greenwich Road. This site includes seven ball fields of varying sizes and physical conditions. Some of the ball fields have lights with public stands and dug-outs. Rec-

reational facilities are also available at Hopewell Crest School during non-school hours. The tax record information for these parcels is presented in **Table 3**.

Area	Municipality	Location	Features
Bostwick Lake	Hopewell/Upper Deerfield	Friesburg Road	Campground, picnicking, state-stocked fishing lake
Mary Elmer Lake	Hopewell/City of Bridgeton	Mary Elmer Drive	3 pavilions, 2 BBQ grills, 2 horse-shoe pits, and a state-stocked fishing lake.
Piney Point Park	Hopewell/City of Bridgeton	Beebe Run Road	3 picnic pavilions, with a single comfort station - electricity is available
West Cumberland Little League	Hopewell Township	Greenwich Road	Ball fields
Hopewell Crest School	Hopewell Township	Sewall Road	Recreational fields

INVENTORY OF OPEN SPACE



Table 3. Tax Record Information for Active Park & Recreation Areas

Block	Lot	Property Location	Property Class	Owner's Name	Acreage	EPL Facility Name
1	1	177 Friesburg Road	P 15C	Hopewell Township	5.10	Recreation Center
2	2	Friesburg Road	P 15C	Hopewell Township	0.50	Vacant Land
31	1.01	Mary Elmer Dr	P 15C	City Of Bridgeton	1.20	Park
34	1	Mary Elmer Lake & Park	P 15C	City Of Bridgeton	58.00	Park & Lake
20	12	Beebe Run Rd	P 15F	City Of Bridgeton	109.60	Park
35	2	122 Sewall Rd	15A	Hopewell Township Brd Of Ed	13.35	Schools
67	40.03	469 Greenwich Road	15C	West Cumb. Little League -Hitchner	23.70	Little League
Total Acreage					211.45	

State Land

In addition to the above active parks and recreational facilities, the NJDEP Green Acres program has also purchased and permanently protected a number of parcels within Hopewell Township. These parcels are managed by the NJDEP Division of Fish and Wildlife as part of the Cohan-

Table 4. Tax Record Information For State-Owned Open Space

Block	Lot	Property Location	Property Class	Owner's Name	Acreage	Epl Facility Name
76	26	S Of Greenwich Road	**	NJ Dept Of Environmental Protection**	15.33	Vacant Land
76	46	Elk Lake Rd	**	NJ Dept Of Environmental Protection**	3.20	Vacant Land
76	47	Old Meeting House Road	**	NJ Dept Of Environmental Protection**	4.41	Vacant Land
76	39	75 Old Meeting House Rd	**	NJ Dept Of Environmental Protection**	36.80	Vacant Land
83	4	Perry Road	15F	STATE OF NJ - DEP	16.30	Vacant Land
86	7.01	River Road	15F	NJ DEP	6.40	Vacant Land
86	7.02	River Road	15F	NJ DEP	6.80	Vacant Land
89	25.01	Perry Rd	15F	STATE OF NJ - DEP	204.20	Vacant Land
86	3.03	River Road	15F	NJ Dept Of Environmental Protection	11.13	Vacant Land
86	6	Sheppards Mill Rd	15F	NJ Dept Of Environmental Protection	37.60	Vacant Land
89	28	Cemetery Rd	15F	STATE OF NJ DEP	196.78	Vacant Land
89	32	Cohansey River	15F	NJ Dept Of Environmental Protection	10.30	Vacant Land
89	34	Cohansey River	15F	NJ Dept Of Environmental Protection	4.80	Vacant Land
89	35	Marsh	15F	N.J. DEP.	16.80	Vacant Land
89	36	Cohansey River	15F	N.J. DEP	6.00	Vacant Land
89	38	Cohansey River	15F	N.J. DEP	6.20	Vacant Land
Total Acreage					583.05	

**Not yet reflected in tax records (11/2009)

sey River Wildlife Management Area (**Table 4**). State-owned lands (and easements) provide for wildlife management and passive recreation. These areas are collectively referred to as the Cohansey River Wildlife Management Area (CRWMA), and total approximately 580 acres in Hopewell Township (**Figure 5**).



INVENTORY OF OPEN SPACE

County Land

Cumberland County owns and operates Cumberland Manor, the Juvenile Detention Center, the Veterans Cemetery, and a commercial office building within Hopewell Township. The County also owns some qualified farmland surrounding these facilities. Although these lands may not be fully open for public access, they are listed below in **Table 5**. Drainage easements also owned by Cumberland County are not listed in this summary table (see Appendix A).

Table 5. Tax Record Information For County-Owned Property

Block	Lot	Property Location	Property Class	Owner's Name	Acreage	Epl Facility Name
74	23	Sunny Slope Drive	15C	Bd Of Chosen Freeholders Of Cumb Co	33.5	Penal Institution
75	7	154 Sunny Slope Drive	15C	County Of Cumberland	83.4	Nursing Home
74	26	Trench Road	15E	Cumberland Cty Bd Of Freeholders	14.8	Cemetery
50	53	555 Shiloh Pike	15F	County Of Cumberland	1.7	Commercial Bldg.
74	23	Sunny Slope Drive	3B	Bd Of Chosen Freeholders Of Cumb Co	44.4	Qfarm
75	7	Sunny Slope Drive	3B	Cumb. Cty C/O Purchasing-Mulford	46.6	Qfarm
80	5	Trench Rd	3B	Cumb. Cty C/O Purchasing-Mulford	22.1	Qfarm
Total Acreage					246.5	

Municipal Land

In addition to the active park and recreational parcels listed in **Table 3**, Hopewell Township owns a number of other parcels within the municipality. The Township municipal building, former

Table 6. Tax Record Information For Municipal-Owned Property

Block	Lot	Property Location	Property Class	Owner's Name	Acreage	Epl Facility Name
1	1	177 Friesburg Road	15C	Hopewell Township	5.1	Recreation Center
29	46	50 Woodlawn Avenue	15C	Township Of Hopewell	0.75	Vol Fire Company
52	21	500 Shiloh Pike	4A	Township Of Hopewell	2	
52	22	498 Shiloh Pike	15C	Township Of Hopewell	10.70	Vacant Land
54	2	590 Shiloh Pike	15C	Township Of Hopewell	1.30	Municipal Bldg.
63	1	720 Shiloh Pike	15C	Hopewell Township	17.60	Community Center
63	16	Barretts Run Rd	15C	Township Of Hopewell	26.30	Vacant Land
65	25	Roadstown Rd	15C	Hopewell & Stow Creek Twps	1.20	Fire Hall Vacant Land
65	26	751 Roadstown Road	15C	Hopewell Township	0.35	Volunteer Fire Co
76	27	S W Of Greenwich Rd	15C	Township Of Hopewell	1.2	Landfill
76	28	S W Of Greenwich Rd	15C	Township Of Hopewell	0.8	Landfill
76	29	S W Of Greenwich Rd	15C	Township Of Hopewell	1	Landfill
76	30	S W Of Greenwich Rd	15C	Township Of Hopewell	1.1	Landfill
76	31	S W Of Greenwich Rd	15C	Township Of Hopewell	0.7	Landfill
76	32	S W Of Greenwich Rd	15C	Township Of Hopewell	5.1	Landfill
76	33	S W Of Greenwich Rd	15C	Township Of Hopewell	5.3	Landfill
76	35	539 Trench Rd	15C	Township Of Hopewell	10.88	Landfill
78	23.01	Cohansey River	15C	Township Of Hopewell	4.00	Vacant Land
78	23.02	Cohansey River	15C	Township Of Hopewell	3.90	Vacant Land
88	12.01	Cohansey River	15C	Township Of Hopewell	2.50	Vacant Land
Total Acreage					101.78	

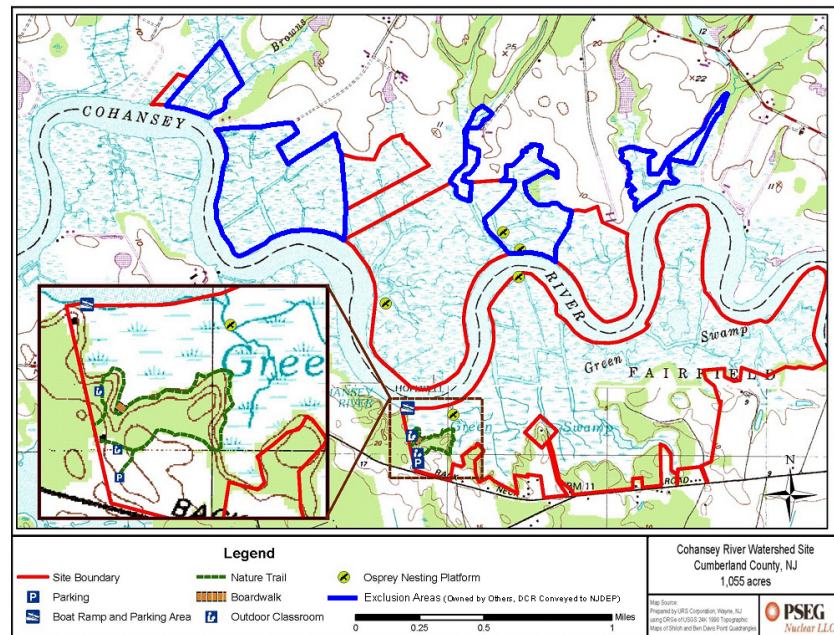


landfill, and Community Center are three of the actively used parcels. Although these lands may not be fully open for public access, they are listed below in **Table 6**. Drainage easements and other small parcels (<1-ac) also owned by Hopewell Township are not listed in this summary table (see Appendix A).

4.2 PRIVATE LAND

Quasi-Public Properties

PSEG Nuclear, LLC has preserved and restored 520 acres of tidal marsh within Hopewell Township. These restored tidal marshes bordering the Cohansey River were formerly dominated by the invasive European strain of *Phragmites australis*, which had displaced the native saltmarsh cordgrass (*Spartina alterniflora*). PSEG's Estuary Enhancement Program ("EEP") manages the properties, and while there are no upland access points along the Hopewell side of the



river, PSEG has constructed a public boat ramp directly across the Cohansey River in Fairfield Township. They are open for public access, except for several portions of the restored marsh that have restricted access (**Figure 5**). All EEP properties are covered by a Deed of Conservation Restriction granted to the NJDEP by PSEG for the parcels that they own, or by the third-party landowner, when fee-simple ownership was not obtained by PSEG (**Table 7**). More information on these properties and PSEG's EEP can be found on their website (<http://www.pseg.com/info/environment/estuary>).

Farmland-Assessed Property

A total of 14,174 acres in Hopewell Township are farmland-assessed (Class 3B in Appendix A). This acreage is found throughout the township on a total of 483 lots.

Preserved Farmland

Hopewell Township adopted a Farmland Preservation Plan Element of the Master Plan in November, 2004. The Plan details Hopewell Township's goal to develop the agricultural industry by "1) preventing and minimizing the incursion of large scale residential development into its agricultural zones, and 2) by 'staying out of agricultures way' by not hindering or restricting the private sector's efforts to change, flex, and innovate as the agricultural industry evolves over time." As of May 2010, Hopewell Township has permanently protected 3,312 acres of farmland



INVENTORY OF OPEN SPACE

Table 7. Tax Record Information For Quasi-Public Property

Block	Lot	Property Location	Property Class	Acreage	Note
88	18(Part)	280 River Road	3B	26.00	3 rd Party DCR
88	19	S Of River Rd	3B	(Included with B88/ L18)	3 rd Party DCR
88	26	Cohansey River	3B	(Included with B88/ L18)	3 rd Party DCR
88	27.01	Cohansey River	1	17.60	DCR
88	29	Cohansey River	1	25.00	DCR
88	31	Cohansey River	1	16.20	DCR
89	1(Part)	Archie Platt Rd	3B	60.00	3 rd Party DCR
89	2(Part)	120 Archie Platt Rd	3B	(Included with B89/L1)	3 rd Party DCR
89	8	Cohansey River	1	192.00	DCR
89	10	Marsh	1	31.50	DCR
89	18(Part)	W End Of Perry Lane	1	111.25	3 rd Party DCR
89	19	Cohansey River	1	2.50	3 rd Party DCR
89	20	Browns Body Meadow	1	9.25	3 rd Party DCR
89	24	Cohansey River	1	24.60	3 rd Party DCR
89	25.02	Cohansey River	1	3.75	DCR
Total Acreage				519.65	
3 rd Party DCR=Deed Of Conservation Restriction Granted To NJDEP By Third Party Owner					

from development through the New Jersey Farmland Preservation Program (**Table 8 and Figure 5**).

Vacant Land - No Structural Improvements

Hopewell Township has a total of 598 acres of vacant land on 199 lots (Class 1 in Appendix A).

Church & Non-Profit Ownership

There are a total of ~125 acres of property that are owned by churches, cemeteries, or non-profit organizations in Hopewell Township (Class 15D, 15E, and 15F in Appendix A). Most of these properties are small holdings. The two largest parcels are the Fernwood Cemetery on Shiloh Pike (24 acres) and the Girl Scout Camp on Bridgeton Road (25 acres).



Table 8. Tax Record Information For Preserved Farmland (as of October 2011)

Block	Lot	Property Location	Property Class	Tax Acreage	SADC Acreage	OSRP Acreage
4	7	339 ROUTE 540	3B	73.90	73.30	73.30
7	3	373 HARMONY ROAD	3B	50.17	49.01	49.01
7	7	178 SEELEY COHANSEY RD	3B	98.5	99.88	99.88
7	8	WALTERS RD	3B	20.02	22.68	22.68
7	9.01	WALTERS ROAD	3B	33.20	34.44	34.44
7	11	HARMONY RD	3B	48.40	48.78	48.78
9	1.01	16 WALTERS ROAD	3B	47.50	44.95	44.95
9	3.01	WALTERS ROAD	3B	29.00	32.21	32.21
13	6	219 COLUMBIA HIGHWAY	3B	106.30	108.50	108.50
15	2	104 HOLDING RD	3B	38.10	34.59	34.59
16	3	104 HOLDING RD	3B	88.3	89.18	89.18
16	7	BEEBE RUN RD	3B	74.70	72.38	72.38
16	8	317 MINCHES CORNER RD	3B	31.90	32.83	32.83
17	2	BEEBE RUN RD	3B	109.70	109.23	109.23
17	3	MINCHES CORNER ROAD	3B	1.60	0.00	1.60 ¹
17	5.01	MINCHES CORNER ROAD	2	3.81	3.48	0.00 ²
17	5.02	MINCHES CORNER ROAD	3B	1.51	1.35	0.00 ³
18	1	COLUMBIA HWY&MINCHES	3B	23.10	23.46	23.46
18	3	312 MINCHES CORNER ROAD	3B	54.50	52.21	52.21
18	3.01	MINCHES CORNER ROAD	3B	9.13	7.83	7.83
20	1	SILVERLAKERD&BEEBE R	3B	15.00	0.00	14.13 ⁴
20	3	251 BEEBE RUN RD	3B	27.00	0.00	31.57 ⁵
22	5	BARRETTS RUN RD	3B	17.80	17.55	17.55
22	6	727 BARRETTS RUN RD	3B	29.40	31.23	31.23
63	41	397 ROADSTOWN ROAD	3B	67.90	67.81	67.81
63	42	437 ROADSTOWN ROAD	3B	52.80	54.64	54.64
64	1	216 RANDOLPH ROAD	3B	123.20	132.45	132.45
64	2	E OF DIAMENT RD	3B	27.40	29.38	29.38
64	2.01	DIAMENT RD	3B	16.00	16.45	16.45
64	2.04	199 DIAMENT ROAD	3B	5.00	5.49	5.49
65	11	621 ROADSTOWN ROAD	3B	141.10	149.74	149.74
70	3.01	ROADSTOWN RD	3B	42.00	42.41	42.41
70	4	ROADSTOWN RD	3B	25.70	26.29	26.29
70	8	602 ROADSTOWN ROAD	2	61.91	61.84	61.84
71	17	465 ROADSTOWN - GREENWICH	3B	76.40	74.03	74.03
71	17.01	ROADSTOWN GRNWCH RD	3B	1.10	1.11	1.11
71	18	ROADSTOWN GRNWCH RD	3B	41.10	39.84	39.84
71	19	ROADSTOWN GRNWCH RD	3B (included in L18)		0.16	0.16
71	20	ROADSTOWN GRNWCH RD	2	0.70	0.67	0.67
71	43	ROADSTOWN GRNWCH RD	3B	14.10	13.94	13.94



INVENTORY OF OPEN SPACE

Table 8. Tax Record Information For Preserved Farmland (as of October 2011)

Block	Lot	Property Location	Property Class	Tax Acreage	SADC Acreage	OSRP Acreage
78	4	DUTCH NECK & SLADE	3B	26.70	26.60	26.60
78	12	SLADE LANE	3B	198.10	0.00	198.10 ⁶
78	3.01	49 DUTCH NECK & SLADE LAN	3B	11.80	12.10	12.10
78	20	SANITARIUM RD	3B	17.80	19.80	19.80
79	5	DUTCH NECK RD	3B	148.50	146.53	146.53
79	6	CUBBY HOLLOW RD	3B	51.20	50.86	50.86
79	16	251 CUBBY HOLLOW RD	2	0.40	0.37	0.00 ⁷
79	17	253 CUBBY HOLLOW RD	2	0.40	0.41	0.00 ⁸
80	4	152 TRENCH ROAD	3B	69.50	69.32	69.32
80	6	242 TRENCH ROAD	3B	73.70	73.27	73.27
80	7	113 BARRETTS RUN RD	3B	79.40	75.08	75.08
80	17	BARRETTS RUN ROAD	3B	46.10	47.95	47.95
80	18	77 BARRETTS RUN RD	3B	78.60	78.93	78.93
80	18.01	99 BARRETTS RUN ROAD	2	2.00	2.02	0.00 ⁹
80	18.02	45 BARRETTS RUN ROAD	2	2.70	2.82	0.00 ¹⁰
81	13	HOPE GRANGE RD	3B	16.70	17.81	17.81
82	9	HOPE GRANGE RD	3B	136.30	141.32	141.32
82	11	473 SHEPPARDS MILL RD	3B	75.10	73.81	73.81
83	1	17 CEMETERY ROAD	3B	76.98	86.36	86.36
84	2	CEMETERY RD	3B	28.10	29.06	29.06
84	2.01	CEMETERY RD	15E	1.25	1.35	0.00 ¹¹
89	4	SHEPPARDS MILL RD	3B	1.50	1.42	1.42
89	5	SHEPPARDS MILL RD	3B	65.50	62.52	62.52
89	6	SHEPPARDS MILL RD	3B	17.80	18.46	18.46
89	7	91 LOATMAN ROAD	3B	136.00	130.95	130.95
89	12	SHEPPARDS MILL ROAD	3B	17.60	20.33	20.33
89	14	484 SHEPPARDS MILL RD	3B	101.40	105.84	105.84
89	15	LOATMAN RD	2	4.10	3.47	0.00 ¹²
89	16	LOATMAN RD	3B	76.20	77.52	77.52
TOTAL				3290.38	3081.60	3311.73

(Endnotes)

- 1 Parcel not on SADC inventory as preserved, but designated as preserved on tax maps
- 2 Parcel on SADC inventory as preserved, but not designated as preserved on tax maps; not included in OSRP acreage
- 3 Parcel on SADC inventory as preserved, but not designated as preserved on tax maps; not included in OSRP acreage
- 4 Parcel not on SADC inventory as preserved, but designated as preserved on tax maps
- 5 Parcel not on SADC inventory as preserved, but designated as preserved on tax maps
- 6 Parcel not on SADC inventory as preserved, but designated as preserved on tax maps
- 7 Parcel on SADC inventory as preserved, but not designated as preserved on tax maps; not included in OSRP acreage
- 8 Parcel on SADC inventory as preserved, but not designated as preserved on tax maps; not included in OSRP acreage
- 9 Parcel on SADC inventory as preserved, but not designated as preserved on tax maps; not included in OSRP acreage
- 10 Parcel on SADC inventory as preserved, but not designated as preserved on tax maps; not included in OSRP acreage
- 11 Parcel on SADC inventory as preserved; listed as tax exempt on tax maps, but not farmland; not included in OSRP acreage
- 12 Parcel on SADC inventory as preserved, but not designated as preserved on tax maps; not included in OSRP acreage



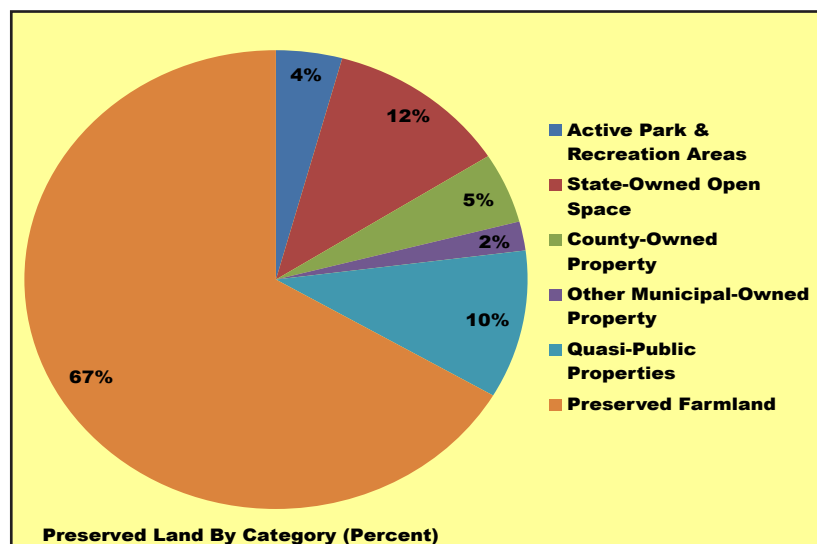
4.3 PRESERVED LAND SUMMARY

Hopewell Township consists of a total of 18,803 acres. Of this land, 4,975 acres, or 26.5 percent, is “preserved” through public ownership or by deed restrictions. These “preserved” lands are summarized as follows:

Active Park & Recreation Areas	211 ac
State-Owned Open Space	583 ac
County-Owned Property	247 ac
Other Municipal-Owned Property	102 ac
Quasi-Public Properties	520 ac
Preserved Farmland	3,312 ac
TOTAL	4,975 ac

Only those parcels permanently protected by NJ State ownership or deed restrictions are reasonably guaranteed to remain in their current use. The future use of parcels owned by Cumberland County or Hopewell Township can be modified and these parcels could potentially be developed. Several of these “preserved” parcels owned by Cumberland County or Hopewell Township also contain constructed public facilities or buildings, and therefore are not technically open space.

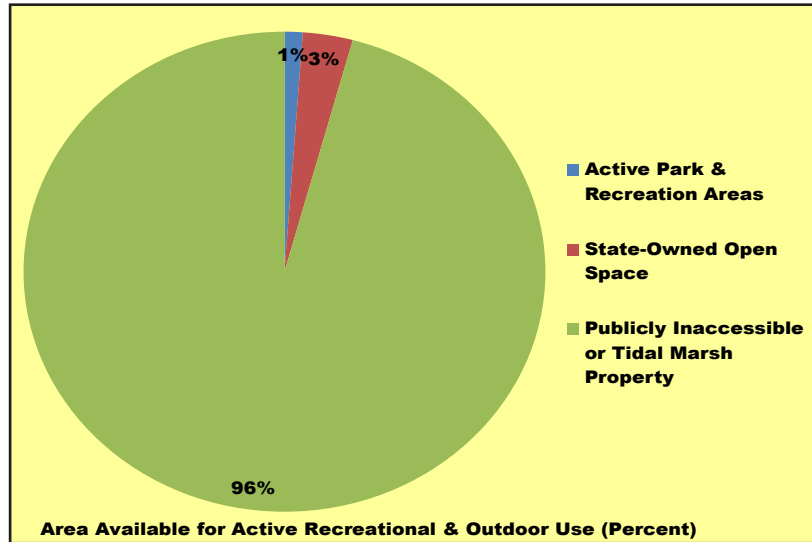
In addition, the majority of these “preserved” lands are privately owned (e.g., preserved farmland) and not open for public access or use. Furthermore, a significant portion of these “preserved” lands are also tidal marsh, which although it is open for public access, can be accessed only by boat.





4.4 ACTIVE RECREATION AREA SUMMARY

Only a relatively small portion of the land within Hopewell Township is open to the public for active recreational or outdoor use. Of the 4,975 acres of “preserved” land within the Township, only approximately 1,314 acres are accessible to the public (27.3%). Excluding those parcels that are tidal marsh and only accessible by boat, approximately 790 acres are open for public recreational and outdoor use. The majority of this publicly accessible upland is state-owned wildlife management area without any public access improvements.



Comparison of the area open to the public to the total land area indicates that only 4.2% of the upland property within the Township is available for active recreational or outdoor use by the public:

Active Park & Recreation Areas	211 ac
State-Owned Open Space	583 ac
Publicly-inaccessible or Tidal Marsh Property	18,009 ac
TOTAL	18,803 ac

One of goals of this plan is to increase the availability of area within the Township that is open to the public for active recreational and outdoor use.

4.5 INVENTORY OF POTENTIALLY AVAILABLE LAND

This inventory of potentially available lands in the Township is intended to identify the categories and types of land that the township should look towards when planning for open space preservation. Some of these property classes are not traditionally thought of as potential “open space,” but Hopewell Township should utilize a diverse inventory of lands to begin to prioritize proper-

INVENTORY OF OPEN SPACE



ties for acquisition. This inventory includes:

Farm-assessed Land (without approved development and not permanently preserved)	10,862 ac
Vacant Land (without approved development)	598 ac
Developed Land over 5 acres	573 ac
TOTAL	12,033 ac

Vacant land (Property Class “2” in Appendix A) are generally smaller, undeveloped lots that may eventually be used for residential development if not otherwise preserved. The “Developed Land” category in this summary is comprised of lots that already have some residential or commercial development, but are large enough (>5.0 acres) that portions of these lots may be available for preservation as open space or recreational areas (Property Class “4A” in Appendix A).

Of the 18,803 acres in Hopewell Township, 12,033 acres are included in this inventory of additional potential open space (64%). As would be expected given the primary agricultural use in Hopewell Township, over 90 percent of this land is farm-assessed property. While qualified farmland currently provides tax revenue to the Township, farmland that is not permanently protected remains vulnerable to future residential development that will require municipal services.



SECTION 5: NEEDS ANALYSIS

5.1 ACTIVE RECREATION ANALYSIS

Parks and open space play an important role in the quality of life for people of all ages. People naturally enjoy the outdoors, scenic views, and both passive and active recreational activities. Active park facilities provide structured play for young people, such as basketball courts, baseball fields and tennis courts. The Hopewell Crest School and West Cumberland Little League Association both provide active park facilities. Although Hopewell Township's proposed TDR program includes provisions for neighborhood parks within the proposed receiving area, the Township does not currently have any other playgrounds or open areas for impromptu sports and activities for people of all ages.

Assessing active recreational needs in a community can be done by utilizing methods developed by national and regional planning agencies. All such methods are approximations of need, based on certain assumptions about a community's residents, and most are designed for assessment in suburbanized municipalities or those becoming more urbanized. Although Hopewell Township is not an urban area, these models can provide some guidance.



One such model is a population-based analysis proposed by the National Recreation and Park Association. The National Recreation and Park Association (NRPA) uses a systematic planning approach that takes into account the unique needs, desires, and resources of communities as well as changing environmental, social, economic, and demographic trends. This approach analyzes the types of parks and facilities required for each individual community, along with the amount of acreage required to site those kinds of parks and facilities. According to NRPA standards, a suburban community should aim

to provide 12 acres of active recreation lands per 1,000 residents.

Comparing NRPA's acre recommendations to Hopewell Township's estimated population of 4,571 people, the Desired Active Parkland for Hopewell is approximately 55 acres. Although Hopewell residents may use facilities in adjacent municipalities at Cumberland Regional High School or within the City of Bridgeton, the Township has only approximately 26 acres of active recreation areas, including those at Hopewell Crest School and the West Cumberland Little League facilities. With continued residential development in Hopewell Township, this deficiency in desired active recreational facilities will become even more pronounced.

The NRPA also makes the recommendations shown in **Table 9** for specific types of recreation amenities based on population.



Table 9. Recommended Recreation Facilities per NRPA Population Standards

Activity/Facility	Recommended Space Requirements	No. of units per Population
Trails	Variable	1 system per region
Tennis	2 acres	1 court per 2,000
Basketball	5,040-7,280 sq ft	1 per 5,000
Volleyball	4,000 sq ft	1 per 5,000
Baseball	3.0 - 3.85 acres	1 per 5,000
Softball	1.5 - 2.0 acres	1 per 5,000
Soccer	1.7 - 2.1 acres	1 per 10,000
Multiple Recreation Court (basketball, volleyball, tennis)	9,840 sq ft	1 per 10,000
Indoor Swimming Pool	0.5 - 2 acres	1 per 20,000
Handball	800 sq ft	1 per 20,000
Ice Hockey	22,000 sq ft	1 per 100,000
Field Hockey	1.5 acres	1 per 20,000
Football	1.5 acres	1 per 20,000
1/4 mile Running Track	4.3 acres	1 per 20,000

Hopewell Township is a small municipality and presently has less than 5,000 residents, however, the existing active recreational facilities are considered insufficient for current residents and the expected residential growth will necessitate additional facilities. The available athletic facilities at Hopewell Crest School are cramped, utilize adjacent private property, and are only available outside normal school hours. In addition, the athletic fields themselves do not meet expected standards for athletic play. The athletic fields at West Cumberland Little League are limited to baseball and softball fields, are not owned by the municipality, and are fully utilized for league practice and play during three seasons of the year. Hopewell Township has no trails, tennis courts, or volleyball courts.

To provide for the present and expected population growth within Hopewell Township, additional and improved recreational facilities are required.





5.2 OPEN SPACE AND PASSIVE RECREATION ANALYSIS

The State Comprehensive Outdoor Recreation Plan (NJ SCORP) calculates the recreation open space *minimum* requirements for federal, state, county, and municipal governments, which it publishes as the Balanced Land Use Guidelines. These measures regard land as a finite resource for

Table 10. New Jersey Balanced Land Use Guidelines

Category	Standard
Federal	4% of the total land area of the state
State	10% of the total land area of the state
County	7% of the developable area of the county
Municipal	3% of the developable area of the municipality
Source: NJ SCORP	

which there are legitimate, competing uses. This approach does not take into account current or forecasted population or the intensity of development patterns.

The Balanced Land Use Guidelines are shown in **Table 10**. This approach recognizes that environmentally sensitive lands are usually unsuitable for tennis

courts, ball fields, basketball courts, and other active recreation facilities, but may be suitable and should be preserved in federal, state, county, and municipal park systems and conservation areas. The 3% guideline for municipalities is calculated based on total land area minus undevelopable land (wetlands, waterways, and open waters).

The Federal and State Guidelines apply to the state as a whole, but as a point of reference, Hopewell Township has no Federally-owned land and the State of New Jersey presently owns about 3.1% of the Township. Cumberland County presently owns about 1.3% of the Township, however, these County-owned lands are not available as recreation open space.

The municipality presently owns approximately 118 acres within Hopewell Township, but this acreage can be adjusted as follows for comparison to the NJ SCORP Guidelines:

Total Land Area	18,803 ac
(-) Undevelopable Lands (freshwater wetlands, tidal wetlands, open water,)	~2,256 ac
Total Developable Area	~16,547 ac
Total Owned by Township	118 ac
(-) Presently developed municipal land	66 ac
(-) Other undevelopable (drainage, etc.)	2 ac
(+) Owned by City of Bridgeton	169 ac
Total Municipal-Owned Recreation Open Space	~219 ac
Percent of Municipal-Owned Recreation Open Space	1.3%



The recreation open space owned by the municipality (Hopewell Township + City of Bridgeton) comprises about 1.3% of the Township.

Therefore, while approximately 26% of Hopewell Township may be considered preserved land (state, county, or municipal-owned; preserved farmland; and quasi-public property), only a small portion of this land is available for passive recreation and outdoor activities. The portion of these preserved lands and recreation open space owned by the municipality should be increased to maintain and improve the quality of life for Township residents. There is a lack of publicly-accessible areas/facilities to allow passive recreational activities such as hiking, bird watching, or enjoyment of the Cohansey River scenic vistas.

In addition, as discussed in the next section of this OSRP, many of the environmentally sensitive areas so critically important to maintenance of water quality in tributaries to the Cohansey River, protection of groundwater resources, preservation of remaining forest cover, and protection of wildlife resources remain unprotected and vulnerable to future development pressure.

As discussed in the Hopewell Township Environmental Resource Inventory, the Cohansey River is a natural resource of local, state, and even national ecological importance. Local planning and growth management strategies play an important role in protection and preservation of this resource. Currently, public access to this scenic and ecologically important River is minimal and should be increased for local residents and wildlife enthusiasts. Other important environmental resources in Hopewell include the numerous stream corridors, forested lands, and historic and cultural resources.

Hopewell Township should consider planning efforts to increase the availability of land open for passive recreational activities and, in conjunction with these efforts, should focus efforts on preservation and protection of environmentally sensitive areas that can be made accessible to the public for enjoyment of the Township's ecological treasures.



5.3 OPEN SPACE AND RECREATION NEEDS SUMMARY

OPEN SPACE & RECREATION NEEDS

- A. Additional and improved active recreational facilities are required.**
- B. There is a lack of publicly-accessible areas/facilities to allow passive recreation and outdoor activities.**
- C. Trails and recreation areas linking people to nature are limited.**
- D. Public access to the Cohansey River within Hopewell Township is minimal and opportunities to enjoy its scenic shoreline and vistas are lacking.**
- E. Environmentally sensitive areas remain unprotected and vulnerable to future development pressure.**
- F. Development within stream corridors threatens protection of water quality in tributaries to the Cohansey River.**
- G. Remnant forest habitat and its wildlife resources are threatened by development and fragmentation.**
- H. Critically important groundwater recharge areas remain unprotected and vulnerable to future development pressure.**

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SECTION 6: RECOMMENDATIONS/ACTION PLAN

6.1 ACTIVE RECREATION RECOMMENDATIONS

Need A: Additional and improved active recreational facilities are required.

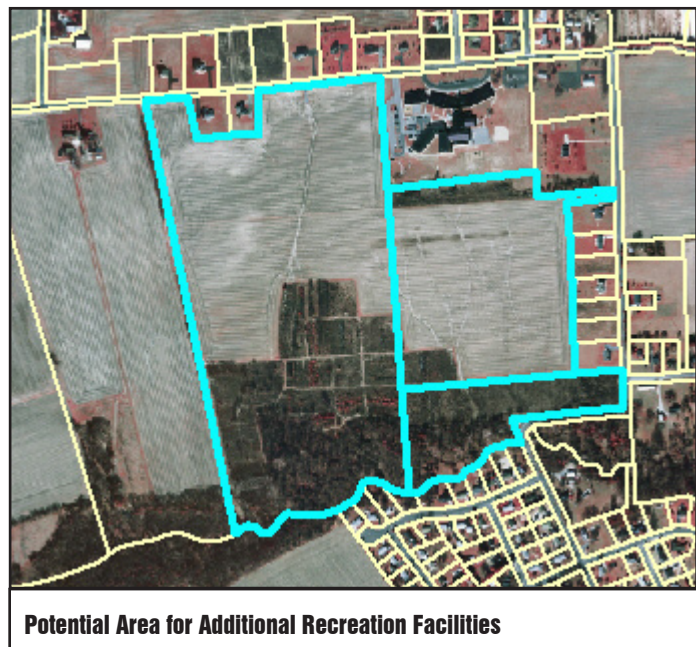
Based on public input and professional guidance, the Hopewell Township Environmental Commission recommends that the Township pursue development of the following additional recreational facilities:

NUMBER	ACTIVITY/FACILITY	REQUIRED SPACE
1	Trail	Linear
1	Baseball Field	4 acres
1	Softball Field	2 acres
1	Soccer Field	2 acres
1	Volleyball Court	1 acres
2	Tennis Courts	2 acres
1	Field Hockey Field	2 acres
TOTAL		13+ acres

One logical area for expansion of the active recreation facilities within Hopewell Township is adjacent to the existing facilities at Hopewell Crest School. These parcels are currently in private ownership and threatened by residential development. The Township should, however, look for opportunities to purchase portions of these parcels for expansion of active recreation facilities (**Table 11**).

If Hopewell Township is successful in implementing a TDR program, a second suitable area may be adjacent to the location recommended for construction of an additional school in the current draft of the Development Transfer Plan Element of the Master Plan. This parcel is also in private ownership, but portions of this parcel should be considered for future planning purposes (**Table 11**). As discussed below in Section 6.2, this location would be adjacent to the recommended linear trail through the Township and would be easily accessible to pedestrian or bicycle traffic.

There may be other suitable locations within the Township for additional active



RECOMMENDATIONS



Potential Area for Additional Recreation Facilities

recreational facilities as can be recommended by the Recreation Committee.

Table 11 below lists the tax record information for the parcels currently recommended as potential locations for additional active recreation facilities.

Table 11. Tax Record Information For Potential Additional Active Recreation Facilities				
Block	Lot	Property Location	Property Class	Acreage
35	3	Kinkle Road	3B	27.80
35	3.01	Sewall Road	3B	67.63
35	3.02	Mary Elmer Drive	3B	10.00
67	16	385 Barretts Run Road	3B	51.30

NOTE: THE PRESENCE OF A PARTICULAR PROPERTY ON LISTS IN THIS OSRP INDICATES ONLY THAT THE PROPERTY FALLS WITHIN THE RECOMMENDED AREA, AND THAT THERE ARE SOME ENVIRONMENTAL OBJECTIVES RELATIVE TO THE PROPERTY. SUCH OBJECTIVES CAN BE ACHIEVED THROUGH A VARIETY OF METHODS, INCLUDING DIRECT ACQUISITION, CONSERVATION EASEMENTS, LAND ORDINANCES, AND/OR GOOD STEWARDSHIP BY LANDOWNERS. ANY ACQUISITION WOULD REQUIRE A WILLING SELLER.



6.2 OPEN SPACE AND OUTDOOR RECREATION RECOMMENDATIONS

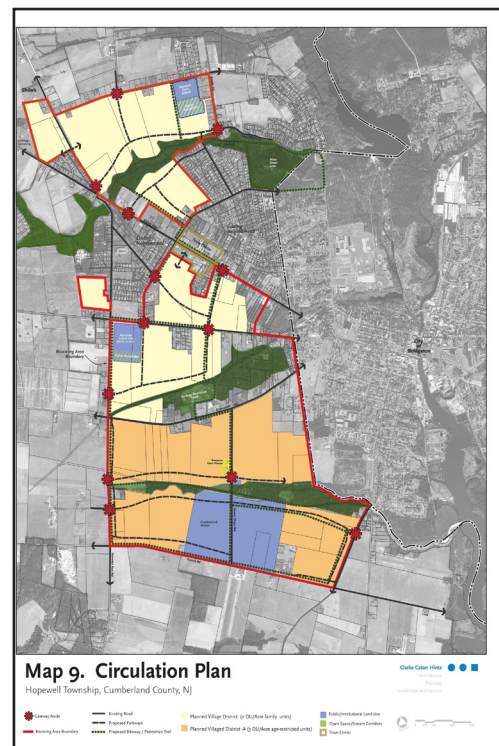
Need B: There is a lack of publicly-accessible areas/facilities to allow passive recreation and outdoor activities.

Although approximately 26 percent of Hopewell Township is “preserved” through public ownership or by deed restrictions, only 4.2% of the upland property within the Township is available for passive recreational or outdoor use by the public. The Township is dominated by agriculture, so farmland preservation should remain the primary vehicle for preservation. However, the Township should pursue the preservation of additional upland areas with public access improvements to allow passive recreation and outdoor activities.

Preservation of additional acreage through New Jersey’s Green Acres program with those properties enrolled in New Jersey’s payment in-lieu of taxes (“PILOT”) program can partially satisfy this objective. Hopewell presently has about 3% or 590 acres currently receiving PILOT funding from the state. These payments make no distinction between uplands and wetlands.

It is recommended that the Township work with New Jersey’s Green Acres Program to pursue preservation of the additional lands identified below under Needs C through H. These preserved lands would be in addition to preserved farm land and would be open to the public for passive recreation and outdoor activities. The township should also explore opportunities to partner with the State Green Acres program, the NJDEP Division of Fish & Wildlife, the Cumberland County Improvement Authority, and other non-profits to expand such state Wildlife Management Areas (WMA) as Elk Lake, Bostwick Lake and Cohansey River in order to better protect these resources (avoid land use conflicts) and create greater opportunities for their use and enjoyment by residents and visitors alike.

Adoption of this OSRP as an element of the Hopewell Township Master Plan will establish planning objectives and serve to guide future planning decisions within the Township. It is also recommended that the Township aggressively pursue establishment of a Local Purpose Tax dedicated to open space, farmland preservation, environmental, and recreational purposes. A Local Purpose Tax would provide a stable source of fund-





ing to match other grant money for land preservation as it becomes available¹.

Need C: Trails and recreation areas linking people to nature are limited.

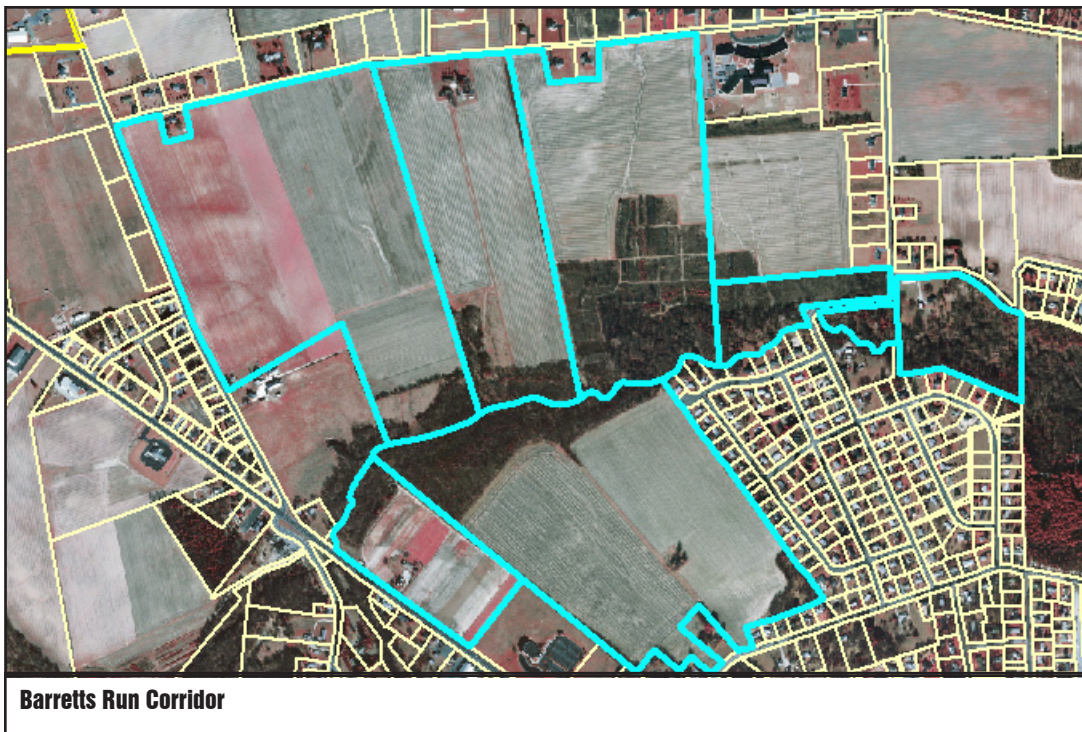
As recommended in Section 6.1, Hopewell should pursue the development of linear trails within the Township for walking, jogging, and biking. These linear trails would provide an opportunity for recreation and link with the natural environment.

TDR Receiving Area

If Hopewell Township is successful in implementing a TDR program, the current draft of the Development Transfer Plan Element of the Master Plan contains several bikeway/pedestrian trails within the proposed Receiving Area (**Figure 6**). These TDR proposed trails generally follow stream corridors which serve to also protect some of the environmentally sensitive areas discussed below.

Barretts Run Corridor

In addition to those corridors identified within the Draft Development Transfer Plan Element of the Master Plan, it is recommended that the Township pursue establishment of a walking trail within the Barretts Run Corridor. The Barretts Run Corridor from Route 49 to Mary Elmer Lake is adjacent to current and proposed residential development and would be readily accessible to township residents. The corridor contains significant wetlands, which are not developable under



¹ “Towns and counties with an open space tax (or other stable funding source) and an Open Space and Recreation Plan (OSRP) are eligible for larger Green Acres Acquisition Grants (50% of the purchase price instead of 25%) under the Planning Incentive Program. Once a town meets the Planning Incentive criteria, it receives funds in the form of a special block grant, similar to a credit line, that can be used for any parcel listed in its approved OSRP.” (ANJEC Bulletin)



New Jersey regulations and should make purchase of a right-of-way from private landowners possible. A linear trail in this location would need to be located primarily along the northern side of Barretts Run, and likely include a bridge or two to connect to existing facilities within Mary Elmer Lake Park. There is an existing sanitary pumping station along Route 49 that could provide a suitable location for public parking at one end of the trail.

The establishment of a trail within the Barretts Run Corridor would require the purchase of a right-of-way through some or all of the parcels listed below in **Table 12**. Several of the parcels identified in Table 12 are also listed in the table of potential additional active recreation facilities (Table 11), so purchase of these parcels could serve a dual purpose.

Table 12. Tax Record Information For Barretts Run Corridor

Block	Lot	Property Location	Property Class	Acreage
34	2	98 Mary Elmer Dr	4A	14.5
34	2.01	Mary Elmer Drive	3B	2.5
35	3.01	Sewall Road	3B	67.6
35	3.02	Mary Elmer Drive	3B	10.0
35	4	Sewall Road	3B	50.9
35	5	607 Barretts Run Rd	3B	21.9
35	5.01	Sewell & Barretts Run Rd	3B	94.6
35.09	8	West Park Drive	3B	83.0
35.09	12	Shiloh Pike	3B	19.0

Need D: Public access to the Cohansey River is minimal and opportunities to enjoy its scenic shoreline and vistas are lacking.

The Cohansey River is a natural resource of local, state, and even national ecological importance. It is also exceptionally important for fish and other aquatic organisms, birds including bald eagles, wildlife, and human recreation. Currently, public access to this scenic and ecologically important River is minimal and should be increased for local residents and wildlife enthusiasts. It is recommended that Hopewell Township seek to establish at least one access point to the Cohansey River for its residents to enjoy its scenic shoreline and vistas.

Lower Hopewell Township is highly scenic and boasts many outstanding natural areas and view sheds of the Cohansey River and area farms. The area is a designated Important Bird Area and is documented habitat for a wide variety of threatened and endangered avian wildlife. It is one of the best places in the entire Delaware Bayshore Region for viewing rare grassland birds and raptors. The New Jersey Green Acres Program has preserved some parcels in Lower Hopewell (**Figure 5**) and PSEG has preserved some of the tidal marsh (see insert in Section 4.2), but these



parcels provide only limited access to the Cohansey River shoreline and vistas².



Cohansey River Access Target Area

Hopewell Township should consider working with the New Jersey Green Acres Program and other non-profit land preservation organizations to secure public access to the Cohansey River within the designated Target Area. The Township should also take advantage of any other opportunities that may arise during future development proposals to secure public access. Once property rights have been obtained, the Township can pursue grant money or other sources of funding to develop public access facilities (e.g., parking, trails, observation platforms, and etc.).

Securing public access to the Cohansey River within the Target Area could require the purchase, or negotiation of a right-of-way, on a number of tax parcels within Blocks 78, 85, 88, and 89 on the Hopewell Township Tax Maps (see **Appendix A**). The priority should be upland parcels that have access to the river and road frontage to allow vehicular access to a nearby parking area.

Need E: Environmentally sensitive areas remain unprotected and vulnerable to future development pressure.

Need F: Development within stream corridors threatens protection of water quality in tributaries to the Cohansey River.

Need G: Remnant forest habitat and its wildlife resources are threatened by development and fragmentation.

Need H: Critically important groundwater recharge areas remain unprotected and vulnerable to future development pressure.

² The “Dutch Neck Bluffs” provide the best scenic vista of the Cohansey River in Hopewell Township. The cover page photograph for this OSRP was taken from B78 L24 off Aitkin Rd.



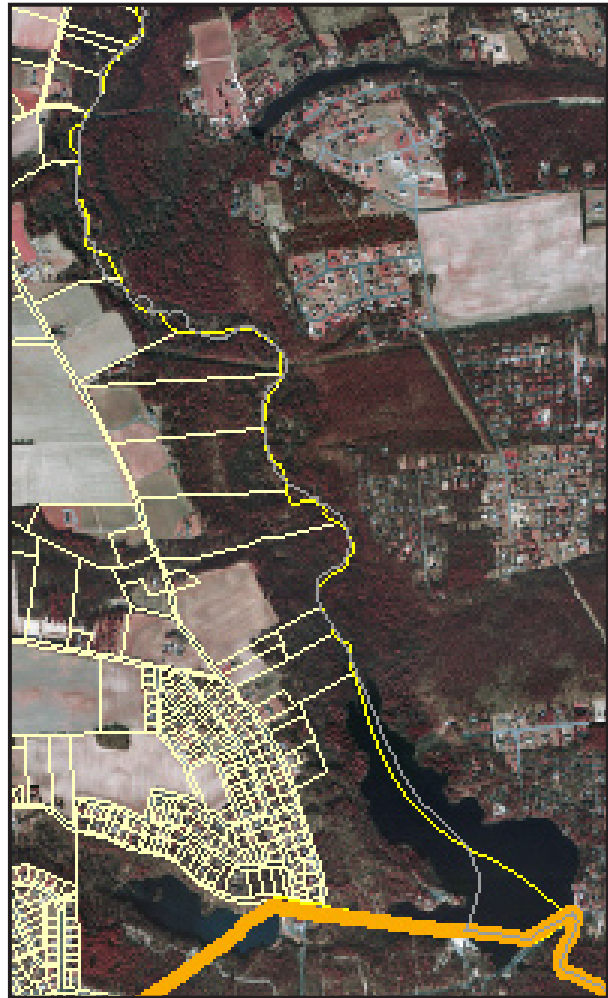
Open Space and Recreation Needs E, F, G, and H have overlapping objectives and preservation/protection of environmentally sensitive Target Areas will satisfy multiple needs. A discussion of the priority Target Areas and how the preservation/protection of these areas will satisfy Hopewell Township needs is as follows:

Upper Cohansey River Corridor

The Upper Cohansey River Corridor is one of the environmentally sensitive areas of Hopewell Township that needs to remain protected from future development impacts. This river corridor contains primarily forested wetlands (**Figures 2 and 4**), and although New Jersey regulations prohibit development within mapped wetlands, the corridor is vulnerable to the effects of development in adjacent upland areas.

Protection of vegetation within this river corridor is necessary to:

- Control downstream flooding;
- Maintain the chemical, physical, and biological integrity of the water resources of the watershed;
- Protect significant ecological components of the corridor such as wetlands, floodplains, woodlands, steep slopes and wild-life and plant life habitats;
- Prevent excessive nutrients, sediment, and organic matter from reaching surface waters by maintaining the vegetated buffer for filtration, deposition, absorption, adsorption, plant uptake, biodegradation, and de-nitrification;
- Maintain natural fluvial geomorphology of the stream system, thereby reducing stream bank erosion and sedimentation and protecting habitat for aquatic organisms;
- Conserve natural, scenic, and recreation areas within and adjacent to the river;
- Conserve the natural features important to land and water resources, e.g., head-water areas, groundwater recharge zones, floodways, floodplains, springs, streams, wetlands, woodlands and prime wildlife habitats;
- Maintain base flows in stream and moisture in wetlands;
- Provide for shading of the aquatic environment so as to moderate temperatures, retain more dissolved oxygen, and support a healthy assemblage of aquatic flora and fauna.



Upper Cohansey River-Seeley Pond to Sunset Lake



Preservation and protection of the Upper Cohansey River Corridor can be obtained without purchase of properties within this Target Area. It is recommended that Hopewell Township consider implementing additional development ordinances and land use planning tools to protect this open space and environmentally sensitive area.

It is further recommended that Hopewell Township consider improved public access to the Upper Cohansey River Corridor. The New Jersey Division of Fish and Wildlife has historically stocked trout at two locations along the upper Cohansey, one at Seeley Road and one at Silver Lake Road. There presently exists an unimproved parking lot adjacent to Seeley Pond that provides access for fishermen, and the Silver Lake Road location has a widened shoulder area for parking. These areas should be improved and maintained as a designated public access points.

Property along the Upper Cohansey River Corridor is presently in private ownership and fishing is limited to the area adjacent to the roads. Hopewell Township should consider working with Upper Deerfield Township and the NJDEP to open up some reaches of the river for public fishing.

The Upper Cohansey River from Seeley Pond to Sunset Lake reportedly used to be passable by canoe. Hopewell Township should also consider working with Upper Deerfield Township, the NJDEP and the City of Bridgeton to re-open this stretch of river to passage by canoe or kayak. Improvement of the two access

points and signage would provide an additional, nearby opportunity for outdoor recreation for township residents and other outdoor enthusiasts.

Mounce Creek Corridor

The ecologically significant Elk Lake drains into Mounce Creek before flowing into the Cohansey River. This Mounce Creek Corridor is important wildlife habitat for the bald eagle and other protected species. The NJDEP Green Acres Program has recently expanded their Cohansey River Wildlife Management Area and preserved some of the parcels within the Mounce Creek Corridor, but portions of the corridor remain unprotected and vulnerable to future development. Hopewell Township should consider working with the NJDEP to expand the Cohansey River WMA and to preserve additional parcels along Mounce Creek located to the north of Sheppard's Mill Road for proper protection of this important habitat.



Elk Lake - Sheppard's Mill Pond Area

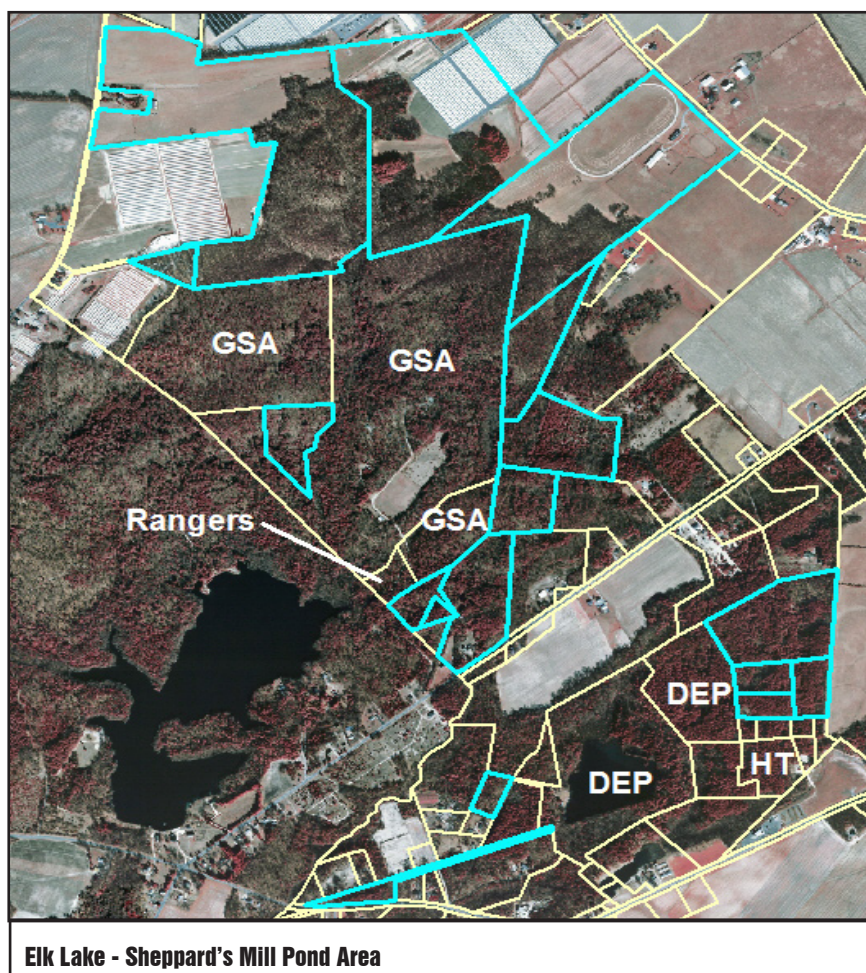
Elk Lake is a scenic, forested area north of the Cohansey River that is rich in both wildlife and historical significance. The proximity of this area to the River and nearby wetlands provides a habitat for a wide variety of birds and fauna. Additionally, the vernal pools surrounding the Lake attract unique aquatic life. The architectural ruins of previous industrial use suggests this area was once the site of a historic hamlet or village.

Sheppard's Mill Pond proper is located in Greenwich Township, but much of the watershed is located within Hopewell Township. Portions of the watershed are owned by the Girl Scouts of Central and Southern New Jersey, but much of the watershed remains in private ownership. Sheppard's Mill Pond has recently experienced some problems with water quality and preservation of the stream buffers and forested areas of the watershed is important for the protection of water quality.

The Elk Lake - Sheppard's Mill Pond Area is one of the last remaining undeveloped areas within Hopewell Township and remains in forest cover. As discussed below, it is also part of the Burden Hill Forest which is an environmentally sensitive area important as wildlife habitat and for groundwater recharge.

As recommended in the current draft of the Hopewell Township TDR Land Use Plan Element, the Township should consider targeting this area for a future park³. The Township currently owns several lots adjoining the Elk Lake property, which could possibly provide access to the Lake. .

The parcels currently owned by Hopewell Township, plus those lots owned by the NJDEP and the Girl Scouts, can potentially be managed as parkland available for open space and outdoor recreation. The Township should consider working with Greenwich



³ This area was also identified as a potential county park area in Cumberland County planning documents from 1968.



Table 13. Tax Record Information For Elk Lake – Sheppard’s Mill Pond Area

Block	Lot	Property Location	Property Class	Acreage
71	15	BOWENTOWN RD	3B	57.3
71	16	BOWENTOWN RD	3B	51.4
71	17	465 ROADSTOWN - GREENWICH	3B	76.4
71	27.02	BOWENTOWN RD	1	11.02
71	28	GREENWICH ROAD	1	14.2
71	29	GREENWICH ROAD	1	7.0
71	33	941 GREENWICH ROAD	2	11.6
71	36	PRIVATE LANE	1	3.0
71	40	W OF BOWENTOWN	1	6.2
71	42	E OF ROSTWN GRNW	3B	2.1
76	48	N OF LOWER HOPEWELL	1	2.0
76	60	SHEPPARDS MILL RD	1	3.2
76	22	COOPER ROAD	1	15.8
76	23	COOPER ROAD	1	3.14
76	24	COOPER ROAD	1	4.0
76	25	COOPER ROAD	1	2.7

Township, the NJDEP, the Girl Scouts, and other non-profit land preservation organizations to explore opportunities to preserve Elk Lake, Sheppard’s Mill Pond, and the surrounding forest as a multiple-use recreation area.

Those forested parcels that should receive priority for purchased or preservation are listed in **Table 13**. Farming activities on surrounding parcels should be maintained and only the forested portions of several these parcels would require preservation.

Other Cohansey River Tributary Corridors

As recommended in the current draft of the Hopewell Township TDR Land Use Plan Element (**Figure 6**), the Township should also consider concentrating open space preservation/protection efforts within the numerous stream corridors throughout the Township that should be protected for water quality, wildlife habitat, rural character, and recreational uses. These stream corridors contain the majority of the remaining forest cover within the township. **Figures 2 and 4** show the location of the various stream corridors within Hopewell Township.

Several of these stream corridors have been discussed above as priorities for preservation/protection because they have special ecological values. In addition, three of these stream corridors have been identified in Hopewell Township’s draft TDR Development Transfer Plan Element as areas to be preserved in the future receiving area. These corridors are the Barrett Run Corridor and the two stream and wooded corridors north and south of Greenwich Road, both of which include former railroad beds. A fourth area identified in the draft TDR Development Transfer Plan Element is located at the eastern end of Trench Road along the Cohansey River. All four of these open space areas should be connected to existing and future greenways outside of the receiving area if Hopewell Township is successful in implementing a TDR program.

Burden Hill Forest Area

The last remaining area of Hopewell Township recommended for special protection or preservation is that portion of the Burden Hill Forest Complex that extends into Lower Hopewell. A small finger of the 15,000 acre Burden Hill Forest Complex extends into Hopewell Township. This important upland, highly unfragmented forest is an area targeted for preservation by all New

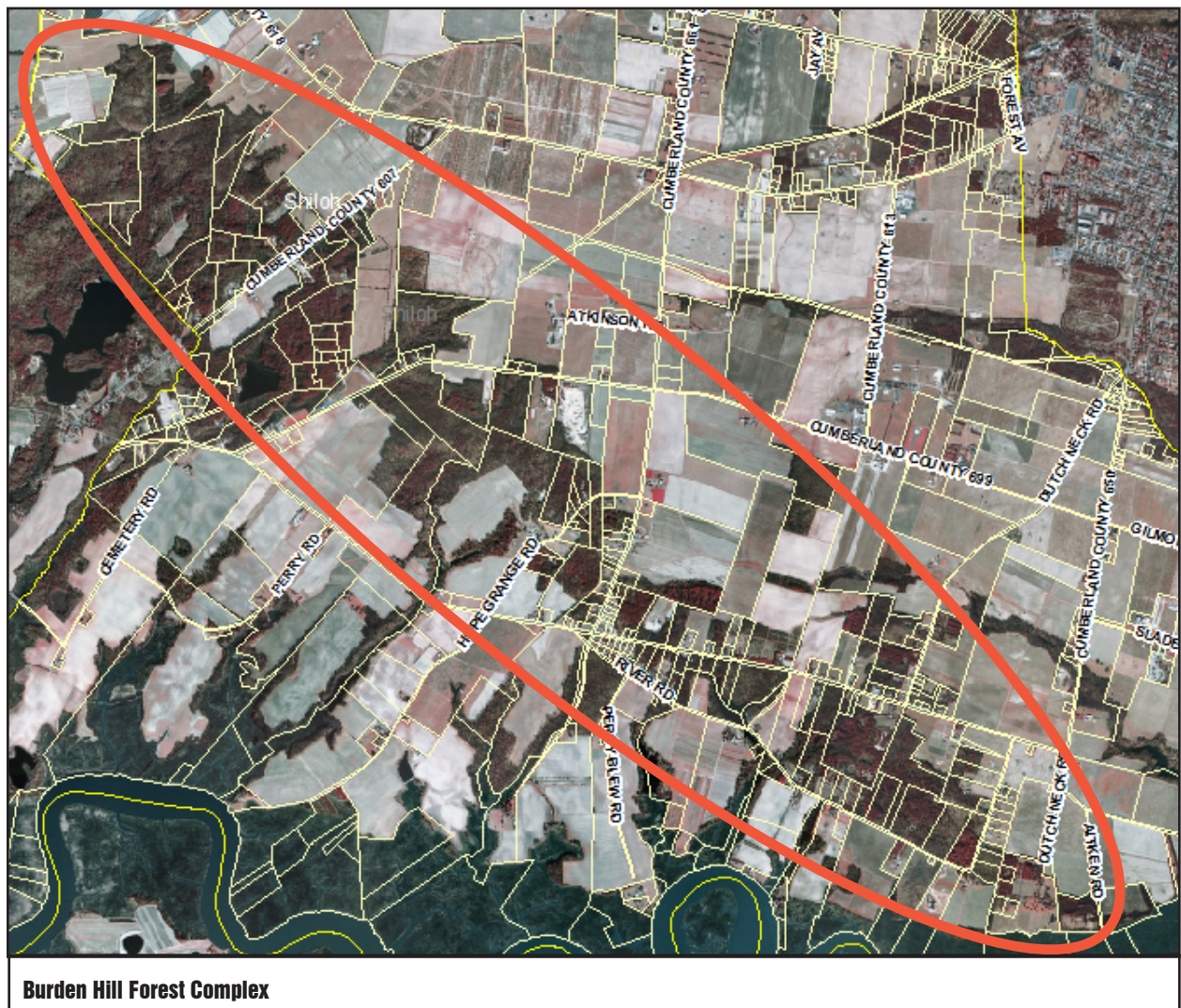


RECOMMENDATIONS

Jersey conservation organizations.

The forest provides excellent nesting habitat for migratory neo-tropical songbirds and is a national stronghold for the federally endangered swamp pink, as well as other rare plants. This Complex is also important for protection of groundwater resources and has very high infiltration rates for groundwater recharge, some as high as 10-15 inches per year. The ridge vegetation consists of pineland, forested headwaters and native vegetation of the coastal plain. In addition, a large stand of Atlantic White Cedar exists within the Complex, adjacent to Elk Lake.

The Burden Hill Forest Area can be identified in Figures 1, 2, and 3 as the swath of forested land stretching southeast across the southern portion of Hopewell Township from Sheppard's Mill Pond to the Cohansey River. The largest threat to mature woodlands and interconnected forest habitat, such as the Burden Hill Complex, in Hopewell and adjacent townships, is residential development. In response, a landowner outreach effort involving the New Jersey Green Acres Program, Natural Lands Trust, the American Littoral Society, and the New Jersey Conservation Foundation has been initiated to obtain fee purchases and conservation easements on lands for



RECOMMENDATIONS



trail and greenway connections throughout the forest complex. Hopewell should coordinate with the New Jersey Green Acres Program and other conservation organizations interested in protecting or preserving parcels within this Target Area.

It is recommended that Hopewell Township also consider additional development ordinances and land use planning tools to protect this forested and this environmentally sensitive area. Protection of the Burden Hill Forest Complex within the Target Area should focus on tax parcels within Blocks 71, 76, 79, 80, 81, 82, , 85, 86, 87, and 88 on the Hopewell Township Tax Maps (see **Appendix A**). The priority should be parcels that have contiguous forest cover and are vulnerable to development or forest clearing activities.



6.3 ACTION PLAN

The Action Plan suggests projects that Hopewell Township should pursue to implement the Open Space and Recreation Plan and suggested time frames for implementing these actions. This Open Space and Recreation Plan is not a static document. The Action Plan should be updated as necessary, and progress or changes should be reported to the Township Committee.

ACTION PLAN

First Year

- A. Adopt the Open Space and Recreation Plan as an Element of the Hopewell Township Master Plan.**
- B. Submit the OSRP to the Cumberland County Department of Planning and Economic Development as source material for their development of an OSRP for the County.**
- C. Submit the final OSRP to the New Jersey Green Acres Program for participation in the state's Planning Incentive Program.**

Within Three Years

- D. Hopewell Township Committee and representatives to consider options for enhancing use of existing open space and recreational areas (e.g., Elk Lake Wildlife Management Area, West Cumberland Little League, and etc.)**
- E. Consider a ballot item for voter approval establishing a local purpose tax dedicated to open space, farmland preservation, historic preservation, and recreation. Work with the Environmental Commission, Recreation Committee, and the Agricultural Advisory Board to educate residents on the need for and benefits of such a tax, including the financial benefits.**
- F. Hopewell Township Recreation Committee to develop and present formal recommendations for consideration by the Township Committee for the additional recreational facilities recommended by this OSRP.**



Within Five Years

- G. Hopewell Township Environmental Commission to develop and present formal recommendations for consideration by the Township Committee regarding additional development ordinances to protect the Upper Cohansey River Corridor and the Burden Hill Forest Complex.**
- H. Hopewell Township Environmental Commission to develop and present formal recommendations for consideration by the Township Committee regarding the feasibility of a walking trail within the Barretts Run Corridor.**
- I. Consider opportunities for improved public access to the Upper Cohansey River Corridor. As opportunities arise, the Hopewell Township Committee and representatives should work with Upper Deerfield Township, Cumberland County, New Jersey's Green Acres program, private developers, and other interested parties to develop improved and maintained public access points for fishing, canoeing and kayaking.**
- J. Hopewell Township Committee to consider the recommendations of the Hopewell Township Recreation Committee regarding the additional recreational facilities recommended by this OSRP.**

Ongoing

- K. Hopewell Township Agricultural Advisory Board to consider special environmental attributes and Target Areas identified in this OSRP in decisions regarding priority for farmland preservation funding.**
- L. Hopewell Township Committee and representatives to consider working with the New Jersey Green Acres Program and other non-profit land preservation organizations to secure public access to the Cohansey River within the designated Target Area. Hopewell Township should take advantage of any other opportunities that may arise during future development proposals to secure public access and pursue grant money or other sources of funding to develop public access facilities (e.g. parking, trails, observation platforms, and etc.).**



- M. Hopewell Township Committee and representatives to consider working with the NJDEP to expand the Cohansey River WMA and preserving additional parcels within the Mounce Creek Corridor for proper protection of this important habitat.**
- N. Consider targeting the Elk Lake - Sheppard's Mill Pond Area for additional preservation and protection. Hopewell Township Committee and representatives should work with Greenwich Township, the NJDEP, the Girl Scouts, and other non-profit land preservation organizations to explore opportunities to preserve the area as a multiple-use recreation area available to the public.**
- O. Hopewell Township Committee and representatives to consider concentrating additional open space preservation/protection efforts within the stream corridors throughout the Township that should be protected for water quality, wildlife habitat, rural character, and recreational uses.**
- P. Hopewell Township Committee and representatives to consider coordinating with the New Jersey Green Acres Program and other conservation organizations interested in protecting or preserving parcels within the Burden Hill Forest Complex.**

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SECTION 7: REFERENCES

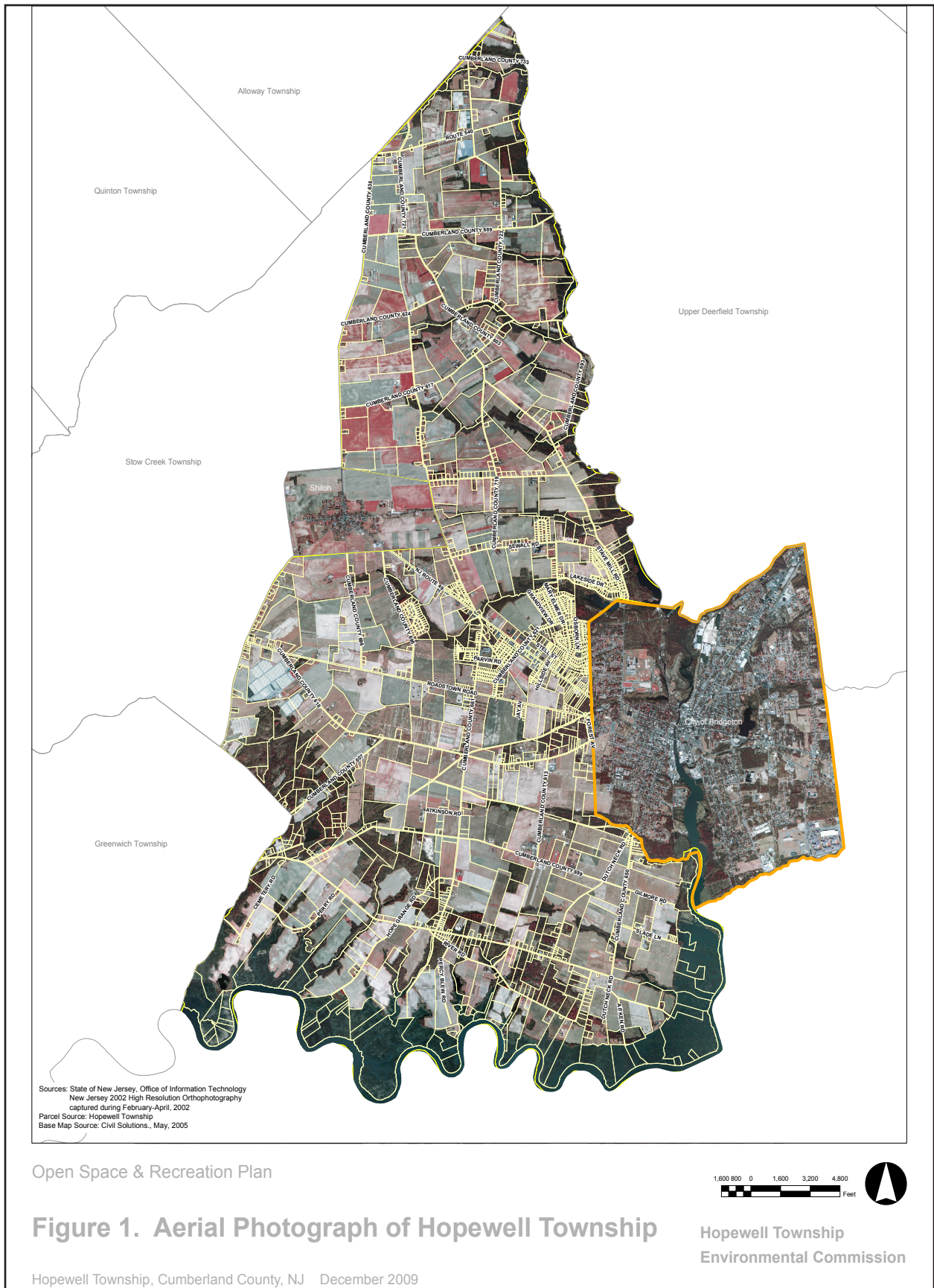
- Association of New Jersey Environmental Commissioners. Resource Paper: Open Space Plan. February 2003. (<http://www.anjec.org/pdfs/OpenSpacePlan.pdf>)
- Hopewell Township. Farmland Preservation Plan Element of the Hopewell Township Master Plan. November 2004.
- Hopewell Township. Conservation Element of the Hopewell Township Master Plan. October 2007. (<http://hopewelltpw-nj.com/ERI/Adopted%20version%20ERI%20with%20Maps.pdf>)
- Hopewell Township. Development Ordinance. May 2008. (<http://hopewelltpw-nj.com/HOPEWELL%20DEVELOPMENT%20ORDINANCE%20May-08.pdf>)
- Hopewell Township. Draft Development Transfer Plan Element of the Master Plan. Prepared by Clarke•Canton•Hintz for the Hopewell Township Planning Board. February 2007.
- Hopewell Township. Draft Land Use Plan Element of the Master Plan. Prepared by Clarke•Canton•Hintz for the Hopewell Township Planning Board. February 2007.
- Hopewell Township. Conservation Element of the Hopewell Township Master Plan. Appendix 5: Sites of Historical Interest. May 2008. (<http://hopewelltpw-nj.com/Environmental%20Commission/Historical%20Sites/Hopewell%20Township%20Sites%20of%20Historical%20Interest%2001132008.pdf>).
- National Recreation and Park Association (NRPA). NRPA Population Standards.
- New Jersey Audubon Society. The Important Bird and Birding Areas (IBBA) Program. Cohansey River Corridor. December 2009. (<http://www.njaudubon.org/SectionIBBA/IBBASiteGuide.aspx?sk=3029>)
- New Jersey Department of Environmental Protection. Green Acres Program: Open Space and Recreation Plan Guidelines. March 2009. (<http://www.nj.gov/dep/greenacres/pdf/osrpg.pdf>)
- New Jersey Department of Environmental Protection. Green Acres Program. 2008–2012 New Jersey Statewide Comprehensive Outdoor Recreation Plan, Open Space and Recreation Plan Guidelines. November 2007. (<http://www.nj.gov/dep/greenacres/pdf/scorp.pdf>)

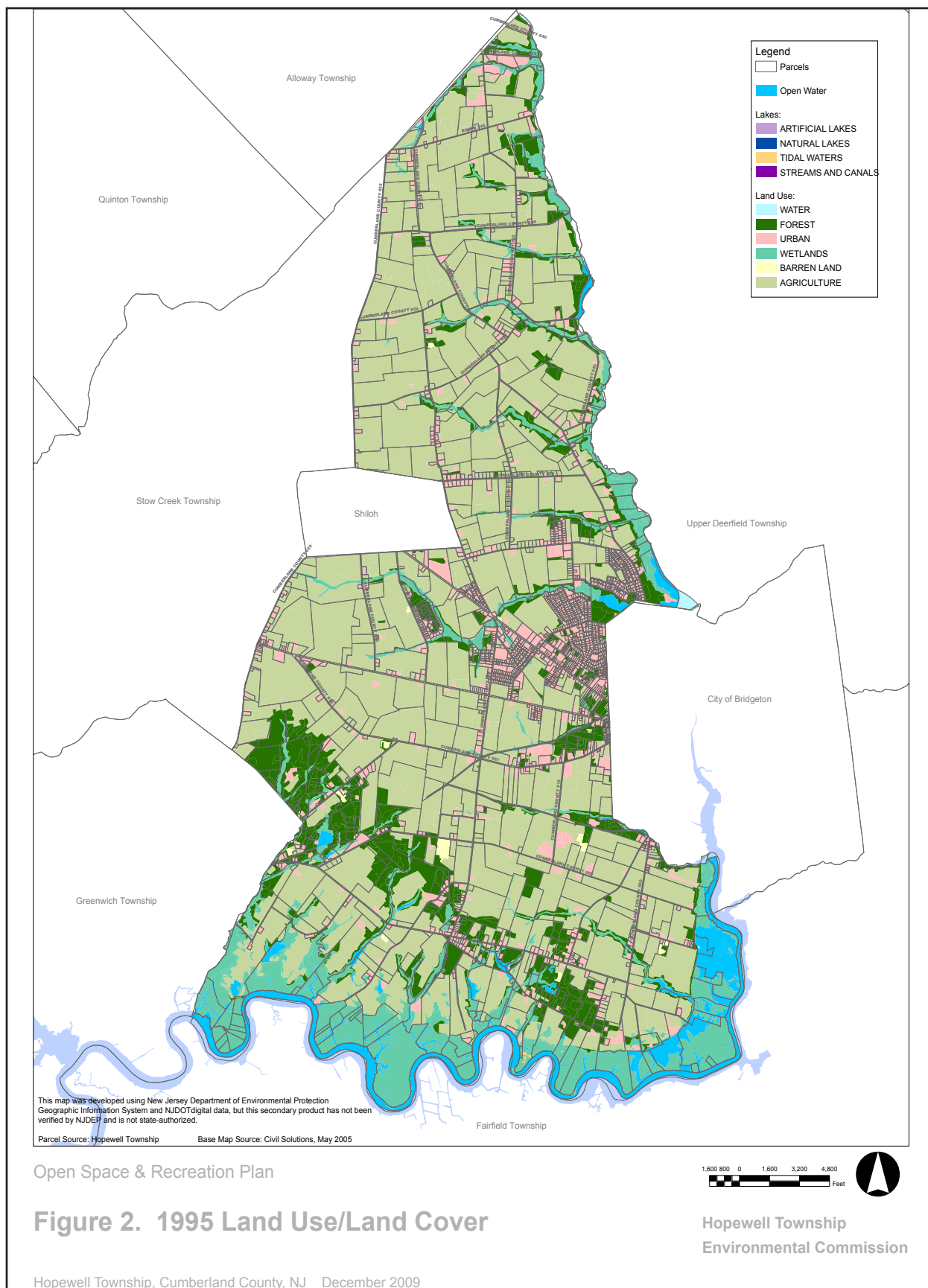
REFERENCES

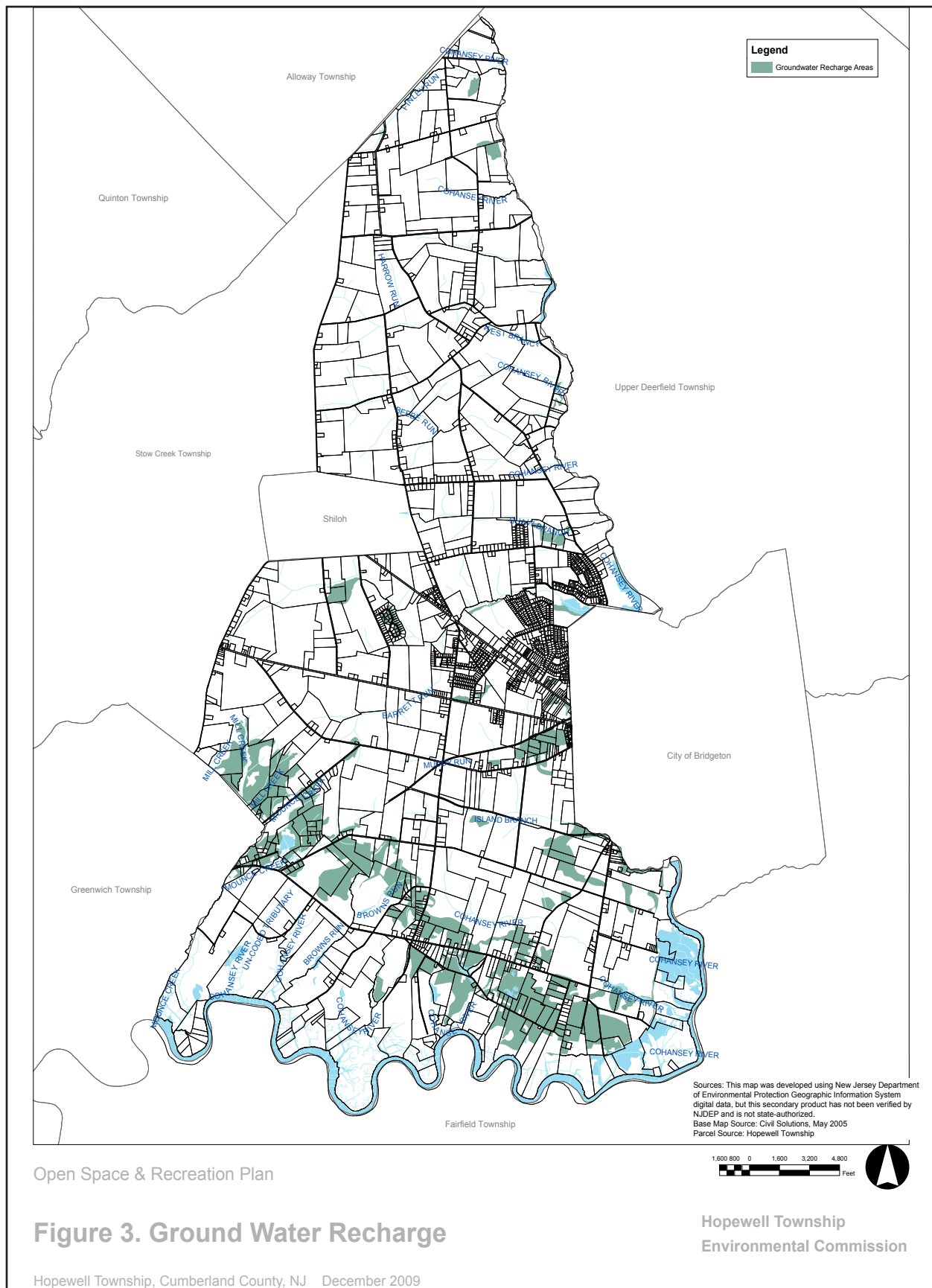


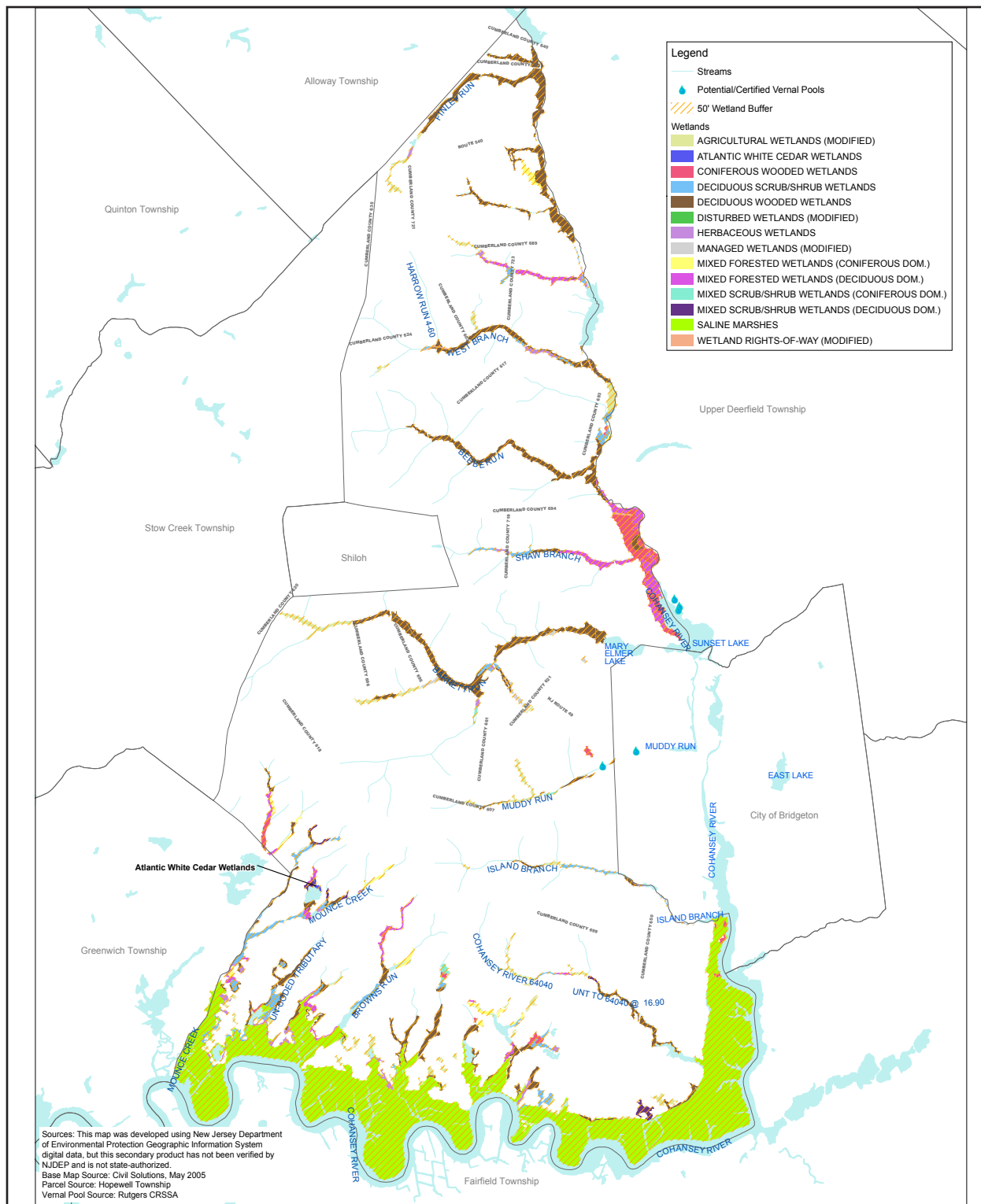
New Jersey Department of Environmental Protection. Division of Fish and Wildlife.
Endangered and Nongame Species Program. New Jersey Wildlife Action Plan.
Cohansey River Conservation Zone. January 2008. (http://www.state.nj.us/dep/fgw/ensp/wap/pdf/wap_draft.pdf)

PSEG Estuary Enhancement Program. (<http://pseg.com/environment/info/estuary>)







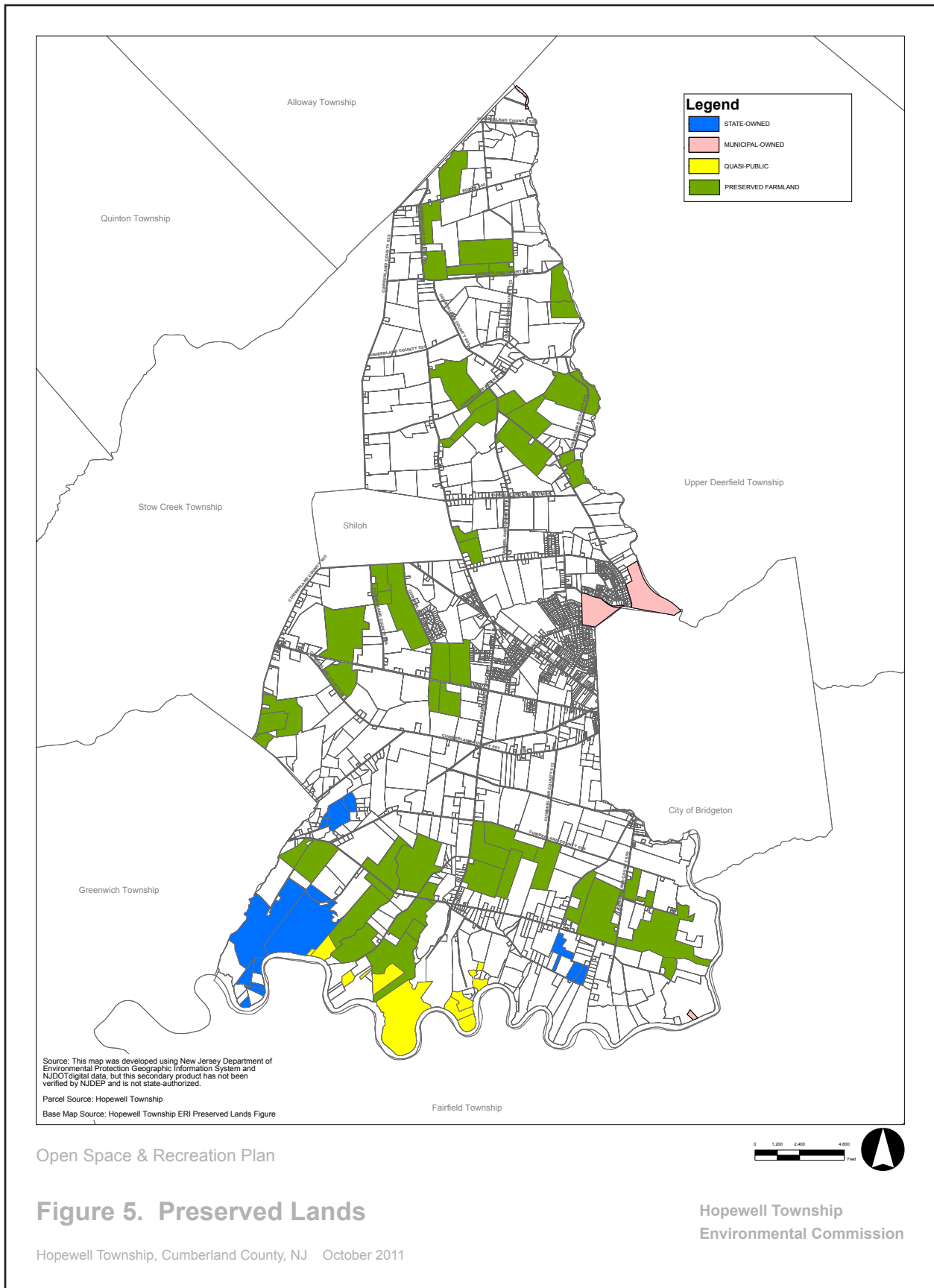


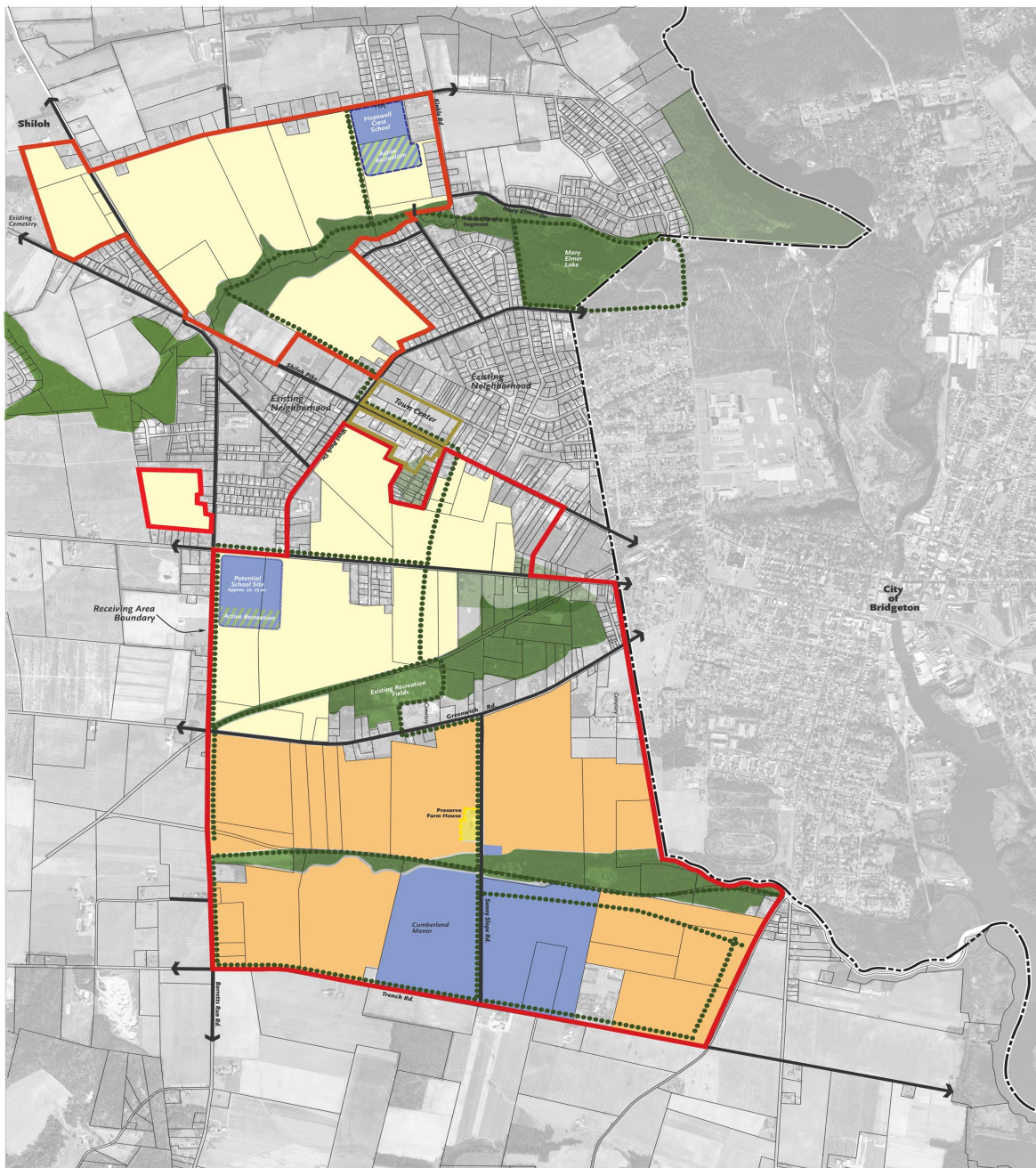
Open Space & Recreation Plan

Figure 4. Wetlands, Streams & Vernal Pools

Hopewell Township
Environmental Commission

Hopewell Township, Cumberland County, NJ December 2009





Map 10. Open Space Plan

Hopewell Township, Cumberland County, NJ

- Receiving Area Boundary
- PVD (2 DU/Acre family units)
- PVD-A (3 DU/Acre age-restricted units)
- Open Space/Stream Corridors
- Proposed Bikeway / Pedestrian Trail

Clarke Caton Hintz
Architecture
Planning
Landscape Architecture



Open Space & Recreation Plan

Figure 6. TDR Receiving Area Open Space Plan

Hopewell Township
Environmental Commission

Hopewell Township, Cumberland County, NJ May 2010