

Central Pine Barrens Comprehensive Land Use Plan

Volume 1: Policies, Programs and Standards

Plan Volume 1: Version of 4/19/23

Revision history:

January 13, 1995: Originally recommended by the Commission to the Towns of Brookhaven, Riverhead, and Southampton.

April 12 and 26, 1995: Amended by Commission resolutions following comments from towns.

June 12, 1995: Modified by the State Environmental Quality Review Act Findings Statement.

June 28, 1995: Approved in final form by the Commission, and signed into law by the Commission and the Governor.

May 1, 1996: Amended by resolution of the Commission pursuant to ECL Article 57 provisions for Plan amendments.

February 21, 2001: Amended to recommend legislative expansion of the Core residential exemption list.

October 20, 2004: Amended to recommend restricting government to compelling public need Core permits, and establishing a grandfathered government project list.

May 16, 2012: Ministerial Amendments adopted to Chapters 4, 5, and 6 pursuant to Commission resolution.

November 21, 2012: Credit Allocation Amendments to Chapter 6.

April 19, 2023: Amendments to Chapters 4, 5 and 6, effective date April 19, 2024.

Central Pine Barrens Joint Planning and Policy Commission
624 Old Riverhead Road
Westhampton Beach, New York 11978

Central Pine Barrens Comprehensive Land Use Plan

Volume 1: Policies, Programs and Standards

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New York State Police
Riverhead Town Code Enforcement
Riverhead Town Police
Southampton Town Police
Suffolk County District Attorney's Office Environmental Crime Unit
Suffolk County Park Police
Suffolk County Police
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Central Pine Barrens Comprehensive Land Use Plan

Volume 1: Policies, Programs and Standards

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Dedication

To Arthur Kunz: professional planner, Director of the Suffolk County Planning Department, teacher, friend to all, and an early champion of pine barrens preservation.

Special Acknowledgement

Since the inception of the Commission in July of 1993, and during the several months which preceded the state legislation, many individuals and groups have found the time and energy to work on the pine barrens issue.

One person, however, merits special acknowledgement and the sincere thanks of the Commission for committing himself and his agency to making the pine barrens plan a success, rather than a historical footnote. Without the assistance of Michael LoGrande - as a professional planner, originator of Suffolk County's Drinking Water Protection Program, and as Chairman and Chief Executive Officer of the Suffolk County Water Authority - there would simply not be a Plan. The Commission gratefully acknowledges his steadfast support.

Preamble to Volume 1

The Long Island Pine Barrens Protection Act of 1993 requires the preparation of a comprehensive land use plan ("the Plan") for the Central Pine Barrens of Long Island.

This volume, Volume 1: Policies, Programs and Standards, constitutes the Plan stipulated by the Pine Barrens Protection Act. Individual chapters of this Plan describe the provisions, standards, guidelines, programs, recommendations and other components of the Plan.

1. Executive Summary

In the preface to the *Central Pine Barrens Draft Plan* (July, 1994), the following observation was offered:

As with any work which emanates from multiple authors and covers a diversity of distinct topics, composing a summary or preface for such a work is difficult. Perhaps the diversity of authors and topics is a reflection of the subject being addressed, namely the Central Pine Barrens of Long Island.

This observation still applies. The pages and contents which follow cannot possibly convey the complex path of their construction. What remains invisible, even to the astute and careful reader, are the many possibilities considered and not selected, the paths explored and rejected, and the knowledge and experience which simply had to be accumulated before any consensus could be reached.

Also not visible are the consensus building processes, often frustrating and seemingly intractable, which had to be learned and mastered before the blank pages became filled. These processes, like those which formed and continue to influence the Central Pine Barrens, are complex and may never be fully understood, even by those who are a part of them.

Perhaps, however, one clue to the difference lies in the contrasting nature of the two.

The landscape quilt which we know as the pine barrens is the product of a complex geological, hydrological, biological and cultural process, and remains quietly on the earth while we study and learn more about this remarkable system. The consensus building process which led to this Plan, in stark contrast to the pine barrens proper, is a dynamic process brought to life by people. It neither sits still while we study and master it, nor does it evolve predictably. This Plan, therefore, is remarkable by its very existence.

In committing our hard won agreements to a formal Plan document, every effort has been made to keep the Plan succinct, understandable and readable. The pages which follow propose the following:

- A land acquisition component, with a long range goal of acquiring the bulk of the Core Preservation Area properties
- A new and innovative development rights transfer program, permitting owners of Core Preservation Area properties to receive and sell development rights, known as Pine Barrens Credits, directly or through a central "clearinghouse"

- Specification of receiving areas for Pine Barrens Credits, including "as of right" use areas, Residential Overlay Districts, and town-specific development rights transfer strategies for each of the three towns
- A Pine Barrens Credit "clearinghouse", to facilitate the operation of the development transfer program
- Development standards and guidelines, broken down by subject areas, for projects within the Compatible Growth Area
- Definitive procedures for both Compatible Growth and Core Preservation Area development applications, including jurisdictional definitions, application completeness criteria, decision periods, etc.
- Innovative protected lands management strategies, including two new interagency forums, the Protected Lands Council and the Law Enforcement Council. This includes specific recommendations for the detailed tasks involved in each of these two professional disciplines, written by the members themselves
- Topical strategies for integrating traditional resource based recreation activities such as hunting, fishing, and trail usage
- Detailed discussion of the much discussed fire management strategies for the Core Preservation Area, including a separate appendix on the development of a prescribed burning plan.
- Recommendations for legislative changes needed to fully achieve the goals of the pine barrens law.
- A tangible, realistic mission statement for future Commission actions and operations.

No Plan, though, however designed and implemented, will ever come to life by itself. Production of this Plan is simply the next step toward a permanent stewardship commitment - a commitment to preservation of the pine barrens, a commitment towards responsible planning and community evolution in the growth areas, and a commitment to honor the principles embodied herein.

Perhaps the best guide to our implementation of this Plan is to remember that the pine barrens are likely to survive well beyond our individual lifetimes, and what future East Enders find here, whether natural or human built communities, depends upon how responsibly we act in the years to come. Personally, I will use my own preferred yardsticks.

One simple yardstick, for example, will be the quality of the vista that I see around me when I return regularly to one of my favorite spots. Too many years back for me to recall, a special individual, one who I am privileged to call my friend, first introduced me to this spot in the pine barrens. In his 1986 *The Pine Barrens of Ronkonkoma* (New York-New Jersey Trail Conference, 1986), that friend, Larry Paul, writes of this spot:

It has a colossal view, undoubtedly the finest anywhere in the Pine Barrens. From it are visible all of the Dwarf Pine Plains and the barrier beach from Moriches nearly to Shinnecock Bay. To be here on a clear autumn day, with clouds massed overhead, with backlighting through the luminous wine-hued foliage of the oaks, to gaze far out upon that incredible flaring white mirror of the Atlantic, is to understand why the pinelands must be held forever wild.

I am confident that such experiences will always be available to those who seek them in the Central Pine Barrens, if only we bring this Plan to life in all its facets. The time to start is now.

*Ray Corwin
Executive Director
Great River, NY
January, 1995*

2. Introduction to the Pine Barrens Act

2.1 The Long Island Pine Barrens Protection Act of 1993

The "Long Island Pine Barrens Protection Act" (Chapters 262 and 263 of the New York State laws of 1993) was passed unanimously by the New York State Legislature in the closing days of its 1993 legislative session. Sponsored by Senator Kenneth LaValle and Assemblyman Thomas DiNapoli, the Act was signed into law by Governor Mario Cuomo on July 14, 1993. *The Act established a process for creating the third largest forest preserve in New York State, centered upon Long Island's Central Pine Barrens.*

The Pine Barrens Protection Act is an amendment to the Environmental Conservation Law (ECL) Article 57, "the Long Island Pine Barrens Maritime Reserve Act" of 1990 (Chapter 814 of the laws of 1990), which delineated a terrestrial and marine planning area for Eastern Long Island, and established an accompanying planning entity, the Long Island Maritime Reserve Council. The 1993 amendments which comprise the Pine Barrens Protection Act require that a comprehensive management plan be developed for that subset of the Maritime Reserve known as the Central Pine Barrens. This 100,000 acre area covers portions of the towns of Brookhaven, Riverhead and Southampton, and small portions of the villages of Quogue and Westhampton Beach. Specifically, ECL Section 57-0105 states that

The legislature further finds that a portion of the system known as the Central Pine Barrens area requires the preparation and implementation of a state supported regional comprehensive land use plan that will provide for the preservation of the core preservation area, protection of the Central Pine Barrens area and for the designation of compatible growth areas to accommodate appropriate patterns of development and regional growth with recognition of the rights of private land owners and the purpose of preservation of the core area.

The Pine Barrens Protection Act defines two geographic areas, the overall Central Pine Barrens (CPB) zone and the smaller 52,500 acre Core Preservation Area (CPA), contained within the larger area. Those portions of the Central Pine Barrens which are not within the Core Preservation Area are referred to as the Compatible Growth Area (CGA, approximately 47,500 acres).

Figure 2-1: Central Pine Barrens statutory areas

(See separate insert.)

Other provisions in the 1993 act contain amendments to the State Finance Law and Public Officers Law, and address the relationship between the new legislation and the State Environmental Quality Review Act (ECL Article 8) and the Sole Source Aquifer Protection Act (ECL Article 55, informally referred to as the Special Groundwater Protection Area law). Each of these laws must be considered in the implementation of the newly amended Article 57.

Immediately after the passage of the Pine Barrens Protection Act, the State Legislature passed a statewide Environmental Protection Act, providing long term funding for a variety of conservation efforts, including the implementation of the new provisions of Article 57. This measure involved the amendment of various state laws, including portions of the Environmental Conservation Law, in order to provide funds for landfill closure, waste reduction and planning, secondary materials marketing, local waterfront revitalization plans, and conservation assistance to local governments and not for profit organizations. Title 13 of the Environmental Protection Act specifically authorizes the appropriation of funds for Central Pine Barrens planning.

During the ensuing 20 months, the legislative milestones set forth in the Act were addressed as detailed in Figure 2-2. On March 13, 1995, a legislative extension to June 30, 1995 (Senate bill number 2322, Assembly bill number 3657) was passed and signed into law by Governor George Pataki. The extended period provided additional time for completion of the Plan review and the production of the final generic environmental impact statement.

2.2 The Pine Barrens Act in a Long Island context

Concurrent with the pine barrens work, several other regional environmental planning efforts are also underway. The Long Island South Shore Estuary Reserve Act (Chapter 556 of the laws of 1993) passed in the same legislative session as the Pine Barrens Protection Act. This law created a fifty mile long planning area extending from the western boundary of Hempstead Town in Nassau County to the eastern shoreline of Shinnecock Bay in Southampton Town, and including the waters between the barrier beach and the mainland. It also created the South Shore Estuary Reserve Council, to oversee the preparation of a comprehensive plan focused upon the Great South Bay waters, adjacent wetlands and upland areas which feed these waters. The state's East End Economic and Environmental Task Force completed its preliminary report in November of 1993. In addition, the National Estuary Program's Peconic Bay Task Force is actively pursuing its policy and management work. Several generic environmental impact studies are also underway or have been completed within the Central or eastern Suffolk area as well.

A snapshot of current activities, though, does not explain their evolution. The roots of these contemporary initiatives stretch back through a generation, and identifying a discrete historical point as an origin of the current pine barrens work is problematic.

Early in 1993, two events, a *Long Island Water Summit* conference (1/26/93 at SUNY at Stony Brook), and a *Why Can't Long Island?* conference (4/12/93 at Melville, NY) were held, capping

several years of litigation and controversy, preceding the discussions which eventually led to the passage of the Long Island Pine Barrens Protection Act in July of 1993. Yet, these events were only the most recent. The 1992-93 period also saw the release of the Article 55 based Long Island Comprehensive Special Groundwater Protection Area Study by the Long Island Regional Planning Board (Hauppauge, NY 1993).

The close of 1992 witnessed the final resolution of the much publicized pine barrens cumulative impact litigation, filed by the Long Island Pine Barrens Society in November of 1989. The State Court of Appeals ruled that no cumulative impact study could be required, while endorsing the desirability of the study.

The year 1992 also saw the issuance of two significant environmental studies. One was the first New York State open space plan, Conserving Open Space in New York State (New York State Department of Environmental Conservation and the Office of Parks, Recreation and Historic Preservation, Albany, NY). That document cited the pine barrens region as a resource of statewide importance. The second was the issuance of the Brown Tide Comprehensive Assessment and Management Plan (Suffolk County Department of Health Services, Hauppauge, NY), whose study area included portions of the Central Pine Barrens.

Prior to these events, in 1987 and 1988, Suffolk voters approved the Drinking Water Protection Program to purchase lands for protection of groundwater supplies. In 1986, Suffolk County approved a \$60 million open space initiative, targeting nearly 5000 acres across the County for protection, a large portion of which are in the Central Pine Barrens. Prior to this, in 1984, Suffolk County instituted the Pine Barrens Review Commission through a county charter law, providing a level of development review specifically concentrating upon four geographic areas defined in that new law.

The original Long Island Pine Barrens Task Force was formed by the Commissioner of the New York State Department of Environmental Conservation in 1978. In that same year, New York State received a corporate gift of pine barrens land from the Radio Corporation of America. The gift involved two tracts totalling several thousand acres in Rocky Point and the area of Southampton Town immediately south of the hamlet of Riverhead. The Task Force later proposed creation of a 90,000 plus acre preserve, and examined a range of issues related to pine barrens protection and management.

In 1974 the County's Farmland Protection Program, one of the earliest purchase of development rights (PDR) programs in the country, began. In the early 1960's, Suffolk County embarked upon its open space and parkland programs, notably with the purchase of portions of the Peconic River system's contributing streams and ponds, an area now known as Robert Cushman Murphy County Park. This early open space purchase, some thirty plus years ago, presaged the current pine barrens work by its location in the area now known as the Core Preservation Area.

2.3 Implementation of the Act to date

Since the passage of the Pine Barrens Protection Act in July of 1993, several of the statutory calendar dates specified in the law have been reached. These include the filing of official maps, the passage of interim goals and standards for development in the Compatible Growth Area during the planning period, the inventorying of private parcels in the Core Preservation Area, notification of the owners of the inventoried land, production of the Draft Plan and draft generic environmental impact statement, various public hearings, and production of the first annual report. Figure 2-2 details these statutory activities through this date.

Figure 2-2: Pine Barrens Protection Act statutory activities to date		
Statutory Date	Event or Requirement	Notes
July 14, 1993 (Effective date)	Long Island Pine Barrens Protection Act signed into law by Governor Cuomo at Southaven County Park	Start of statutory calendar.
August 13, 1993 (Within 30 days of effective date)	Initial meeting of Commission must be held, following public notice by County Executive.	Public notice given 7/30/93. Held August 6, 1993 at the Riverhead County Center
August 28, 1993 (within 45 days of effective date)	A map of the Central Pine Barrens classifying and depicting the Core Preservation Area and the Compatible Growth Area must be filed with the Secretary of State, the Suffolk County Clerk and the clerk of each town or village whose boundaries are included within the Central Pine Barrens. Notice of the filing and availability of the map must be published at least twice in a paper of general circulation in Suffolk County.	Filed with: <ul style="list-style-type: none"> • NYS Secretary of State on 8/24/93 • Suffolk County Clerk on 8/27/93 • Town clerks on 8/26/93 • Village clerks on 8/27/93. Notice published in <i>Newsday</i> on 8/28/93 and 8/29/93.
October 12, 1993 (within 90 days of effective date)	Expiration of the ninety day period following enactment during which a lead agency can allow an active project to qualify under Section 57-0121(8)(c) for a planning period exemption from Interim Goals and Standards.	Ninety day period expired without extension by Commission.

<p>October 14, 1993 (within 3 months of effective date)</p>	<p>Interim Goals and Standards for hardship cases and for Compatible Growth Area developments must be published.</p>	<p>Adopted on 10/13/93 as emergency rules. Published in NYS Register 11/17/93. State Administrative Procedure Act hearing held 1/3/94. Readopted as emergency rules on 1/12/94. Adopted as final rules on 2/23/94, and published in NYS Register on 3/23/94.</p>
<p>February 6, 1994 (within 6 months of first meeting)</p>	<p>All private parcels within the Core Preservation Area must be inventoried.</p> <p>Upon completion of inventory, those property owners must be notified.</p> <p>Upon completion of inventory, development yield for each property within the Core Preservation Area must be calculated and assigned.</p>	<p>Inventory was completed by 2/4/94. Inventory was adopted at 2/7/94 meeting.</p> <p>Letter was approved at 2/9/94 Commission meeting. Approx. 3500 letters were mailed by 3/2/94.</p> <p>Development yield calculation and assignment was completed by 6/28/94. The Commission accepted the calculations at its 7/11/94 meeting.</p>
<p>July 14, 1994 (Within 12 months of effective date)</p>	<p>Draft Land Use Plan must be prepared and published, following consultation with Advisory Committee.</p> <p>Draft GEIS must be prepared and published.</p>	<p>Preliminary versions of the Draft Plan were published on 2/23/94 and 4/20/94.</p> <p>The Draft Plan was published and accepted by the Commission at its 7/13/94 meeting.</p> <p>A positive declaration for the Plan was issued by the Commission at its 4/13/94 meeting.</p> <p>A scoping session for the GEIS was held 4/27/94 at Longwood Junior High School in Middle Island. Comment period was kept open through 5/11/94.</p> <p>Draft GEIS was published and accepted by the Commission at its 7/13/94 meeting.</p>

<p>August 6, 1994 (Within 12 months of first meeting)</p>	<p>Receiving districts within and without the Central Pine Barrens sufficient to receive transferred development rights and/or values of the core area, and sufficient for the continuation of an adequate transfer of rights and/or values program, must be identified.</p> <p>Fiscal impacts of the established transfer of development rights and values system must be considered.</p>	<p>This was contained in the Draft Plan published and accepted at the Commission's 7/13/94 meeting.</p> <p>An initial report on existing conditions was issued by the Harriman School on 8/1/94 and considered by the Commission.</p>
<p>October 13, 1994 (Within 3 months of publication of the Draft Land Use Plan)</p>	<p>Public informational meetings must be held in the towns of Brookhaven, Riverhead and Southampton.</p> <p>At least one public hearing within the Central Pine Barrens must be held.</p>	<p>The Riverhead session was held 9/7/94 at Riverhead Town Hall, the Brookhaven session was held 9/13/94 at the Brookhaven Town offices, and the Southampton session was held on 9/21/94 at Remsenburg-Speonk school in Remsenburg.</p> <p>Public hearing was held on 9/28/94 at the Brookhaven Town offices. The comment period was kept open through 11/7/94.</p>
<p>January 15, 1995 (Within 3 months of last public hearing)</p>	<p>Revised Plan must be completed and recommended to town boards</p>	<p>Revised Plan (Volumes 1 and 2) was recommended by Commission at its 1/13/95 meeting.</p>
<p>After March 13, 1995</p>	<p>Modification of the Plan by the Commission at the request of town representatives.</p>	<p>A modified proposed final Plan was approved by the Commission and recommended to the towns at the Commission's 4/12/95 and 4/26/95 meetings.</p>
<p>Once per year</p>	<p>Report to Governor and State Legislature, with copies to town and village legislative bodies</p>	<p>The first report covered the period 7/14/93 to 7/14/94 and was adopted by the Commission at its 8/10/94 meeting.</p>

Implementation of the Act has not been limited to statutory requirements, however. The Commission's planning and interim period development review work have coexisted, involving workshops for planners and local government officials, community outreach programs, workshops for property owners, hearings and project reviews under the interim development standards, and coordination of the state, county and town staff, plus working committees on various topics, who have participated in the plan development process.

Governmental staff support for the planning and project review work has been provided by the Suffolk County Water Authority, in conjunction with the Suffolk County and Town planning departments, the New York State Department of Environmental Conservation, and numerous additional agencies at several levels.

2.4 Goals of the pine barrens statute

Sections 57-0121(1),(2) and (3) of Environmental Conservation Law Article 57 describe the goals and objectives for the Plan, and break these down by statutory zones: the Central Pine Barrens, the Core Preservation Area and the Compatible Growth Area.

These passages principally address preservation of the pine barrens ecosystem and water quality, but also address development patterns, land use categories, and agricultural, recreational and human uses. Overlaps occur across the three geographic categories, but the combination of goals in each area is unique.

The Plan goals for the overall Central Pine Barrens are found in ECL Section 57-0121(2) as follows:

The land use plan for the Central Pine Barrens area shall be designed to:

- (a) protect, preserve and enhance the functional integrity of the Pine Barrens ecosystem and the significant natural resources, including plant and animal populations and communities, thereof;*
- (b) protect the quality of surface water and groundwater;*
- (c) discourage piecemeal and scattered development;*
- (d) promote active and passive recreational and environmental educational uses that are consistent with the land use plan; and*
- (e) accommodate development, in a manner consistent with the long term integrity of the Pine Barrens ecosystem and to ensure that the pattern of development is compact, efficient and orderly.*

The Plan goals for the Core Preservation Area are found in ECL Section 57-0121(3) as follows:

The land use plan with respect to the core preservation area shall be designed to protect and preserve the ecologic and hydrologic functions of the Pine Barrens by:

- (a) *preserving the Pine Barrens area in their natural state thereby insuring the continuation of Pine Barrens environments which contain the unique and significant ecologic, hydrogeologic and other resources representative of such environments;*
- (b) *promoting compatible agricultural, horticultural and open space recreational uses within the framework of maintaining a Pine Barrens environment and minimizing the impact of such activities thereon;*
- (c) *prohibiting or redirecting new construction or development;*
- (d) *accommodating specific Pine Barrens management practices, such as prescribed burning, necessary to maintain the special ecology of the preservation area;*
- (e) *protecting and preserving the quality of surface and groundwaters; and*
- (f) *coordinating and providing for the acquisition of private land interests as appropriate and consistent with available funds.*

The Plan goals for the Compatible Growth Area are found in ECL Section 57-0121(4) as follows:

The land use plan with respect to the compatible growth areas shall be designed to:

- (a) *preserve and maintain the essential character of the existing Pine Barrens environment, including plant and animal species indigenous thereto and habitats therefor;*
- (b) *protect the quality of surface and groundwaters;*
- (c) *discourage piecemeal and scattered development;*
- (d) *encourage appropriate patterns of compatible residential, commercial, agricultural, and industrial development in order to accommodate regional growth influences in an orderly way while protecting the Pine Barrens environment from the individual and cumulative adverse impacts thereof;*
- (e) *accommodate a portion of development redirected from the preservation area. Such development may be redirected across municipal boundaries; and*
- (f) *allow appropriate growth consistent with the natural resource goals pursuant*

to this article.

3. Land Acquisition Policy

3.1 The role of acquisition in Central Pine Barrens protection

All undeveloped properties within the Core Preservation Area contribute to the protection and preservation of the ecologic and hydrologic functions of the pine barrens. Acquisition of land is an essential component of this Plan if the conservation objectives are to be met. Many properties will be of such ecological or hydrological importance that government or private conservation agencies may wish to acquire fee title for management purposes.

It is a goal of this Plan to advocate the use of fee simple acquisition as the principal protection measure - the tool of choice - for the majority of the privately held, undeveloped and currently unprotected lands within the Core Preservation Area. Acquisition of the full interest in conservation, park, preserve and recreational lands provides a secure foundation for management, recreation and resource protection.

Specifically, it is this Plan's long range goal that 75% of the privately held, undeveloped and currently unprotected lands within the Core Preservation Area be protected through acquisition. The Commission recognizes that achieving this goal is dependent upon the availability of public funds. This chapter looks at the acquisition record to date, and examines various scenarios which could bring pine barrens protection close to this goal.

3.2 Selected criteria for fee title acquisitions within the Core Preservation Area

A partial listing of factors that might be considered in planning and prioritizing acquisition parcels includes:

- sensitivity to degradation of a resource from permitted uses
- adjacency to existing public or private lands
- consolidation of existing protected lands and inholdings into a logical management unit
- protection of trail systems
- creation of corridors between existing publicly owned parcels
- preservation of significant cultural or historical resources
- security of significant natural resources, such as rare, threatened or endangered species or natural communities
- Suffolk County Water Authority and local municipal agency well siting and wellhead protection
- protection of scenic vistas
- restoration and maintenance of ecosystem integrity
- presence of a willing seller

- adverse economic impacts to a school district

A complete and final listing of all criteria that might be considered in selecting an acquisition is neither practical nor desirable. Circumstances may change, and new considerations, not anticipated now, may provide compelling arguments for an acquisition. Also, each acquiring agency will assign different weights to these criteria. For example, the New York State Department of Environmental Conservation might consider the importance of an area for recreational purposes, while a private not for profit organization, such as The Nature Conservancy, might be interested in the ecological importance of an acquisition.

3.3 Land acquisition maps prepared for this analysis

The following land acquisition related maps were created for the Commission by the Suffolk County Water Authority Policy and Planning Department for this analysis. (The full sized versions of these are included in this document by reference, as the originals are 70 by 33 inches.)

- *Core Preservation Area and Compatible Growth Area boundaries*

The Pine Barrens Protection Act created a Core Preservation Area of approximately 52,500 acres within the 100,000 acre Central Pine Barrens zone. Development here is statutorily regulated. The Act also designated the remaining approximately 47,500 acres as the Compatible Growth Area. Development here is to be planned in such a way as to avoid suburban sprawl and haphazard and piecemeal development. Figure 2-1 is a reduced version.

- *Pine Barrens Core Preservation Area lands already in the public domain*

Approximately 24,500 acres are already protected by public or private not for profit owners as open space for passive or active recreation, or conservation purposes. Suffolk County is by far the largest owner of public property within the Core Preservation Area with approximately 14,000 acres. New York State also has substantial holdings of approximately 8,000 acres. The United States Department of Defense holds title to 3200 acres (the "approach zones" outside the fenced area of the United States Navy's Naval Weapons Industrial Reserve Plant at Calverton), and current federal laws protect this acreage from development. The towns of Southampton and Brookhaven, and private conservation agencies such as The Nature Conservancy, also hold title to property within the Core Preservation Area. See Figure 3-1.

- *Pine Barrens Core Preservation Area in private ownership.*

Within the Core Preservation Area, approximately 14,000 acres are privately owned and undeveloped. (This acreage is the subject of the policy statement in Section 3.1 of this Plan.)

These lands may be large undivided tracts or small "old filed map lots" as small as a tenth of an acre. In all, there are nearly 3,000 different owners of these private parcels.

The remaining land within the Core Preservation Area, approximately 14,000 acres, is developed with housing, agriculture, roads, community service facilities and other uses. See Figure 3-2.

3.4 Suffolk County acquisition program

Suffolk County, the largest single owner of public property in the Central Pine Barrens Core Preservation Area, has committed to a number of Core Preservation Area property acquisitions. The Suffolk County Legislature Resolution Number 1685-93 lists nearly 50 parcels. The County has committed \$10 million from the Drinking Water Protection Fund for pine barrens acquisitions such as these, and, as of this writing, five acquisitions on this list have been achieved.

Suffolk County also has obtained \$180,000 through the federal Intermodal Surface Transportation Enhancement Act (ISTEA) for acquisitions in the Manorville Hills area. This money will be augmented by the County from the acquisition funds discussed above.

3.5 New York State acquisition program

The 1994-95 fiscal year budget for New York State includes \$10 million for Central Pine Barrens Core Preservation Area acquisitions. In each of the calendar years 1997 through 1999, an additional 2 million dollars will be available for further acquisitions. This latter funding is from a natural resources damages settlement arising from a major oil spill on Long Island. These funds are made available from the Natural Resources Damages Account, which is administered by the Commissioner of the New York State Department of Environmental Conservation, serving as Trustee of the Fund.

A number of parcels have been identified and targeted for acquisition with this and future state funding. The set of parcels shown on the maps is neither final nor exhaustive. Other parcels might be considered, and parcels shown here may not be purchased. New York State DEC has also obtained \$160,000 from the ISTEA program for acquisitions near Pleasure Drive in the Flanders areas of Southampton.

The Natural Resources Damages Account also provided \$5 million in state funding to capitalize the transfer of development rights clearinghouse for the Pine Barrens Credit Program (see Chapter 6), protecting Core Preservation Area acreage in addition to the direct acquisition programs discussed in this chapter.

Figure 3-1: Public domain lands in the Pine Barrens

(See separate insert.)

Figure 3-2: Private undeveloped parcels in the Pine Barrens

(See separate insert.)

3.6 Suffolk County Water Authority Core Preservation Area holdings

The Suffolk County Water Authority, an independent state chartered public authority, has acquired approximately 176 acres within the Central Pine Barrens, 81.7 acres within the Compatible Growth Area and 94.3 acres within the Core Preservation Area. Some of the acquisitions now contain public water supply wells, some are sites for future wells, and some were acquired as part of its watershed protection land acquisition program.

Following the passage of the Pine Barrens Protection Act, the Authority took the lead in making acquisitions within the Core Preservation Area by purchasing 35.5 acres of vacant land on East Bartlett Road in Middle Island for \$6,000 per acre. This acquisition may serve as a benchmark for subsequent acquisitions by the State and County. Through efforts such as these, the Authority is committed to providing high quality drinking water for the residents of Suffolk County.

3.7 Future acquisitions by public agencies

The agencies listed here, with the exception of Riverhead Town, already own vacant property within the Core Preservation Area. Several of them have active open space acquisition programs that have recently purchased property which is now within the Core Preservation Area. Some of these entities are likely to acquire and hold title to additional property in this area. They include:

- United States Government (Fish and Wildlife Service or National Park Service)
- State of New York Department of Environmental Conservation
- State of New York Office of Parks, Recreation and Historic Preservation
- Suffolk County
- Suffolk County Water Authority
- Brookhaven Town
- Riverhead Town
- Southampton Town

3.8 Future acquisitions by private, not for profit organizations

Private not for profit organizations have historically purchased property, or provided assistance for property acquisitions by public agencies, for preservation purposes within the Central Pine Barrens Core Preservation Area. The Nature Conservancy is one such example.

3.9 Status of Core Preservation Area protection efforts and future needs

Approximately 24,500 acres of the Core Preservation Area are already in public or private conservation ownership. Since 1960, Suffolk County has made acquisitions worth an estimated \$200 million in constant dollars. The State of New York has also made acquisitions, with a lower total dollar value. The state protected land holdings within the region now known as the Core Preservation Area were significantly boosted in 1978, with the corporate gift by the Radio Corporation of America of approximately 5,000 acres of pine barrens in Rocky Point and the area of Southampton Town immediately south of the Riverhead business district.

Since the enactment of the Pine Barrens Protection Act in 1993, the County and State programs have acquired a total of approximately 736 acres (288 acres by the State and 448 acres by the County, not including the Suffolk County Water Authority holdings discussed above). The County expects to acquire an additional 550 acres under the Drinking Water Protection Program. The State expects to acquire approximately 750 additional acres with its remaining Fiscal Year 1995 funds. The actual total acreage acquired in each program will depend upon the per acre costs of each acquisition and may vary considerably from these estimates.

The total acreage (including the 736 acres noted in the preceding paragraph) which could be purchased through the existing stream of funds, is approximately 3400 acres if the average acquisition cost is \$7,000 per acre. This funding stream includes the State Fiscal Year 1995 allocation, the State Natural Resources Damages Account money, the county's Drinking Water Protection Program funds, and the federal Intermodal Surface Transportation Enhancement Act program. With an average per acre cost of \$8,000, that total drops to 3,000 acres. These estimates are contained in Figure 3-3.

The current phase of acquisitions in the Core Preservation Area has included several large parcels, some of which had received preliminary plat approval. The average cost per acre has been approximately \$7,500. This per acre cost can be expected to drop as less valuable parcels are acquired. This trend would tend to lower the long term overall cost of the program.

Many privately owned parcels within the Core Preservation Area are landlocked. Others, though single and separate and with "paper" access, cannot be developed in the current economic climate. While the total property affected by this development limit is not yet known, it may be as high as 5,000 acres.

The Nature Conservancy has acquired by donation 124 acres of property inside the Core Preservation Area in the last six years. This total does not include those parcels that have been transferred to Suffolk County.

A blanket resolution permitting Suffolk County to accept donations of property within the Core Preservation Area without requiring a separate resolution for each parcel was passed by the Suffolk County Legislature and signed by the County Executive in January, 1995 (introductory

Resolution Number 1851-94; Resolution Number 47-1995). This resolution should encourage additional donations since it places no financial burdens on the property owner who wants to make a gift of property for tax purposes. The Nature Conservancy estimates that as many as 300 acres might be obtained through donations by owners of small parcels in the Core Preservation Area.

Finally, Suffolk County takes title to various parcels through tax defaults. Those located in the Core Preservation Area are added to the protected lands that the County already holds there. They are not sold at auction as would be the case for properties elsewhere in the County.

3.10 Future acquisitions: Funding possibilities

Suffolk County has funded its current round of acquisitions through the Drinking Water Protection Program, based upon the sales tax surcharge of one quarter of a percent. This stream of funding will continue through 1999, and will generate an estimated \$7 million in each of the years 1995 through 1999, in excess of debt service obligations. This same funding source, over the same period, will generate approximate \$2 million for land acquisitions by each of the three towns affected by the Plan. All or part of these funds could be used for acquisitions within the Core Preservation Area.

Suffolk County also has an open space acquisition program. While no dollars from this program are currently targeted for Core Preservation Area purchases, future monies could be so directed.

Current New York State funds for Core Preservation Area purchases are the result of a special state appropriation for the 1994-95 fiscal year. The State also has dedicated funding for land acquisition under the Environmental Protection Act of 1993. This Environmental Protection Fund (EPF) will generate an estimated \$32 million for statewide acquisitions in the proposed 1995-96 state budget. Subsequent years will see larger amounts available as previous acquisition commitments are fulfilled. While the EPF is for statewide use, part of it could be used for Core Preservation Area acquisitions on Long Island. Additionally, other Core Preservation Area acquisitions could be funded from the State Natural Resources Damages Account, especially if the Account were to receive monies from local natural resource damage settlements.

As noted above, 24,500 acres are already preserved in the Core Preservation Area, with another 14,000 acres already developed. Approximately 14,000 acres of the Core Preservation Area are vacant and in private ownership. Currently, funds are available to acquire approximately 3000 through 3400 acres (covering the price per acre range of \$7,000 to \$8,000). Though not included in Figure 3-3, donations of land and property acquired through the tax default process will continue to occur, perhaps totalling 500 acres in the next five years.

Acquisition of all of the vacant, privately owned acres in the Core Preservation Area would require approximately \$117 million, if the average acquisition price is assumed to be \$7,500 per

acre, and using as a starting point the actual allocations to date shown in Figure 3-3. Here, a steady commitment of state and county funds would result in the purchase of all privately held vacant property in the Core Preservation Area by 2002. This assumes that all other factors, including the average cost per acre, remain constant. This scenario assumes no development rights transfer. However, Chapter 6 proposes such a program.

Figure 3-3: Pine Barrens acquisition projection of committed funds

Source	Fiscal year	Allocation	Administrative costs (*)	Program funds	Acres protected at \$7,000 per acre	Acres protected at \$8,000 per acre
Suffolk County DWPP (**)	1994	\$10,000,000	\$1,000,000	\$9,000,000	1286	1125
DEC State Budget	1995	\$10,000,000	\$1,000,000	\$9,000,000	1286	1125
DEC ISTEА (***)	1995	\$160,000	\$16,000	\$144,000	21	18
Suffolk County ISTEА	1995	\$180,000	\$18,000	\$162,000	23	20
DEC NRDA (****)	1997	\$2,000,000	\$200,000	\$1,800,000	257	225
DEC NRDA	1998	\$2,000,000	\$200,000	\$1,800,000	257	225
DEC NRDA	1999	\$2,000,000	\$200,000	\$1,800,000	257	225
<i>Estimate of acreage through acquisition using allocated funds:</i>					3387	2963
<p><i>Notes:</i></p> <p>(*) Assumes a 10% cost for appraisals, surveys, and other overhead costs.</p> <p>(**) County Drinking Water Protection Program (DWPP).</p> <p>(***) Federal Intermodal Surface Transportation Enhancement Act (ISTEA). ISTEА funds require matching grants, which are contained within the county and state figures above.</p> <p>(****) State Natural Resources Damages Account (NRDA).</p>						

4. Review Procedures and Jurisdiction

4.1 Introduction

The following sets forth the procedures to be used by the Central Pine Barrens Joint Planning and Policy Commission for review of development in the Central Pine Barrens as provided for in the Long Island Pine Barrens Protection Act.

This process does not exempt any development project from the provisions of the New York State Environmental Quality Review Act, the National Environmental Policy Act and other regulatory requirements and applicable federal, state, county, or local laws. For development that adheres to the standards for land use contained herein and the Statement of Findings adopted upon completion of the Generic Environmental Impact Statement prepared pursuant to the Act, the cumulative impact analysis pursuant to the State Environmental Quality Review Act will be deemed to be satisfied.

4.2 Intent

It is the intent of the Central Pine Barrens Joint Planning and Policy Commission to provide for effective environmental review of proposed development in the Central Pine Barrens, and to avoid duplicate reporting and review requirements and unnecessary delays. Municipalities are encouraged to develop streamlined review procedures for development proposals that conform with the land use and development standards contained herein. It is the further intent of the Commission to provide timely reviews and input which are concurrent with the New York State Environmental Quality Review Act, the National Environmental Policy Act and other regulatory requirements and applicable federal, state, county, or local laws.

These procedures are intended to coordinate Commission guidance and provide regulatory review of development located in the Central Pine Barrens area as defined and delineated in the New York State Environmental Conservation Law, Article 57. The Central Pine Barrens is a "critical environmental area" pursuant to New York State Environmental Conservation Law Article 8 and its implementing regulations.

For development subject to review pursuant to the Act and defined in this Plan, the Commission shall hold only one (1) hearing on a development proposal, unless the Commission by majority vote deems it necessary to hold an additional hearing.

4.3 Definitions

Within this Central Pine Barrens Comprehensive Land Use Plan, the following terms and phrases shall have the meaning listed.

4.3.1 Complete application

A "complete application" shall consist of the following:

1. a completed standard application form, as supplied by the Commission;
2. a copy of the local municipal application package with all supporting materials, and any approvals that have been issued as of the date of the application; and,
3. as required and accepted with respect to scope and content, a Long Form Environmental Assessment or Draft Supplemental draft supplemental Environmental Impact Statement, in addition to any other documentation prepared or issued pursuant to the State Environmental Quality Review Act or equivalent local laws, as of the date of the application.

4.3.2 Plan

"Plan" shall mean the Central Pine Barrens Comprehensive Land Use Plan.

4.3.3 Commission

"Commission" shall mean the Central Pine Barrens Joint Planning and Policy Commission as defined within the New York Environmental Conservation Law Article 57.

4.3.4 Act

"Act" shall mean New York State Environmental Conservation Law, Article 57 as may be amended from time to time.

4.3.5 Development

"Development" shall have the meaning set forth in Section 57-0107 (13) of the Act.

4.3.5.1 Interpretation of "nondevelopment" provision 57-0107(13)(xiii)

The Commission hereby clarifies that Article 57-0107(13)(xiii) only regulates the lot area requirement as indicated by the square footage required within the applicable zoning district and does not include any other dimensional variances associated with the subdivision. The Commission further clarifies that Article 57-0107(13)(xiii), as a whole, may only be applied to a parcel once and may not be applied to subdivide a resultant parcel created by its prior application.

4.3.6 Central Pine Barrens

"Central Pine Barrens" shall have the meaning set forth in Section 57-0107 (10) of the Act.

4.3.7 Core Preservation Area

"Core Preservation Area" shall have the meaning set forth in Section 57-0107 (11) of the Act.

4.3.8 Compatible Growth Area

"Compatible Growth Area" shall have the meaning set forth in Section 57-0107 (12) of the Act.

4.3.9 Project Site

"Project site" shall be defined as all parcels and portion(s) of parcel(s) located within the Central Pine Barrens, whether contiguous or not, that are associated with a proposed development.

4.3.10 Self Restoration

Self Restoration: A natural restoration process to allow existing seed banks, roots, etc. in the soil to re-colonize a previously disturbed site. Under this process, active monitoring and management for invasive plant species is undertaken for a prescribed period of years to prevent invasive plants from overtaking the restoration area.

4.3.11 Tall Structure

"Tall structure" shall be defined as any structure, whether a new structure or one resulting from a height extension of an existing structure, which meets or exceeds a total height of seventy-five (75) feet from average unaltered grade of the project site.

4.4 Development subject to review by the Commission

The following types of development shall be the subject of review by the Commission as provided for in the Act:

4.4.1 Development located within the Core Preservation Area

This includes all development proposed within the Core Preservation Area.

4.4.2 Nonconforming development within the Compatible Growth Area

This includes all development within the Compatible Growth Area that does not conform to the standards for land use set forth in Volume 1, Chapter 5 of this Plan.

4.4.3 Compatible Growth Area development over which the Commission asserts jurisdiction

This includes development within the Compatible Growth Area for which the Commission, by an individual Commissioner's petition and a majority vote, asserts review jurisdiction as provided for in the Act.

4.4.4 Compatible Growth Area development within Critical Resource Areas

This includes all development within the Compatible Growth Area which is also within a Critical Resource Area as provided for in the Act and defined in this Plan.

4.4.5 Developments of Regional Significance

This includes development within the Compatible Growth Area which constitutes a Development of Regional Significance as provided for in the Act and defined in this Plan.

4.5 Review procedures

4.5.1 Development located within the Core Preservation Area (“Core development”)

The Act requires the prohibition or redirection of development in the Core Preservation Area and sets forth the jurisdiction of the Commission over, and certain requirements for processing, hardship exemptions. The Act authorizes the Commission, by majority vote, to waive strict compliance with this Plan upon finding that such waiver is necessary to alleviate hardship according to the conditions and finding of extraordinary hardship or compelling public need pursuant to subdivision 10 of Section 57-0121 of the Act.

4.5.1.1 Core development: Lead agency assertion

The Commission shall seek lead agency status for development proposed in the Core Preservation Area pursuant to the State Environmental Quality Review Act.

4.5.1.2 Core development: Filing of an application

The application shall be filed with the Commission by the project sponsor. A municipal application to the Town is not required for an application under this subsection.

4.5.1.3 Core development: Hearing

Within thirty (30) days of an application being submitted to the Commission, a public hearing on the development shall be held. At this time, the project sponsor and any other person shall have an opportunity to comment on the development proposal.

4.5.1.4 Core development: Statutory basis for the Commission's decision

The decision by the Commission on the application shall be based upon the standards in subdivision 10 of Section 57-0121 of the Act, which describes the criteria for determining that a hardship has been demonstrated.

4.5.1.5 Core development: Decisions, default decisions and extensions of decisions

The time within which the Commission must decide a Core Preservation Area hardship application for which a negative declaration has been made by the Commission pursuant to Environmental Conservation Law Article 8 is one hundred twenty (120) days from receipt of such application. The time within which the Commission must decide a Core Preservation Area hardship application for which a positive declaration has been made by the Commission pursuant to Environmental Conservation Law Article 8 is sixty (60) days from issuance of a findings statement by the Commission pursuant to Environmental Conservation Law Article 8. If the Commission fails to make a decision within the aforesaid time periods, the development shall be deemed to be approved by the Commission, unless such time periods are extended by mutual agreement of the applicant and the Commission.

4.5.2 Development located within the Compatible Growth Area which does not conform to the standards contained in Volume 1, Chapter 5 of the Plan (“nonconforming development”)

The Act sets forth the jurisdiction for the Commission's review of development within the Compatible Growth Area of the Central Pine Barrens area. Such review includes development that does not conform to the standards in Volume 1, Chapter 5 of this plan. The Act also authorizes the Commission, by majority vote, to waive strict compliance with the standards upon finding that such waiver is necessary to alleviate a demonstrated hardship. The Commission shall not review conformance or nonconformance with guidelines in Volume 1, Chapter 5 in evaluating hardship provisions under this section.

4.5.2.1 Nonconforming development: Filing of an application

For projects that are not consistent with the standards, a complete application shall be filed with the Commission by the project sponsor.

4.5.2.2 Nonconforming development: Changes in consistent projects

If, during the local review, a proposed development project is modified such that the local municipality finds that it becomes inconsistent with any standard in Volume 1, Chapter 5, the local municipality shall notify the Commission and the project sponsor immediately. Upon receipt of said notice, the project sponsor shall be notified that an application for hardship relief as provided herein shall be required. Alternatively, the project sponsor shall be afforded an opportunity to revise the development project so that it is consistent with the standards.

4.5.2.3 Nonconforming development: Completeness determination deadline

The Commission shall make a determination as to whether an application is complete within thirty (30) days of receipt of the application.

4.5.2.4 Nonconforming development: Review standards

The Commission's standard for review pursuant to this section shall be the hardship standard provided in Section 57-0123(3) of the Act, as amended from time to time.

4.5.2.5 Nonconforming development: Hearing

Within thirty (30) days of the application being deemed complete, a public hearing on the development proposal shall be held. The Commission shall provide the project sponsor and any other person an opportunity to be heard as provided for, and in accordance with the procedures provided in the Act.

4.5.2.6 Nonconforming development: Decisions, default decisions and extensions of decisions

The time within which the Commission must make a decision on a Compatible Growth Area application which does not conform to the standards contained within Volume 1, Chapter 5 of the Plan is one hundred twenty (120) days from said application being deemed complete. If the Commission fails to make a decision within the aforesaid time period, the application shall be deemed to be approved by the Commission, unless such time period is extended by mutual agreement of the applicant and the Commission.

4.5.3 Development located within the Compatible Growth Area which has been subjected to a petition by the Commission pursuant to ECL Section 57-0123(2) (“assertion development”)

The Act sets forth the jurisdiction for the Commission's review of development within the Compatible Growth Area of the Central Pine Barrens. The Act authorizes the Commission, through petition by an individual commissioner and an affirmative vote of the Commission, to review any project which has a significant adverse impact on the goals of the Plan.

4.5.3.1 Assertion development: Assertion of jurisdiction by the Commission over the project

Upon a majority vote of the commissioners, the Commission may assert review jurisdiction over said project.

4.5.3.2 Assertion development: Hearings and assertion of review jurisdiction

Assertion of review jurisdiction by the Commission shall not be deemed to require a public hearing unless the Commission, by a majority vote, so specifies.

4.5.3.3 Assertion development: Review standards

Should the Commission assert review jurisdiction pursuant to this subdivision, the jurisdiction of the Commission shall be limited to compliance with the standards and guidelines set forth in Volume 1, Chapter 5 of this Plan which the Commission identified in the vote on jurisdictional assertion. The Commission shall review conformance with guidelines set forth in Volume 1, Chapter 5 of this Plan as per Section 57-0123(2)(a) of the Act.

4.5.3.4 Assertion development: Hearing

The Commission shall request necessary information from the project sponsor. Within sixty (60) days of the Commission asserting review jurisdiction, a public hearing on the development proposal shall be held, unless the Commission by majority vote deems a hearing unnecessary, in accordance with the procedures provided in the Act. If a hearing is held, the Commission shall provide the project sponsor and any other person an opportunity to be heard as provided for, and in accordance with, the procedures provided in the Act.

4.5.3.5 Assertion development: Decision on projects over which jurisdiction is asserted by the Commission

The decision of the Commission on any project which is before it by virtue of the assertion of jurisdiction by the Commission shall be made within one hundred twenty (120) days of the date of said assertion of jurisdiction.

4.5.3.6 Assertion development: Default decisions

In the event that the Commission fails to make a decision within one hundred twenty (120) days, the development proposal shall be deemed to be approved by the Commission.

4.5.4 Development located within the Compatible Growth Area which is also located within a Critical Resource Area (“CRA development”)

The Act sets forth the jurisdiction for the Commission's review of development within the Compatible Growth Area of the Central Pine Barrens. Such review includes development that is located in Critical Resource Areas. The Act also authorizes the Commission, by majority vote, to waive strict compliance with this Plan upon finding that such waiver is necessary to alleviate a demonstrated hardship.

4.5.4.1 CRA development: Definition of Critical Resource Areas

Commission review pursuant to this section shall apply only to the Critical Resource Areas identified in Figures 4-1 through 4-7.

Section 57-0121(6)(e) of the Act requires that this Plan include “Identification and mapping of critical resource areas within the Central Pine Barrens area which are of regional or statewide significance. Such areas shall include fragile lands, significant shorelands of rivers, lakes, and streams; freshwater wetlands; significant wildlife habitats; unique scenic or historic features; and rare or valuable ecosystems and geological formations which are of regional or statewide significance.”

4.5.4.1.1 Brookhaven Town Critical Resource Areas

Figure 4-1 depicts existing Critical Resource Areas in the Town of Brookhaven.

Figure 4-1: Summary of Critical Resource Areas in the Central Pine Barrens <i>(Resolved by the Commission at its 12/14/04 meeting - All sites are within the Compatible Growth Area.)</i>		
Name and Description	Tax Map Number and Approximate Size	Feature(s)
<p>Carmans River West Middle Island West bank of Carmans River, opposite Carmans River East site. <i>See B1 on Figure 4-2</i></p>	<p>0200-528-06-16.2 Approx. 24.5 acres.</p>	<p><i>Sending area.</i> Steep slopes (entire site), cultural resources, atypical wetland vegetation association on upland portion, exploitably vulnerable species (e.g., prickly pear, spotted wintergreen, trailing arbutus, mountain laurel), large hardwood forest, DEC freshwater wetland (B-3), riverfront open space. Ownership: Suffolk County.</p>
<p>Carmans River East Middle Island East bank of Carmans River, opposite Carmans River West site. <i>See B2 on Figure 4-2</i></p>	<p>0200-548-02-1.4 and 1.6 Approx. 28 acres.</p>	<p><i>Sending area.</i> Steep slopes (especially from 60 foot contour to the west and the river, steeply sloped swales (possibly an early Holocene drainage formation), cultural resources with high archaeological potential, and extensive freshwater wetlands with associated vegetation (e.g., pepperbush, red maple, black gum) exist on this site. Ownership status: Unknown.</p>
<p>South Manorville Site 1 South of Hot Water Street, west of CR 111. <i>See B3 on Figure 4-3</i></p>	<p>0200-510-02-01, 2.2, 3,4 Approx. 82 acres.</p>	<p>The partially county-owned Cranberry Pond to the immediate north of this site is a documented tiger salamander habitat, and this site contains much of the upland portion of that habitat (generally estimated as approximately 1000 feet from the southern shore). This hilly site also contains the area known as Punk's Hole, a Revolutionary War bivouac site. Ownership: Suffolk County.</p>
<p>South Manorville Site 2 South of Hot Water Street, west of CR 111. <i>See B4 on Figure 4-3</i></p>	<p>0200-561-01-12, 13 Approx. 18 acres.</p>	<p>This site enhances the adjacent open space tracts. Ownership: Suffolk County .</p>

Figure 4-2: Map of Critical Resource Areas along the Carmans River

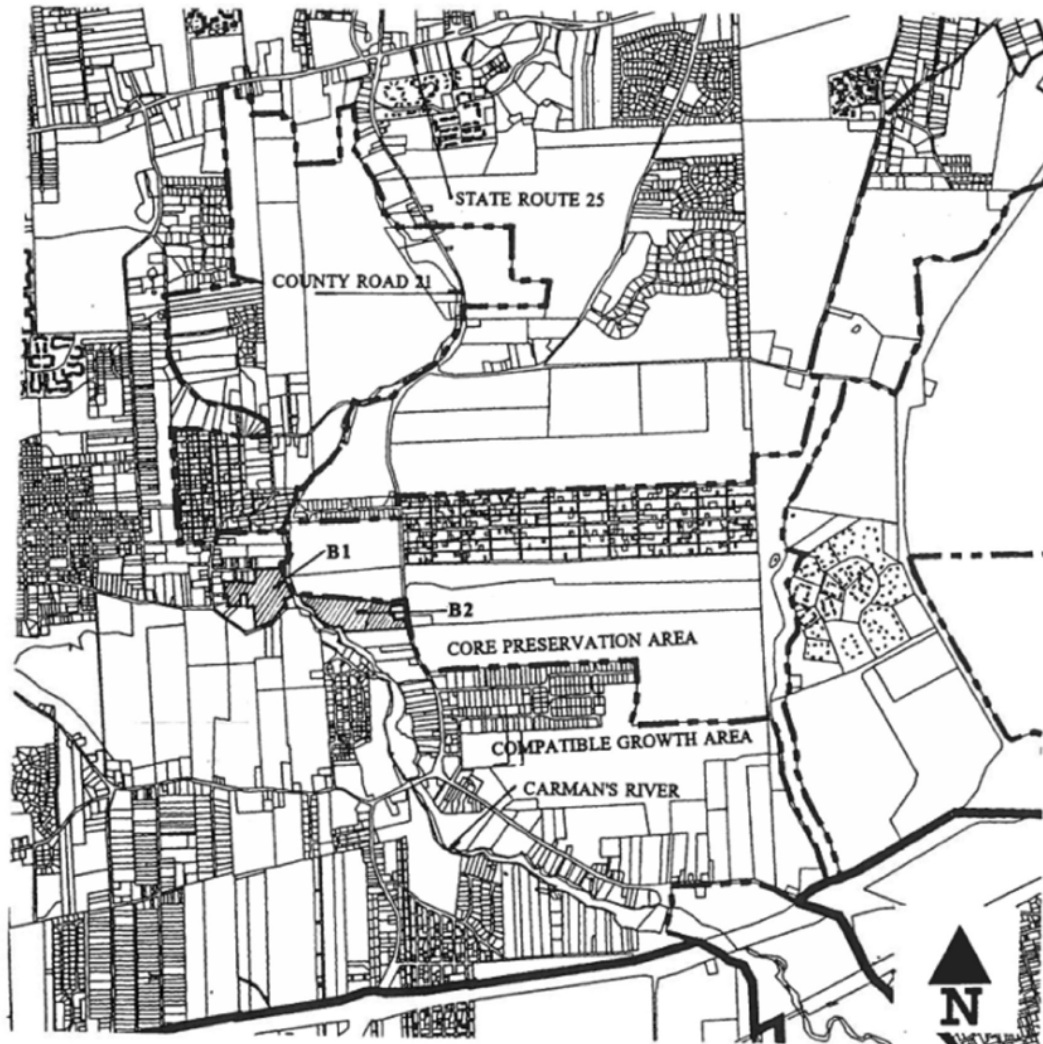
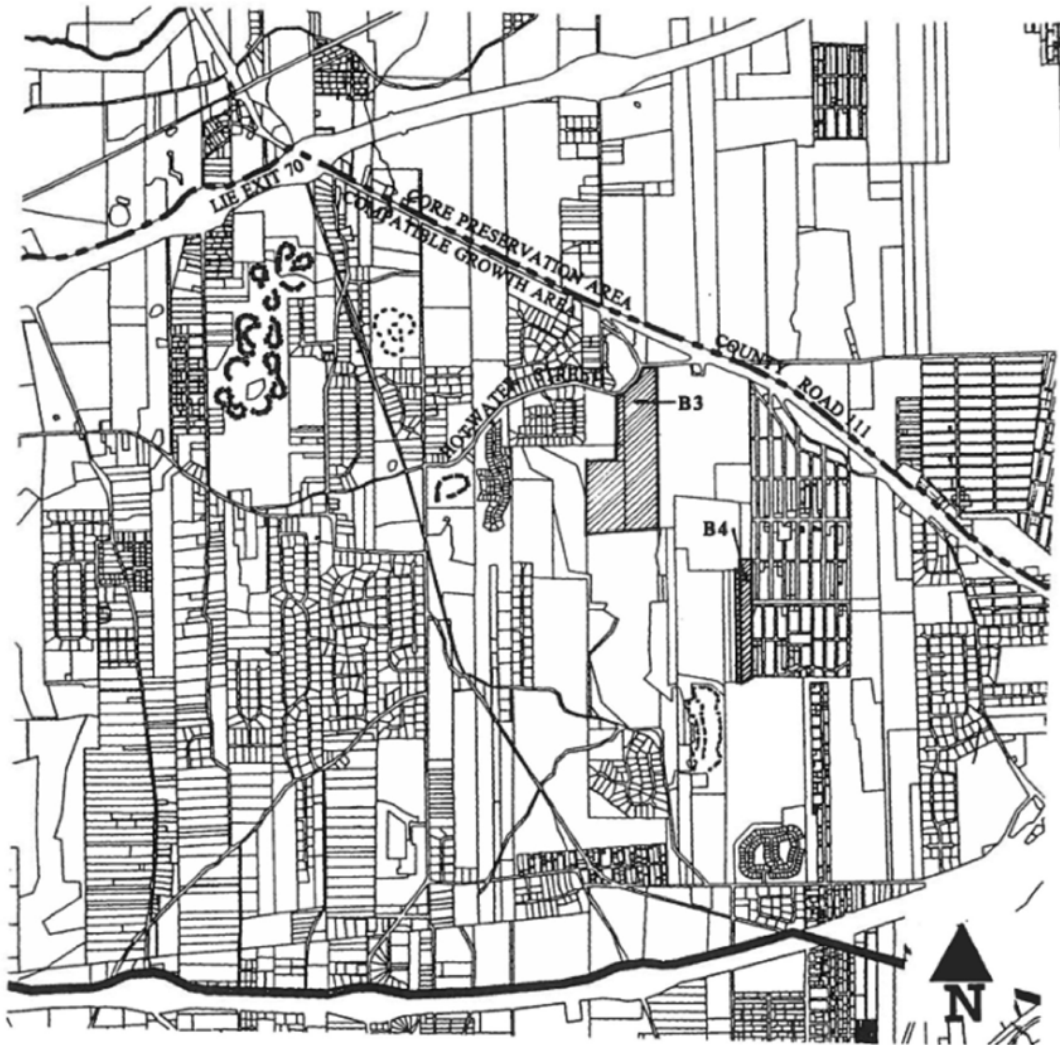


Figure 4-3: Map of Critical Resource Areas south of County Route 111



4.5.4.1.2 Southampton Town Critical Resource Areas

There are ten Critical Resource Areas within Southampton Town’s CGA, identified in Figure 4-2, totaling approximately 1,585 acres.

Figure 4-4: Critical Resource Areas in the Southampton Town CGA		
Name and Description	Tax Map Number(s) and Approximate Size	Feature(s)
Flanders Ponds Southwest corner of CR 105 and NYS Rt 24 <i>See S1.</i>	0900-142-01-1.42, 53, 54.3 Approx. 86.3 acres	Extensive freshwater wetlands, adjacency to Core Area, large block of preserved lands, rare fauna and flora, critical Peconic Bay watershed lands.
Pleasure Drive West Flanders South of NYS Rt 24, west of Pleasure Drive. <i>See S2.</i>	0900-167-03-09.1 Approx. 86.2 acres.	Archaeological areas, extensive freshwater wetlands, pristine pine and oak woods, rare fauna and flora, contiguous block of preserved lands.
Red Creek Site 1: Wehrman Pond South side of Red Creek Rd, opposite Red Creek Pond. <i>See S3.</i>	900 - 151 - 1 - 6.1 and 10.5 p/o 900 - 151 - 1 - 10.3 and 10.4 900 - 151 - 1 - 6.2 Approx. 18.8 acres.	<i>This is also a voluntary Pine Barrens Credit Sending area.</i> Wehrman Pond and the adjacent uplands comprise an eastern mud turtle habitat.
Red Creek Site 2 North side of Old Squires Rd, west of Red Creek Road. <i>See S4.</i>	900 - 151 - 4 - 1 through 7 900 - 173 - 2 - 1.3 through 1.11 Approx. 45.8 acres.	Mixed deciduous forest complements existing open space on adjacent <u>Core</u> parcels.
Red Creek Site 3 West of Red Creek Road <i>See S5.</i>	0900-173-02-8.2, 8.3 Approx. 40.9 acres.	Part of the corridor for the proposed Paumanok Path segment heading towards Squire Pond.
Red Creek Site 4 North of NYS Rt 24 and South of Old Squires Road. <i>See S6.</i>	900 - 205 - 1 - 1.1 through 1.3, 3 900 - 173 - 1 - 1.1 through 1.3 Approx. 77.2 acres.	Open space area complementing adjacent parkland.

<p>Munn's Pond Vicinity Hampton Bays North side of Montauk Highway, adjacent to east side of Munn's Pond parkland, west of Bellows Pond Road. <i>See S7.</i></p>	<p>0900-221-02-10</p> <p>Approx. 9.8 acres.</p>	<p>Open space area buffering the adjacent Munn's Pond site.</p>
<p>Henry's Hollow Region East Quogue Lies between Sunrise Highway and the railroad tracks <i>See S8.</i></p>	<p>900 - 220 - 1 - 103 p/o 900 - 220 - 1 - 112 900 - 220 - 1 - 53, 56 through 87 900 - 220 - 1 - 88.1, 88.2, 89 p/o 900 - 220 - 1 - 90 900 - 220 - 1 - 98.10 through 98.16, and 98.2 through 98.9 900 - 220 - 1 - 99.1 900 - 220 - 1 - 99.10 through 99.14 p/o 900 - 220 - 1 - 99.15 900 - 220 - 1 - 99.16 through 99.18 900 - 220 - 1 - 99.2 900 - 220 - 1 - 99.20 p/o 900 - 220 - 1 - 99.21 p/o 900 - 220 - 1 - 99.23 p/o 900 - 220 - 1 - 99.24 900 - 220 - 1 - 99.3 through 99.9 900 - 251 - 1 - 10 through 35 900 - 251 - 1 - 36.1 900 - 251 - 1 - 37 through 49 900 - 251 - 1 - 4 through 9 900 - 251 - 1 - 50.1, 50.2 900 - 251 - 1 - 51 through 69 900 - 251 - 1 - 90 p/o 900 - 251 - 1 - 91.1</p>	<p>Buck moth habitat generally north of 100 foot contour.</p>

	<p>900 - 251 - 1 - 92.1 through 92.8 900 - 251 - 1 - 96, 98 900 - 251 - 3 - 1 through 83 900 - 251 - 4 - 1 through 7 900 - 251 - 5 - 1 through 43 900 - 289 - 2 - 1 through 5 900 - 289 - 2 - 19 through 39 (p/o refers to part within CGA)</p> <p>Approx. 539.6 acres.</p>	
<p>Dwarf Pines Gabreski Airport Westhampton Contains the northwesternmost corner of Gabreski Airport. <i>See S9.</i></p>	<p>p/o 900 - 312 - 1 - 4.2</p> <p>Approx. 23.96 acres.</p>	<p>Dwarf pine plains.</p>
<p>Upland Forest Westhampton East of Speonk- Riverhead Rd and 5th Ave., north of Montauk Highway. <i>See S10.</i></p>	<p>900 - 305 - 1 - 6, 7.1 900 - 330 - 1 - 3.1, 4.1 900 - 329 - 1 - 1, 2.1, 3, 4, 5, 6, 7, 8.1 p/o 900 - 276 - 3 - 1 p/o 900 - 276 - 3 - 2 p/o 900 - 276 - 3 - 5.2 p/o 900 - 305 - 1 - 4 p/o 900 - 305 - 1 - 5 p/o 900 - 329 - 1 - 9 p/o 900 - 329 - 1 - 10</p> <p>(p/o refers to that part located in CGA and not in a receiving area)</p> <p>Approx. 151.9 acres.</p>	<p>Open space on northerly portion of site complements adjacent open space.</p>

Figure 4-5: Critical Resource Areas in Riverside - Flanders area of Southampton Town

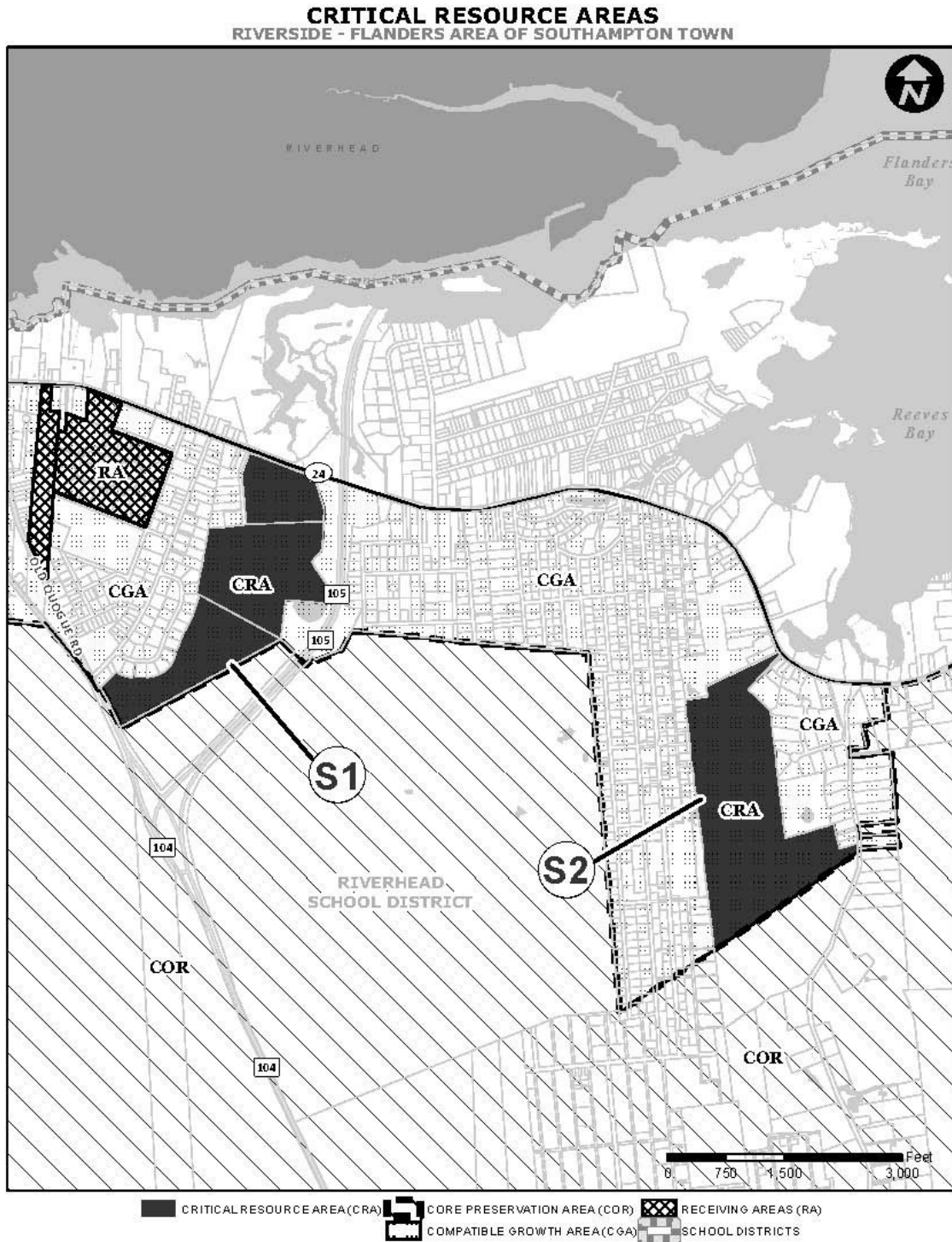


Figure 4-6: Critical Resource Areas in Red Creek area of Southampton Town

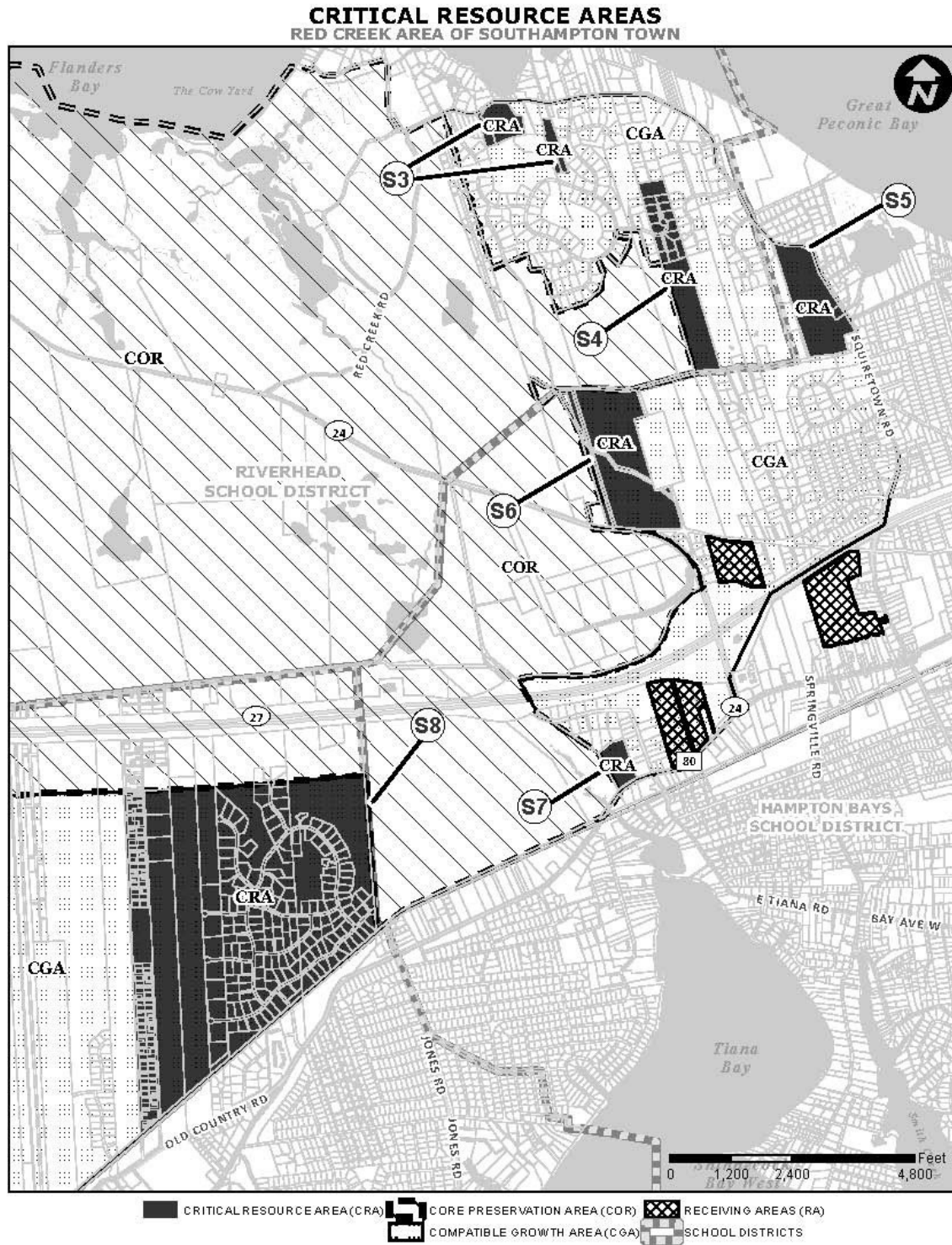
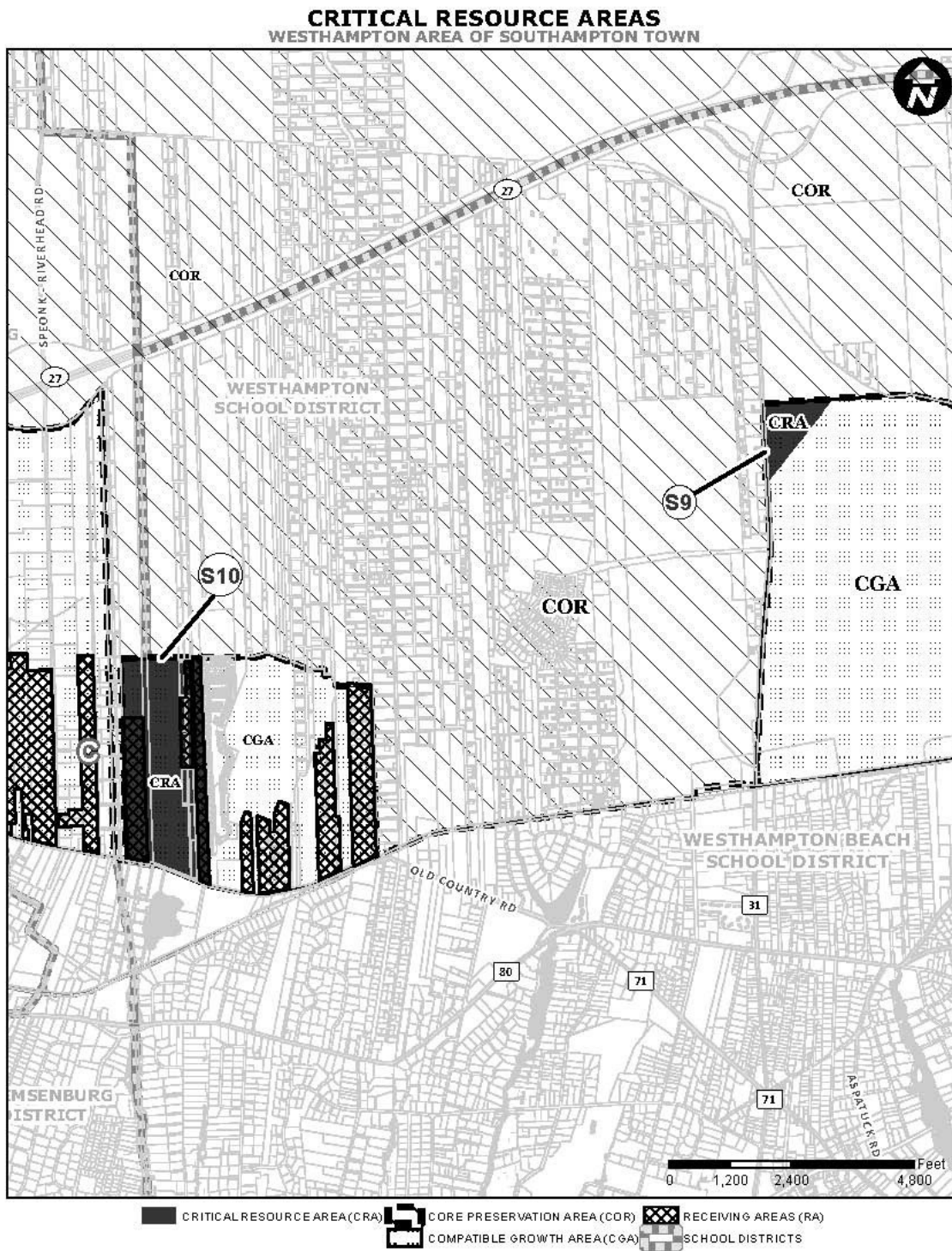


Figure 4-7: Critical Resource Areas in Westhampton area of Southampton Town



4.5.4.2 CRA development: Review standards

The Commission's review pursuant to this section shall be limited to compliance with the standards and guidelines set forth in Volume 1, Chapter 5 of this Plan and the protection for the critical resource feature(s) designated in the Plan. The Commission shall review conformance with guidelines set forth in Volume 1, Chapter 5 of this Plan.

4.5.4.3 CRA development: Application and hearing

A complete application shall be filed by the project sponsor as defined in 4.3.1. Within sixty (60) days of the application being deemed complete, a public hearing on the development proposal shall be held, unless the Commission by majority vote deems a hearing unnecessary, in accordance with the procedures specified in the Act. If a hearing is held, the Commission shall provide the project sponsor and any other person an opportunity to be heard as provided for, and in accordance with the procedures provided in the Act.

4.5.4.4 CRA development: Decision on the application

A decision on the application shall be made by the Commission within one hundred twenty (120) days of said application being deemed complete.

4.5.4.5 CRA development: Default decisions

In the event that the Commission fails to make a decision within one hundred twenty (120) days, the development proposal shall be deemed to be approved by the Commission.

4.5.5 Developments of Regional Significance located within the Compatible Growth Area (“DRS development”)

The Act sets forth the jurisdiction for the Commission's review of development within the Compatible Growth Area of the Central Pine Barrens. This includes the review of development that meets the threshold(s) constituting a Development of Regional Significance as enumerated in the Plan. The Act also authorizes the Commission, by majority vote, to waive strict compliance with this Plan upon finding that such waiver is necessary to alleviate a demonstrated hardship.

4.5.5.1 DRS development: Definition of a Development of Regional Significance

The following developments are defined as Developments of Regional Significance

1. A non-residential project that proposes development which exceeds 300,000 square foot of gross floor area, or an addition to an existing commercial, industrial, office, educational institution or health care facility development where the addition is 100,000 square feet or more

and that addition causes the total square footage to exceed 300,000 square feet.

2. A residential project that proposes the development of the development of two hundred (200) residential development units or more or causes the total number of existing residential units on a project to exceed 200 units. A unit shall include any mixture of residential dwelling units such as attached single family units or homes, detached single family units or homes, apartments, condominiums, cooperative units.

3. A mixed use project that proposes a mixed use development of 400,000 square feet or greater of any type of use.

4. A project that causes groundwater to be open to the atmosphere and be subject to surface runoff if proposed surface water area meets or exceeds the three acre threshold pursuant to the requirements of New York State Environmental Conservation Law Article 23, Title 27 and its implementing regulations 6 NYCRR Parts 420-425 pertaining to Mined Land Reclamation. Lined ponds that do not expose subsurface groundwater.

Development projects which meet all of the following three criteria are not Developments of Regional Significance:

1. the development project is situated within a designated receiving area pursuant to this Plan, and
2. the development project results from a transfer of development rights from a sending area as defined in this Plan, and
3. the development project contains a minimum of fifteen percent (15%) of residential units, or a minimum of fifteen percent (15%) of commercial, industrial or office use square footage, which is a direct result of the transfer of development rights.

Additionally, the Calverton redevelopment project described in Chapter 9 is defined to not be a Development of Regional Significance.

4.5.5.2 DRS development: Review standards

The Commission's review pursuant to this section shall be limited to compliance with the standards and guidelines set forth in Volume 1, Chapter 5 of this Plan. The Commission shall review conformance with guidelines set forth in Volume 1, Chapter 5 of this Plan.

4.5.5.3 DRS development: Application and hearing

A complete application shall be filed by the project sponsor as defined in 4.3.1. Within sixty (60) days of the application being deemed complete, a public hearing on the development proposal shall be held unless the Commission by majority vote deems a hearing unnecessary, in accordance with the procedures provided in the act. If a hearing is held, the Commission shall

provide the project sponsor and any other person an opportunity to be heard as provided for, and in accordance with the procedures provided in the Act.

4.5.5.4 DRS development: Decision on the application

A decision on the application shall be made by the Commission within one hundred twenty (120) days of said application being deemed complete.

4.5.5.5 DRS development: Default decisions

In the event that the Commission fails to make a decision within one hundred twenty (120) days, the development proposal shall be deemed to be approved by the Commission.

4.5.6 Adoption of sense resolutions by the Commission for development projects

With respect to a development project undergoing review pursuant to the State Environmental Quality Review Act (SEQRA) by another government agency and which is also a pending application being processed and reviewed by the Commission, the Commission may elect to adopt a sense resolution expressing its review and evaluation to date of such project and forward the same to those other agencies. The primary purpose of such a sense resolution shall be to facilitate the completion of the other agencies' SEQRA review and thereby enable the Commission to make a final decision on such a development project.

5. Standards and Guidelines for Land Use

5.1 Central Pine Barrens overall area

The following sets forth the standards and guidelines for land use within the Central Pine Barrens.

Standards are to be implemented, and are enforceable, by municipalities, municipal agencies and the Commission, or any other agency with enforcement powers within the Central Pine Barrens. Discretionary decisions regarding standards are to be made by the Commission, under the provisions set forth in Volume I, Chapter 4 of this Plan. These standards are in addition to all other regulatory requirements and do not exempt any entity from complying with applicable federal, state, county, or local laws.

Guidelines are to be utilized by municipalities and municipal agencies with discretionary decisions determined at the municipal level, unless a project is before the Commission due to its location within a Critical Resource Area, because it is a Development of Regional Significance or because there was an assertion of jurisdiction as described in Volume I, Chapter 4 of this Plan.

The municipalities may adopt standards and guidelines which are more restrictive than those contained in this Plan.

Pre-existing structures or uses that comply with existing laws, including legal non-conforming uses, may be continued in accordance with their current approved use(s).

5.2 Core Preservation Area

The Core Preservation Area is to be preserved by a strategy of government land acquisition, the transfer of development rights, conservation easements, gifts, land swaps, and donations. Development in the Core Preservation Area shall be prohibited or redirected, and hardship exemptions granted by this Commission as provided for in the Act.

Allowable uses within the Core Preservation Area shall be limited to those operations or uses which do not constitute development, or hardship exemptions granted by this Commission pursuant to the Act.

Any existing, expanded, or new activity involving agriculture or horticulture in the Core Preservation Area is an allowable use if it does not involve material alteration of native

vegetation. The erection of agricultural buildings, including but not limited to barns, greenhouses and farm stands, required for the production of plants or animals as reflected under ECL Section 57-0107(14), shall constitute an allowable use. If such activity does involve material alteration of native vegetation, the use will require a hardship exemption from the Commission.

5.3 Compatible Growth Area

5.3.1 Applicability and other policies

The Central Pine Barrens Joint Planning and Policy Commission adopts the following standards and guidelines for development in the Compatible Growth Area in accordance with applicable state law.

These standards shall be incorporated into local land use and development review procedures, ordinances and laws by the local municipalities. The Commission shall also apply these standards to those projects that it directly reviews within the Compatible Growth Area.

These guidelines shall be incorporated into land use and development procedures, and utilized by municipalities and municipal agencies on a discretionary basis.

All standards and guidelines for land use in this section are based on the best available scientific evidence and municipal laws and practices.

Agriculture or horticulture in the Compatible Growth Area is encouraged to comply with best management practices. Best management practices are, for purposes of this Plan, the same practices stated in the document entitled *Agricultural Management Practices Catalogue for Nonpoint Source Pollution Prevention and Water Quality Protection in New York State*, prepared by the New York State Nonpoint Source Management Practices Task Force, New York State Department of Environmental Conservation, 2007.

5.3.2 State Environmental Quality Review Act (SEQRA)

A generic environmental impact statement (GEIS) has been completed for the Plan, including the standards and guidelines for land use set forth in this section.

A supplemental environmental impact statement may be required for individual development projects by the appropriate town or other governmental agency, if a significant environmental

effect is identified that is outside the scope of the standards and guidelines set forth in this chapter. If a potentially significant environmental effect is not identified, a Supplemental Environmental Impact Statement or an Environmental Impact Statement should not be required. The scope of the supplemental EIS should be limited to subjects that are not addressed by the standards or guidelines or the GEIS.

5.3.3 Intent and Compatible Growth Area standards

The Commission recognizes the need for balanced growth and development consistent with the water resource protection and habitat preservation goals provided for in the Act.

Development projects in the Compatible Growth Area are required to meet all of the standards in this chapter unless a permit has been issued under the provisions of Volume I, Chapter 4 of this Plan.

Where standards contained in the Plan differ from state, county, local law or regulation, the stricter standard(s) shall apply.

5.3.3.1 Sanitary waste, nitrate-nitrogen and other chemicals of concern

Nitrate-nitrogen, a contaminant that emanates from numerous types of land uses, is a recognized indicator of groundwater quality. The Suffolk County Department of Health Services abides by the New York State nitrate-nitrogen standard for drinking water. In addition to the specific standards for nitrate-nitrogen, other contaminants of concern may be relevant in specific applications or in specific areas.

Standards

5.3.3.1.1 Suffolk County Sanitary Code Article 6 compliance

All development proposals subject to Article 6 of the Suffolk County Sanitary Code (“Realty Subdivisions, Developments and Other Construction Projects”) shall meet all applicable requirements of the Suffolk County Department of Health Services. Projects which require variances from the provisions of Article 6 shall meet all requirements of the Suffolk County Department of Health Service's Board of Review in order to be deemed to have met the requirements of this standard.

5.3.3.1.2 Sewage treatment plant discharge

Where deemed practical by the County or State, sewage treatment plant discharge shall be outside and downgradient of the Central Pine Barrens. Treatment systems that are approved by the New York State Department of Environmental Conservation or the Suffolk County Department of Health Services may be used in lieu of a sewage treatment plant.

5.3.3.1.3 Suffolk County Sanitary Code Articles 7 and 12 compliance

All projects must comply with the provisions of Articles 7 and 12 of the Suffolk County Sanitary Code, including any provisions for variances or waivers if needed, and all applicable state laws and regulations in order to ensure that all necessary water resource and wastewater management infrastructure shall be in place prior to, or as part of, the commencement of construction.

5.3.3.1.4 Commercial and industrial compliance with the Suffolk County Sanitary Code

All commercial and industrial development applications shall comply with the provisions of the Suffolk County Sanitary Code as applied by the Suffolk County Department of Health Services, and all other applicable federal, state or local laws. Development projects which require variances from the provisions of the Suffolk County Sanitary Code shall meet all requirements of the Department of Health Service's Board of Review in order to be deemed to have met the requirements of this standard.

Guideline

5.3.3.1.5 Nitrate-nitrogen

A more protective goal of two and one half (2.5) ppm shall be achieved for new development projects through an average residential density of one (1) unit per two (2) acres (or its non-residential equivalent), through clustering or through other mechanisms to protect surface water quality for projects in the vicinity of ponds and wetlands.

For purposes of this section, in the vicinity of ponds and wetlands means that the project site contains areas subject to review by the state or a local municipality under their respective tidal or freshwater wetland, or both, regulations or other provision regulating activities in a surface or tidal wetland.

5.3.3.2 Reserved

5.3.3.3 Wellhead and groundwater protection

The New York State Department of Health requires minimum separation distances for public water supply wells from contaminant sources pursuant to Appendix 5D of 10 NYCRR Part 5, Subpart 5-1 Public Water Supply Systems in order to protect these public water supplies from contamination. Although this may have been considered adequate to prevent the rapid drawdown of bacterial contamination or its entry into groundwater through poorly constructed wells, it does not necessarily ensure an adequate level of protection against the suite of organic and inorganic pollutants that may threaten community water supplies.

Standard

5.3.3.3.1 Significant discharges and public supply well locations

The location of public supply wells shall be considered in all applications involving significant discharges to groundwater, as required under the New York State Environmental Conservation Law Article 17.

Guideline

5.3.3.3.2 Private well protection

The Suffolk County Department of Health Services' guidelines for private wells should be used for wellhead protection.

5.3.3.4 Wetlands and surface waters

Freshwater wetlands that exist within the Central Pine Barrens are considered to be an important natural resource, providing flood and erosion control, the filtering of contaminants and sediments from stormwater runoff, and habitat for plants and wildlife.

Tidal wetlands existing within the marine environment bordering portions of the Central Pine Barrens are equally valuable natural resources. These wetlands support the reproduction of finfish and shellfish, provide habitat for waterfowl and species which are designated as rare, endangered, threatened or special concern, and contribute a scenic quality that supports recreational economies.

Surface waters, including freshwater ponds, lakes, streams, rivers, and creeks, occur throughout the Central Pine Barrens. These are considered to be resources of significant value in economic, aesthetic and ecological terms. Their protection is judged to be vital to the dynamics of the pine barrens.

Standards

5.3.3.4.1 **Nondisturbance buffers**

Development proposals for sites containing or abutting freshwater or tidal wetlands or surface waters must be separated by a nondisturbance buffer area that is no less than th required by the New York State Tidal Wetland, Freshwater Wetland, or Wild, Scenic and Recreational Rivers Act or local ordinance. The Commission reserves the right to require a stricter and larger nondisturbance buffer for development projects not subject to municipal review. Distances shall be measured horizontally from the wetland edge as mapped by the New York State Department of Environmental Conservation, field delineation or local ordinance. Projects which require variances or exceptions from these state laws, local ordinances and associated regulations, shall meet all requirements imposed in a permit by the New York State Department of Environmental Conservation or a municipality in order to be deemed to have met the requirements of this standard.

5.3.3.4.2 **Buffer delineations, covenants and conservation easements**

Buffer areas shall be delineated on the site plan, and covenants and/or conservation easements, pursuant to the New York State Environmental Conservation Law and local ordinances, shall be imposed to protect these areas as deemed necessary.

5.3.3.4.3 **Wild, Scenic and Recreational Rivers Act compliance**

Development shall conform to the provisions of the New York State Wild, Scenic and Recreational Rivers Act, where applicable. Projects which require variances or exceptions under the New York State Wild, Scenic and Recreational Rivers Act shall meet all requirements imposed by the New York State Department of Environmental Conservation in order to be deemed to have met the requirements of this standard.

Guideline

5.3.3.4.4 **Additional nondisturbance buffers**

Stricter nondisturbance buffer areas may be established for wetlands as appropriate.

5.3.3.5 Stormwater runoff

Development of lands within the pine barrens inevitably results in an increase of runoff water following precipitation. Runoff water originating from the roofs of buildings and from driveways is usually discharged directly to subsurface dry wells situated on the building lot. However, the great volume of runoff water originating from paved streets and roads is usually discharged by pipes into large open recharge basins or sumps. These basins may cover several acres and require the removal of considerable native vegetation to the detriment of the site's ecology and aesthetics.

Standards

5.3.3.5.1 Stormwater recharge

Development projects must provide that all stormwater runoff originating from development on the property is recharged on site unless surplus capacity exists in an off site drainage system.

5.3.3.5.2 Natural recharge and drainage

Natural recharge areas and/or drainage system designs that cause minimal disturbance of native vegetation should be employed, where practical, in lieu of recharge basins or ponds that would require removal of significant areas of native vegetation.

5.3.3.5.3 Ponds

Ponds should only be created if they are to accommodate stormwater runoff, not solely for aesthetic purposes.

5.3.3.5.4 Natural topography in lieu of recharge basins

The use of natural swales and depressions should be permitted and encouraged instead of excavated recharge basins, whenever feasible.

5.3.3.5.5 Soil erosion and stormwater runoff control during construction

During construction, the standards and guidelines promulgated by the New York State Department of Environmental Conservation pursuant to state law, which are designed to prevent soil erosion and control stormwater runoff, should be adhered to.

5.3.3.6 Coordinated design for open space, habitat and soil protection

Comprehensive, coordinated planning and design of development proposals within the pine barrens is essential to ensure maximum preservation of open space and habitat linkages. Development projects must be designed with full consideration of existing development and known future plans for the adjacent parcels. otherwise, inefficient road patterns may require unnecessary clearing and lot layout that may hinder or entirely prevent the preservation of large, unbroken blocks of open space.

Conservation design principles must be used when creating development project plans to ensure that the most valuable natural features and functions of a project site are retained and set aside as open space. All development projects are required to meet the open space and clearing requirements specified in Figure 5-1.

Open space is defined as any undeveloped and unimproved, publicly or privately-owned open area, which can be comprised of either land or water, that remains in its natural state and may include agricultural areas that are permanently preserved and will not be developed. Open space is intended to be available, where applicable, for low-intensity recreational activities which have nominal environmental impact and have no effect on the environmental integrity of the open space, including hiking, hunting, nature study, bird watching and orienteering. In no case does open space mean active recreational facilities such as golf courses, amusement parks and ballfields. Proper management of these areas, including assignment of responsibility for such management, is essential in order to protect open spaces from illegal dumping, clearing, motor vehicle trespass and other abuses.

Buffer areas are defined, for the purposes of this section, as areas incorporated into a development project site design for purposes including, but not limited to, conservation area compliance, habitat preservation, open space protection, separation between wetlands and development, visual consideration, or mitigation of environmental impacts. These buffer areas must be properly managed and protected to prevent damage and deterioration.

Clearing is defined as the removal, cutting or material alteration of any portion of the natural vegetation found on a development project site exclusive of any vegetation associated with active agricultural or horticultural activity or formalized landscape and turf areas.

Excessive clearing of natural vegetation can result in severe soil erosion, excessive stormwater runoff, and the destruction or reduction of pine barrens plant and wildlife habitat, and shall be minimized on development project sites through the provisions of this section. Revegetation of a development project site to meet open space requirements may be accomplished through the self-heal restoration process instead of planting horticulturally

derived native plants from off-site sources depending on site conditions.

Further, the Long Island Comprehensive Waste Treatment Management Plan (the "208 Study"; Long Island Regional Planning Board, Hauppauge, NY, (1978)) indicated that fertilizers are a significant source of nitrogen and phosphorous contamination to ground and surface waters. Due to their low fertility, soils common to the pine barrens (e.g., Carver, Haven, Plymouth and Riverhead) require both irrigation and fertilizer application for establishment and maintenance of turf and nonnative vegetation. As native pine barrens vegetation is replaced with turf through development, increased contamination and a general change in the ecosystem may be expected.

Standards

5.3.3.6.1 Vegetation clearance limits

The clearance of natural vegetation shall be strictly limited. Site plans, surveys and subdivision maps shall delineate the existing naturally vegetated areas and calculate those portions of the site that are already cleared due to previous activities.

Areas of the site proposed to be cleared combined with previously cleared areas shall not exceed the percentages in Figure 5-1. These percentages shall be taken over the total site and shall include, but not be limited to, roads, building sites, drainage structures and landbanked parking. The clearance standard that would be applied to a development project site if developed under the existing residential zoning category may be applied if the proposal involves multi-family units, attached housing, clustering or modified lot designs. Site plans, surveys and subdivision maps shall be delineated with a clearing limit line and calculations for clearing to demonstrate compliance with this standard.

To the extent that a portion of a development project site includes Core property, and for the purpose of calculating the clearance limits, the site shall be construed to be the combined Core and CGA portions. However, the Core portion may not be cleared except in accordance with Section 5.2 of the Plan.

5.3.3.6.1.1 Development project sites which consist of non-contiguous parcels shall be treated as if the parcels were contiguous for purposes of determining conformance.

5.3.3.6.1.2 Development project sites which consist of parcel(s) that are split among two or more zoning categories shall have a total clearing allowance for the entire site which is the sum of the individual clearances for each separately zoned portion

of the site.

- 5.3.3.6.1.3 Development project sites in Residential Overlay Districts that include the redemption of Pine Barrens Credits shall apply Figure 5-1 based on the resulting average lot size after the redemption of Credits, rather than the base zoning lot size. To determine the amount of clearing allowed, interpolate the maximum site clearance percentage using Figure 5-1, as long as the requirements of the Town Code and of Section 6.4 of the Plan are met.
- 5.3.3.6.1.4 Land cleared for purposes of conducting environmental restoration pursuant to ECL 57-0107(13)(c), shall be considered “natural vegetation,” and shall not be considered “cleared” or “previously cleared” land in determining conformance.
- 5.3.3.6.1.5 Persons seeking relief from clearing requirements on development project sites must file a CGA hardship application.
- 5.3.3.6.1.6 For a project site which is split between the Core Preservation Area and the Compatible Growth Area, and within which Pine Barrens Credits have been issued for the Core Preservation Area portion, only the Compatible Growth Area acreage shall be used to determine the amount of clearing allowed according to Figure 5-1.

Figure 5-1: Clearance and Open Space Standards

This table shows total overall development project site clearance and requirement for open space including lots, roads, drainage and other improvements.

Zoning lot size (see Notes at end of table)(*)	Maximum overall development project site clearance (**)	Minimum open space requirement (**)
10,000 square feet residential (1/4 acre)	90 %	10 %
15,000 square feet residential (1/3 acre)	70 %	30 %
20,000 square feet residential (1/2 acre)	60 %	40 %
30,000 square feet residential (2/3 acre)	58 %	42 %
40,000 square feet residential (1 acre)	53 %	47 %
60,000 square feet residential (1.5 acre)	46 %	54 %
80,000 square feet residential (2 acres)	35 %	65 %
120,000 square feet residential (3 acres)	30 %	70 %
160,000 through 200,000+ square feet residential (4 - 5+ acres) The total amount of disturbance of natural vegetation shall not exceed the clearance percentage, except on flagpole lots where the area of the pole shall be exempt from the total lot area and the total amount of clearing permitted.	25 %	75%
Other defined residential zoning lot size	Interpolate from entries above.	Interpolate from entries above.
All other zoning categories, including those categories without defined zoning lot sizes and parcels owned by the State or a public corporation	60 %	40 %

Notes:

(*) These entries are the minimum lot sizes required by zoning as of June 28, 1995 or the date the parcel is added to the Central Pine Barrens if later or the current zoning, whichever is more protective of the environment by minimizing clearing or maximizing open space, not the size of the subject parcels.

(**) In calculating the percentage of land cleared and the percentage of open space to be retained, the preserved areas in a development should preferably be existing native vegetation. These are maximum clearance and minimum open space standards, and more restrictive standards may be imposed during the review by the Commission, involved agency, or local municipality due to consideration of other standards, especially those addressing preservation of rare or endangered species, or unique flora or vegetation.

5.3.3.6.2 Open space standard requirement, unfragmented open space and habitat

Development project sites must meet at a minimum the percentages of open space specified in Figure 5-1 regardless of existing physical site conditions. Applicants must prioritize first the use of existing cleared areas for development on a project site prior to clearing areas of natural vegetation. Site plans, surveys - and subdivision maps must delineate the open space boundary lines and include the calculation of open space areas to demonstrate conformance with this standard. Applicants must identify the receiving entity to which dedicated open space will be transferred as required by Standard 5.3.3.6.5.

Conservation design promotes the creation of open space that permanently protects the significant natural and cultural resources and environmental features of a site by concentrating development into compact areas. This will be required for development projects and accomplished through the use of conservation design methods that include clustering, reduced density development design, or similar methods that achieve the requirements of this section.

In determining which areas of a development project site to set aside as open space, the order of priority, from highest to lowest, shall be as follows:

- Areas that include any species, habitats or significant attributes required to be protected under existing regulations. This includes, but is not limited to, wetlands; the habitats of endangered; threatened and special concern species; floodplains; archaeological sites and burial grounds and cemeteries.
- Areas that contain woodlands followed by other natural areas.
- Areas that contain woodlands and other natural areas adjacent to existing open space, that will connect open space areas into large contiguous, unbroken blocks of habitat. This should include consideration of existing and planned future development of adjacent properties.

Project sites that do not have sufficient existing natural areas to meet the open space requirement specified in Figure 5-1 due prior development or use, will be required to revegetate areas to satisfy this standard. This will include sites that do not meet the open space requirement due to pre-existing clearing or disturbance, formalized landscaped and turf areas and/or impervious surfaces.

A range of one or more restoration methods may be required that include, but are not limited to, the “Self-Heal” approach, active restoration with nursery stock, and/or transplantation activities. The "Self-Heal" approach should be the first approach used for restoration of areas to be set aside as open space, unless otherwise prevented by site conditions. The “Self-Heal” approach is preferable because it allows existing live seed banks, rhizomes, roots, etc. to naturally recolonize a disturbed area rather than using active restoration with nursery stock grown offsite. The transplanting of natural vegetation from areas proposed to be developed should also be considered and implemented where feasible.

The restoration of these areas will require the preparation of a restoration plan that will be subject to the review and approval of the approving agency. The plan will include at a minimum, a description of the restoration method, map of areas to be restored, site preparation work, schedule for implementation, monitoring and reporting requirements to guarantee a success rate of 85% after three to five years, and invasive species management, and reporting requirements. Since site conditions can vary, the approving agency may require other provisions in the restoration plan to ensure successful restoration of these areas to serve as open space. If the Self-Heal approach fails to successfully restore the areas, a restoration plan will need to be developed and approved by the reviewing agency that provides for active restoration with native species.

The restoration area once it has been successfully restored with native species must be protected as the open space area in accordance with Standard 5.3.3.6.5, Receiving entity and protection for open space areas.

5.3.3.6.3 **Fertilizer-dependent vegetation limit**

No more than 15% of an entire development project site shall be established in fertilizer-dependent vegetation including formalized turf areas. Generally, nonnative species require fertilization therefore, planting of such nonnative species shall be limited to the maximum extent practicable. Development designs shall be in conformance with Standard 5.3.3.6.4 Native plantings.

5.3.3.6.4 **Native plantings**

Development designs shall incorporate the species listed as “recommended” in Figure 5-2 “Planting Recommendations.” Landscaping and restoration plans shall strive to use Long Island native genotypes, unless the plants are not available. A more extensive list of acceptable and unacceptable plants is available from the Commission office.

Figure 5-2: Planting recommendations

(Native plants are more drought tolerant than nonnative species, are adapted to our local environment, maintain natural ecological diversity, perpetuate fast disappearing native genotypes, and comprise a form of habitat restoration.)

Scientific name (In alphabetic order)	Common name
Recommended native plants	
<p><i>Andropogon gerardi</i> <i>Andropogon scoparius</i> <i>Betula lenta</i> <i>Betula populifolia</i> <i>Celtis occidentalis</i> <i>Demnstaedtia punctilobula</i> <i>Epigea repens</i> <i>Hamamelis virginia</i> <i>Ilex glabra</i> <i>Ilex opaca</i> <i>Myrica pensylvanica</i> <i>Parthenocissus quinquefolia</i> <i>Pinus rigida</i> <i>Populus tremuloides</i> <i>Prunus maritima</i> <i>Prunus serotina</i> <i>Pteridium aquilinum</i> <i>Quercus alba</i> <i>Quercus coccinea</i> <i>Quercus rubra</i> <i>Rosa virginiana</i> <i>Rubus allegheniensis</i> <i>Salix discolor</i> <i>Sassafras albidum</i> <i>Solidago species</i> <i>Spirealatifolia</i> <i>Vaccinium angustifolium</i> <i>Vaccinium corymbosum</i></p>	<p>Big bluestem Little bluestem White Birch Grey birch Hackberry Hay scented fern Trailing arbutus Witch hazel Inkberry American holly Northern bayberry Virginia creeper Pitch pine Quaking aspen Beach plum Black cherry Bracken fern White oak Scarlet oak Red oak Virginia rose Northern blackberry Pussy willow Sassafras Goldenrod Spirea Low bush blueberry High bush blueberry</p>
<i>Continued ...</i>	

Invasive, nonnative plants specifically <u>not</u> recommended	
<p><i>Acer platinoides</i> <i>Acer pseudoplatanus</i> <i>Ampelopsis brevipedunculata</i> <i>Berberis thunbergii</i> <i>Celastrus orbiculatus</i> <i>Coronilla varia</i> <i>Eleagnus umbellata</i> <i>Lespedeza cuneata</i> <i>Ligustrum sinense</i> <i>Lonicera japonica</i> <i>Lonicera maackii</i> <i>Lonicera tartarica</i> <i>Lythrum salicaria</i> <i>Miscanthus sinensis</i> <i>Pinus nigra</i> <i>Polygonum cuspidatum</i> <i>Pueraria lobata</i> <i>Robina pseudoacacia</i> <i>Rosa multiflora</i> <i>Rosa rugosa</i> <i>Rudbeckia hirta</i></p>	<p>Norway maple Sycamore maple Porcelain berry vine Japanese barberry Asiatic bittersweet Crown vetch Autumn olive Himalayan bushclover Chinese privet Japanese honeysuckle Amur honeysuckle Tartarian honeysuckle Purple loosestrife Eulalia Black pine Mexican bamboo Kudzu Black locust Multiflora rose Rugosa (salt spray) rose Black eyed susan</p>

5.3.3.6.5 Receiving entity and protection for open space areas

The use, maintenance and management of open space shall be considered when protecting open space areas. The project applicant must specify the entity to which the open space will be dedicated. The protection of the open space shall be guaranteed by dedicating the open space to a government entity, private not for profit, land conservation management organization, homeowner’s association or similar entity through the transfer of title or a permanent conservation easement or covenant recorded with the Suffolk County Clerk, or similar mechanism to ensure open space protection.

5.3.3.7 Protection and conservation of species and communities

The pine barrens ecosystem hosts several species of rare, endangered or threatened animals and plants, as well as species of special concern. The State of New York has identified such species and has enacted laws to protect their number and habitat. The New York State Natural Heritage Program has also identified unique natural communities and habitats of special concern.

The U.S. Fish and Wildlife Service estimates that bird strikes with buildings, windows and

other structures account for up to several million bird deaths per year. Bird collisions occur because birds perceive glass and reflections of vegetation, landscapes or sky to be real and they attempt to reach habitat, open spaces or other attractive features visible through either glass surfaces or free-standing glass. Many of these collisions are preventable with appropriate building design.

Standards

5.3.3.7.1 **Special species and ecological communities**

Where a significant impact is proposed upon a habitat essential to those species identified on the New York State maintained lists as rare, threatened, endangered or of special concern, or upon natural communities classified by the New York State Natural Heritage Program as G1, G2, G3 or S1, S2 or S3, or on any federally listed endangered or threatened species, appropriate mitigation measures as determined by the appropriate state, county or local government agency shall be taken to protect these species.

5.3.3.7.2 **Bird conservation and protection**

Development projects shall incorporate bird friendly structures, design and site planning elements to reduce bird strikes and mortality to the greatest extent feasible. Seek guidance provided in the American Bird Conservancy et al publication “Bird Friendly Building Design,” available from their website.

5.3.3.8 Soils

Disturbance of, and construction on, steep slopes within the pine barrens involves considerable removal of native vegetation resulting in excessive surface water runoff and severe soil erosion. Steeply sloped areas are also subject to more rapid spread of wildfire than flat ground.

Guidelines

5.3.3.8.1 **Clearing envelopes**

Clearing envelopes should be placed upon lots within a subdivision so as to maximize the placement of those envelopes on slopes less than ten percent (10%).

5.3.3.8.2 **Stabilization and erosion control**

Construction of structures on slopes greater than ten percent (10%) may be

approved if technical review shows that stabilization measures, erosion control practices and structures are implemented to mitigate negative environmental impacts and no alternative location exists on the project site.

5.3.3.8.3 Slope analyses

Project review is facilitated if submissions contain a slope analysis showing slopes in the ranges 0-10%, 11-15% and 15% and greater. In areas with steep slopes, slope analysis maps should be required. This can be satisfied with cross hatching or shading on the site plan for the appropriate areas.

5.3.3.8.4 Erosion and sediment control plans

Erosion and sediment control plans should be required in areas of fifteen percent (15%) or greater slopes.

5.3.3.8.5 Placement of roadways

Roads and driveways should be designed to minimize the traversing of slopes greater than ten percent (10%) and to minimize cuts and fills.

5.3.3.8.6 Retaining walls and control structures

Details of retaining walls and erosion control structures should be provided for roads and driveways which traverse slopes greater than ten percent (10%).

5.3.3.9 Dark sky compliance

Light pollution is caused by inefficient or unnecessary use of artificial light that may cause light trespass on properties, over illumination and glare that can cause discomfort to the eyes, light clutter and sky glow that diminishes the ability to view the night sky and may disrupt wildlife behavior. This standard applies to projects not subject to local municipal review.

Standard

5.3.3.9.1 Light pollution prevention

This standard applies only to projects which are not subject to local municipal review and approval. The candlepower distribution from lighting fixtures and installations shall be cut off at all angles beyond those required to restrict direct illumination to the specific area or surface being illuminated. Development shall utilize full cutoff lighting that directs all light downward and eliminates spill light and direct upward light. Fixtures must be noted on the proposed site plan as

dark-sky compliant fixtures. Existing exterior fixtures on a development project site shall be retrofitted accordingly.

5.3.3.10 Reserved

5.3.3.11 Scenic, historic and cultural resources

The Long Island Pine Barrens Protection Act specifies that the Plan shall consider and protect unique scenic, cultural or historic features. Volume 2 of the Plan includes an inventory of many of these resources, and separate inventories for these items exist in local, state, county, federal or private inventories.

The Commission's policy is to protect and enhance those landscape based features of a community which define it, provide for its distinction from neighboring communities, provide for natural areas among the communities which complement the protection of the pine barrens ecosystem, and contribute to a regional diversity, both natural and cultural. The standards and guidelines in this section will promote the protection of these features in the Central Pine Barrens.

Standard

5.3.3.11.1 Tall structures and scenic resources

This standard applies to projects not subject to local municipal review. A development project subject to this standard must not exceed the height definition for tall structures in Chapter 4, Section 4.3.11. This standard requires, in part, the adaptive use and reuse of existing tall structures rather than the construction and placement of new ones when and where feasible and appropriate.

Guidelines

5.3.3.11.2 Cultural resource consideration

Development proposals should account for, review, and provide protection measures for:

1. Established recreational and educational trails and trail corridors, including but not limited to those trail corridors inventoried elsewhere in this Plan.
2. Active recreation sites, including existing sites and those proposed as part of a development.
3. Scenic corridors, roads, vistas and viewpoints as documented in Volume 2 of

this Plan, and which are listed in Figure 5-3, which may be amended from time to time, in Volume I of this Plan and may be located in Critical Resource Areas, and along the Long Island Expressway, Sunrise Highway, County Road 111 and William Floyd Parkway.

4. Sites of historical or cultural significance, including historic districts, sites on the State or National Registers of Historic Places, and historic structures listed on the State or National Registers of Historic Places, recognized by local municipal law or statute.
5. Sensitive archaeological areas as identified by the New York State Historic Preservation Office or the New York State Museum.

5.3.3.11.3 **Inclusion of cultural resources in applications**

Development proposals should note established recreation and educational trails and trail corridors; active recreation sites; scenic corridors, roads, vistas and viewpoints located in Critical Resource Areas and undisturbed portions of the roadsides of the Long Island Expressway, Sunrise Highway, County Road 111 and William Floyd Parkway; sites on the State or National Register of Historic Places, and historic structures and landmarks recognized by municipal law or statute, or listed on the State or National Registers of Historic Places; and sensitive

archaeological areas as identified by the New York State Historic Preservation Office or the New York State Museum within a five hundred (500) foot radius of the outside perimeter of the project site, including any project parcels which are physically separate from the bulk of the proposed development area.

A development proposal may be disapproved or altered if the local municipality determines that the development proposal, in its current form, may have a significant negative impact on any of the above resources.

5.3.3.11.4 **Protection of scenic and recreational resources**

Protection measures for scenic and recreational resources should include, but not be limited to, retention of visually shielding natural buffers, replacement of degraded or removed natural visual buffers using native species, use of signs which are in keeping in both style and scale with the community character, and similar measures.

5.3.3.11.5 **Roadside design and management**

Undisturbed portions of the roadside should be maintained in a manner that protects the scenic features of these areas. Clearing (including that for aisles, driveways, access and parking) is not precluded within these roadside areas, provided that appropriate buffers are maintained, and that manmade structures meet standards consistent with the character of the area.

Figure 5-3: Scenic Roads and Areas in the Central Pine Barrens*

*(Standards and guidelines shall apply only to the portion of these areas
and roadways located in the Compatible Growth Area)*

Scenic Roads in the Central Pine Barrens Area

- **Sunrise Highway (NYS 27)** from CR 51 intersection east to NYS 24 intersection.
- **Riverhead -Moriches Road (CR 51) and Center Drive** from CR 111 north to Riverhead County Center.
- **Riverhead –Moriches Road (CR 63)** from CR 51 north toward Riverhead
- **Riverhead-Westhampton Road (CR 31) and Riverhead-Quogue Road (CR 104)** from Suffolk Airport north to Riverhead
- **Flanders Road (NYS 24)** from approximately Cross River Drive (CR 105) east to Jackson Avenue
- **Yaphank hamlet and Yaphank-Middle Island Road (CR 21)** from Lower Lake north to Cathedral and Prosser Pines
- **William Floyd Parkway** from northerly edge of Brookhaven Laboratory to Route 25A
- **Rocky Point Road (CR 21)** from approximately Whiskey Road north to northern edge of state preserve
- **North Street and Mill Road** through Manorville hamlet
- **Schultz Road and Wading River-Manorville Road**

Scenic Areas in the Central Pine Barrens

- **NYS Rocky Point Natural Resource Management Area**
- **Prosser Pines County Nature Preserve**
- **Southaven County Park and Carmans River**
- **Brookhaven State Park**
- **Peconic River and associated Coastal Plain Ponds** from Middle Country Road (NYS 24) south to Schultz Road and east towards Connecticut Avenue
- **Swan Pond County Parkland**
- **Manorville-Riverhead Hills** from roughly the Long Island Expressway extending along an arc running southeast and east to CR 51

- **Riverhead Hills**, an extension of the above “arc”, running from CR 51 east past Suffolk Community College, Speonk-Riverhead Road to CR 104
- **Cranberry Bog County Nature Preserve** located south of Riverhead County Center
- **Sears Bellows/Maple Swamp/Flanders Hills County parkland** from Flanders Road (NYS 24) south to Sunrise Highway; from Pleasure Drive east to Bellows Pond Road
- **South Flanders and Henry’s Hollow region**
- **Dwarf Pine Barrens**
- **Flanders and Hubbard County Parks, Southampton Town Red Creek Parkland**
- **Quogue Wildlife Refuge**
- **Peconic River** from Connecticut Avenue east to Riverhead hamlet and Flanders Bay
- **Paumanok Path** (Pine Barrens Trail portion) from Rocky Point south, southeast, and east to Sears Bellows County Park, the Red Creek region, and outside the Central Pine Barrens towards Montauk Point
- **Wildwood Lake** south of Riverhead hamlet
- **Artist Lake** immediately south of Middle Country Road in Middle Island
- **Lake Panamoka** approximately one mile north of Middle Country Road, between Ridge and Calverton

*A more complete description of each of the scenic resources listed is provided in the Central Pine Barrens Comprehensive Land Use Plan, Volume 2: Existing Conditions, Chapter 8: Scenic Resources, 6/28/1995, reprinted 8/96.

5.3.3.12 Reserved

6. Pine Barrens Credit Program

6.1 Purpose of the Pine Barrens Credit Program

As required in the Long Island Pine Barrens Protection Act, the Plan is designed to preserve the pine barrens ecology and to ensure the high quality of surface and groundwater within the Central Pine Barrens. The Act states that the Plan shall discourage piecemeal and scattered development, and accommodate development in a manner consistent with the long term integrity of the pine barrens ecosystem. The Act further states that the Plan should ensure a compact, efficient and orderly plan of development. The Legislature recognized that the Plan may restrict the use of some lands currently in private ownership and that these restrictions are necessary and desirable to protect and preserve the hydrologic and ecologic integrity of the Central Pine Barrens area, as well as the public health and welfare of future generations.

It is the primary purpose of the Pine Barrens Credit Program to maintain value in lands designated for preservation or protection under the Plan by providing for the allocation and use of Pine Barrens Credits (PBCs). The Pine Barrens Credit Program will also promote development which is compact, efficient and orderly, and which is designed to protect the quality and quantity of surface water and groundwater and the long term integrity of the pine barrens ecosystem.

6.2 Pine Barrens Credit Certificate defined

A Pine Barrens Credit (PBC) Certificate is a document issued on behalf of the Commission which indicates the number of Pine Barrens Credits to which the owner of a particular parcel of land is entitled and which attests to the fact that the development rights of a particular parcel of land in a sending district of the Central Pine Barrens have been severed from the land by the recording of a conservation easement, and that these rights are available for sale or use.

6.3 Allocation of Pine Barrens Credits

For the purpose of computing the allocation of Pine Barrens Credits, a parcel of land is defined as a separately assessed Suffolk County Real Property Tax Parcel which is within the Core Preservation Area and existed on the Central Pine Barrens Comprehensive Land Use Plan initial adoption date of June 28, 1995 or the date the parcel is added to the Core Preservation Area or sending area, if later.

6.3.1 Method of allocation

One (1) Pine Barrens Credit shall be allocated for each single family dwelling permitted on a residentially zoned parcel of land located within the Core Preservation Area or a designated sending area designated within this Plan or the date the parcel is added to the Core Preservation

Area or sending area, if later, based upon the development yield set forth in Sections 6.3.1.1.1 through 6.3.1.1.9 of this Plan under the zoning regulations in existence when this Plan is adopted in June, 1995.

Development yield is established by multiplying the gross lot area of the parcel by the development yield factor for each residential zoning category. The development yield factors for the various residential zoning categories are enumerated in Section 6.3.1.1 below, in which one acre equals 43,560 square feet.

6.3.1.1 Development yield factors and computation for single family residentially zoned property

- 6.3.1.1.1 If zoning allows one (1) dwelling unit per ten thousand (10,000) square feet, the development yield factor is 2.70 Pine Barrens Credits per acre.
- 6.3.1.1.2 If zoning allows one (1) dwelling unit per fifteen thousand (15,000) square feet, the development yield factor is 2.00 Pine Barrens Credits per acre.
- 6.3.1.1.3 If zoning allows one (1) dwelling unit per twenty thousand (20,000) square feet, the development yield factor is 1.60 Pine Barrens Credits per acre.
- 6.3.1.1.4 If zoning allows one (1) dwelling unit per forty thousand (40,000) square feet, the development yield factor is 0.80 Pine Barrens Credit per acre except for Southampton Town old filed map parcels for which it is 1.00 PBC per acre.
- 6.3.1.1.5 If zoning allows one (1) dwelling unit per sixty thousand (60,000) square feet, the development yield factor is 0.60 Pine Barrens Credit per acre except for Southampton Town old filed map parcels for which it is 0.66 PBC per acre.
- 6.3.1.1.6 If zoning allows one (1) dwelling unit per eighty thousand (80,000) square feet, the development yield factor is 0.40 Pine Barrens Credit per acre except for Southampton Town old filed map parcels for which it is 0.50 PBC per acre.
- 6.3.1.1.7 If zoning allows one (1) dwelling unit per one hundred twenty thousand (120,000) square feet, the development yield factor is 0.27 Pine Barrens Credit per acre except for Southampton Town old filed map parcels for which it is 0.33 PBC per acre.
- 6.3.1.1.8 If zoning allows one (1) dwelling unit per one hundred sixty thousand (160,000) square feet, the development yield factor is 0.20 Pine Barrens Credit per acre.
- 6.3.1.1.9 If zoning allows one (1) dwelling unit per two hundred thousand (200,000) square feet, the development yield factor is 0.16 Pine Barrens Credit per acre except for Southampton Town old filed map parcels for which it is 0.20 PBC per acre.
- 6.3.1.1.10 If zoning allows one (1) dwelling unit per four hundred thousand (400,000) square feet, the development yield factor is 0.08 Pine Barrens Credit per acre.
- 6.3.1.1.11 One (1) acre as used in 6.3.1.1.1 through 6.3.1.1.10 equals forty three thousand five hundred sixty (43,560) square feet.
- 6.3.1.1.12 A fractional allocation of a Pine Barrens Credit shall be rounded upward to the nearest one hundredth ($1/100^{\text{th}} = 0.01$) of a Pine Barrens Credit.
- 6.3.1.1.13 If zoning allows one (1) dwelling unit per thirty thousand (30,000) square feet, the development yield factor is 1.20 Pine Barrens Credits per acre.

These development yield factors and sample computations are summarized in Figure 6-1 and Figure 6-1a.

Figure 6-1: Pine Barrens Credit Program development yield factors for single family residentially zoned property		
Provision	If zoning allows:	Then the development yield factor (*) is:
6.3.1.1.1	1 (one) dwelling unit per 10,000 sq ft	2.70 PBCs per acre(**)
6.3.1.1.2	1 (one) dwelling unit per 15,000 sq ft	2.00 PBCs per acre(**)
6.3.1.1.3	1 (one) dwelling unit per 20,000 sq ft	1.60 PBCs per acre(**)
6.3.1.1.4	1 (one) dwelling unit per 40,000 sq ft	0.80 PBC per acre(**) except Southampton Town old filed map parcels which receive 1.00 PBC per acre
6.3.1.1.5	1 (one) dwelling unit per 60,000 sq ft	0.60 PBC per acre(**) except Southampton Town old filed map parcels which receive 0.66 PBC per acre
6.3.1.1.6	1 (one) dwelling unit per 80,000 sq ft	0.40 PBC per acre(**) except Southampton Town old filed map parcels which receive 0.50 PBC per acre
6.3.1.1.7	1 (one) dwelling unit per 120,000 sq ft	0.27 PBC per acre(**) except Southampton Town old filed map parcels which receive 0.33 PBC per acre
6.3.1.1.8	1 (one) dwelling unit per 160,000 sq ft	0.20 PBC per acre(**)
6.3.1.1.9	1 (one) dwelling unit per 200,000 sq ft	0.16 PBC per acre(**) except Southampton Town old filed map parcels which receive 0.20 PBC per acre

6.3.1.1.10	1 (one) dwelling unit per 400,000 sq ft	0.08 PBC per acre(**)
6.3.1.1.13	1 (one) dwelling unit per 30,000 sq ft	1.20 PBC per acre(**)

(*) *These development yield factors are augmented by section 6.3.1.1.12: fractional allocations are rounded upward to the nearest one hundredth (1/100 = 0.01) of a Pine Barrens Credit (PBC).*

(**) *One acre equals 43,560 sq ft.
“Southampton Town old filed map parcels” are defined in Southampton Town Code Section 330-53, including any amendments by the Town to this provision in the future.*

Figure 6-1a Pine Barrens Credit allocation examples for single family residentially zoned property	
Example 1:	A 1.00 acre parcel zoned one unit per 40,000 square feet. 1.00 acre X 0.80 Pine Barrens Credit per acre = 0.80 PBC
Example 2:	A 3.25 acre parcel zoned one unit per 40,000 square feet. 3.25 acres X 0.80 PBC per acre = 2.60 PBCs
Example 3:	A 7.89 acre parcel zoned one unit per 80,000 square feet. 7.89 acres X 0.40 PBC per acre = 3.156 PBCs This is then rounded upward to 3.16 PBCs as per section 6.3.1.1.12.
Example 4:	A 10.53 acre parcel zoned one unit per 120,000 square feet. 10.53 acres X 0.27 PBC per acre = 2.8431 PBCs This is then rounded upward to 2.85 PBCs as per section 6.3.1.1.12.
Example 5:	A 0.25 acre parcel zoned one unit per 200,000 square feet. 0.25 acre X 0.16 PBC per acre = 0.04 PBC This is then increased to the minimum allocation of 0.10 PBC as per section 6.7.6.7.

6.3.2 Allocation for property zoned for other than single family residential use

The Commission establishes the allocations in Figure 6-2 for property in the Core Preservation Area, which is designated as a sending area, as well as for sending area property within the Compatible Growth Area which is zoned for other than single family residential use.

**Figure 6-2: Pine Barrens Credit Program development yield factors
for property zoned for other than single family residential use.**

(Note: Although some of the following zoning classes are now obsolete, those have been retained here in the event that a parcel in a sending area had one of those zoning categories on its relevant record date listed in Section 6.3.)

Zoning Class	Pine Barrens Credits per acre
Defense Institutional District	1.00 PBC per acre*
Industrial A District	1.00 PBC per acre*
Highway Business	1.00 PBC per acre*
J Business 2 District	1.00 PBC per acre*
J Business 3 District	0.20 PBC per acre*
J Business 4 District	1.00 PBC per acre*
J Business 5 District	1.00 PBC per acre*
Light Industrial 1 District	1.00 PBC per acre*
Light Industrial 3 District	0.27 PBC per acre*
Light Industrial 200 District	0.20 PBC per acre*
Light Industrial 40 District	1.00 PBC per acre*
Brookhaven Multi-Family 1 District	0.27 PBC per acre*
Brookhaven PRC	0.10 PBC per acre*
Riverhead Natural Resource Preservation District	0.20 PBC per acre*
Riverhead Open Space Conservation District	0.25 PBC per acre*
All Other Districts	0.10 PBC per acre*

*One acre equals 43,560 square feet; fractional allocations are rounded upward to the nearest one hundredth (1/100 = 0.01) of a Pine Barrens Credit (PBC). No fewer than 0.10 (one tenth) Pine Barrens Credit shall be allocated by the Clearinghouse for any parcel of land, regardless of its size or road accessibility.

6.3.3 Limitations on allocation

The following limitations shall apply to the allocation of Pine Barrens Credits:

- 6.3.3.1 No allocation shall be made for any property owned or held by a public agency, municipal corporation or governmental subdivision, including property held by reason of tax default.
- 6.3.3.2 No allocation shall be made for any property for which the development rights have previously been fully used, or allocated for use, under this Plan or any other program.
- 6.3.3.3 No allocation shall be made for any property owned or held for the purpose of land protection, preservation or conservation.
- 6.3.3.4 Partially improved parcels shall receive a decreased allocation based upon the extent of improvement. Furthermore, there shall be a proportional decrease in allocation based upon the receipt of all discretionary permits for improvement of a parcel or hardship permits issued by the Commission. The Pine Barrens Credit allocation for a parcel of land shall be reduced by one (1) Pine Barrens Credit for each existing single family unit on the parcel or equivalent as such equivalent is described in the document entitled *Standards for Approval of Plans and Construction for Sewage Disposal Systems for Other Than Single Family Residences*, approved by the Suffolk County Department of Health Services, Division of Environmental Quality, on June 15, 1982, revised March 5, 1984 and December 1, 2009, and as implemented prior to February 5, 1988, as amended from time to time (hereinafter referred to as the "Suffolk County Health Department Standards").
- 6.3.3.5 In situations where a development project site contains a parcel that is split between the Core Preservation Area and Compatible Growth Area, and where the entire project site's acreage (i.e., Core and Compatible Growth Area acreage added together) was used for determining the amount of clearing that can occur on the Compatible Growth Area portion, then no Pine Barrens Credits can be obtained on the Core Preservation Area portion.
- 6.3.3.6 Pine Barrens Credits can only be allocated to partially developed parcels when the parcel size is at least twice the minimum lot size for the zoning district to which that parcel belongs and the parcel is otherwise eligible for a Credit allocation under this Plan.
- 6.3.3.7 In allocating Credits to portion(s) of an otherwise eligible parcel, the Clearinghouse shall consider the extent of any prior public acquisition of that parcel or any portion thereof.
- 6.3.3.8 No allocation of Credits shall be made to any parcel or portion thereof upon which an ownership overlap condition exists among more than one competing owners unless and until such ownership overlap condition is resolved by the applicant to the satisfaction of the Commission. In addition, applications for Credits on such parcels where the overlap condition includes as one of the competing owners any governmental agency or body, the Commission shall communicate in writing to the relevant governmental agency or body a request for guidance on resolving the overlap condition.

6.4 Designated receiving districts for Pine Barrens Credits

6.4.1 Definitions

For the purposes of Chapter 6 of this Plan, the following definitions shall apply.

6.4.1.1 As of right Pine Barrens Credit redemption

"As of right" means that the redemption of Pine Barrens Credits entitles a person to an increase in intensity or density in accordance with this Plan. Town Planning Boards, and, in the Town of Riverhead, the Riverhead Town Board performing the function of site plan review, may determine compliance with this Plan as part of the subdivision or site plan review procedures, and shall approve such use of Pine Barrens Credits with no additional special permit required.

Pine Barrens Credits generated in any area in the Central Pine Barrens within any town shall be redeemable for any as of right Pine Barrens Credit uses in each respective town as described in this Plan subject only to the restrictions expressed herein.

6.4.1.2 Increased density and increased intensity

"Increased density" means an increase in the number of residential units. "Increased intensity" means an increase in the gross floor area of a nonresidential structure and/or use. Development in accordance with existing zoning regulations is not considered an increase in permitted land use intensity or density.

6.4.2 Town of Brookhaven designated Pine Barrens Credit receiving districts

6.4.2.1 Brookhaven Pine Barrens Credit Program overview

The Pine Barrens Credit Program for the Town of Brookhaven is designed to redirect development for residentially zoned lands within the Core Preservation Area to receiving districts throughout the Town utilizing two basic approaches. These are:

1. "As of right" Credit Redemption: The transfer of development rights through Residential Overlay Districts (RODs) to one (1) and two (2) acre residentially zoned lands with increased density through approval of the Planning Board pursuant to the definition in Section 6.4.1.1 of this Plan, and
2. "Non as of right" Credit Redemption: The use of innovative planning techniques such as Planned Development Districts (PDDs), Planned Retirement Communities (PRCs), and other zoning incentives.

6.4.2.2 Brookhaven "As of Right" Residential Overlay District specifications

The Town of Brookhaven has identified Residential Overlay Districts to receive Pine Barrens Credits from the Core Preservation Area where increased density shall be allowed in those

residential districts set forth in a map contained in Figure 6-3.

6.4.2.2.1 Brookhaven density increase

Under the Brookhaven transfer of development rights program, a single Pine Barrens Credit shall permit an increase in density equal to one (1) single family dwelling as defined in the Brookhaven Town Code.

6.4.2.2.2 Brookhaven total yield

Under the Brookhaven transfer of development rights program, the total yield in all eligible one (1) and two (2) acre residentially zoned receiving districts shall be equal to the square footage of the total parcel contained within the receiving site divided by the minimum square footage allowed under the Brookhaven Town Code in the appropriate residential zone. The minimum lot size in such eligible residentially zoned receiving districts shall allow for the construction of necessary roads and recharge basins, and the possible dedication of open space.

Notwithstanding the above, the minimum lot size shall be as necessary to assure compliance with Section 6.5.2 of this Plan. However, such decrease in the minimum lot size below the formula set forth above shall only be authorized where absolutely necessary to comply with Section 6.5.2 of this Plan, and in no instance shall the average lot size be less than 30,000 square feet in A-1 zoning districts and 60,000 square feet in A-2 zoning districts.

6.4.2.2.3 Brookhaven approval subject to criteria

This “as of right” increase shall be allowed, subject to the approval of the Town of Brookhaven Planning Board during the subdivision and site plan approval processes, based upon the criteria set forth below and those contained within Section 85-450(D) of the Brookhaven Town Code.

6.4.2.2.4 Brookhaven criteria

The following two criteria shall apply:

1. An area of a parcel shall be constituted ineligible as a Residential Overlay District where the area of the parcel is located within:
 - a. five hundred (500) feet of any stream, bluff, surface water, or wetlands regulated by the New York State Department of Environmental Conservation or the Town of Brookhaven;
 - b. hurricane inundation zones as defined by the Federal Emergency Management Agency and the New York State Emergency Management Office (including, but not limited to, Fire Island), and Special Flood Hazard Areas as determined by the National Flood Insurance Rate Maps;
 - c. the South Setauket Special Groundwater Protection Area (South Setauket SGPA);
 - d. the state's Wild, Scenic and Recreational River corridors as mapped by the New York

State Department of Environmental Conservation;

- e. publicly or privately owned parcels held for, or dedicated to, conservation or agricultural preservation purposes, including, but not limited to, parklands, parcels with conservation or agricultural preservation easements and parcels whose development rights or development potential have been removed or restricted;
 - f. the Core Preservation Area.
2. A parcel shall be ineligible as a Residential Overlay District where forty percent (40%) or more of the land area of the parcel contains steep slopes of fifteen percent (15%) or greater.
 3. A parcel shall be ineligible as a Residential Overlay District where the parcel does not conform to the requirements for such Districts contained within Section 85-450(D) of the Brookhaven Town Code.

6.4.2.3 Innovative strategies for the redemption of Brookhaven Pine Barrens Credits

In addition to the Planning Board approval process as described in Section 6.4.1.1 of this Plan, the Town of Brookhaven intends to use creative techniques to provide additional mechanisms for the use of Pine Barrens Credits during the life of the Pine Barrens Credit Program. The use of Planned Development Districts, subject to the approval of the Town Board, will allow for the conversion of residential development rights into commercial, industrial and/or other uses, which will serve to limit the final number of residential dwelling units to be built while avoiding a negative tax impact.

In addition, the Town of Brookhaven will seek to utilize the following initiatives, through approval of the Brookhaven Town Board, for redemption of Pine Barrens Credits where appropriate:

1. Use of residential districts, consisting of currently residentially zoned parcels, which are too small for Planned Development District use, but which are more appropriately zoned for commercial and industrial use;
2. The use of Planned Retirement Communities as already set forth in the current Brookhaven Town Code;
3. Other innovative zoning incentives.

6.4.2.4 Additional Brookhaven Pine Barrens Credit Program policies

6.4.2.4.1 Transfers from Hydrogeologic Zone 3 to Hydrogeologic Zone 6

The Town of Brookhaven may also seek the support of the Commission to obtain a ruling from the Suffolk County Board of Health to allow for the transfer of development rights from the Core Preservation Area, which is located in Hydrogeologic Zone 3, to selected portions of Hydrogeologic Zone 6. This transfer would utilize the increased bonus density formula set forth above, and transfer Pine Barrens Credits to the northern portions of Hydrogeologic Zone 6 (i.e., north of Sunrise Highway, NYS Route 27) so as not to increase nitrogen loadings to the Great

South Bay, Moriches Bay or their tributary streams or wetlands.

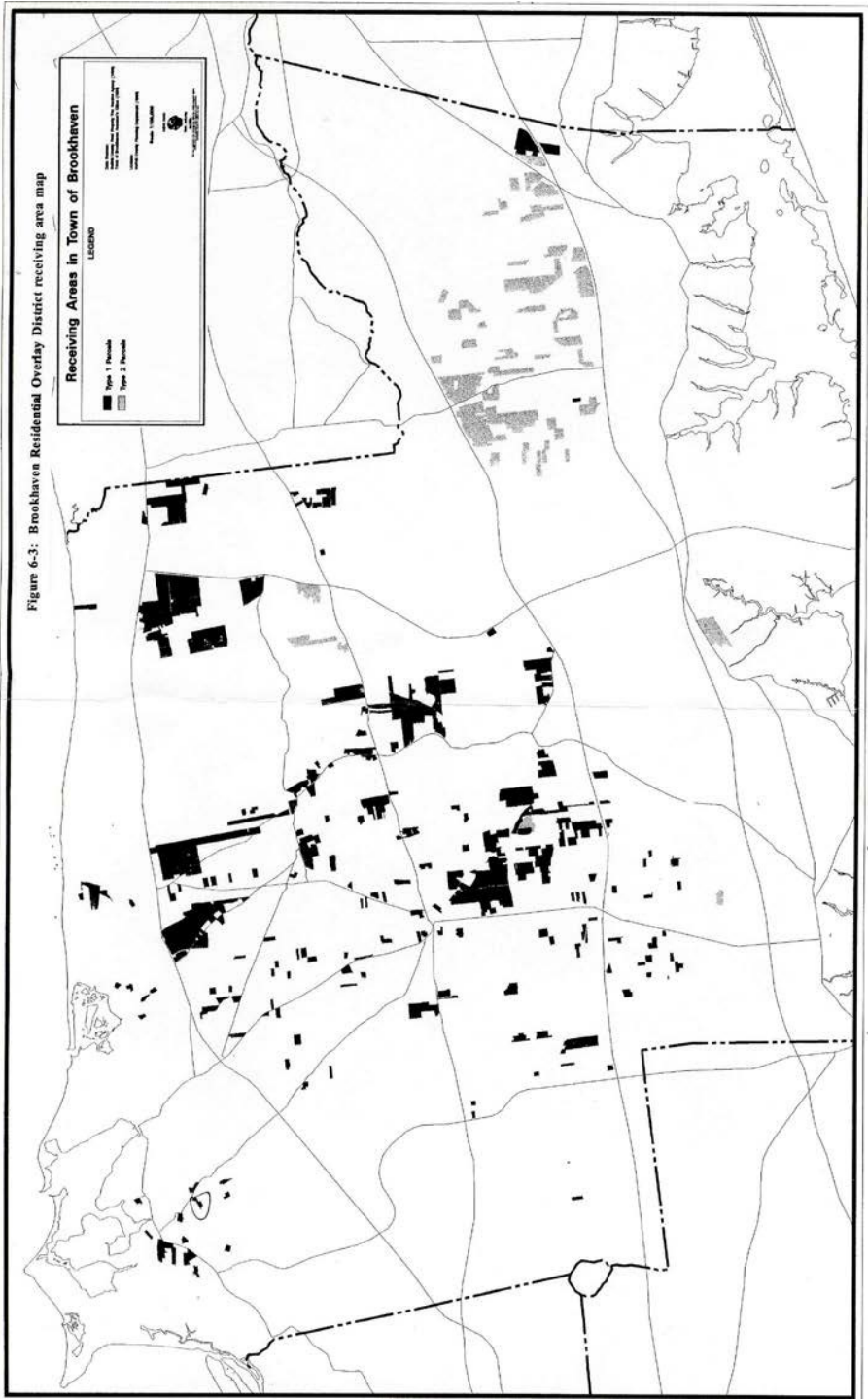
6.4.2.4.2 Brookhaven acquisition priorities

The Town of Brookhaven, in addition, requests that the Commission prioritize acquisition of Brookhaven residential parcels within the Core Preservation Area in those school districts which are most adversely impacted by the Plan.

6.4.2.4.3 Brookhaven townwide policy

It is the intent of the Town of Brookhaven to utilize transfers of development rights in a manner which will allow for the preservation of the Core Preservation Area without a significant negative environmental or economic impact on the rest of the Town.

Figure 6-3: Brookhaven Residential Overlay District as of right receiving area map



6.4.3 Town of Riverhead designated Pine Barrens Credit receiving districts

The Town of Riverhead has identified receiving districts which are eligible to receive Pine Barrens Credits in an as of right manner from the Core Preservation Area, and in which increased intensity shall be allowed. These receiving districts are described in Figures 6-4 and 6-5.

6.4.3.1 Riverhead intensity increase

A single Pine Barrens Credit shall permit an increase in intensity equal to three hundred (300) gallons per day per acre or the equivalent rated sewage flow as described in the Suffolk County Health Department Standards.

6.4.3.2 Riverhead as of right policy

The increased intensity shall be available as of right for those receiving districts identified in Figures 6-4 and 6-5.

Figure 6-4: Riverhead as of right receiving area map

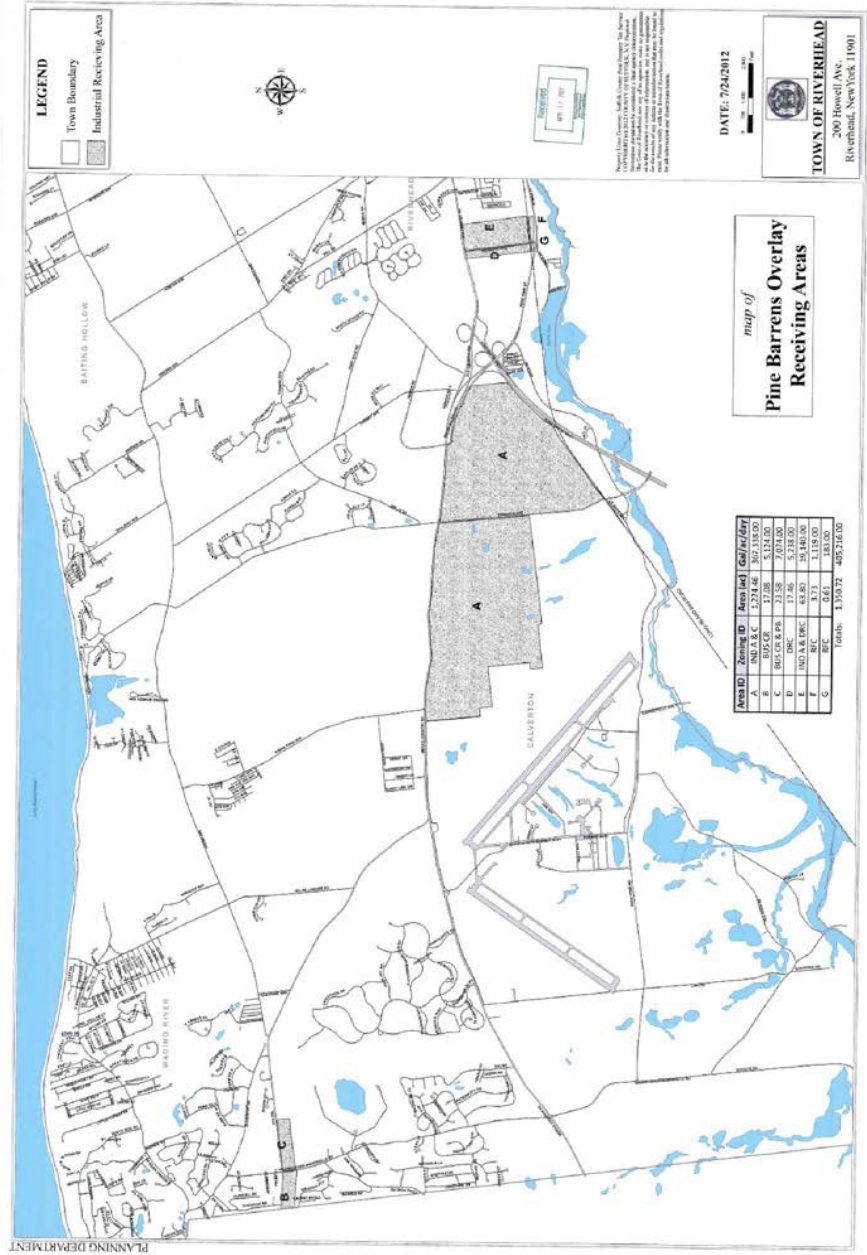


Figure 6-5: Riverhead receiving area parcels

(All parcels which are within the receiving areas are listed here, regardless of their current land use. All Riverhead parcels are within the same school district.)

Tax map number	Acreage	Tax map number	Acreage
Receiving Area "A": Calverton; Receiving Areas "B" and "C": Wading River			
0600-73-1-1.2	1.4	0600-116-1-4	22.5
0600-73-1-1.4	0.58	0600-116-1-7.1	113.3
0600-73-1-1.6	0.44	0600-116-2-1.1	25.1
0600-73-1-1.9	3.1	0600-116-2-2	25.1
0600-73-1-1.12	1.1	0600-116-2-3	25.4
0600-73-1-1.15	1.3	0600-116-2-4	24.5
0600-73-1-1.16	1.3	0600-116-2-5	48.3
0600-73-1-1.17	1.3	0600-117-1-1.2	36.39
0600-73-1-1.18	1.3	0600-117-1-2	8.86
0600-73-1-1.19	1.7	0600-117-1-3	41.98
0600-73-1-1.20	0.43	0600-117-1-4	22.73
0600-73-1-1.22	0.16	0600-117-1-5	41.43
0600-73-1-1.75	2.6	0600-117-1-6	24.16
0600-75-3-3.2	0.81	0600-117-1-8.4	30.18
0600-75-3-3.7	13.5	0600-117-2-2.3	3.9
0600-75-3-18.3	1.8	0600-117-2-2.5	9.5
0600-97-2-37	0.46	0600-117-2-2.6	2.0
0600-98-1-4	1.0	0600-117-2-3.1	4.49
0600-98-1-7	1.0	0600-117-2-3.2	3.0
0600-98-1-8	1.9	0600-117-2-4.1	8.0
0600-98-1-10	1.0	0600-117-2-5	0.78
0600-98-1-11	0.5	0600-117-2-6	1.0
0600-98-1-17	2.0	0600-117-2-7.2	4.9
0600-98-1-20	4.4	0600-117-2-8.2	52
0600-98-1-21	10.3	0600-117-2-9.1	37.53
0600-98-1-22	0.85	0600-117-2-11	116.30
0600-99-1-2.2	0.90	0600-117-2-12.3	121.91
0600-99-1-3	7.45	0600-117-2-13	14.37
0600-99-2-9	1.0	0600-117-2-14	0.62
0600-99-2-14.1	0.48	0600-118-1-1	0.49
0600-99-2-27	0.77	0600-118-1-2.1	31.84
0600-116-1-1	50.5	0600-118-1-2.2	32.76
0600-116-1-2	30.2	0600-118-1-3.1	27.86
0600-116-1-3.1	28.2	0600-118-1-4	0.33
		0600-118-1-13	0.73

Figure 6-5 (p.2): Riverhead receiving area parcels

(All parcels which are within the receiving areas are listed here, regardless of their current land use. All Riverhead parcels are within the same school district.)

Tax map number	Acreage	Tax map number	Acreage
<i>Receiving Areas "D, E, G and F": West Main Street</i>			
0600-118-3-2.2	4	0600-119-1-35.5	2.4
0600-118-3-2.3	7.6	0600-119-1-36	1.6
0600-118-3-3	4	0600-119-1-37	16.7
0600-119-1-22.1	21	0600-119-1-40	3.6
0600-119-1-23	46.9	0600-119-2-1	0.5
0600-119-1-24	24.8	0600-119-2-2	0.1
0600-119-1-25	6.6	0600-119-2-4.1	1.7
0600-119-1-26.1	2.5	0600-119-2-5	0.4
0600-119-1-28.2	2.3	0600-119-2-7.1	3.6
0600-119-1-28.4	2.3	0600-119-2-8	0.2
0600-119-1-28.5	2.3	0600-119-2-10.1	0.4
0600-119-1-28.6	3.7	0600-119-2-11	0.3
0600-119-1-29	3.5	0600-119-2-12	0.6
0600-119-1-30	1.5	0600-119-2-13	0.5
0600-119-1-31.2	1.9	0600-119-2-14	0.3
0600-119-1-32.1	3.9	0600-119-2-15	0.1
0600-119-1-32.2	3	0600-119-2-16	0.6
0600-119-1-35.3	9.3	0600-119-2-17	0.4
0600-119-1-35.4	4	0600-119-2-18	0.4
		0600-137-1-7	2
		0600-137-1-8	1.6
		0600-137-1-32	51.4
		0600-137-2-10	12.1

6.4.4 Town of Southampton designated Pine Barrens Credit receiving districts

The Town of Southampton has identified receiving districts which are eligible to receive Pine Barrens Credits as of right from the Core Preservation Area and the Compatible Growth Area and in which increased density shall be allowed. These receiving districts are described in Figures 6-7 and 6-8.

6.4.4.1 Overview of the Southampton Pine Barrens Credit Program

The Pine Barrens Credit Program in Southampton is designed to redirect development from all residentially zoned lands within the Core Preservation Area and to preserve other key areas within the Compatible Growth Area.

Two primary approaches are to be used:

1. Redirection of development to other areas of the Town on an as of right basis through residential overlay districts, and
2. Use of innovative planning areas referred to as Planned Development Districts to creatively accommodate Pine Barrens Credits through a variety of development schemes. These approaches would convert Pine Barrens Credits to highly tax ratable uses such as resort and tourism, commercial and retail, senior housing and care centers, and medical centers.

The zoning and total acreage of residential lands which would be eligible for Pine Barrens Credit allocation are shown in Figure 6-6.

Figure 6-6: Southampton zoning and Pine Barrens Credit illustration						
Statutory zone	R-20 acreage	R-40 acreage	CR-60 acreage	R-80 acreage	CR-120 acreage	CR-200 acreage
Core Preservation Area	13	16	169	0	265	3367
Compatible Growth Area	48	0	10	42	221	1015
Totals	61	16	179	42	486	4382
<i>Note:</i> R-20 is a Residence District with a 20,000 square feet minimum lot size. CR-60 is a Country Residence District with a 60,000 square feet minimum lot size.						

Pine Barrens Credits would be allocated to owners of these lands using the method outlined in this chapter of this Plan. However, in the case of old filed map lots, allocation of Pine Barrens Credits does not include a yield factor, since these lots were platted with infrastructure allowances. This coincides with the Town's existing old filed map regulations and results in a slightly higher allocation of Pine Barrens Credits for these lots, as defined within Section 6.3.1.1 and Figure 6-1. Southampton Town old filed map parcels are defined in Southampton Town Code Section 330-53, and that definition is adopted in this Plan for purposes of the Pine Barrens Credit Program, including any amendments by the Town to this provision in the future.

Within the Core Preservation Area, it is vital to have as much of the Towns' industrially zoned land protected by acquisition as possible, due to the difficulty in allocating Pine Barrens Credits. The Town therefore requests the prioritization of these lands for acquisition through the present state and county programs, especially since many of these parcels fall within ecologically sensitive areas such as the dwarf pine plains. However, the Town does recognize that some owners of industrially zoned land may wish to sell or utilize Pine Barrens Credits for such development. In such cases, the Commission may exercise the right to allocate Pine Barrens Credits on a plan basis.

6.4.4.2 As of right redemption of Southampton Pine Barrens Credits

The primary strategy for the redirection of development from the Core Preservation Area is through Residential Overlay Districts. In these districts, a single Pine Barrens Credit shall allow an increase in density equal to one (1) dwelling unit, as defined by the Southampton Town Code. The end result is an incremental increase in density in selected residentially zoned areas of the Town.

This does not result in a net gain of dwelling units or population within the Town, but simply redirects development and channels growth in order to preserve more ecologically sensitive lands. The as of right receiving areas are designed to accommodate those Pine Barrens Credits from the Core Preservation Area within the same school district. In no case will it be necessary to cross school district boundaries on an as of right basis.

In Southampton, where most of the receiving areas are presently zoned one (1) unit per five acres, the creation of Residential Overlay Districts will allow the redemption of Pine Barrens Credits through an average of one (1) unit per acre. In certain school districts, in order to accommodate all Pine Barrens Credits, the Southampton Town Planning Board may need to require lot sizes less than one (1) unit per acre, though not lower than one (1) unit per one half (0.5) acre.

Where it was necessary to designate receiving sites within areas that are presently zoned one (1) unit per acre, the establishment of densities higher than one (1) unit per one half (0.5) acre may be essential for full redemption of Pine Barrens Credits within that school district. For those sites, incorporation of a sewage treatment plant would be required by the Suffolk County Sanitary Code.

The net result of these Southampton Town policies is compact and efficient development that will protect Central Pine Barrens lands without significant public expenditure. The designation of

receiving sites coincides with those areas where infrastructure and municipal services already exist. Thus, the cost to municipalities and taxpayers with regard to new road construction, water main extension and the provision of police, fire and other services is thereby lowered.

6.4.4.3 Other strategies for the redemption of Southampton Pine Barrens Credits

The redemption of Pine Barrens Credits through mechanisms other than as of right uses may be possible through the many strategies that were outlined in *The Comprehensive Plan Initiative for Groundwater and Pine Barrens Forest Preservation* (the Southampton "Western Generic Environmental Impact Statement" or WGEIS; 1993), and which continue to be outlined through the update of the Town Comprehensive Plan. An overview of possible strategies which will be given future consideration by the Town is listed below, along with the potential areas where such redemption may take place.

These areas would serve to provide more opportunities for future use of Pine Barrens Credits. Furthermore, the use of Planned Development Districts would allow for the conversion of residential development rights into commercial, industrial, tourism, or other uses. These would serve to limit the ultimate amount of residential dwelling units that could be built while still providing for a strong tax base.

The following potential strategies may be employed in the future by Southampton Town, as approved by the Town Board, for the redemption of Pine Barrens Credits. Geographical areas that may be suitable for such redemption mechanisms are also noted.

1. Use of Pine Barrens Credits could permit density increases for senior citizen housing and elder care facilities.
2. Overlay districts along the Montauk Highway and Long Island Railroad corridors could promote revitalization and concentrated development patterns within existing hamlet centers. Potential locations for such activity include, but are not limited to, areas L, R and S.
3. Use of Pine Barrens Credits could allow accessory apartments within existing residential zoning districts.
4. Mixed use overlay districts along existing commercial corridors could allow for alternative uses to counteract strip development. Locations that could be suitable for these receiving districts are Q, T, R and 2.
5. Appropriate industrial development areas have been identified at the Suffolk County airport for the redirection of Pine Barrens Credits from industrially zoned land located in the Core Preservation Area, and for the conversion of residential Pine Barrens Credits.
6. Use of Pine Barrens Credits could promote tourism uses and related facilities. Areas M, I, P, EQ, and RS are identified as suitable for this.
7. Use of Pine Barrens Credits could allow multifamily, or more compact, residential development. Sites that could accommodate this activity include K, J, 2, E, and the county's Bomarc site along Old Country Road in Westhampton.

Figure 6-7: Southampton as of right receiving area map

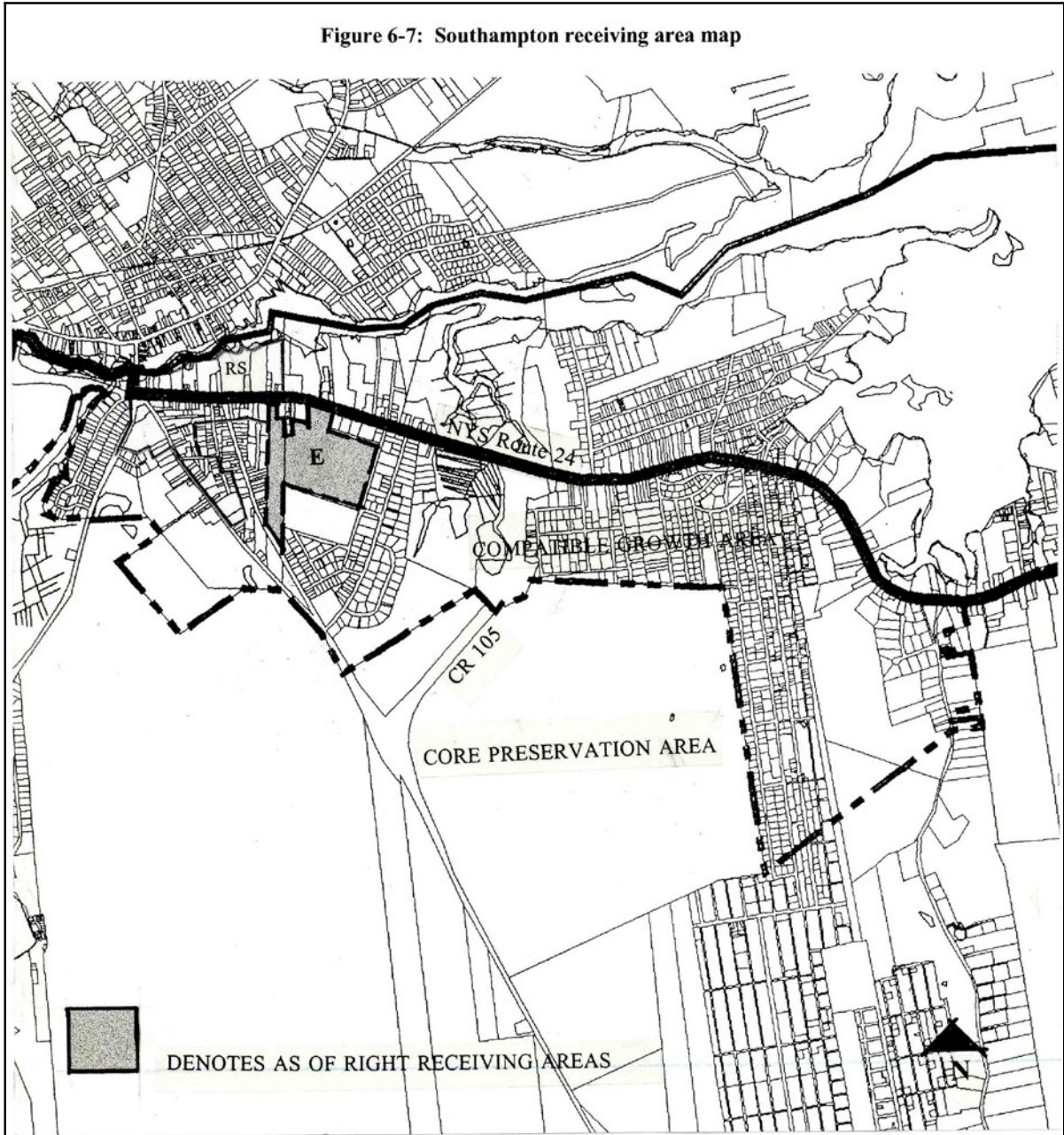


Figure 6-7 (p.2): Southampton as of right receiving area map



Figure 6-7 (p.3): Southampton as of right receiving area map

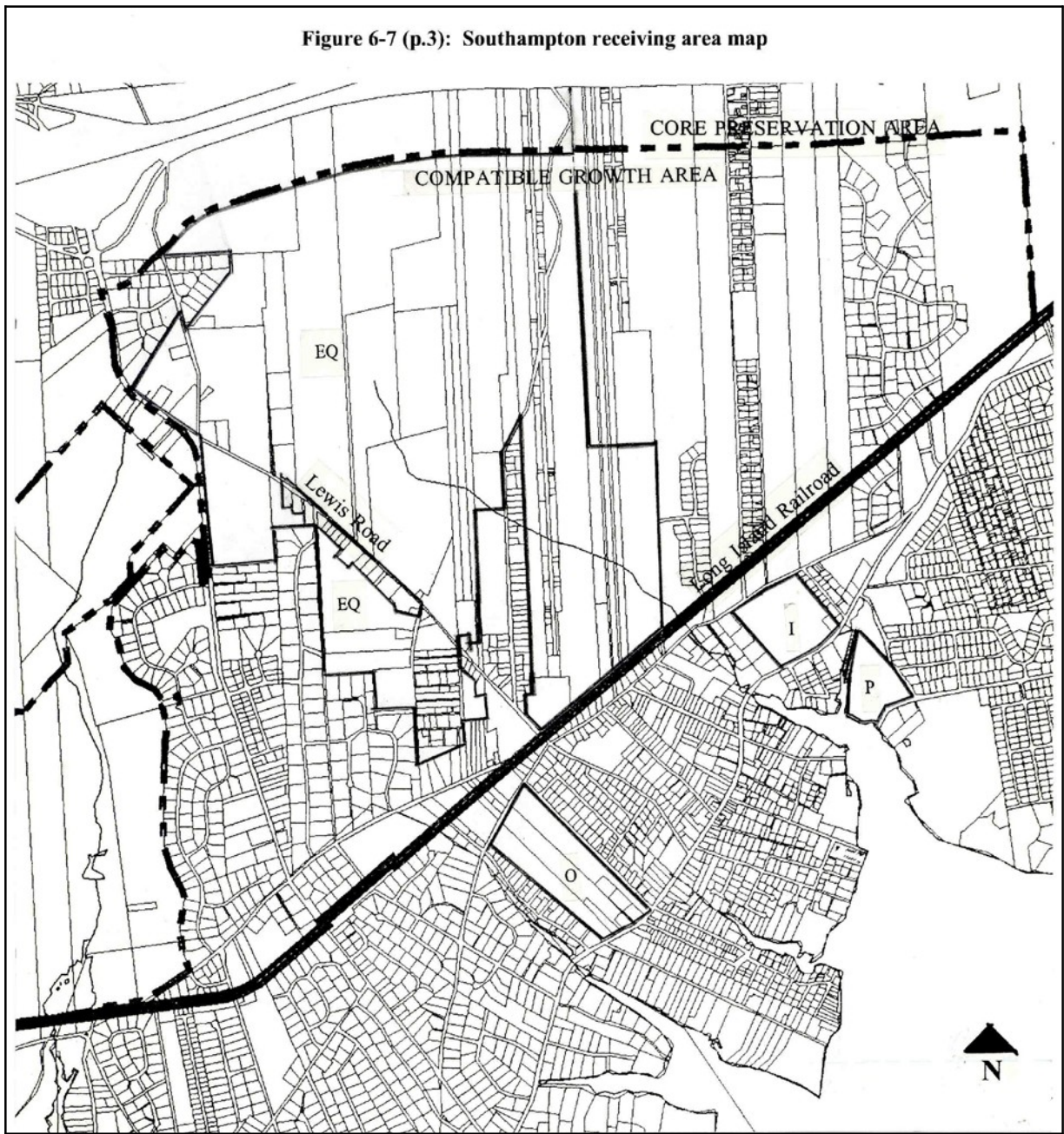


Figure 6-7 (p.4): Southampton as of right receiving area map

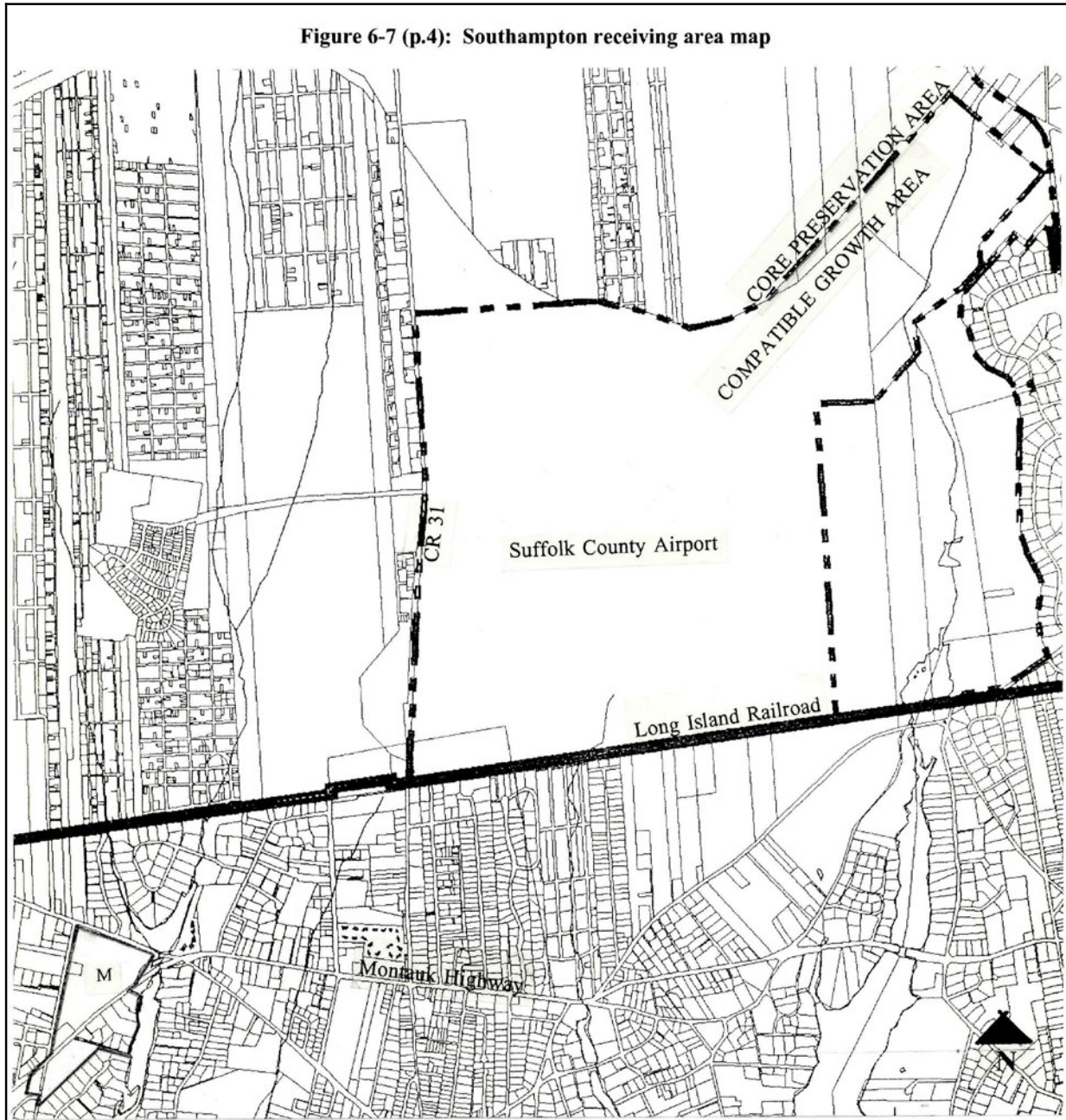


Figure 6-7 (p.5): Southampton as of right receiving area map

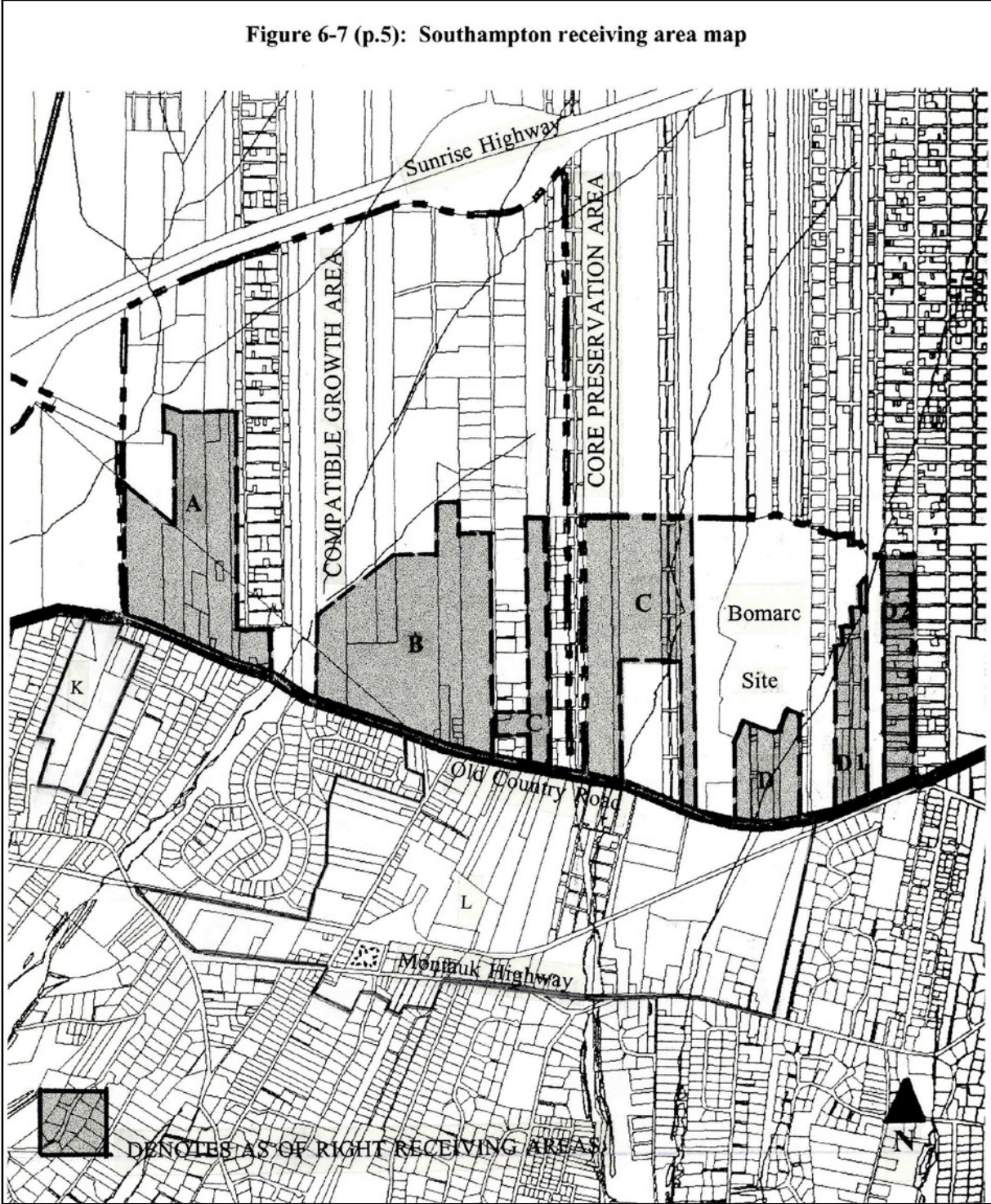


Figure 6-8: Southampton receiving area parcels

(All parcels which are within the receiving areas are listed here, regardless of their current land use.)

Receiving Area	Tax map number	Acreage	Receiving Area	Tax map number	Acreage
<i>Riverhead school district</i>					
E	900-139-3-10.2	12.5	E	900-141-1-9.2	35
<i>Hampton Bays school district</i>					
2	900-221-3-12.1	12.5	3	900-205-3-12.1	16.3
2	900-221-3-16.1	7.6	J	900-225-1-1	33.5
2	900-221-3-18	2.5	J	900-225-1-21	3.5
<i>Eastport school district</i>					
A	900-325-1-2.2	26.0	A	900-325-1-8.2	17.4
A	900-325-1-3.2	11.8	A	900-325-1-34.1	5.3
A	900-325-1-4.2	5.6	A	900-325-1-47.1	1.2
A	900-325-1-6.3	1.5	B	900-326-1-3.2	5.5
A	900-325-1-7.3	12.0	B	900-326-1-5.2	6.3
<i>Speonk-Remsenburg school district</i>					
A	900-325-1-3.1	6.0	B	900-326-1-p/o 5.1	55.5
A	900-325-1-4.1	15.7	B	900-326-1-p/o 6	22.9
A	900-325-1-p/o 7.2	16.4	B	900-326-1-10	36.7
A	900-325-1-p/o 8.1	5.6	B	900-326-1-p/o 17	7.8
A	900-325-1-43	2.3	C	900-276-3-p/o 1	36
B	900-326-1-p/o 3.1	8.8	C	900-327-1-p/o 6	28.9
B	900-326-1-p/o 4	8.4	C	900-328-1-4	3.3

Figure 6-8 (p.2): Southampton receiving area parcels

(All parcels which are within the receiving areas are listed here, regardless of their current land use.)

Receiving Area	Tax map number	Acreage	Receiving Area	Tax map number	Acreage
Westhampton Beach school district					
C	900-305-1-7 (ofm)	1.6	D2	900-331-3-1 (ofm)	1.93
C	900-329-1-1	1.49	D2	900-331-3-2 (ofm)	1.93
C	900-329-1-2	1.49	D2	900-331-3-5	1.84
C	900-329-1-3	1.49	D2	900-331-3-6 (ofm)	1.93
C	900-329-1-4	0.69	D2	900-331-3-7 (ofm)	0.96
C	900-329-1-6	0.57	D2	900-331-3-8 (ofm)	0.96
C	900-329-1-p/o 10	20.2	D2	900-331-3-9	1.33
D	900-330-2-11	8.2	D2	900-331-3-12 (ofm)	0.96
D	900-330-2-14.1	3.2	D2	900-331-3-14 (ofm)	0.64
D	900-330-2-16.2	10.5	D2	900-331-3-16 (ofm)	1.61
D1	900-331-2-4 (ofm)	1.26	D2	900-331-3-17	1.41
D1	900-331-2-7 (ofm)	2.30	D2	900-331-3-28 (ofm)	1.70
D1	900-331-2-8 (ofm)	1.12	D2	900-331-3-29 (ofm)	1.79
D1	900-331-2-9 (ofm)	1.49	D2	900-331-3-31 (ofm)	1.93
D1	900-332-2-1 (ofm)	1.15	D2	900-332-3-3 (ofm)	1.93
D1	900-332-2-2 (ofm)	0.92	D2	900-332-3-6 (ofm)	0.54
D1	900-332-2-3 (ofm)	0.92	D2	900-332-3-7 (ofm)	0.96
D1	900-332-2-4 (ofm)	1.72	D2	900-332-3-8 (ofm)	0.96
D1	900-332-2-5	3.20	D2	900-332-3-9 (ofm)	1.93
D1	900-332-2-6	2.5	D2	900-332-3-10 (ofm)	2.30
D1	900-332-2-7	2.5	D2	900-332-3-11 (ofm)	0.96
D1	900-332-2-10	5	D2	900-332-3-12 (ofm)	0.90
			D2	900-332-3-13 (ofm)	1.70
			D2	900-332-3-15 (ofm)	1.93

*Note:
"ofm" indicates an "old filed map" parcel.*

6.4.5 Suffolk County Sanitary Code

The Suffolk County Health Department has amended Article 6 of the Suffolk County Sanitary Code to permit the Department of Health to perform functions heretofore performed by the Board of Review. Insofar as it applies to the Central Pine Barrens, this amendment should be applied so as to facilitate implementation of each town's Pine Barrens Credit program in accordance with this Plan and should sunset no later than the date when the last Pine Barrens Credit allocated in that town is extinguished unless the Commission endorses an earlier sunset date during the five year Plan update as provided in 57-0121(13). Each town, in its Findings Statement, may designate a more restrictive standard, i.e., less than 600 gallons per day per acre.

6.5 Pine Barrens Credit use planning

6.5.1 Amendment of zoning and land use regulations

In order for a town to comply with ECL Section 57-0123, it must amend its land use and zoning regulations to conform to this Plan within three (3) months of the Commission's adoption of this Plan. Such amendments shall include the final adoption by each town of a Planned Development District ordinance designed to accommodate Pine Barrens Credits. Each town shall propose a draft Planned Development District ordinance by June 30, 1995.

6.5.2 Establishment of a receiving capacity plan by each town

Each town shall, within three (3) months of the Commission's adoption of this Plan, submit a plan to the Commission demonstrating the manner in which each town will identify Pine Barrens Credit uses of sufficient quantity and quality within such town to accommodate at least two and one half (2.5) times the number of Pine Barrens Credits available for allocation within the town at that time.

6.5.2.1 One to one receiving capacity to sending credit ratio requirement

Each town shall include enough absorption capacity in receiving districts that meet the as of right definition set forth in Section 6.4 of this Plan so as to absorb all of the Pine Barrens Credits on a one to one (1:1) ratio that the Commission estimates it may allocate in that town pursuant to this Plan. The Commission recognizes that a change in zoning upon a town board's own motion that would decrease the receiving capacity so as to reduce this ratio below 1:1 would have an adverse effect on the Pine Barrens Credit program.

6.5.2.2 Review by the Commission of the absorption capacity estimates

Each town shall present to the Commission its best estimate of the number of Pine Barrens Credits that could be transferred to, and absorbed in, its as of right Residential Overlay Districts, Planned Development Districts, or other kinds of receiving districts, or through incentive zoning

strategies with a supporting analysis. The Commission shall review, and then confirm or modify, such estimates based upon the best evidence available to it. In reviewing and approving this plan, the Commission shall consider each town's compliance with Section 6.5.2 of this Plan based upon such estimates.

6.5.3 Establishment of additional receiving districts

In addition to the receiving districts identified above and the approaches identified by each town for adding additional receiving districts, each town may adopt additional receiving districts to accommodate Pine Barrens Credits as set forth below:

6.5.3.1 Planned Development Districts

The following policies shall apply to the use of Planned Development Districts for the redemption of Pine Barrens Credits.

6.5.3.1.1 Designation of Planned Development Districts as receiving districts

Each town may designate receiving districts that are Planned Development Districts (PDDs). Each PDD shall be mapped by the municipality, or otherwise designated by criteria that the town describes in its PDD regulations. Pine Barrens Credits may be redeemed for residential, commercial and other uses in PDDs. Each plan or scheme must include a redemption schedule, a table of densities or a change of use schedule, as appropriate.

6.5.3.1.2 Requirements of the Suffolk County Sanitary Code

Each PDD must conform to the requirements of the Suffolk County Sanitary Code.

6.5.3.1.3 Regulations regarding the timing of development

Each town may establish regulations regarding the timing of development within each PDD in order to minimize any adverse fiscal impacts on any taxing jurisdiction, except that any such phasing should not apply to any development allowed under existing zoning. To offset the impact of residential development, commercial and industrial development should occur first whenever possible.

6.5.3.1.4 Inclusion of Planned Development District capacity within townwide Pine Barrens Credit absorption capacity estimate

A town may include the absorption capacity of its Planned Development Districts as part of the plan that must be submitted to the Commission under section 6.5.2 above by estimating the number of Pine Barrens Credits that it reasonably expects may be absorbed in its PDDs. However, the estimate must be based upon a local PDD ordinance that shall have been fully adopted in final form within three (3) months of the Commission's adoption of this Plan.

6.5.3.2 Residential Overlay Districts

The following policies shall apply to the use of Residential Overlay Districts for the redemption of Pine Barrens Credits.

6.5.3.2.1 Designation of additional Residential Overlay Districts as receiving districts

Each town may establish additional receiving districts that are residential overlay districts (RODs) within the town.

6.5.3.2.2 Requirements for designation of additional Residential Overlay Districts

Each ROD shall be mapped or otherwise designated based on objective geographic criteria.

6.5.3.2.3 Criteria for restricting locations of Residential Overlay District density increases

No ROD may include any land within the Core Preservation Area or any Critical Resource Area.

6.5.3.2.4 Types of projects in which the Residential Overlay District increase applies

The ROD yield would apply to subdivisions, land divisions, flag lot clusters, and mother and daughter units.

6.5.3.2.5 Requirements of the Suffolk County Sanitary Code

The ROD must conform to the requirements of the Suffolk County Sanitary Code.

6.5.3.2.6 Prohibition of unreasonable school district burdens

Redemption of Pine Barrens Credits in RODs may not produce an unreasonable burden on the receiving school district.

6.5.3.2.7 Inclusion of the Residential Overlay Districts' capacity within the townwide Pine Barrens Credit absorption capacity estimate

A town may include the absorption capacity of its RODs as part of the plan that must be submitted to the Commission under Section 6.5.2.1 of this Plan only if the ROD meets the definition "as of right" set forth above.

6.5.3.3 Incentive Zoning districts

The following policies shall apply to the use of Incentive Zoning Districts for the redemption of Pine Barrens Credits.

6.5.3.3.1 Designation of receiving districts pursuant to incentive zoning or municipal home rule laws

Each town may establish receiving districts pursuant to the incentive zoning provisions contained in New York Town Law Section 261-b or pursuant to New York Municipal Home Rule Law. Pine Barrens Credits may be redeemed for a change in land use, or an increase in intensity or density in such receiving districts.

6.5.3.3.2 Requirements for incentive zoning or municipal home rule receiving districts

For each incentive zoning district designated under Section 6.5.3 of this Plan, the town shall establish a redemption schedule, a table of densities or a change of use schedule, as appropriate. Pine Barrens Credits shall be redeemable in accordance with the specified incentive zoning for each receiving district designated. Upon application to the appropriate jurisdiction(s), additional Pine Barrens Credits may be used to exceed the incentive zoning of a receiving district with the redemption of these additional Pine Barrens Credits.

6.5.3.3.3 Requirements of the Suffolk County Sanitary Code

Each incentive zoning district must conform to the requirements of the Suffolk County Sanitary Code.

6.5.3.3.4 Increases above incentive zoning

As part of its incentive zoning ordinance, a town may provide that any additional increases over and above that provided by the incentive zoning schedule may be conditional upon the purchase of additional Pine Barrens Credits.

6.5.3.4 Additional Overlay Districts, Special Permit Uses or Special Exemption Uses

Additional overlay districts, special permit uses, or special exemption uses may be adopted by the towns to accommodate Pine Barrens Credits.

6.5.4 Intermunicipal redemptions of Pine Barrens Credits

Intermunicipal redemption of Pine Barrens Credits is defined as the redemption of Credits in a town or village in Suffolk County other than the one from which it was generated. Approval from both the receiving and generating town or village is required for the redemption to occur. Such intermunicipal redemptions may, in some instances, involve the redemption of Pine Barrens Credits in municipalities outside the Central Pine Barrens area. Intermunicipal redemptions include, but are not limited to, the redemption of Credits in satisfaction of the requirements of the Suffolk County Department of Health Services anywhere within that Department's jurisdiction.

6.5.5 Permanency of Pine Barrens Credit Redemptions

Absent unanimous commission action to the contrary each Pine Barrens Credit redemption shall be irrevocable.

6.5.6 Redemption of Pine Barrens Credits within the Core Preservation Area prohibited

Pine Barrens Credits may not be redeemed in the Core Preservation Area or other sending area under this Plan.

6.6 Establishment of the Pine Barrens Credit Clearinghouse and the Board of Advisors

The Commission finds that in order to implement the Pine Barrens Credit Program, steps must be taken to promote the use and sale of the Pine Barrens Credits established under the program and that the best means of providing this assurance is through the establishment of a Pine Barrens Credit Clearinghouse that will purchase, sell, and track Pine Barrens Credits. The Commission further finds that it is appropriate to establish a board to perform the functions of a clearinghouse, subject to the provisions set forth below.

6.6.1 Structure and operation of the Board of Advisors

The Pine Barrens Credit Clearinghouse, referred to as the "Clearinghouse", shall be governed by a Board of Advisors (the "Board") consisting of five (5) members. Each ex officio member of the Commission, and the Governor, shall each appoint one (1) member of the Board. The members of the Board shall serve without compensation. The Commission shall appoint one (1) of these five members as Chairperson of the Board and shall also appoint one (1) other member as a Vice-chair. Four (4) members of the Board shall constitute a quorum for the transaction of services or the exercise of any Board function. An affirmative vote of three (3) or more Board members shall be required to pass a resolution or exercise a function of the Board.

6.6.2 Authority of the Board of Advisors

The Board shall have the authority:

- 6.6.2.1 To advise and make recommendations to the Commission as to the monetary value of Pine Barrens Credits to be purchased by the Clearinghouse.
- 6.6.2.2 To purchase Pine Barrens Credits from owners of eligible sending area parcels which have received Credits and from successive owners of Credits to further the objectives of the Pine Barrens Protection Act.
- 6.6.2.3 To sell, exchange or convey Pine Barrens Credits previously purchased by the Clearinghouse to entities willing to purchase such Pine Barrens Credits from the Clearinghouse, and to establish the monetary value of those Pine Barrens Credits which are sold by the Clearinghouse.

- 6.6.2.4 To adopt and, from time to time, amend and repeal suitable bylaws for the management of its affairs;
- 6.6.2.5 To apply for, receive, accept, and utilize, with the approval of the Commission, from any federal, state, or other public or private source, grants or loans for, or in aid of, the Board's authorized purposes;
- 6.6.2.6 To utilize funds allocated for Clearinghouse purposes and to implement appropriate fiscal and accounting practices;
- 6.6.2.7 To appoint such officers, employees and agents as the Board may require for the performance of its duties;
- 6.6.2.8 To call to its assistance, and to avail itself of the services of, employees of any state, county or municipal department, board, commission or agency as may be required and may be made available for these purposes;
- 6.6.2.9 To issue Letters of Interpretation (LOIs) to owners of eligible sending area parcels, and to establish appropriate administrative procedures for such issuance, including, but not limited to, defining what documentation is acceptable for LOI application information.

6.7 Pine Barrens Credit Certificates

The following procedures shall apply to the issuance of Pine Barrens Credit Certificates by the Clearinghouse.

6.7.1 Issuance of Pine Barrens Credit Certificates by the Clearinghouse

All Pine Barrens Credit Certificates shall be issued by the Clearinghouse.

6.7.2 Overview of the issuance procedure

Issuance of a Pine Barrens Credit Certificate encompasses the following three steps:

1. A property owner obtains a Letter of Interpretation from the Clearinghouse stating the number of Pine Barrens Credits allocated to the parcel of land.
2. The property owner applies to the Clearinghouse for a Pine Barrens Credit Certificate by submitting a valid Letter of Interpretation, a standard title report, and other necessary documents as determined by the Clearinghouse.
3. A Pine Barrens Credit Certificate is issued when the Clearinghouse receives proof of filing and recording of the conservation easement from the title insurance company.

6.7.3 Detail of Step 1: Obtaining a Letter of Interpretation

The Clearinghouse will utilize a current survey made in the last ten (10) years, if such a survey is available and provided, to establish the acreage figure to be utilized in the formula determining Credit allocation. If such a survey is available, the survey's acreage figure shall be used, regardless of the acreage shown on the tax bills. If such a survey is unavailable, the acreage figure

will be obtained from the publicly available tax bill information.

- 6.7.3.1 A property owner requests a Letter of Interpretation on a form to be supplied by the Clearinghouse.
- 6.7.3.2 The Clearinghouse staff may conduct an analysis of the property and will allocate Pine Barrens Credits based upon the allocation formula and any unique features of a particular parcel of land. The Clearinghouse staff mails the Letter of Interpretation to the property owner.
- 6.7.3.3 The property owner has thirty (30) days from the date of the Letter of Interpretation to appeal the allocation to the Commission in writing. Extensions of this deadline for filing an appeal may be granted at the Commission's discretion upon written request of the property owner.
- 6.7.3.4 The Commission shall consider the written appeal request within a timeframe of sixty (60) days or by the end of two consecutive regularly scheduled Commission meetings, whichever date comes first after the receipt of an appeal, and shall schedule and hold a hearing within that period of time. The appellant shall be given an opportunity to present arguments and relevant material at the hearing.
- 6.7.3.5 After the appeal hearing, the Commission shall decide the appeal within a timeframe of sixty (60) days or by the end of two consecutive regularly scheduled Commission meetings, whichever date comes first, and may seek the advice of the Clearinghouse Board. The Commission may confirm, increase, or decrease the allocation to be received from the Clearinghouse. A new Letter of Interpretation containing the Commission's final allocation(s) to the subject parcel(s) will be issued following such a decision. An appeal shall be deemed denied if the Commission fails to make a decision in this timeline.

6.7.4 Detail of Step 2: Applying for a Pine Barrens Credit Certificate

- 6.7.4.1 After receiving a Letter of Interpretation, a property owner may request a Pine Barrens Credit Certificate from the Clearinghouse by submitting:
 1. The Letter of Interpretation, and
 2. A title report, and
 3. A completed Pine Barrens Credit Certificate Application Form, which shall be supplied by the Clearinghouse.
- 6.7.4.2 If the title report indicates that the applicant does not have marketable title, that the applicant is not qualified to encumber the property with a conservation easement, or that there are liens on the property, a Pine Barrens Credit Certificate may not be issued until these matters are resolved by the applicant.
- 6.7.4.3 The Clearinghouse will provide to the applicant a conservation easement to sign once accepted title has been established to the satisfaction of the Clearinghouse.
- 6.7.4.4 The Commission will issue, and update as necessary, a policy on titles and title insurance for use by the Clearinghouse.

6.7.5 Detail of Step 3: Recording a conservation easement and obtaining a Pine Barrens Credit Certificate

- 6.7.5.1 The conservation easement may not be recorded until all title issues are resolved and Clearinghouse staff has approved the conservation easement as to its form.
- 6.7.5.2 The Clearinghouse will issue a preliminary approval concerning the title report and the proposed conservation easement.
- 6.7.5.3 The conservation easement will then be recorded with the Suffolk County Clerk, and a copy of it submitted along with proof of its recording, to the Clearinghouse. The title report must be updated to ensure that there has been no conveyance of the property since the report was received and that no liens have been placed upon the property.
- 6.7.5.4 The Clearinghouse will then issue a Pine Barrens Credit Certificate certifying that the holder of the Certificate is entitled to a specified number of Pine Barrens Credits.

6.7.6 Other provisions relating to the issuance of Pine Barrens Credit Certificates

6.7.6.1 Expiration of the Letters of Interpretation

A Letter of Interpretation shall expire three(3) years following its issuance. A property owner is not required to apply for a Pine Barrens Credit Certificate upon receipt of a Letter of Interpretation. However, if such application is not made within three(3) years, the Letter of Interpretation will expire and the property owner will be required to reapply for a new Letter of Interpretation.

6.7.6.2 Delayed issuance of a Pine Barrens Credit Certificate

After receipt of a Letter of Interpretation, a property owner may seek to negotiate the sale of the Pine Barrens Credits described in the letter, and delay obtaining the Pine Barrens Credit Certificate until after reaching an agreement with a prospective buyer of the Pine Barrens Credits.

6.7.6.3 Notification of the Clearinghouse of Pine Barrens Credit usage

A Pine Barrens Credit Certificate shall state that the recipient of the certificate and any party purchasing the Pine Barrens Credits described in the certificate must notify the Clearinghouse of any transaction involving the sale of the Pine Barrens Credits or utilization of the Pine Barrens Credits as security for a loan. The original Certificate must be sent to the Clearinghouse when all or any portion of the Credits associated with that Certificate are conveyed, transferred, or sold prior to redemption. The Clearinghouse shall then issue one or more new Certificate(s), as appropriate, in the name(s) of the new Credit owner(s).

6.7.6.4 Tax status of the subject property

No Pine Barrens Credit Certificates shall be issued for any parcel of land until all real property

taxes and ad valorem levies have been paid in full as certified by the town's tax receiver.

6.7.6.5 Liability for real property taxes on subject property

If a transferor of Pine Barrens Credits owns Pine Barrens Credits on the tax status date under the Suffolk County Tax Act, and such Pine Barrens Credits are transferred subsequent to the tax status date, the transferor shall be liable for all real property taxes on such property from the tax status date until the date of transfer of the Pine Barrens Credits.

6.7.6.6 Issuance of a full Pine Barrens Credit for certain roadfront parcels

The Pine Barrens Credit Clearinghouse may elect to allocate one (1) full Pine Barrens Credit for a parcel of land consisting of at least 4,000 square feet with frontage on an existing public improved road. Parcel frontage on the main lines (as opposed to any improved service roads) of Sunrise Highway (NY State Route 27), the Long Island Expressway (Interstate 495), and similarly limited access highways shall not qualify a parcel for this provision.

6.7.6.7 Minimum Pine Barrens Credit allocation

No fewer than 0.10 (one tenth) Pine Barrens Credit shall be allocated by the Clearinghouse or the Commission for any parcel of land which is eligible for a Credit allocation, regardless of its size or road accessibility.

6.7.6.8 Issuance of Pine Barrens Credits to a Parcel with a Land Use Violation

No Pine Barrens Credits shall be issued for any property where land use conduct has occurred or is occurring that violates the Act, this Plan, any regulation promulgated by the Commission, or any order, determination or permit condition issued by the Commission for which a notice of violation has been issued and not resolved or a Commission enforcement action is pending until the violation is resolved to the satisfaction of the Commission.

6.7.6.9 Transactions involving Pine Barrens Credits

Pine Barrens Credits that are involved in any transaction, whether it involves the selling, buying, redeeming or conveying of Pine Barrens Credits, must be rounded up to the nearest one hundredth ($1/100 = 0.01$) of a Pine Barrens Credit and the final sum of all Credits involved in the transaction shall not exceed the total Credit value of the original Credit Certificate(s) involved in the transaction. Any certificate or transaction that causes a certificate to fail to comply with this section will not be processed by the Commission.

All Credit sale transactions must include a sworn attestation certifying the consideration amount on the certificate and provide written evidence of the sale (i.e., Bill of sale or contract of sale).

6.8 Registry, Reports, and Other Publicly Accessible Information for Pine Barrens Credits

6.8.1 Establishment and maintenance of the Pine Barrens Credit Registry

The Board shall establish and maintain a registry of Pine Barrens Credits and a publicly available set of reports, which shall include, at a minimum, the following information:

1. The name, property, contact, and address of every owner to whom a Pine Barrens Credit certificate is issued pursuant to the Plan, the date of its issuance, the tax district, section, block and lot identification of the parcel of land to which the Pine Barrens Credit has been assigned, the number of Pine Barrens Credits or fraction thereof assigned to each parcel, the total number of Pine Barrens Credits assigned, and the total acreage to which Pine Barrens Credits have been assigned, and
2. The name and address of every person to whom a Pine Barrens Credit is sold or otherwise conveyed, the date of the conveyance, and the consideration, if any, received therefore, and
3. The name and address of any person who pledged a Pine Barrens Credit as security on any loan or other obligation, and the name and address of the lender, and
4. The name and address of any person who has sold or otherwise transferred a Pine Barrens Credit, the purchaser(s) to whom the Pine Barrens Credit was transferred, and the date of the sale; and
5. A record of every redemption of a Pine Barrens Credit including, at a minimum, the person(s) redeeming the Credit(s), the tax district, section, block and lot identification of the parcel(s) of land on which the Credits have been redeemed, the school district(s) from which and to which the transfer occurred, the redeeming agency, and the date of redemption; and
6. The total number of Pine Barrens Credits purchased and transferred. This report shall list the municipality and school district of each tract of land for which Pine Barrens Credits were issued and the municipality and school district to which the Pine Barrens Credits were transferred.

6.8.2 Notification of the Board of certain actions involving Pine Barrens Credits

No person shall purchase or otherwise acquire, encumber, or sell any Pine Barrens Credit without notifying the Board in writing within ten business days thereof.

6.8.3 Distribution of the annual report

The Board shall make available an annual report of the Pine Barrens Credit Program and the activities of the Board as part of the Commission's annual report required under ECL Article 57.

6.9 Municipal functions exclusive of state financial assistance

Nothing in this section shall be construed to prohibit, or in any other way interfere with, the carrying out by any municipality of functions substantially similar to those described and

authorized in this Chapter of this Plan.

6.10 Other development rights transfer programs

Nothing herein shall serve to limit, affect or prohibit the establishment or continuance of any other municipal program for transferring or redirecting development rights.

7. Public Lands Management

7.1 Establishment of a Protected Lands Council

In order to protect and preserve public lands in the pine barrens, a Protected Lands Council should be formed. The Council should consist of, but not be limited to, the major public pine barrens land holders and conservation land managers as follows:

- New York State Department of Environmental Conservation (NYSDEC)
- New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP)
- Suffolk County Department of Parks, Recreation, and Conservation
- Suffolk County Department of Planning
- Brookhaven Town
- Southampton Town
- Riverhead Town
- The Nature Conservancy

Agencies and utilities holding easements on public lands, or owning special purpose sites within the matrix of protected conservation lands (e.g., the Suffolk County Water Authority (SCWA), the Long Island Lighting Company (LILCO) or others), may also be added to the Council. In general, additional entities may be added at the discretion of the Council if they own or manage protected land in the Central Pine Barrens zone.

The Council will be a working association that will formulate strategies for implementing the provisions of Chapter 7 of this Plan. The Council may make recommendations as they pertain to their respective public lands, and may recommend appropriate changes to the protected lands management provisions of the Plan, especially Chapter 7, as needed.

The public agencies and authorities listed above already have the authority, on an individual basis, to carry out the respective activities as stated in this chapter. As a result, the Commission recognizes that these agencies have, and retain, the authority to modify and amend the activities and procedures described in this chapter.

Land use planning for public lands in the Central Pine Barrens has historically emphasized environmental protection, and rightly so. However, human recreational use of public land in the Central Pine Barrens has steadily increased. It is, therefore, a prime responsibility of the Protected Lands Council to evaluate the human impact on natural environs in an effort to avoid conflicts, and to both protect and enhance the resources of these lands, while promoting recreation.

To carry out this mission, the Protected Lands Council will provide a regional approach to management of pine barrens lands held in the public trust. The Council will identify topics

needing special consideration and establish temporary subcommittees of specialists (which include specialists that may or may not be staff of the Council members), undertake interagency programs as deemed necessary and appropriate, and share resources to the extent possible in pursuing their mutual goals.

7.2 Summary of the field management agency survey

Based upon the response surveys conducted during the Plan development period, the agency undertaking the most active natural resource or biological management on its lands is the NYSDEC.

All responsible agencies identify underfunding and insufficient staff as major obstacles to their success. The resources devoted to land management have not kept pace with the land acquisition programs of the past and therefore the programs are ill equipped to carry out the overall goals of this Land Use Plan.

The long term stewardship of public lands in the pine barrens is dependent upon the growth, development and coordination of park and natural resource management and law enforcement programs within each agency. Insufficient resources create the inability to adequately protect and preserve environmental features and address threats to natural areas. It is increasingly difficult to maintain the present facilities and resources in the face of mounting use pressure.

Since most of the protected land is in the natural state, agencies ideally require staff or access to persons with ecological, planning and recreational facility management expertise.

Generally, the county and municipal public agencies responsible for stewardship of public lands in the pine barrens do not have staff with such expertise. On the state level, the NYSDEC has trained and experienced staff; however, resources have been limited. The forest ranger program, for example, has a high turnover which hinders long term program development.

The situation faced by the agencies for land stewardship is not unique to the pine barrens, nor to the Long Island region. Insufficient funding and staffing for land stewardship is a national concern shared by all levels of government.

However, the public lands surveys also show potential for efficiency improvements and creative management through maximum use of interagency cooperation. The management strategies which follow explore these areas as well.

During development of this Plan, managing agencies identified the most common problems which they face as the following:

- 1. There is a lack of adequate survey information for public land acquisitions.** Consequently, boundary identification and posting of public land becomes difficult, as does enforcement of environmental protection laws.
- 2. There is a lack of management access to computer based environmental mapping of ecologically sensitive areas.** Although there has been a great deal of scientific research done in the pine barrens, there is no universal data base upon which to base management decisions.
- 3. There is a lack of interagency coordination procedures concerning land acquisition.** Lack of coordination has led to delays in transfers of jurisdiction, which in turn has made it difficult to identify recently surveyed boundaries.
- 4. There is a lack of regional management plans.** Ideally, public land management plans should be prepared before land acquisition takes place. The real estate, planning, and managing departments and agencies should jointly participate in preparing such plans. Land management for the various public lands should reflect a regional initiative rather than only a unit management (i.e., site management) approach.
- 5. There is a lack of user friendly regulations governing public lands in the Central Pine Barrens.** Citizens wishing to use public lands for recreational purposes are subjected to a variety of rules and regulations concerning permitted activities on public lands. Initiatives which encourage legitimate access by contributory individuals and groups will also reduce future needs for later enforcement and remediative actions.
- 6. Suffolk County, the largest public land holder in the Central Pine Barrens, is subject to certain inadvertently awkward provisions within the County Nature Preserve Handbook.** The guidelines apply to the management of most of the 16,000 acres of core area County owned parkland. The Handbook states that management plans may be formulated subsequent to acquisition; however, if the County Legislature's acquiring resolution does not specifically mention certain elements, then the property remains forever wild, thus making it virtually impossible to coordinate recreational activities through management planning.

7.3 Immediate recommendations for the Protected Lands Council

With the Council's purpose specified in Section 7.1 of this Plan and the results of the management survey described in Section 7.2 in mind, the Protected Lands Council should meet on a regular basis to address areas of mutual concern as identified above or in the future.

Immediate recommendations for actions by the Protected Lands Council are as follows:

7.3.1 A regional approach to public land management in the pine barrens should be adopted. Management plans for existing large tracts of public pine barrens land should be developed. Land use planning for proposed acquisitions in the Central Pine Barrens should be developed by the public land holders affected by the proposed acquisition for approval by the Protected Lands Council before final recommendations are made to the Commission.

Agencies should cooperate to develop a regional management plan for all public land in the Core Preservation Area within five years. Regional plans should address, but not be limited to, administration, recreational uses, natural resource management, law enforcement, and site management.

7.3.2 A universal data base for mapping resource inventories should be established with all land managers having access to the computer based information. All environmentally sensitive areas should be mapped on a geographic information system at a sufficiently high spatial resolution to support the field work of the Council. Integrated with this should be the construction of a database of natural species and communities, an inventory of archeological and historic sites, and other subjects identified by the Council.

The management data base should be upgraded on a regular basis (perhaps weekly or monthly), using information gathered routinely by various public agencies such as the Suffolk County Water Authority (SCWA), the towns and county Departments of Planning, and the Suffolk County Department of Health Services. Solid, reliable data of both cartographic and tabular information is an interagency wide need.

7.3.3 Members of the Protected Lands Council should share personnel where the shared effort will complement individual agency administrative staff for realization of a common goal. One such goal is the sharing of funding to train an interagency survey team to be used to identify, and mark in the field, the public land boundaries in the Central Pine Barrens.

7.3.4 The department of an agency responsible for public land acquisition should coordinate efforts between the legal section and the managing unit of that agency. This will insure both more expedient transfers of jurisdiction and timely enforcement of environmental protection laws.

7.3.5 A uniform set of regulations and permitting procedures governing recreational activities on public lands should be developed by the Protected Lands Council. Interjurisdictional recreational permitting in Central Pine Barrens public land should be simplified in an effort to become user friendly to the general public (e.g., one type of permit for each recreational activity).

7.3.6 The management dilemma created by the Suffolk County Nature Preserve Handbook should be resolved by an amendment to the Handbook permitting the development of management plans for previous parkland acquisitions governed by the Handbook. The amendment should also anticipate cooperative management efforts of the Protected Lands Council as approved by the Commission.

7.3.7 Assessment of agency resources. Each agency within the Council will assess the available resources (staffing, operational , fiscal) for the administration and management of the lands within the Core Preservation Area by March 1996 and make recommendations for program growth.

7.3.8 Assess funding mechanisms. Each governmental entity within the Council should explore and attempt to develop funding mechanisms that will provide adequate support for annual operations and capital needs. An example of such a mechanism is the creation of Park Districts.

7.3.9 Enhance public participation. Involvement of those who frequent the public lands is more than a democratic procedure. Rather, explicit incorporation of the knowledge and experience of knowledgeable private individuals enriches the development of management plans, allocation of park resources and the effectiveness of conservation efforts in general. Strong, active private involvement should be an essential component of management.

7.4 Law enforcement

Effective law enforcement is one of the key tools for protecting public lands and natural resources to assure quality public use and enjoyment. At the present time, there is a lack of effective enforcement of rules and regulations controlling the use of public lands. Many of the real or perceived land management problems and issues would be diminished if the existing rules are adequately enforced.

Enforcement problems include the need to:

- Increase enforcement personnel and provide the tools they need to do their work,
- Improve interagency communication, and
- Impress upon the court system the need to be strongly supportive of the land use laws.

Implementation of the following recommendations will curtail the abusive activities of a very small minority of public lands users, and thereby enhance the recreational opportunities available for the majority of law abiding park and preserve constituents.

7.4.1 Law enforcement goal

The overall goal of this Plan component is to develop a law enforcement program that will, through interagency coordination and cooperation, improve the enforcement of all relevant land use and natural resource laws within the Central Pine Barrens.

The objective is to develop this law enforcement program by January 1, 1996.

7.4.2 Law enforcement problems

1. Lack of law enforcement personnel. Public law enforcement agencies lack the personnel to provide complete law enforcement coverage for the vast pine barrens preserve due to the large land area, scattered public ownership of noncontiguous parcels, and the great diversity of laws and regulations that control the area.

2. Overlapping law enforcement jurisdictions. The following law enforcement agencies have been identified as having jurisdiction within the Central Pine Barrens:

- Brookhaven Town Code Enforcement
- Long Island Railroad Police
- New York State Environmental Conservation Police
- New York State Forest Rangers
- New York State Park Police
- New York State Police
- Riverhead Town Code Enforcement
- Riverhead Town Police
- Southampton Town Police
- Suffolk County District Attorney's Office Environmental Crime Unit
- Suffolk County Park Police
- Suffolk County Police
- Suffolk County Sheriff

This diversity and overlap of jurisdictions causes duplication of some services and lack of other services. A formal interagency forum to address enforcement issues, methods, needs, and other topics on an ongoing basis is needed to coordinate enforcement agency functions.

3. Lenient court rulings. The court system issues lenient court rulings in the enforcement of land use and natural resource laws. The Law Enforcement Council (see Strategies section below) must meet with the court system's administrative staff to share common concerns and problems affecting the Central Pine Barrens.

4. **Abuse of public lands.** Lack of effective law enforcement has resulted in significant abuse of public lands by a minority of people and cynicism by the majority of people towards enforcement personnel, agencies and the courts when performing their enforcement roles.
5. **Lack of public involvement.** Lack of involvement by the public in reporting and recognizing illegal activity in the Central Pine Barrens.

7.4.3 Law enforcement strategies

Interagency Coordination

- 7.4.3.1 **Develop a Law Enforcement Council of all involved agencies** to meet on a regular basis to coordinate enforcement efforts, resolve interagency problems, foster cooperation, improve communication, and develop the interagency law enforcement program referenced above. The Council should consist of a representative from each agency with law enforcement duties in the Central Pine Barrens.
- 7.4.3.2 **Develop and provide a Central Reporting Station or clearinghouse**, including a computer data base for all records. This would include violators' names, locations of violations, and type and severity of violations. This interagency data base would foster cross checking of all this information.
- 7.4.3.3 **Ensure that central dispatchers at all agencies have radios and radio frequencies of all agencies** to improve communications. Provide dedicated phone connections for all involved agencies to interface computers for better record sharing.
- 7.4.3.4 **Develop an interagency field patrol plan** so that all lands are consistently patrolled and no agency is given so much additional responsibility that will compromise its effectiveness.
- 7.4.3.5 **Develop an interagency training program** regarding the enforcement of all laws and regulations relating to the pine barrens.
- 7.4.3.6 **Produce a Central Pine Barrens Law Enforcement Handbook** to coordinate and reemphasize all applicable laws and regulations. The Handbook would be a complete field reference, containing jurisdictional information and maps of geographical boundaries. It would be carried and utilized by all members of law enforcement agencies with Central Pine Barrens jurisdiction.
- 7.4.3.7 **Establish procedures to relate and emphasize to the judiciary, throughout the court system**, the importance of the enforcement of offenses committed within the pine barrens.

7.4.3.8 Develop Assistant District Attorneys who specialize in environmental violations.

Emphasize the seriousness of environmental violations with Assistant District Attorneys and the courts.

7.4.3.9 Schedule court cases so that all environmental violations are handled at the same time in the appropriate courts.

7.4.3.10 The courts should provide follow up information on cases that are dismissed. This information could be made available to participating agencies through the central clearinghouse's data base.

Staffing and Funding

7.4.3.11 Provide law enforcement agencies with adequate staff and equipment to control illegal activities by increasing enforcement staff levels equal to be equal to the demands of the work and by expanding enforcement manpower capabilities (e.g., training of governmental employees and community members who reside in and around the Central Pine Barrens) to report minor violations such as dumping, illegal trail uses, vandalism, etc.

7.4.3.12 Explore the possibility of dedicated funding for law enforcement in the Long Island Pine Barrens, such as the application of a mandatory surcharge to be applied to all monetary fines upon conviction for pine barrens related offenses. This surcharge would not be attached to the New York State Environmental Conservation Law related offenses. These new proceeds could be dedicated to a fund under the direction of the Pine Barrens Law Enforcement Council solely used for the enhancement of law enforcement activities within the Long Island Pine Barrens.

7.4.3.13 Provide funding for updated equipment and supplies in order to enhance the law enforcement agencies' capabilities to patrol and protect the Central Pine Barrens.

Education and Public Awareness

7.4.3.14 Identify all public land within the Central Pine Barrens.

7.4.3.15 Establish a 24 hour hotline for use by the public to report illegal activity in the Central Pine Barrens. Educate the public regarding identification and reporting of illegal activities.

7.4.3.16 Develop a Long Island Pine Barrens Preserve Watch Program. This could be modeled after existing Park Watch programs.

7.5 Recreation, trails, hunting and fishing

7.5.1 Recreation overview

Opportunities for recreation are a principal objective of the Central Pine Barrens Comprehensive Plan. The Act also recognizes that the quality of present and future recreational activities depends on the protection and preservation of the pine barrens' natural resources; specifically, ECL Section 57-0105 states:

The Legislature further finds that the Pine Barrens-Peconic Bay system contains many other unique natural, agricultural, historical, cultural and recreational resources that are mutually supportive and ultimately dependent upon maintenance of the hydrologic and ecologic integrity of this region.

ECL Section 57-0121(3) stipulates that the Plan must be designed to protect and preserve the ecologic and hydrologic functions of the pine barrens by

promoting compatible agricultural, horticultural and open space recreational uses within the framework of maintaining a Pine Barrens environment and minimizing the impact of such activities thereon ...

A comprehensive recreational program must also take into account the recreational needs of present and future users, including residents and users from more distant locales who are attracted to the area. Accommodation of these diverse needs requires active and cooperative efforts of public and private recreational providers.

It is recognized that there are several broad categories of recreational use, as follows:

- 1. Passive recreational activities** are those which have minor physical impacts on natural resources, require minor facility development and maintenance, and are compatible with others using the same area or facilities simultaneously. Examples include, but are not limited to, walking, hiking, birdwatching, canoeing, hunting, fishing, and photography.
- 2. Active recreational activities** are those which have moderate physical impacts on natural resources; require moderate facility development and maintenance; and may be incompatible with other users using the same area or facilities. Examples include, but are not limited to, mountain biking, horseback riding.
- 3. Incompatible recreational activities** are those which have major physical impacts on natural resources. Examples include, but are not limited to, all terrain vehicle use, motorcycle riding and snowmobiling.

4. **Exclusive use activities** are those which need special areas designated and maintained (including extensive cleared lands) solely for such purposes. Examples of such areas include, but are not limited to, model airplane fields, ball fields, and golf courses.

7.5.2 Recreation recommendations

Recognizing these varied recreational uses, and the need to provide for continued and enhanced recreational opportunities in the public lands of the Central Pine Barrens, the following recommendations are included in the Plan:

- 7.5.2.1 **Passive recreational activities and facilities to accommodate them should be planned and implemented by public and private agencies** and should avoid adverse impact on ecologically sensitive areas.
- 7.5.2.2 **Active recreational activities and facilities to accommodate them should be planned and implemented by public and private agencies** and should avoid adverse impact on ecologically sensitive areas.
- 7.5.2.3 **New incompatible recreational activities and uses should be discouraged on public lands in the Core Preservation Area.** They may be allowed in the Compatible Growth Area and may require coordination with the Protected Lands Council to ensure that all factors concerning facility installations and ongoing management for the protection of natural resources have been addressed.
- 7.5.2.4 **Expansion of existing public recreational activities** established and sanctioned by a governmental agency owning or managing protected lands within the Central Pine Barrens, and expansion of existing facilities associated with these recreational activities, including but not limited to the addition, modification, expansion or replacement of structures or facilities necessary for recreational activities and such clearing as may be reasonable required for maintenance or expansion of those activities, are consistent with this Plan. Expansion of a recreational use on public lands requiring the clearing of more than two and one half (2.5) acres of land should receive prior advisory review by the Protected Lands Council.
- 7.5.2.5 **New exclusive use activities should require a full State Environmental Quality Review Act review, as well as a review by the Commission.**
- 7.5.2.6 **A plan to phase out or transfer incompatible and exclusive use recreational activities on public lands in the Central Pine Barrens should be developed by the Protected Lands Council,** as and if deemed appropriate.
- 7.5.2.7 **Since trails are a primary means of access for recreational activities in the pine**

barrens, basic recommendations for trail uses are needed for comprehensive planning to accommodate the diversity of recreational uses.

To develop the safe, enjoyable and resource compatible use and maintenance of trails, the Commission should establish a Trails Subcommittee of the Protected Lands Council, with membership from each public agency and trail user organizations. Agencies and user groups should cooperate in developing policies for trail building, maintenance and policing in the Central Pine Barrens. Some recommended policies and practices for consideration include the following:

7.5.2.8 Informational signs stating the types of uses permitted on the trails and explaining marking systems should be posted at trailheads and other access points. Trails and trail intersections should be clearly marked with a uniform system of blazes or other symbols.

7.5.2.9 Conflicting modes of trail use, i.e., foot travel (including cross country skiing and snowshoeing), mountain bike riding, and horseback riding, should be accommodated on separate trails designated for specific types of uses where possible, except in circumstances where:

1. The landowning or managing agency and the trail managing organizations agree that specified multiple uses are not only compatible with the preservation of the ecosystem but are also compatible with each other, and,
2. The landowning agency determines that separating the activities is not practical or feasible because of a lack of an alternative route.

7.5.2.10 All trails should be designed, built, maintained, and managed to minimize erosion, especially to steep slopes, and to avoid any significant damage to rare, endangered, or fragile plant communities, and the wildlife dependent upon them.

7.5.2.11 Where otherwise provided by law, public agencies may close specific trails and areas to some or all uses for any of the following reasons:

1. To protect a scientific study area;
2. To protect the location of threatened or endangered plant or animal species
3. To prevent overuse from adjoining intensively used recreational areas
4. To protect historic or archeological sites
5. To protect critical wildlife habitats
6. To protect extensively disturbed areas from further impact and to allow for their recovery

Where possible, the managing agencies should make an effort to provide an alternate trail to preserve contiguity and to prevent unauthorized cutting.

7.5.2.12 Land managing agencies are encouraged to provide well fed water sources and troughs for trail users.

7.5.2.13 Paved and unpaved roads are frequently used for nonmotorized recreation and should be integrated into a cohesive pine barrens trail system.

7.5.2.14 Each public agency should be responsible for maintaining trails on properties it manages, and private, volunteer trail associations should be encouraged to assist public agencies in the establishment and maintenance of trails, and public agencies may delegate responsibility for trail maintenance to such associations (e.g, the Long Island Greenbelt Trail Conference is developing a management plan for the Long Island Pine Barrens Trail).

7.5.2.15 Agencies should cooperate in the establishment and linking of the Pine Barrens Trail segment of the Rocky Point to Montauk Point Paumanok Path to assure the development of a contiguous route.

7.5.2.16 Agencies should also cooperate in the development of comparable long distance trails for other user groups, such as equestrians and mountain bikers.

7.5.2.17 A uniform access permit system should be considered to provide smooth, consistent and understandable access conventions for public use of land under different jurisdictions. Evaluation of such a system, and its implementation, should be conducted by the Protected Lands Council.

7.5.2.18 An Educational and Interpretive section should be built into all public information and service programs as a cost effective tool for management of natural resources and public lands. An Education and Interpretation (E/I) Subcommittee should be formed as part of the Protected Lands Council to develop a coordinated plan for serving such functions as, but not limited to:

1. Enriching the experiences of visitors by providing information about the pine barrens
2. Informing users on how to conduct their activities in ways that do not affect other users of the pine barrens
3. Reducing destruction of public lands, resulting in lower maintenance costs
4. Encouraging involvement of visitors and area residents in developing and contributing to natural resource and public use programs
5. Directing visitors subtly from sensitive areas to sites which can sustain heavier impacts
6. Establishing public support for pine barrens preservation

There should be a minimum of one trained E/I specialist for each major public visitation site to provide E/I services and coordination for the public, other agency programs, and

area schools.

7.5.2.19 A careful balance must be sought among competing needs for recreational lands.

A steady increase in the demand for recreational opportunities results in the need for accessible recreational opportunities. It must be recognized that the recreational potential of the pine barrens is limited, and the region may not be able to accommodate all of the demands placed upon its resources.

A key consideration is the maintenance of the quality of the recreational experiences provided. For instance, undesirable overcrowding of any activity area may require limitations on the use of that area.

The challenge, then, is to make a variety of the region's recreational opportunities available to satisfy public demand, but in ways which are compatible with protecting the essential character and natural resources of the pine barrens.

7.5.2.20 Since all recreational activities carry inherent risks, it is recommended that the Trails Subcommittee of the Protected Lands Council evaluate and recommend techniques which would eliminate or reduce liability in order to encourage private and public landowners to open lands to public recreational use.

7.5.2.21 Off road operation of motorized vehicles, other than official fire, police, emergency, administrative, or maintenance vehicles should be avoided on public lands in the Central Pine Barrens. Other motorized vehicles may operate only on trails or roadways designated for their use.

7.5.3 Hunting and fishing recommendations

The varied species of fish and wildlife found within the Central Pine Barrens provide a valuable recreational, food, ecological and economic resource. Each year, thousands of sportsmen and women are drawn to the Central Pine Barrens by the abundant fish and wildlife resources contained within its boundaries.

For example, whitetail deer, rabbits, bobwhite quail, and ringneck pheasant are commonly sought by upland hunters while waterfowl hunters seek geese, wood duck, black duck, and mallard duck on the numerous ponds, rivers and other wetland areas within the pine barrens. Trappers find excellent opportunities for raccoon, red fox, mink and muskrat to name a few species.

A diversity of freshwater fishing opportunities also exist within the Central Pine Barrens. Chain pickerel and largemouth bass are found in many pine barrens waters and, given the area's temperate climate, can grow to trophy proportions. Excellent cold water fishing opportunities for brook, brown and rainbow trout can also be found in waters such as the Carmans River and Wildwood Lake.

Consistent with the Environmental Conservation Law, such activities exist on controlled access areas such as Rocky Point Natural Resources Management Area, the Navy Cooperative Area, and the David Sarnoff Pine Barrens Preserve, among other areas. Certain county parks as well as undeveloped federal, state, county and other municipal lands are utilized as well. Sportsmen also pursue their activities at locations maintained by the Peconic River Sportsmans Club, the Fresh Water Anglers of Long Island, and other clubs, or as members or guests at shooting ranges open to the public or on individually owned properties.

The Environmental Conservation Law sufficiently addresses concerns of use and safety on a statewide basis by defining where hunting implements may or may not be discharged. Section 11-0931 of the Environmental Conservation Law, for example, regulates the use and possession of firearms. It reads, in part, as follows:

No person shall: (1) discharge a firearm or long bow in such a way as will result in the load or arrow thereof passing over a public highway or any part thereof; (2) discharge a firearm or long bow within five hundred feet from a dwelling house, farm building or farm structure actually occupied or used, school building, school playground, or occupied factory or church ...

The Environmental Conservation Law also permits the state to enter into cooperative agreements and to post lands in which it has an interest or right for managing or conducting public hunting, fishing, trapping, and associated activities.

The Environmental Conservation Law and related laws effectively determine where hunting, fishing, trapping, and associated activities may or may not take place throughout the state, including the Central Pine Barrens.

Hunting and fishing are traditional activities which have aided in the preservation of the Central Pine Barrens. They include hunting (e.g., big game, small game, water fowl, falconry and bow hunting), fishing, trapping, and associated activities. These activities are classified as "passive recreational activities" which have minimal impact on natural resources. The participants in such activities have been and remain stewards of the land and historically have supported open space purchases of lands by state, county, and town governments prior and subsequent to the enactment of the Long Island Pine Barrens Protection Act. Notwithstanding the increase in human populations and development, activities as hunting and trapping have assisted in maintaining wildlife populations in a proper balance.

Hunting proficiency being a necessary part of the ethical harvesting of game, participation in a shooting sport remains a prerequisite to engaging in such activity. In addition, the safety of hunters as well as that of those they encounter in the field is ensured by hunters' training.

In this regard, shooting ranges are valuable since they provide places where hunters may practice and receive educational training. While practical training is also received on the range, in order

to engage in the sport of hunting, prospective hunters must first satisfactorily complete a state mandated hunter safety course. A similar course is required for prospective trappers as well.

Areas such as open fields, woodlots and shorelines within the Central Pine Barrens have historically facilitated dog training and field trials. Such activities serve to acquaint the hunter with his or her hunting partner. This leads to appropriate and predictable encounters with other hunters, game and nongame species, and other users of the Central Pine Barrens.

A primary concern among hunters, fishermen and trappers is their safety while on navigable waters. In connection with the use of watercraft, it is imperative that power be sufficient to provide a safe departure and return. Accordingly, the use of suitable gasoline driven outboard motors (no greater than fifteen horsepower) for the propulsion of watercraft within the Central Pine Barrens should continue. The use of such motors, in addition to addressing the safety factor, has been found to create channels through the aquatic vegetation to the advantage of hand powered craft and to increase the flow of water.

It is a goal of the Plan to maintain and enhance the opportunities for pursuit of hunting, fishing, trapping, and associated activities within the Central Pine Barrens. The following recommendations are considered essential to and consistent with meeting this goal.

7.5.3.1 Maintain, unaltered, laws which have traditionally regulated hunting, fishing, trapping, and associated activities. These include the federal fish and wildlife laws, the New York State Environmental Conservation Law, and related state laws. Such related laws include such the federal and state water quality and air quality laws, wetland laws, federal and state navigation laws, federal and state endangered species laws, the State Wild, Scenic, and Recreational Rivers System Act (affecting the Peconic and Carmans Rivers), and the federal and state migratory bird laws.

It should be noted that the Pine Barrens Protection Act provides, in ECL Section 57-0131 that:

Nothing in this article shall be interpreted to authorize the regulation of hunting, shellfishing, fishing, trapping, possession of wildlife or other recreational activities in the Long Island Pine Barrens maritime reserve, except as otherwise provided by law.

7.5.3.2 Existing state and municipally owned lands with permitted uses which presently do not include hunting, fishing, trapping, and associated activities should be evaluated for potential implementation of such uses where appropriate. For public lands included in the Central Pine Barrens, the continued need for existing local restrictions by ordinance, covenant, or otherwise which place burdens on nonresident hunters, fishermen and trappers greater than those which apply to residents should be evaluated by the respective locality.

7.5.3.3 State and municipal funds should be sought to provide adequate fish and wildlife management as well as parking access and launching sites to facilitate hunting, fishing, trapping, and associated activities.

7.5.3.4 The use of gas driven outboard motors with a maximum of fifteen horsepower for the propulsion of watercraft for hunting, fishing and trapping within the Central Pine Barrens should continue.

7.5.3.5 Active management of lands and waters supporting wildlife and fish should continue, including the creation and maintenance of food plots, and activity sites for hunting, fishing, trapping and associated activities, the stocking of indigenous and nonindigenous species, the enhancement of wetlands, and other actions which will insure the abundance of wildlife and fish populations within the public lands of the Central Pine Barrens.

7.6 Natural resources management: Best management practices

Recommendations for best management practices are intended to fulfill the primary natural resources goal of the Pine Barrens Protection Act. ECL Section 57-0121(2)(a) specifically states one of the Plan goals for the overall Central Pine Barrens to:

protect, preserve and enhance the functional integrity of the Pine Barrens ecosystem and the significant natural resources, including plant and animal populations and communities, thereof;

and ECL Section 57-0121(3) states several specific Plan goals for the Core Preservation Area with the overall intent to:

protect and preserve the ecologic and hydrologic functions of the Pine Barrens.

Recommendations are shaped and guided by a vision of the pine barrens landscape as a dynamic one, in which ecological processes such as fire, nutrient cycling, ground and surface water flow, natural succession, evolution, and plant and animal migration shape an intricate, shifting mosaic of diverse natural communities.

It is the intent of these recommendations to eliminate or greatly reduce adverse effects of human activities on pine barrens native species, natural communities, and ecological processes, while still allowing for appropriate, properly approved development, and recreational and educational use of the pine barrens. Where necessary, active management is called for to restore degraded habitats, favor native over nonindigenous species, and maintain or restore ecosystem processes upon which the continued existence of the pine barrens depends.

7.6.1 Recommendations for natural upland communities on public lands

The three natural upland pine barrens communities are the pitch pine-oak forest, pitch pine-oak heath woodland, and dwarf pine plains (including heath variants in local areas). All of these communities depend upon periodic fires or other disturbance for their rejuvenation and maintenance. These communities should be maintained in various successional stages, in a shifting landscape mosaic.

Dwarf pine plains will need the most frequent fire return intervals (10-30 years), the pitch pine-oak heath woodland will require less frequent intervals (20-40 years), the pine-oak forest will need longer intervals (35-60 years), and the oak-pine forest will require the least frequent fire intervals (60-100 years). Some areas of pine barrens may remain unburned for longer than 100 years, or possibly indefinitely.

In some cases ecologically designed land clearing techniques might be used to restart the successional process. Presently, a long term management plan cannot be prepared due to a lack of detailed information, including the identification of specific management techniques to be used in particular areas. A research component should therefore be part of the Fire Management Plan that must be prepared prior to commencement of controlled burning in the pine barrens.

Specific recommendations for natural upland communities on public lands include:

7.6.1.1 Agencies are encouraged to use existing cleared areas whenever possible for new or expanded activities and to restore previously cleared but presently unused areas with native species.

7.6.1.2 Limit the amount of new land clearing. Only the minimum amount of land clearing should be made to achieve the stated and approved goals.

7.6.1.3 Do not plant nonnative species known to be invasive. Figure 5-2 lists some nonnative species which should be avoided.

7.6.1.4 A comprehensive fire management plan for the Central Pine Barrens should be planned and implemented. (See Wildland Fire Management section below, as well as Appendix B regarding prescribed burning.)

7.6.1.5 Review and consider alternative control methods to aerial or broadcast spraying of pesticides (e.g., for gypsy moths, mosquitos) and limit chemical use as much as possible. The impact of pest control measures upon nontargeted species should be evaluated.

7.6.1.6 Avoid environmental intrusions that would alter or destroy habitat or life cycles of rare species (for example, avoid the use of nighttime lighting in areas of known habitat

for rare lepidopteran species).

7.6.1.7 When and where ever possible, restrict the use of authorized vehicles to areas not susceptible to erosion damage. Official vehicle usage should demonstrate sensitivity to erosion potential.

7.6.2 Recommendations for human created natural successional communities on public lands

Examples of human created natural successional communities are old fields and shrublands created by previous human activities. The ecological role of these communities should be evaluated within the context of the overall ecological goals for the pine barrens.

Specific recommendations for human created upland communities on public lands include:

7.6.2.1 Old fields can be maintained, if desired, by periodic mowing. Prescribed burning might be an alternative management tool in some cases. When new lands are brought into protected status they should be evaluated for their ecological significance and a customized unit management plan developed for them.

7.6.2.2 Clearings should be created or maintained only in areas that are already disturbed or fragmented, and should not be created or maintained within otherwise intact, contiguous blocks of pine barrens vegetation unless approved by a regional fire management plan, an approved park master plan or an agency plan.

7.6.2.3 The use of fertilizers and limestone should be kept to an absolute minimum. Furthermore, these chemicals should not be used at all near sensitive wetland communities (see the following sections).

7.6.2.4 Review and consider alternative control methods to aerial or broadcast spraying of pesticides, and limit chemical use as much as possible. The impact of chemical use upon nontargeted species should be evaluated. When chemical use is necessary, pesticides and methods which minimize effects on nontargeted species should be utilized.

7.6.3 Recommendations for freshwater wetland communities on public lands

Most freshwater wetland communities depend upon a continued, uninterrupted supply of high quality groundwater, surface water, or precipitation. Normally, little can be achieved on a local basis only to reduce pollutant inputs in precipitation. However, local management can prevent pollutant, sediment and nutrient inputs to surface runoff and groundwater, and prolonged, artificial drawdowns of the water table.

In addition to protection of water quality and quantity, wetlands may require protection from

physical damage caused by human activities, such as trampling, horseback riding, all terrain vehicles, and beach raking or tilling. In some cases, wetlands may require active management to maintain or restore natural hydrological or ecological conditions or functions. For example, white cedar swamps may require cutting or fire management in order to stimulate cedar regeneration. Some wetlands may need periodic fire or other disturbance to remove organic matter and prevent the wetlands from filling in with sediments.

Coastal plain ponds and pond shores harbor the highest concentrations of rare species in the Central Pine Barrens, and are especially ecologically sensitive. These ponds may require a higher level of protection than other wetland types.

Specific recommendations for freshwater wetland communities on public lands include:

7.6.3.1 Structural and nonstructural mitigation measures should be designed and installed where practical and economically feasible for existing direct stormwater discharges to wetlands. Runoff control structures should be designed to both protect wetlands ecology and provide flood control.

7.6.3.2 Surface drainage from future development should not be discharged directly to these wetlands, or otherwise significantly impact the hydrologic regime of wetlands (timing, duration, magnitude, frequency of water inputs).

7.6.3.3 Physical disturbance or removal of vegetation in or adjacent to wetlands should be avoided with the exception of that associated with the creation of educational or interpretive facilities, and agency approved public recreational uses.

7.6.3.4 New hiking, bicycle or horseback trails should be located so as to avoid or minimize damage to wetlands. A minimum distance of 100 feet is recommended, except for spur trails to designated educational or interpretive stations and to public recreational access points and use areas (e.g., approved hunting blinds, bird observation points, fishing platforms). Existing trails that result in erosion, excessive trampling of wetlands vegetation, or other adverse ecological impacts should be rerouted where practical.

7.6.3.5 Toxic boat bottom paints should be avoided on watercraft.

7.6.3.6 Where scientifically justifiable, active management by cutting, fire, removal of invasive species, or other techniques may be used to prevent the loss of wetland communities or species (e.g., the use of fire for regeneration of white cedar stands or the removal of phragmites). Potential ecological impacts of such management, including not actively managing such sites, should be carefully examined.

7.6.4 Recommendations for saltwater wetland communities on public lands

All saltwater wetland communities require freedom from physical disturbance or alteration as well as an uninterrupted supply of both surface and groundwaters. Existing federal, state and local regulations provide strong and effective protection from physical disturbance. However, water quality may be negatively affected by storm water runoff, septic tank leachate, and fertilizers, which may occur despite the regulations.

Specific recommendations for saltwater wetland communities on public lands include:

7.6.4.1 Protect and preserve tidal wetland values.

7.6.4.2 Restore those tidal wetland areas diminished by manmade activities.

7.6.5 Restoration of degraded habitats on public lands

Ecological restoration is the practice of returning damaged or degraded areas to some semblance of their predisturbance condition. The goal of restoration is to emulate a natural, functioning, self regulating system that is integrated with the ecological landscape in which it occurs. In a successfully restored ecosystem "...natural processes, including evolution, proceed, with the bulk of the biodiversity surviving" (Packard 1993). The aim of restoration is not to recreate the past, but to use the past "...as a reference point for the future" (Falk 1990). Ecosystems and living organisms never stop changing; this capacity for change must be maintained in any restored ecosystem.

In most cases habitat restoration on public lands may be achieved by understanding and then redirecting injurious human activities (a process which also addresses cultural restoration). Many ecosystems will recover through the process of natural succession; however, there are possible exceptions to this "laissez faire" method. Exceptions include wetlands that have been impacted by development that has resulted in degraded water quality and possibly altered hydrologic regimes, severely denuded and eroded areas such as defunct sand mines and other developed areas where nonnative plant species present threats to adjacent natural pine barrens, and areas where disrupted ecosystem processes have caused losses of pine barrens diversity. Active intervention may be required in such cases. The Protected Lands Council should consider and prioritize the need for specific restoration efforts in specific public lands. Plans for restoration should be made on a site specific basis, restoration projects should use appropriate local native stock and materials, should model indigenous pine barrens ecosystems, and should address associated sociocultural issues.

7.6.6 Management of rare, endangered, threatened and special concern species on public lands

Rare, endangered and threatened plant species are those identified in the *New York Rare Plant*

Status List which is updated regularly by New York Natural Heritage Program. The rare, endangered and threatened animal species are those identified and tracked by the New York Natural Heritage Program. Animal species of special concern are identified by the New York State Department of Environmental Conservation's Division of Fish and Wildlife.

For many species, specific habitat requirements and minimum viable population sizes are poorly understood. Thus, it is difficult to make detailed management recommendations for those species. However, maintaining existing natural pine barrens communities in good condition should suffice to protect most or all of these species. In accordance with current thinking in conservation biology, the focus of preservation efforts should be on preservation of habitats, intact ecosystems, and ecological processes that support the rare species and not on individual species.

Specific recommendations include:

7.6.6.1 No known existing rare, threatened or endangered species should be extirpated from the pine barrens. If downward trends of individual species are documented, management actions should be considered to favor those species.

7.6.6.2 Investigate the need for further inventory and inventory updates of individual species and groups of species (e.g., lepidoptera, odonates and grassland species).

7.6.6.3 Activities which might threaten the habitat of rare, threatened or endangered species should be discouraged.

7.6.6.4 If an extant species becomes a federally listed species under the Federal Endangered Species Act, then management should favor that species where appropriate.

7.6.7 Reintroductions of species on public lands

Many plant and animal species have been lost from the pine barrens. Numerous plant species are listed in the New York Natural Heritage Program's database as "Historical" occurrences, not seen for many decades. Animals that are rare within, or have been extirpated from, the Central Pine Barrens include wild turkeys, the river otter, some reptiles and amphibians, and various butterflies and moths.

Recommendations for species reintroduction tasks include:

7.6.7.1 A list of these species should be compiled, and the value of their possible reintroduction should be examined.

7.6.7.2 Plant and animal species known to have historically occurred in the pine barrens

should be considered for reintroduction.

7.6.8 Control of invasive, nonnative species on public lands

Nonindigenous plants and animals accidentally and intentionally introduced to North America over the last 300 or more years have had devastating and widespread effects. Nonindigenous weeds, for example, cost United States farmers up to \$5.4 billion a year in crop loss, and require the use of up to \$2.3 billion worth of pesticides annually (Devine 1994). "But damage done to natural areas by alien plants (and animals) is often overlooked, because the costs can't easily be rendered in dollars" (Devine 1994). Some nonindigenous species coexist with native species and are not a threat, but others are more aggressive and force out native species. Simplified and impoverished plant communities are the result (Devine 1994).

Invasive nonnative plant species are currently not a serious problem in the pine barrens, but they are present along roads and rights of way and have the potential of becoming a threat to the ecology of the pine barrens.

Management recommendations for control of invasive, nonnative species include:

7.6.8.1 Populations of nonnative plant species known to become invasive, including but not limited to those species listed in Figure 5-2, should be identified and controlled.

7.6.8.2 Planting of nonnative plant species on public lands in the Central Pine Barrens should be strongly discouraged. Species known to become invasive should not be planted. Figure 5-2 contains a list of some species which should not be introduced.

7.6.9 Wildland fire management

Natural lands within the core area of the pine barrens consist of a variety of habitats ranging from dry stands of pine to moist deciduous woodlands with streams, ponds, lakes and marshlands. Management of these systems could call for a prescribed burning or may require other techniques such as control of invasive non native species. Some communities such as moist woodlands could be adversely affected by prescribed burning while other communities such as dry pinelands could be burnt to reduce fuel load. Although appropriate management is not always obvious, it is apparent that careful monitoring is essential to develop appropriate management strategies for the pine barrens.

Historic evidence concerning precolonial pine barrens is somewhat contradictory in that there are opinions stating that the pine barrens cover approximately 250,000 acres while other scholars view of the pine barrens is much smaller and confined to the drier, nutrient poor soils of Long Island. However, fires set by man and wood cutting are well documented and could be a major factor in the extent of the postcolonial pine barrens on Long Island.

In an effort to avoid ecological errors, a conservative approach to the management of pitch pine dominated communities should be adopted. This approach would take into consideration a reduction of fuel load by prescribed burning to maintain the present ecosystem while other pitch pine communities should be allowed to undergo succession. This strategy would maintain a percentage of the pine barrens in its present state, allowing for the study of the biological succession within the area of pine barrens that is not burnt. The percent of pine barrens considered for prescribe burning should be well through out and a vital part of the comprehensive fire management plan.

The comprehensive plan would also take into consideration the effect of burning on nontarget organisms. It is evident that further research will be needed for species inventory in an effort to prepare a burn timetable. The plan would also present a detailed monitoring system for evaluating the effects of prescribed burning.

The Protected Lands Council should have the primary responsibility of preparing, implementing, and monitoring any prescribed burn program.

At present only the U.S. Fish and Wildlife Service, the Department of Environmental Conservation, and The Nature Conservancy have trained individuals to carry out prescribed burns in the pine barrens area. Suffolk County is currently sending park personnel to burn school. All of these resources should be utilized in preparing a prescribed burn program.

Burning the pine barrens is neither the goal, nor the desired product, of the fire management process. Fire is but one tool which may be used in managing the pine barrens for ecological integrity and high biodiversity, and may not be necessary or appropriate for all ecological communities or locations within the pine barrens. Fire regimes are dynamic and the effects of fire are variable. Fire may be beneficial under some circumstances, and damaging under other conditions.

7.6.10 Wildfire

Wildfires once burned freely, occasionally for days or weeks, over thousands of acres extending from the Hempstead Plains of Nassau to the pine barrens of Southampton. Such extensive conflagrations no longer occur, partly because the pine barrens have been crisscrossed by numerous roads and clearings that serve as effective firebreaks, and partly due to heightened suppression and prevention activities. Most of these fires are single day events kept to a minimal size due to early detection, aggressive suppression and the fire regime itself. However, even small fires can pose an acute hazard in and adjacent to the pine barrens. The threat to human lives and property justifies the suppression and control of these wildfires. Aggressive fire suppression must remain an essential cornerstone of the pine barrens under these conditions.

Numerous wildfires now occur regularly in the pine barrens, and they are primarily set by people. These unplanned ignitions and resulting wildfires are not a substitute for the ecological process

that fire plays in this ecosystem and are unacceptable from both an ecological and management basis. The expenses and risks to fire fighting personnel are also unacceptable. These fires are unacceptable from an ecological perspective since the fires tend to occur in the same locations repeatedly (usually not the areas in most ecological need of burning).

Wildfires can be suppressed using a variety of strategies including confinement, containment, and control. These strategies utilize the tactics of both direct and indirect attack. Control strategies with direct attack tactics and heavy reliance on mechanized equipment is the current means used by most fire departments in suppressing wildfires in the pine barrens. Most departments within the pine barrens use the Incident Command System (ICS) with heavy dependence upon Mutual Aid assistance. The Mutual Aid response is coordinated through the Suffolk County Fire, Rescue and Emergency Services Commission. This Plan realizes the success that this well established structure has had for suppressing wildfire within the pine barrens.

There has been an ecological cost to the way in which wildfires have been suppressed by the direct attack method. Although almost every area of the pine barrens is crisscrossed with fire and old woods roads, with each wildfire new firelines are constructed by brush trucks. These high impact suppression methods may cause longer term problems, including the introduction of new roads. Recovery of vegetation within these firebreaks is subsequently prevented due to the new firebreaks becoming unofficial roads for vehicle use. These temporary firebreaks may persist for many years, and may become access points for dumping. Currently, no one has responsibility to carry out rehabilitation of these new inroads.

Modified suppression strategies that use confinement and containment methods with indirect attack should be considered. This is especially true where there are already existing fire or woods roads. Full suppression should remain the standard for areas where wildland and developed areas meet, when fires threaten residential areas, and human life and property are in immediate danger. However, many areas of the pine barrens are relatively remote, and wildfires could be allowed to burn up to existing firebreaks under appropriate weather conditions. Guidelines for such an approach utilizing minimum impact suppression tactics to suppress wildfire need to be developed.

While there may be an increase in personnel time by utilizing modified suppression strategies, this can be offset by the reduction in equipment expenditures, especially those outlays caused by equipment damage. The modified suppression tactics will also reduce the firefighters' exposure to risk while also reducing the damage to the land resource. While this may lengthen the duration of the wildfire event and may increase overall acreage involved, the total number of personnel required at any one time is reduced. An Escaped Fire Situation Analysis (EFSA) completed for each extended attack fire might be recommended to evaluate the feasibility of the appropriate suppression response. The EFSA should be completed in consultation with the land owner. Agencies may assign a resource advisor for any fire to work within the Incident Command System and directly with the Incident Commander in developing suppression

strategies and tactics. Prefire planning will be an important part of directing the appropriate suppression response due to the short duration of most fire events in the pine barrens. Since Long Island is not a state fire district, state funds are not available to local fire departments for wildfire suppression activities. Additional issues that need to be addressed include prevention programs and establishment of a standard system of record keeping for fire events.

Total fire suppression would result in continued, unchecked fuel buildup, which increases the risk of catastrophic fires outside the natural variability of this fire regime. Experience elsewhere in the country has shown there is a point of negative returns from total suppression. At that point, even heavy staffing is unable to suppress 100 percent of fires. Eventually events and conditions (i.e., heavy fuel loadings, multiple ignitions, weather events with low relative humidity, strong winds, and high temperatures) overburden suppression capabilities, resulting in conflagrations or multiple fires beyond the control of resources. A solution for this lies in development of a prescribed burning program. A detailed discussion of prescribed burning is presented in Appendix B.

8. Water Resources and Hydrology

8.1 Water resource overview

The Central Pine Barrens encompasses regions of deep aquifer recharge, as well as subsystems with shallow flow components that discharge to the Peconic and Carmans Rivers. This complex hydrogeology controls the fate of man-induced pollution, and therefore the quality of freshwater ecosystems.

Overall groundwater quality is still excellent in relation to drinking water standards, particularly in the Magothy Aquifer. Limited degradation of shallow groundwater quality has occurred, however, as reflected in the elevated nitrogen concentrations of the Peconic and Carmans Rivers. These rivers, and an unknown proportion of the Central Pine Barrens wetland systems, are also impacted by stormwater runoff discharges, which may be the most significant source of ecosystem-altering nutrients such as phosphorus. These impacts can be expected to increase as additional areas are developed unless densities, and activities that degrade groundwater and generate contaminated stormwater, are controlled.

Measures designed to enhance and protect surface and groundwater resources have previously been recommended in the *Long Island Comprehensive Waste Treatment Management Plan* (the "208 Plan"; Long Island Regional Planning Board, Hauppauge, NY, 1978), the *Long Island Segment of the Nationwide Urban Runoff Program* (NURP; Long Island Regional Planning Board, Hauppauge, NY, 1982), the *Suffolk County Comprehensive Water Resources Management Plan* (WRMP; Suffolk County Department of Health Services et. al., Hauppauge, NY, 1987), the *Long Island Comprehensive Special Groundwater Protection Area Plan* (the SGPA Plan; Long Island Regional Planning Board, Hauppauge, NY, 1993), and the *Brown Tide Comprehensive Assessment and Management Program* (BTCAMP; Suffolk County Department of Health Services, Hauppauge, NY, 1992).

Many of these recommendations, particularly those related to drinking water protection, have already been implemented through the Suffolk County Sanitary Code and other regulations. However, other recommendations, including those related to the control of stormwater runoff discharges and other nonpoint sources of contamination, need additional institutional support.

The following hydrogeologically based recommendations for the Plan highlight those previous recommendations that are considered most vital to the particular ecological and water resource protection and enhancement needs of the Central Pine Barrens, and suggest new approaches when necessary. The recommendations include measures that should be implemented immediately, as well as longer term efforts that may only be workable if additional funding becomes available.

8.2 Immediate management recommendations

The actions which are appropriate for immediate implementation are the following:

8.2.1 Mitigation of impacts of stormwater discharges to surface waters

To reduce nutrient, sediment, and pollutant loadings to surface waters, structural and nonstructural mitigation measures should be designed and implemented, where practical and feasible, for all existing and future significant direct stormwater discharges to surface waters within the Central Pine Barrens, i.e., where runoff is derived from major roads, golf courses, agricultural fields, horse farms, etc.

8.2.2 Mitigation of shallow flow impacts upon the Peconic Estuary

To minimize the impacts of future development on water quality in the Peconic River and Flanders Bay, BTCAMP recommendations for the shallow-flow groundwater contributing area, including clustering, limits on new sewage treatment plant surface water discharges, and the required use of Best Management Practices related to lawn areas, fertilizer use and pesticide applications should be implemented.

The Plan should provide for overall future development densities in the Peconic River groundwater watershed consistent with BTCAMP recommendations by preserving extensive land areas and allowing increased densities in other limited, designated receiving areas.

8.2.3 Sewage treatment

To further reduce existing and future impacts on surface and groundwater quality within the Central Pine Barrens, all new and expanded sewage treatment plants (STPs) should be required to utilize Best Available Technology for nitrogen removal, with effluent discharge outside the Central Pine Barrens, where technically and economically feasible. Adequate financial assurances for proper long-term operation and maintenance should also be required.

In addition, an evaluation should be made of the cost-effectiveness of sewerage areas developed at densities exceeding Suffolk County Sanitary Code Article 6 requirements to improve groundwater quality.

8.2.4 Suffolk County Sanitary Code adherence

To protect groundwater quality within the Compatible Growth Area from potential pollution associated with future development, the relevant provisions of Suffolk County Sanitary Code Articles 6, 7, and 12 should be strictly applied, except as modified elsewhere in this document.

8.2.5 Transfer of development rights

To further reduce future impacts on surface and groundwater quality within the Core Preservation Area, unsewered residential subdivisions based on lots averaging as little as 20,000 square feet may be allowed within the Compatible Growth Area where increased densities result from the transfer of development rights from the Core Preservation Area, and the overall number of dwelling units in the Core Preservation Area and Compatible Growth Area combined will not be greater than that presently allowed under Suffolk County Sanitary Code Article 6 requirements.

8.2.6 Clustering of residential development

To protect the water quality of existing public and private wells, clustering of residential development on large parcels within the Compatible Growth Area should be limited to building lots of no less than 20,000 square feet where downgradient areas are served by private wells or where existing public water supply wells may be significantly impacted.

8.2.7 Core Preservation Area wetlands water quality management

To protect and improve water quality, and maintain adequate water levels within Core Preservation Area wetlands, the following actions are recommended:

1. Structural and non-structural mitigation measures should be designed and implemented where practical and feasible for all existing direct stormwater discharges to Core Preservation Area wetlands.
2. Surface drainage from future development should be prohibited from being discharged directly to, or otherwise impacting, these systems.
3. New public water supply wells should be located at a sufficient depth and distance from Core Preservation Area wetlands to avoid sustained, permanent drawdowns at these wetlands which would significantly alter the character of these wetlands.

8.2.8 Public supply and agricultural well screening guidance

To preserve the deeper portions of the aquifer system for future generations, public water supply wells in the Central Pine Barrens should be screened in the Upper Glacial or shallow Magothy Aquifers where distances to sensitive surface water bodies and ambient water quality conditions (e.g., natural iron content) allow. Similarly, agricultural wells should be kept as shallow as possible to prevent the drawdown (i.e., accelerated vertical migration) of nutrient and pesticide residues, and to recapture and recycle these chemicals.

8.2.9 Establishment of a central hydrological data repository

To continue to provide the strongest possible technical basis for long-term management

decisions, ongoing hydrologic data collection efforts should be expanded, and a central data repository should be established. Additional information sources, such as the National Weather Service's NEXRAD radar (Next Generation Radar; one installation is located at Brookhaven National Laboratory) rainfall monitoring system, should be added to the database.

8.3 Intermediate term management recommendations

The following efforts should be commenced at Plan adoption and will take a few years to provide useful management information:

8.3.1 Water level and chemical modeling of significant wetlands

To further refine our understanding of natural water level fluctuations in Core Preservation Area wetlands, and the relative roles of groundwater and runoff inputs, hydrologic studies that include water quantity and chemical budgets should be conducted at significant wetland systems. Such studies would be most appropriate for the least-impacted coastal plain ponds known to be supporting rare and endangered species.

8.3.2 Fate of pollutant modeling and wetland restoration

To further refine our understanding of the fate of chemical pollutants within Central Pine Barrens wetland systems, fine-scale wetland hydrologic and water quality models should be developed. These models should then be applied to impacted, but ecologically significant, wetland systems where future restoration efforts will be made.

8.4 Long term management recommendations

The following efforts should be undertaken, as funding allows, to further enhance the capability to manage the lands and resources to be preserved and protected in the Central Pine Barrens:

8.4.1 Sensitivity analysis of Core Preservation Area wetlands

To refine our understanding of how controllable and uncontrollable (e.g., rainfall) inputs to Core Preservation Area wetlands may affect efforts to preserve and protect rare and endangered species, the sensitivity of these specific aquatic flora and fauna to changes in physical and chemical conditions should be determined. Emphasis should be placed on the biota of those wetland systems that are presently least impacted.

8.4.2 Monitoring of water resource impacts of management programs

To provide a long-term evaluation of management programs related to such activities as new

agricultural crops (e.g., vineyards), fire management, and camping, the impacts on water quality of these activities should be monitored and evaluated on an on-going basis.

8.4.3 Delineation of the Carmans and Forge Rivers' contributing areas

To improve management programs for the Carmans and Forge Rivers, detailed delineations of the shallow groundwater contributing areas of these systems should be made.

8.4.4 Regional deep flow groundwater modeling

To better define deep flow through the aquifer system and the influence such flow may have on coastal surface water bodies, regional groundwater models should be refined and expanded.

9. Other Policies

9.1 Legislative recommendations for full implementation of the Plan

Section 57-0121(6)(q) of the statute requires the Plan to state any

Recommendations for further legislation at the state, county, and local levels as may be necessary to fully implement the provisions of this article.

Towards this requirement, the Commission has identified the following proposed legislative actions, including legislative changes to the Long Island Pine Barrens Protection Act of 1993.

9.1.1 Addition to the Environmental Conservation Law Section 57-0107(13) addressing certain roadfront Core Preservation Area parcels

The following provisions should be added as Subdivisions (x) and (xi) under Section 57-0107(13), and the existing subdivisions (x), (xi), (xii), and (xiii) should be designated (xii) through (xv), respectively.

"(x) *In the core preservation area, construction of one single family home and customary accessory uses thereto on those parcels identified in the Comprehensive Land Use Plan adopted by the Commission in June of 1995.*

(xi) *In the core preservation area, construction of one single family home and customary accessory uses thereto on any vacant, privately owned parcel located on or taking access from an existing improved road contained within a substantially developed area as defined by and subject to criteria and procedures established by the Central Pine Barrens Joint Planning and Policy Commission upon enactment of this amendment."*

The parcels referred to in the proposed new subdivision (x) are listed in Figure 9-1.

Figure 9-1: Core Preservation Area residential nondevelopment parcel list

(Inclusion of a parcel on this list does not exempt it from any other applicable laws.)

Tax map number	Acreage	Zoning	Road
<i>Brookhaven Town (District 200)</i>			
0200-270-04-04	0.25	A5	Cedar Street
0200-270-04-10	0.80	A5	Pinehurst Boulevard
0200-298-02-10	0.75	A5	Primrose Path
0200-300-02-19	0.60	A5	Highview Drive
0200-300-02-38.1	0.50	A5	Starr Boulevard
0200-300-03-17	0.68	A5	Oak Street
0200-300-04-24	0.40	A5	Parkway Drive
0200-300-04-27	0.40	A5	Parkway Drive
0200-300-04-28	0.40	A5	Parkway Drive
0200-300-04-32	0.40	A5	Parkway Drive
0200-300-04-34	1.0	A5	Starr Boulevard
0200-300-04-35	1.0	A5	Starr Boulevard
0200-300-04-37	1.0	A5	Starr Boulevard
0200-351-01-15.1	1.1	A1	Red Maple Road
0200-351-01-21	1.5	A1	Giant Oak Road
0200-351-02-11	2.0	A1	Red Maple Road
0200-352-01-14	0.5	A1	Sally Lane
0200-352-01-35	0.25	A1	Pond Lane
0200-355-03-18	1.0	A5	Primrose Path
0200-355-04-4.1	1.0	A5	Jones Road
0200-355-04-4.9	1.0	A5	Doe Run
0200-355-04-4.12	1.0	A5	Doe Run
0200-355-04-4.13	1.0	A5	Doe Run
0200-355-04-4.15	1.0	A5	Doe Run
0200-355-04-4.17	1.0	A5	Jones Road
0200-358-01-05	0.90	A5	Starr Boulevard
0200-358-01-09	1.0	A5	Starr Boulevard
0200-382-01-18.2	1.9	A1	Medford Road
0200-382-01-25	2.0	A1	Giant Oak Road
0200-383-01-6.1	0.26	A1	Sally Lane
0200-383-01-19	1.0	A1	Sally Lane
0200-407-01-9.2	1.0	A1	Peconic Road
0200-408-01-2.1	0.5	A1	Giant Oak Road
0200-408-01-2.2	0.5	A1	Giant Oak Road
0200-529-02-18	0.25	A5	County Road 21

Figure 9-1 (p.2): Core Preservation Area residential nondevelopment parcel list
(Inclusion of a parcel on this list does not exempt it from any other applicable laws.)

Tax map number	Acreage	Zoning	Road
<i>Riverhead Town (District 600)</i>			
0600-118-04-3.1	4.3	Industrial A	River Road
0600-118-04-3.2	1.1	Industrial A	River Road
0600-118-03-07	0.25	Residence C	River Road
0600-118-03-08	0.40	Residence C	River Road
0600-137-03-13	0.30	Residence C	River Road
0600-137-03-15.1	0.70	Residence C	River Road
0600-137-04-10.4	1.7	Residence C	River Road
0600-137-04-11.5	2.5	Residence C	Riverview Avenue
0600-138-01-4.2	1.3	Residence C	River Road
0600-138-01-11.1	0.32	Residence C	River Road
0600-138-01-15.3	1.2	Residence C	River Road
0600-138-01-16.1	1.5	Residence C	River Road
0600-138-01-20	0.34	Industrial A	River Road
0600-141-01-2.2	4.2	NRP	Line Road
0600-141-01-2.3	4.2	NRP	Line Road
0600-144-01-05	0.26	Industrial A	River Road
0600-144-01-16.2	1.3	Residence C	Private road
0600-144-01-18	0.15	Residence C	Private road
0600-144-01-19	0.55	Residence C	Private road
0600-144-01-28	0.33	Residence C	Private road
0600-144-01-29.1	0.94	Residence C	Private road
0600-146-01-16.2	6.7	NRP	Wading R./Manor. Road
0600-146-01-16.4	4.7	NRP	River Road
0600-146-01-16.6	5.6	NRP	River Road
0600-146-01-17.2	0.52	NRP	Private road
0600-146-01-27.8	2.2	NRP	Wading R./Manor. Road
0600-146-01-29.13	0.82	NRP	Private road
0600-146-01-29.15	0.66	NRP	Private road
0600-146-03-4.4	2.4	NRP	River Road
0600-146-03-9.14	1.0	NRP	River Road
0600-146-03-13	0.57	NRP	River Road
0600-148-02-2.11	1.4	NRP	Schultz Road

Note: NRP is Riverhead's Natural Resources Protection zone.

Figure 9-1 (p.3): Core Preservation Area residential nondevelopment parcel list

(Inclusion of a parcel on this list does not exempt it from any other applicable laws.)

Tax map number	Acreage	Zoning	Road
<i>Southampton Town (District 900)</i>			
0900-163-02-01	1.09	R-15	County Road 63
0900-163-02-02	1.0	R-15	County Road 63
0900-163-02-04	1.0	R-15	County Road 63
0900-163-02-29	0.46	R-15	Anne Avenue
0900-163-02-31	0.23	R-15	Anne Avenue
0900-163-02-39	0.46	R-15	Topping Drive
0900-163-02-52	0.41	R-15	Topping Drive
0900-164-03-61	0.21	R-10	Pine Court
0900-164-03-68	0.26	R-10	Birch Court
0900-164-04-38	0.41	R-15	Topping Drive
0900-168-01-13	0.81	CR-60	Pleasure Drive
0900-169-01-16.1	1.69	CR-60	Pleasure Drive
0900-169-01-16.2	1.66	CR-60	Pleasure Drive
0900-170-01-01	0.48	CR-60	State Route 24
0900-170-01-02	0.48	CR-60	State Route 24
0900-170-01-04	2.9	CR-60	Townsend Avenue
0900-170-01-13	0.46	CR-60	State Route 24
0900-170-01-18.1	1.1	CR-60	State Route 24
0900-170-01-32	0.50	CR-60	State Route 24
0900-170-02-1.10	2.4	CR-60	Pleasure Drive
0900-201-01-14	1.0	CR-200	Pleasure Drive
0900-201-01-21	2.3	CR-200	Pleasure Drive
0900-202-01-5.1	5.0	CR-200	Pleasure Drive
0900-202-01-7.2	6.3	CR-200	Pleasure Drive
0900-202-01-7.3	5.0	CR-200	Pleasure Drive
0900-218-01-5.5	0.71	CR-200	Registry Drive
0900-218-01-06	0.40	R-20	Delacey Avenue
0900-218-01-9.3	0.16	R-20	Viking Lane
0900-218-01-9.4	0.27	R-20	Viking Lane
0900-218-01-35	0.50	R-20	Pennant Lane
0900-218-01-44	0.46	R-20	Pennant Lane
0900-218-01-50	0.28	R-20	Staller Drive
0900-218-01-59	0.36	R-20	Delacey Avenue
0900-218-01-60	0.48	R-20	Viking Lane
0900-218-01-61	0.46	R-20	Viking Lane
0900-218-01-63	0.34	R-20	Staller Drive
0900-249-01-9.1	2.3	R-40	Jeffrey Lane
0900-249-01-9.3	1.2	R-40	Jeffrey Lane

9.1.2 Changes to the Environmental Conservation Law Section 57-0123(3) addressing Core Preservation Area hardship applications

Within Section 57-0123(3), insert between "alleviate hardship" and "according to the conditions" the following:

", for proposed development in the Core Preservation Area,".

Additionally, at the end of Section 57-0123(3), insert the following:

"The Commission must make a decision within 120 days of receipt of a complete application. If the Commission fails to make a decision within 120 days, the development shall be deemed to be approved by the Commission, unless extended by mutual agreement of the applicant and the Commission. The Commission by majority vote is also authorized to waive strict compliance with such plan or any element or standard contained therein, upon finding that such waiver is necessary to alleviate hardship for proposed development in the compatible growth area according to the conditions and findings of hardship pursuant to Subdivision 9 of Section 57-0121 of this article. The Commission must make a decision within 120 days of the receipt of a complete application. If the Commission fails to make a decision within 120 days, the development shall be deemed to be approved by the Commission unless extended by mutual agreement of the applicant and the Commission."

9.1.3 Addition to the Environmental Conservation Law Section 57-0123(2) addressing Compatible Growth Area applications

Within Section 57-0123(2), the following provision should be inserted at the end of this subsection:

"If the Commission fails to make a decision within 120 days, the development shall be deemed to be approved by the Commission, unless extended by mutual agreement by the applicant and the Commission. The Commission must make a decision within 120 days of asserting jurisdiction over a project that is before the Commission based on the petition by a Commissioner. If the Commission fails to make a decision within 120 days of the date of asserting jurisdiction, the development shall be deemed to be approved by the Commission, unless extended by mutual agreement by the applicant and the Commission."

9.1.4 Assistance to local fire districts

The Commission recognizes that extensive acquisition of lands in the Core Preservation Area may have an impact, now or in the future, upon local fire districts. As part of the implementation

of this Plan, the legal thresholds for state assistance payments to impacted districts should be determined, as well as the full set of such programs which exist. Appropriate application for such programs and payments should then be immediately undertaken. The Commission recognizes and appreciates the significant role which the local fire districts, and their staff and volunteers, occupy in a successful pine barrens preservation and management program.

9.2 Calverton redevelopment policy¹

Pursuant to Public Law 103-c337, Section 2833, the Secretary of the Navy is authorized to convey to the Town of Riverhead Community Development Agency a 2,900 acre tract of real property at Calverton, more particularly described as the Calverton Naval Weapons Industrial Reserve Plant, subject to the condition that the real property is used for the economic redevelopment of the site and that the redevelopment authority be comprised of entities having an interest in the land use of the region.

The Pine Barrens Protection Act, Section 57-0107(13)(i), provides that public improvements undertaken for the public welfare do not constitute development within the meaning of the law.

Based upon the above referenced Public Law, all economic development activity upon the lands of the Calverton Naval Weapons Industrial Reserve Plant conveyed by the Secretary of the Navy is considered a public improvement pursuant to Section 57-0107(13)(i) of the Pine Barrens Protection Act and therefore does not constitute "development" within the meaning of all sections of the Pine Barrens Protection Act. Further, Public Law 103-c337 contemplates the development of a Comprehensive Master Plan and attending Generic Environmental Impact Statement to guide the location and intensity of economic development activity on the site; such plan and GEIS to be adopted prior to the conveyance of the property to the Town.

9.3 North Shore Properties policy²

North Shore Properties is a proposal for development of approximately 2,100 acres pursuant to a Conceptual Master Plan submitted to the Town of Brookhaven by Breskel Realty, Beau-Bres Realty and Havenbrook Associates. On May 21, 1992 a Draft Generic Environmental Impact Statement on North Shore Properties was accepted by the Brookhaven Town Board. A Final Generic Environmental Impact Statement was accepted on April 19, 1994 and on December 6, 1994, The Town Board adopted its Findings Statement.

The Findings Statement includes one site specific project, known as the Brookhaven Town

¹*This policy was approved unanimously by resolution of the Commission at its 1/11/95 meeting.*

²*This policy was approved unanimously by resolution of the Commission at its 4/26/95 meeting.*

Center, located on approximately 150 acres which is to be developed in two phases. The Brookhaven Town Center is located in the Compatible Growth Area.

The project within North Shore Properties, designated in the Brookhaven Town Board Findings Statement as Brookhaven Town Center, Phases I and II, continues to be exempt from and not subject to the provisions of Article 57 and the Plan. Furthermore, all other and future development of North Shore Properties will be subject to the Plan, and will be in conformance with the procedures, standards and guidelines contained in the Plan.

10. Commission Structure and Operation

10.1 Functions of the Commission

The Pine Barrens Protection Act, in ECL Section 57-0119(6), establishes the Commission's areas of authority. These include, in part, the authority to:

- *Prepare, adopt, enforce and implement this Plan*
- *Establish and operate the transfer of development rights system*
- *Adopt such rules and regulations which are necessary to fulfill its legislative charge*
- *Hold hearings on Plan amendments, development applications within its jurisdiction and other matters within its area of responsibility*
- *Establish a staff, contract for assistance or utilize state and county agency staff as may be made available*
- *Establish and maintain a public education and outreach program relating to the Commission's work*
- *Convene meetings, conferences and technical sessions as deemed necessary to its responsibilities*
- *Encourage scientific and technical work, as resources permit, which assists municipalities with conforming to the Plan*
- *Provide a yearly report of activities to the Governor, the State Legislature and local officials*

10.2 Future Commission efforts and staffing

To date, the Commission has been staffed and supported by a cross section of personnel representing various disciplines, skill levels and technical emphasis. The support of these agencies and organizations is gratefully acknowledged by the Commission. ***A special expression of thanks is given to the Suffolk County Water Authority for providing a steady commitment of personnel on loan to the Commission during the planning period.***

Upon final ratification of this Plan, the Commission will remain a permanent, functioning government entity. It will seek to ensure compliance with the provisions of the Pine Barrens

Protection Act and strive to facilitate full implementation of this Plan.

This spectrum of responsibilities will include:

- *Supporting the transfer of development rights program and clearinghouse. This would include, for example, supporting the Board of Advisors' work.*
- *Providing technical assistance where feasible to the acquisition effort. This could include data management and cartography.*
- *Reviewing, and issuing decisions on, development projects within the jurisdiction of the Commission. This includes application completeness review, logistical arrangements for hearings, substantive review of applications and coordination among the municipalities and the Commission.*
- *Holding hearings on applications, Plan amendments and other matters as necessary.*
- *Recommending any legislative changes required to fulfill the goals and objectives of the statute. Examples of this appear in Chapter 9 of this Plan.*
- *Supporting, to the extent staff and other resources permit, the ongoing public lands and resource management efforts within the Central Pine Barrens, especially within the Core Preservation Area. Excellent examples of this work include support for the Protected Lands Council and the Law Enforcement Council described in Chapter 7 of this Plan.*

While the specification of precise budgets must necessarily remain a yearly effort, the areas of discipline which these ongoing responsibilities require can be addressed. These areas do not necessarily correspond to staff members, and responsibilities may be shared across such members. Areas of expertise which would be most utilized, either through in house staff or by associated outside personnel, include:

- *Planning, environmental analysis and community design.*
- *Natural resources management.*
- *Water resources management.*
- *Data management and cartography.*
- *Real property expertise.*
- *Legal counsel.*

- *Administration, including budget management, office establishment and operation, staff allocation, business planning, etc.*
- *Finance and accounting.*

The Commission recognizes that it must accomplish its statutory mission in a manner which is both effective and efficient. It further recognizes that this dual criteria must be applied and adhered to *permanently*, and not simply initially, nor only on the pages of this document.

Towards this end, this Plan proposes that the Commission's year by year staffing levels, as well as the suite of skills encompassed by the staff, be concentrated upon the specific functions specified in this section, with additional duties added as future circumstances specifically warrant. It further proposes that these staffing decisions be made upon a year by year basis, perhaps as part of a two to three year business plan.

This approach ensures that the Commission, staff, working Councils and committees always have specific, tangible and achievable goals, each with an associated near term deadline.

Additionally, the Commission recognizes that effectiveness and efficiency are best blended by a combination of permanent, professional staff, dedicated to the goals of this Act and directly responsible to the Commission, and a close working relationship with other agency staff, elected officials, citizen and professional organizations, property owners, resource managers, and all interested and affected individuals. Many of the necessary mechanisms for this ongoing work have been already established through the planning period.

11. Severability

If any chapter, section, paragraph, subdivision, clause, phrase or provision of this Plan shall be adjudged invalid or held unconstitutional by a court of competent jurisdiction, such judgement shall not affect, impair or invalidate the remainder of this Plan, but shall be confined in its operation to the chapter, section, paragraph, subdivision, clause, phrase or provision directly involved in the controversy in which such judgement shall have been rendered.

Appendix A: Commission resolution of 1/13/95

(A photocopy of the signed 1/13/95 resolution goes here.)

Appendix B: Development of a Prescribed Burning Plan

An emerging challenge within the pine barrens is sustaining short interval fire dependent ecosystems. These efforts will encounter significant difficulties; however, avoiding treatments creates various consequences as well (United States Department of Agriculture 1993). For example, without these efforts, the pine barrens may:

- Change from experiencing relatively low damage, stand maintenance fires to more severe high damage, stand destroying fires.
- Convert from fire resistant and resilient species to fire intolerant species having less resilience to fire disturbances.
- Experience less controllable and more costly wildfires, which increase the danger to firefighters.
- Lose existing wildland and developed area interface values.
- Have an increased potential for higher particulate matter emissions during fires, due to an increase in fuel loads and understory biomass.

A good monitoring program must be a part of any fire management program in the Central Pine Barrens in order to ensure that the effects of prescribed burning are completely understood. The time span necessary to assess ecological effects may be as short as a few years for ecosystems that burn often, but may be as long as decades for systems that burn less often. A detailed monitoring program should be outlined in the fire management plan that will be developed.

There already exists a wealth of wildland fire experience and knowledge from throughout the country and New York State to draw upon. At some locations, prescribed fire has been used as a management tool for years by various agencies and organizations. Issues that need to be resolved for the Central Pine Barrens include establishing the locations of the burn units, discerning the funding, analyzing the potential liabilities, acquiring the approvals for the fire management plans and the training of staff. These issues should be resolved during development of the fire management plan.

The concept of fire management must be strengthened by increasing prescribed burn expertise while maintaining strong fire suppression capabilities. Prevention, suppression, hazard reduction, prescribed fire, and fire rehabilitation within the pine barrens must be aligned to complement one another. The areas of wildfire suppression and prescribed burning are more fully discussed below. Although they are presented under individual headings, they are interrelated.

Management ignited prescribed fire or controlled burning (referred to as prescribed burning in this Plan) is the controlled application of fire to wildland fuels under specified environmental conditions. This allows the fire to be confined to a predetermined area and at the same time produces the intensity required to attain planned resource management objectives.

There are primarily three types of prescribed burning that might be utilized in the pine barrens, including research burns, management burns, and training and demonstration burns. An individual prescribed burn often has multiple benefits with several objectives. For example, ecological objectives typically include the maintenance or restoration of fire dependent communities and fire adapted species, or research on the ecological effects of wildland fire. Land management objectives for the same prescribed burn may be to reduce the available fuel source and simultaneously improve wildlife habitat conditions and access.

A sound fire management program using prescribed burning can reduce the severity and size of wildfire by reducing fuel loads, such as fallen needles and branches, standing dead wood, and accumulating living biomass containing volatile oils and waxes. It is essential that such a program also be sensitive to ecological factors as well. Specific types of fires are appropriate for management use. The exclusive use of low intensity backfires applied as a fuel reduction burn may result in the "homogenization" of the vegetation, a simplification of the plant communities and a loss of biodiversity. (These fires have been used in the New Jersey Pinelands). The range of natural variability should be an essential component of any fire regime that is ultimately proposed for the pine barrens. This includes variability of frequency, intensity, size, pattern, seasonality, and type of fire applied (i.e., crown versus surface fire).

Before a prescribed burn program is developed, a comprehensive fire management plan should be prepared. A fire management plan should present the ecological and land management objectives, justify these objectives, consider alternatives to burning, describe the research and monitoring plan, analyze weather patterns, present fuel models, discuss fuel reduction, wildfire policies, smoke management, safety issues, and legal considerations. The Protected Lands Council is responsible for the development and implementation of a fire management plan. A detailed list of plan components is presented under "Recommendations" below.

Upon completion, the fire management plan is subject to legal review, and should be distributed to all potentially interested agencies, including but not limited to fire departments. One or more public meetings to present and discuss the plan should be held. A public education and notification program should be carried out. Fire related information must be provided to the public and responsible agencies' decisionmakers, enabling an informed judgement to be made concerning prescribed fire (USDA Forest Service 1993). This dialogue should present a scientifically sound message about fire's ecological role.

Safety is of paramount importance with any prescribed burn program. Each prescribed burn is carried out only under carefully prescribed conditions of wind speed, wind direction, temperature, and humidity. Such burns are carefully planned and timed, with firebreaks prepared ahead of time. All prescribed burns are conducted by a trained and qualified crew, supervised by a prescribed fire incident commander (also referred to as a "burn boss" or "fire leader") who has additional training and experience in fire management. Volunteer fire departments are not expected to carry the burden or to provide resources including personnel or equipment. However, fire departments should participate in the planning, and in the event of an escape and

the prescribed burn being declared a wildfire, the local fire chief could be called upon to serve as Incident Commander.

At present, only the United States Fish and Wildlife Service, the Department of Environmental Conservation, and The Nature Conservancy have individuals trained to carry out prescribed burns in the pine barrens. Ideally, an interagency program should be developed to train town and county personnel, and coordinate fire management activities (see Recommendations below).

The prescribed burning program for the Central Pine Barrens should begin slowly and carefully, with ample time for public review and careful analysis of all issues. The first burns should be small, with a low level of complexity. The prescribed burn program can grow only as the comfort level grows. Safety constraints, logistical difficulties and expenses are likely to limit prescribed burns to only the most ecologically critical areas for many years to come. Sensitive resources and areas will also be identified where prescribed fire may not be an appropriate management technique, thus limiting its use in these areas.

A prescribed fire management program should be planned and implemented to maintain pine barrens communities and their rare species, and to protect public safety by reducing the hazards in strategic locations. The Protected Lands Council is responsible for the planning and implementation of the fire management program.

After the completion of a comprehensive fire management plan, it is recommended that an overall fire management plan be developed for the protected public lands of the entire Central Pine Barrens. The overall plan should be followed by detailed plans for each burn location.

Specific recommended actions are as follows:

B.1 Develop a comprehensive fire management plan carrying out the ecological and land management goals of the Plan. This would be for public lands in the Core Preservation Area.

The fire management plan should include the components shown in Figure B-1. This outline is similar to that used by the National Park Service in their fire planning process for individual parks (National Park Service 1990).

Figure B-1: Suggested structure of a fire management plan

I. Introduction

- A. Purpose of the Wildland Fire Management Plan
- B. Environmental Compliance
- C. Authority for Implementation of the Wildland Fire Management Plan

II. Compliance with Central Pine Barrens Commission Policy

- A. Enabling Legislation
- B. Resource Values to be Protected
- C. Role of the Fire Management Plan
- D. Fire Policy History

III. Ecological Description of Area

- A. General
- B. Natural Resources
- C. Climate
- D. Vegetation
- E. Wildlife
- F. Air and Water Quality
- G. Cultural Resources
- H. Social and Economic Resources

IV. Fire Management Policy

- A. Agencies' Policies
- B. Central Pine Barrens Policy

V. Fire Management Strategies

- A. Suppression
- B. Management Ignited Prescribed Fire

VI. Fire Environment

- A. Fire History
- B. Fire Effects
- C. Fire Behavior and Fuel Types
- D. Annual Fire Weather Cycle

VII. Fire Management Responsibilities

- A. Fire Management Responsibilities
- B. Budget and Fiscal Management
- C. Interagency Coordination
- D. Fire Qualifications and Training
- E. Fire Management Zones

VIII. Wildfire Management Program

- A. Fire Prevention Program
- B. Presuppression
- C. Fire Behavior Predictions
- D. Fire Detection
- E. Fire Suppression
- F. Minimum Impact Suppression and Rehabilitation
- G. Fire Records and Reports

IX. Management ignited Prescribed Fire

- A. Prescribed Fire Program
- B. Prescribed Burn Plan
- C. Prescribed Burn Objectives
- D. Prescribed Burn Operations
- E. Documentation and Reporting
- F. Fire Monitoring
- G. Fire Effects Monitoring
- H. Prescribed Burn Critique

X. Air Quality and Smoke Management Guidelines

XI. Sensitive Resources

XII. Fire Research and Monitoring

XIII. Public Safety

XIV. Public Relations

- A. Information
- B. Education

XV. Fire Critiques and Annual Plan Review

- A. Fire Critiques
- B. Annual Fire Summary
- C. Annual Fire Management Plan Review

XVI. Appendices

- A. References Cited
- B. Definitions
- C. Notification Plan
- D. Escape Fire Situation Analysis
- E. Cooperative Agreements
- F. Species List
- G. Regulatory Compliance
- H. Prescribed Burn Plan and Prescription Outline

B.2 The Protected Lands Council should consult with the Suffolk County Fire, Rescue and Emergency Services Commission, the County Fire Marshal, and local fire departments when developing the comprehensive fire management plan.

B.3 After the comprehensive fire management plan is written and approved, then fire management plans and prescriptions for individual sites or units should be developed satisfying the same set of criteria, in area specific detail.

B.4 The potential of establishing the Central Pine Barrens as a New York State Fire District as per Environmental Conservation Law Article 9-1109 should be examined. This should be examined as a possible source of assistance to local fires departments' training and other needs, especially those departments having, or likely to have, considerable protected lands within the Core Preservation Area.

B.5 The current wildfire training program should be expanded and improved. This will be coordinated through the Suffolk County Fire, Rescue and Emergency Services Commission with assistance from other agencies as needed.

Due to the already heavy demands placed upon volunteer fire departments for maintaining structural fire fighting and emergency medical qualifications, this training might be best geared for specific individuals within departments who would specialize in wildland fire management. This might require the development of a wildland fire specialist or coordinator position within individual departments.

B.6 A prescribed fire training program should be developed through coordination among the Suffolk County Fire, Rescue and Emergency Services Commission, the volunteer fire departments, The Nature Conservancy and the New York State Department of Environmental Conservation. Support for this training by Suffolk County Fire, Rescue and Emergency Services Commission will be important to get interested town and county personnel involved with the prescribed fire program.

The goal of this training program will be to develop an interagency base to support prescribed fire activities in the pine barrens. Increasing prescribed burn expertise will not only require training, but will need to be followed up with exposure to actual prescribed burning or substituted with wildfire suppression experience on a limited basis.

Appendix C: Natural Resource Management Bibliography

- Devine, R. 1994. Botanical Barbarians. *Sierra* 79:50-57 and 71.
- Packard, S. 1993. Restoring Oak Ecosystems. *Restoration & Management Notes*. 11:5-16.
- Falk, D. 1990. Discovering the future, creating the past: some reflections on restoration. *Restoration & Management Notes* 8:71-72.
- Fimbel, R.A. 1993. Restoring the pygmy pine forests of New Jersey's Pine Barrens. *Restoration Ecology* 1:117-129.
- Givnish, T.J., E.S. Menges and D.F. Schweitzer. 1988. Minimum area requirements for the long-term conservation of the Albany Pine Bush and Karner Blue Butterfly: An Assessment. Prepared for the City of Albany by Malcolm Pirnie, Volume IV, Appendix T.
- Little, S. 1979. Fire and plant succession in the New Jersey Pine Barrens, pg. 297-314 In: Forman, R.T.T. *Pine Barrens: Ecosystem and Landscape*. Academic Press, N.Y.
- Latham, R.E. and A.H. Johnson 1993. Fire-dependent and fire-resistant alternate steady states in plant communities driven by positive feedbacks between plants, ecosystem nutrient capital, and wildfire. University of Pennsylvania, Philadelphia PA 19104. Proposal to the National Science Foundation.
- Olsvig, L.S., J.F. Cryan, and R.H. Whittaker. 1979. Vegetational gradients of the pine plains and barrens of Long Island, New York. pg. 265-282 In: Forman, R.T. *Pine Barrens: Ecosystem and Landscape*. Academic Press, New York. 601 pp.
- Reiners, W.A. 1965. Ecology of a heath-shrub synusia in the Pine Barrens of Long Island, New York. *Bulletin of the Torrey Botanical Club*, 92:448-464.
- Southampton Town Department of Planning and Natural Resources. 1993. *The Comprehensive Plan Initiative for Groundwater and Pine Barrens Forest Preservation - Western Town Generic Environmental Impact Study*.
- USDA Forest Service. 1993. *Fire related considerations and strategies in support of ecosystem management*. Fire and Aviation Management Staffing Paper. Washington, DC. 30 p.
- USDI National Park Service. 1990. *NPS-18, Wildland fire management guide*. Ranger Activities Division. Washington, DC. Rel. 3. II, 5, 1, 1-11.
- Windish, A.G. and R.E. Good. 1986. A preliminary analysis of controlled burning effectiveness in maintaining New Jersey Pine Plains communities. In: *Forestry Studies in the New Jersey Pinelands Final Report6*. Division of Pinelands Research, Center for Coastal and Environmental Studies, Rutgers University, New Brunswick, NJ.
- Whittaker, R.H. 1979. Vegetational Relationships of the Pine Barrens. pg. 315-331. In: Forman, R.T. *Pine Barrens: Ecosystem and Landscape*. Academic Press, New York.
- Whittaker, R.H. and G.M. Woodwell. Structure, production and diversity of the oak-pine forest at Brookhaven, New York. *J. Ecol.* 57: 155-174.