Stewardship of Public Lands in the Upper Carmans River Watershed: Recommendations



prepared for the

Central Pine Barrens Joint Planning and Policy Commission

by the

Protected Lands Council

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Contents

Preface
General Recommendations
Trail Corridors3
Habitat Protection and Restoration4
Scenic and Cultural Resources5
Water Quality12
Land Acquisitions13
Hunting and Fishing13
Cooperative Management13
Volunteers14
Information and Promotion15
Funding16
Pine Barrens Library and Central Repository for Records 16
Specific Site Recommendations17
North-South Trail Corridor17
East-West Trail Corridor21
Cathedral/Prosser Pines Area25
Whiskey Road to NY 2526
River Corridor29
Tallmadge Trail33
Summary 34
Appendices

Preface

Like most of the Central Pine Barrens region, the Carmans River headwaters area is exceedingly rich in natural, scenic and cultural resources. These unique and irreplaceable features, combined with the exceptional scenic beauty of many of the area's parks and open spaces, provide a multitude of opportunities to become a magnet for public use and enjoyment, instilling a sense of place and a deep appreciation for stewardship across the region.

The Carmans River enjoys New York State Wild, Scenic and Recreational River status and drains a watershed of 71 square miles. From the Long Island Expressway northward, it contains a patchwork of public lands managed by New York State, Suffolk County and the Town of Brookhaven. The Protected Lands Council's study of this area lists recommendations for enhancing the protection, management and use of these open spaces.

After considering a wide range of issues relating to the Carmans, the PLC wished to avoid duplicating work being done elsewhere, especially by the Town of Brookhaven's Carman's River Study Group. Thus, although this report addresses these many concerns, it focuses primarily on public uses. The public has paid generously and willingly for preservation of this land, and they should be able to enjoy the fruits of their efforts through activities compatible with protection of the environment. These include hiking, birding, photography, fishing, hunting, mountain biking and similar activities.

Encouraging the presence of visitors engaged in legitimate recreation will also help to drive out the illegal use that has threatened the integrity of some of the parcels. Further, better access to and promotion of these beautiful places would provide economic benefits derived from increased tourism. As the New York Statewide Trails Plan notes, the presence of trails produces direct and secondary economic benefits to nearby communities in the form of spending by trail users, consequent increased spending by business owners, and a positive impact on adjacent property values.

All Long Islanders have a stake in the protection of and access to the Carmans River. As the Central Pine Barrens Comprehensive Land Use Plan itself states (7.3.9), "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."

We encourage the continued growth of interagency and user-group cooperation in managing these holdings, for the sake of efficiency, cost effectiveness and the many benefits that spring from shared knowledge.

The recommendations of the Protected Lands Council included in this study pertain to all public land north of the Long Island Expressway, extending to the existing Paumanok Path Greenbelt Trail in the Whiskey Road area. East-west boundaries generally conform to the watershed limits except where logical connections go beyond those lines.

General Recommendations

Trail Corridors

The new Draft New York Statewide Trails Plan devotes an entire chapter to "Creating Connections," connections "between people and nature, among residents and visitors, among all levels of government, between government and citizenry, between communities and open spaces, between private enterprise and public goods, bridging concepts and development, connecting habitats separated by urban sprawl, and advancing knowledge for public benefit." A goal of the plan is to "Provide opportunities for all New Yorkers to have easy access to trails." Also, the Pine Barrens Plan calls for managing agencies to cooperate in the development of long-distance trails for hikers and other user groups (7.5.2.15-16). Opportunities for such routes abound in the Carmans River watershed (see Specific Site Recommendations, below):

- A major north-south corridor of contiguous land stretches from the Rocky Point Natural Resource Management Area southward all the way to the L.I.E., with a connection to Southaven County Park yet another possibility. Much of this route parallels Ray Corwin's decades-old vision of a Shoreham-to-Smith Point Brookhaven Trail.
- From this corridor it is also possible to walk to downtown Yaphank through Fox Lair and westward through Warbler Woods and the Carmans River Watershed Nature Preserve.
 Moving westward from there, an assemblage of town and county parcels offers potential for trails to Independence Hill—the Town of Brookhaven's Glacial Ridge Trail concept.
- The Longwood Library's proposal for a trail connection to Cathedral Pines County Park would make a shorter north-south corridor possible on the west side of the river.

The types of trails—hiking, biking, horse riding, multi-use, etc.—that would be appropriate for these corridors and on other parcels would be determined by several factors, including terrain, soil composition, presence of particular species, proximity to the river or wetlands, etc.

Separation of uses, as described in the Pine Barrens Plan (7.5.2.9), is desirable where practical. Also, multiple trail corridors are desirable, as dispersed recreation has less of an impact on natural resources than concentrating the use into one specific area.

Any development of new trails should be coordinated through the Protected Lands Council and the managing agencies. Trails should be configured for the protection of the resource, the least impact upon the land and for long-term sustainability. Whenever possible, existing paths should be linked to form trails so as to minimize new cutting. Trail design and development should be in accordance with best management practices and generally-accepted standards. One good source of information is the New York State Technical Trail Assistance Page: http://www.nysparks.com/recreation/trails/technical-assistance.aspx.

OPRHP Trails Documents to help guide trail management include:

- Trail Standards and Guidelines for NYS Parks (pdf)
- Trail Signage Guidelines for the NY State Park System (pdf)

- OPRHP Guidelines for Closing Trails (pdf)
- OPRHP Trail Assessment Process and Forms (pdf)

As stated in the Pine Barrens Plan (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."

According to the National Park Service, "Sustainability on natural surface trail corridors is defined as the characteristic of a travel surface to support currently planned and future uses with minimal impact to the natural systems of the area. Sustainable trails have negligible soil loss or movement while allowing the naturally occurring plant systems to inhabit the area, recognizing required pruning and eventual removal of certain plants over time. Sustainable trails will not adversely affect the naturally occurring fauna. Sustainable trail design will accommodate existing and future uses while only allowing appropriate uses. The sustainable trail will require little rerouting and minimal maintenance over extended periods of time." (*Natural Resources Management Guideline*, 1997)

Local user groups (e.g., L.I. Greenbelt Trail Conference, Nassau-Suffolk Horsemen, and CLIMB) should have input on trail routes and can assist with any necessary clearing and normal maintenance of trails.

Any excess, unwanted trails should be closed and restored to the surrounding natural condition. Sample techniques include closing off trails with brush and/or native plantings and adding organic leaf litter.

Habitat Protection and Restoration

1) Any trails added to the Carmans River area should conform to the strictures outlined in the Pine Barrens Plan (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.

2) In the Carmans River area, it is important when routing trails or adding other enhancements to avoid situations that cause runoff and siltation. This is especially true for areas where slopes or other features make sediment impacts to the river likely. The Plan (7.6.3.4) recommends that trails remain 100 feet or more away from wetlands when possible.

- 3) Mapping of existing invasives, and removal or management of them going forward, should be ongoing activities.
- 4) Securing public land from such illegal uses as ATV riding and dumping is of paramount importance. Many of the remedies used in the Protected Lands Council's ATV Mitigation Project would apply in the Carmans area as well. In a number of locations, the land managing agencies may need to add barriers and gates that prevent access by off-road vehicles. As has been the case with the ATV Project, agency staff and volunteers would need to monitor these places regularly and effect repairs as necessary. Construction would involve an outlay of funds for materials and supervision by staff from a land-managing agency. Strengthening of law enforcement remedies and monitoring activities should be considered as well.
- 5) Natural resource inventories should be completed for sections that may not have them, and an ecological management plan needs to be developed.
- 6) The Core Preservation Area should be expanded to include all public lands in the study area, in order to further protection and improve management. At the very least, the Commission should designate these lands as Critical Resource Areas, as provided for in ECL Article 57.
- 7) Restoration of habitat will be needed in several places. For example, the Carmans River Headwaters Nature Preserve has been severely eroded by ATVs. Some paths need to be closed, while others are in need of waterbars, steps and other measures. Also, the overabundance of deer and the lack of forest management, such as mechanical treatments or prescribed fire, threaten the health of our forests. Oak die-off and deer browsing anything that sprouts are causing adverse impacts on our landscape.
- 8) Other areas need management of existing habitat or measures to restore species. For example, an ongoing restoration of *Agalinus acuta* in Fox Lair needs to continue, either through mowing or prescribed fire. Existing grasslands in other areas should be maintained for species diversity.

Scenic and Cultural Resources

The protection, restoration, and enhancement of scenic and cultural resources, and the transformation of the upper Carmans River into a place that looks, feels, and functions more like the preserve that it is, are paramount to furthering the goals and vision of the Long Island Pine Barrens Protection Act (NYS ECL Article 57), and Pine Barrens Plan.

Though two separate disciplines, scenic and cultural resource protection are addressed together in this report because the attractiveness of the area, from the perspective of the visiting public, is so dependent on the combined qualities of these resources. For example, it is difficult for a visitor to experience the fascination of an historic district, when it is riddled with the sights of dilapidated fences, excessive pavement, sign pollution, garbage dumpsters, and the lack of street trees. In deference to the mandate to protect Pine Barrens scenic and cultural resources, the Pine Barrens Plan also recognizes this interconnectedness, or overlap, between the values of historic and scenic resources. (Vol. 2, Ch. 8.4)

Public parks, preserves, the river, ponds, wetlands, farmland, and natural areas are the primary focus of this report, and it goes without saying that these are by nature, scenic resources in the region that must be preserved and protected. However, public rights-of-way are also the subject of many of the recommendations in this report, as they are in the Pine Barrens Plan, as well. Streetscapes and vistas from public roads most often give visitors their first impression of a region. The protection and enhancement of the scenic qualities that visitors enjoy, while canoeing or fishing on the River or using trails in parks and preserves, is essential. Looking at existing development in and around our study area, and even some of the development plans that are in the works, it is apparent that inadequate attention has been placed on scenic and cultural resource protection. Preserving, restoring, and enhancing viewsheds are critical to transforming this area into the regional preserve that it is.

The operational definition of scenic resources in the Pine Barrens Plan was guided by the results of studies performed elsewhere, including New Jersey and Cape Cod:

"Scenic resources are defined as those landscape patterns and features which are visually or aesthetically pleasing and which therefore contribute affirmatively to the definition of a distinct community or region within the Central Pine Barrens." (Pine Barrens Plan, Vol. II, Ch. 8.2)

Regarding the value of preservation, the Pine Barrens Plan recognizes that:

"The Long Island pine barrens protection area contains a wealth of cultural resources. It contains areas with significant historic and/or archaeological resources worthy of preservation. These resources contribute both to the visual enhancement of the landscape and to present knowledge of land use and ecology in the Central Pine Barrens. Data collected from such resource sites can contribute to our knowledge of past climatic and precolonial ecological conditions, thereby assisting in the development of an ecological model of the Central Pine Barrens. In addition, many significant resources are located together with other sensitive resources such as wetlands. These significant cultural resources also trace, with unusual fidelity, the heritage of this area of Suffolk County."

The Protected Lands Council strongly recommends that the Commission develop a long-range, comprehensive cultural and scenic resource protection, restoration, and management plan to guide land managers, planners, and policy makers toward the goals and visions noted above, and set forth in NYS ECL Article 57, and in the Pine Barrens Plan. These scenic and cultural resource protection goals and visions are echoed in many other plans, policies, and programs in New York and across the Nation. These parallel initiatives offer many opportunities for collaboration and the sharing of resources amongst Pine Barrens partner agencies, especially needed during this time of economic hardship. It is noted in the New York State Historic Preservation Plan that:

"There is growing recognition among New York State's communities that local tools such as comprehensive plans, land use and zoning regulations (including historic preservation ordinances and similar tools), historic preservation plans or components

of other municipal planning documents, and historical and cultural resource surveys provide the strongest protections for the historic and cultural resources that help define community character."

The Long Island South Shore Estuary Reserve Comprehensive Management Plan, part of which covers the Carmans River region, also recognizes that:

"All levels of government must work together in cooperation with private development interests to [...] retain the visual landscape of the estuary."... "Concerted public and private efforts will be needed to perpetuate the region's historical legacy."²

Due to the size of the Pine Barrens Region and time constraints during the preparation of the Pine Barrens Plan, the Plan provided limited inventories of scenic and cultural resources, but at the same time recognized that more detailed and standardized assessments were needed and that further protections be adopted in future Plan amendments. It notes that "The Central Pine Barrens region is large; a scenic resource assessment system must be capable of use throughout its components areas. A system should be both easily used and understood by non-professionals, as well as professionals, particularly if it is to be applied at the scale of the local setting." (Pine Barrens Plan, Vol. 2, Appendix 4-1).

During the development of the Pine Barrens Plan, many sources of information about cultural resources in and around this study area were considered. One of these was a voluminous report which contained an extensive, yet incomplete inventory of cultural resources in the Central Pine Barrens.³ Dozens of these sites are listed in the Plan, as well. There are four historic districts in the study area: Longwood Historic District, Middle Island Historic District, Siegfried Park and the Brookhaven Town Yaphank Historic District. All of these sites and Districts must be preserved and restored.

As can be seen on historic maps of the study area, early American and aboriginal settlements were primarily located in ecologically sensitive areas, in areas where the water table is high, around wetlands and surface water, and along what have now become major thoroughfares. Archeologists discovered what is believed to be a Native American village in Middle Island. The NYS Office of Parks, Recreation, and Historic Preservation maintains records and studies, considered sensitive, about archaeological resources within the study area, and indeed there are many in need of protection from looters and pothunters. Native American artifacts found within the River headwaters are tucked away in places known only to a select few individuals. These should be returned to the Town and placed under the care of a qualified institution willing to place them on display. Funding should be made available for further archaeological investigation and staffing is needed to safeguard sensitive sites.

^{1 2009 – 2013} New York State Historic Preservation Plan – Approved by the National Park Service, 3/27/09

² Long Island South Shore Estuary Reserve Comprehensive Management Plan, 2001

³ "Central Pine Barrens Commission – Plan Development: Cultural Resources Working Group Final Report", December 1994

Insensitive over-development, a lack of understanding about the preservation and restoration of historical structures and cultural landscapes, and inadequate staffing levels at reviewing agencies have been among the primary causes of the demise or degradation of these resources and still pose a significant threat to what remains.

Cultural resources are not always buildings, and indeed, cultural landscape management is a whole science unto itself. Nationally recognized standards for cultural landscape preservation and restoration should be adhered to. Culturally significant vegetation, such as lopped trees, historic boxwoods, and shipmast locust trees must be identified and protected. Early American "ditch and mound" hedges should be preserved. An inventory of the study area in the 1970's noted at least one of Benjamin Franklin's mile markers in the study area. This and the remainder of theses stones need to be located and preserved. These are among many ancillary features that fascinate researchers, visitors and trail users alike.

Care must also be taken to ensure the preservation and restoration of the New York State Historic Marker Program markers that were placed across the region. A description of the significance of these:

"New York State has promoted its history and educated the highway traveling public with several roadside marker programs. The initial New York State Historic Marker Program began in 1926 as a program of the State Education Department to commemorate the Sesquicentennial of the American Revolution. Between 1926 and 1939, more than 2,800 small, navy blue and yellow, cast iron roadside markers were erected statewide and they remain familiar to anyone traveling the state's highways." ⁴

Many sources of information about scenic resources in and around this study area were considered during the development of the Pine Barrens Plan and more have become available in the years following adoption. The Plan specifically identified scenic resources within study area, including, but not limited to the Carmans River, Artist Lake, the Paumanok Path, the hamlet of Yaphank, NYS Rocky Point Natural Resource Management Area, a good part of the CR 21 corridor, Cathedral Pines County Park, and Prosser Pines County Nature Preserve.

The PLC recommends that a complete and detailed inventory and assessment of existing cultural and scenic resources be conducted to provide a basis for the plan recommended above. The cultural and aesthetic resources with exceedingly high values, as well as those in degraded states, need to be identified. Supporting documentation for formally designated historic districts, landmarks, and Critical Resource Areas should be located. An inventory of street trees and landscaping on public lands should be one of the primary components of this inventory, as well as assessments of other infrastructure, such as signage, fencing, and sidewalks.

Design Standards

Scenic and historic resource protection and restoration design standards should be adopted and incorporated into the management plan recommended above. These design standards should apply to all infrastructure and buildings in parks, preserves, rights-of-way, and the

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⁴ New York State Museum - http://www.nysm.nysed.gov/services/marker/srvmarker.html

river, as well as all types of signage, bridges, parking areas, fences, guardrails, retaining walls, kiosks, driveways, and lighting. They could also be applied as guidelines for private lands, especially in highly visible locations along the River, transportation corridors, and historic areas.

For the Carmans River study area, as well as the entire Pine Barrens, a concerted effort should be made to transform all buildings and infrastructure on public lands to meet one of two design guideline themes, as appropriate for the site: "Historical," or, for a lack of a better term, "National Park-like." It should be recognized that every detail counts, *i.e.* seemingly small actions can result in huge impacts, both positive and negative, to the overall perception and experience of visitors to the region.

It is recommended that infrastructure be kept to an absolute minimum on all public lands, including the rights-of-way in the study area. This tenet not only enhances aesthetic values but is less expensive and does not require maintenance. The exception to this is green infrastructure (trees/vegetation), which should be optimized.

It is a known fact that tree-lined travel corridors, shade trees, and landscaping significantly increase property values. Extensive and appropriate planting of native trees should be done to hide unattractive infrastructure and existing buildings that cannot be removed or redesigned to conform to standards. Woodlands should also be restored or established to screen undesirable elements. Trees also provide other benefits, such as stormwater abatement, erosion control, habitat, and energy savings.

Development of scenic and historic preservation design standards is beyond the scope of this report. However, to demonstrate the concept, standards and materials that are usually accepted or rejected might be as follows:

Generally Acceptable: Narrow roads, no curbs, sidewalks separated from the roadway by wide planted tree lawns, natural parking surfaces and walkways that blend with surroundings (such as Long Island pea gravel, earth, or some pervious pavers), vegetated parking lot buffers, split rail fence, aesthetic guardrails (Adirondack Park-style wood or rusted steel), walls constructed of local stone, historic lighting fixtures conforming to Dark Sky standards, historically accurate wood or iron fencing, brick, historically accurate signs, e.g. historic style black font on a white background, and rustic signs with white font on brown wood. It should be noted that white on brown is an internationally recognized standard for informational or guidance signs in parks and recreation areas, including political boundary signs, tourist attraction signs, "adopt-a-highway" signs, and even street signs in some areas.

Generally Unacceptable: Asphalt (except for public roads), crushed bluestone, poor imitations of brick, concrete, raised concrete curbs, parking lots located in front of buildings, any infrastructure that is visible from the river, historically inaccurate gazebos, benches, and sheds, fences that are obviously plastic, galvanized guard rail, stockade fence, chain link fence (if chain link fence is absolutely necessary, it should be black), all fence slats (vinyl, imitation grass), modern masonry walls, internally-lit signs, signs and

awnings of bright clashing colors, poorly placed infrastructure that blocks views of historic and scenic elements, modern light fixtures and fixtures that are not "dark-sky" compliant, visible dumpsters and trash cans, and too many signs, regardless of design (sign pollution).

NY State's Local Waterfront Revitalization (LWRP) policies to protect and restore the Nissequogue River corridor's scenic and historic resources should be considered for the Carmans River corridor:

Policy # 23 is a requirement to: "Protect and Restore Structures, Districts, Areas or Sites that are of Significance on the History, Architecture, Archaeology or Culture of the State, its Communities or the Nation."

Policy # 25A is a requirement to: "Protect, Restore, and Enhance the Natural Visual Character of the Nissequogue River and Adjacent Areas as the River System is a Locally Significant Scenic and Recreational Resource."

In the LWRP plan for the Nissequogue River, these policies are expanded upon to include detailed historic and scenic resource protection and restoration design standards.

It is recommended that overhead power lines be relocated underground in Historic Districts. In addition to restoring the aesthetic appeal of the Historic Districts, this would make the infrastructure more hurricane-resistant. If any monies become available, the Yaphank historic district and the most significant locations in parks and historic sites should be considered first.

Scenic vistas should also be evaluated and protection standards developed and reviewed for any new development that will be visible from scenic resource sites. For example, the former "American Tissue" development proposal, a massive building, did not analyze potential impacts to scenic resources on the river or in its watershed. Telecommunications towers are not scenic and should be visually excluded in the study area. If cell towers are constructed sharing agreements among multiple carriers should be required so that the number of towers can be minimized.

Financial resources must be allocated for routine litter removal, infrastructure maintenance, graffiti removal, dumping remediation, etc.

Other Strategies

Other relevant plans, programs, guidance documents, regulations, and resources should be should be linked to a central database and reviewed and considered during the development of the Pine Barrens cultural and scenic resource protection plan recommended above. Some of these are already referenced in the Pine Barrens Plan. There are also many well-established and recognized tools and strategies that could be applied and emulated in the Carmans River region to improve streetscapes both within and outside of Historic Districts.

Regulatory agencies should identify violations and enforce compliance with regulations related to, but not limited to landscaping, street trees, lighting, clearing, and signage. Requirements for correction of violations by property owners must conform to adopted scenic and cultural resource design standards. For those sites that are degraded but are in full compliance with regulations, there should be a program in place that offers guidance, incentives, and recognition awards to those willing to make appropriate improvements voluntarily. Small grants may be offered, as there are many improvements that are inexpensive that can make a world of difference in aesthetics. For example, bare root shade trees can be obtained for less than \$25.00.

The Town should seek to participate in the NYS Department of State's Local Waterfront Revitalization Program and become a Certified Local Government.

As called for in the 2009 – 2013 New York State Historic Preservation Plan, a main street program should be established to coordinate and support local efforts to revitalize all commercial areas, especially in the historic districts.

Nominations for listings on the National Register, State Register, and as local landmarks should be expanded, as well as designations to the County's Historic Trust. The U.S. Department of Interior authored a publication that is widely considered one of the bibles of architectural standards for historic resource protection and restoration.

Brookhaven Town should establish a tree planting program to join other towns on Long Island that have earned the prestige of being designated a "Tree City USA." LIPA also has a "Wire Friendly Tree Program" whereby participants receive a rebate for planting certain species of small trees under power lines. NYS Department of Environmental Conservation offers small tree planting grants through its "School Spruce-up Program." These are only a few of the many community greening programs that could be taken advantage of. A memorial tree planting fund should be established, whereby donors contribute to a managed tree fund in lieu of gifting cut flowers. For example, the overabundance of memorial park benches along the walking trail at Cedar Beach Town Park in Mount Sinai, more benches than will ever be used, indicates that there is a need for the Town to suggest to donors that they consider the memorial tree fund instead. A list of sites where people could have a tree planted might be readied for donors.

The Town's Historic District Advisory Committee should be asked to provide guidance to home and business owners that volunteer to make improvements in architectural and site design in and around historic districts, which will not only transform the streetscape, but will improve real estate values. (Changes to structures within the historic districts that require a permit already are reviewed by the HDAC).

Participation in the National Trust's Main Street Program should also be considered to enhance streetscapes and historic resource values.

Given the nature of the hodgepodge of existing development and the degraded state of many of the cultural and formerly scenic resources in the upper Carmans River area, it is not easy

to envision that this region, and the entire Pine Barrens, for that matter, could ever come close to looking and feeling like an Adirondack Park, Central Park, and/or Williamsburg, Virginia. However, there are many existing elements across the region's landscape that can be enhanced, abundant opportunities for restoration, nationally recognized standards that can be employed to advance such a transformation, and many tools, resources, and even grants to help push toward this vision, one small step at a time.

The Specific Site Recommendations listed later in this report should be expanded upon after a thorough assessment of the study area has been completed as part a comprehensive plan to further the protection, restoration, and enhancement of scenic and cultural resources in the Carmans River region, as envisioned in the LI Pine Barrens Protection Act.

Water Quality

The Town of Brookhaven's Carmans River Study Group is currently considering a wealth of research on water quality, and the PLC does not wish to duplicate their efforts. We do note that:

- 1) Road runoff is a major issue along C.R. 21, East Bartlett Road, across the Upper and Lower Lake dams, and again at Hard's Lake dam. Petroleum products are of course an issue, but the greater threat seems to be from road salt. In winter, sand should be used to treat icy roads in the Carmans River area, or as a compromise a mix with less salt and more sand.
- 2) Nitrogen, phosphorus and possibly arsenic emanating from fertilizers are of concern. The PLC will defer to those who have researched these issues, but we support strict standards on parts per million of contaminants.
- 3) Household and pharmaceutical chemicals in parts per trillion may not be detectable yet, but they should be kept in mind as monitoring techniques advance.
- 4) Contaminants from septic systems are a concern. In addition, there are documented problems with package treatment plants routinely exceeding permit standards. It is recommended that the State review standards and operating histories of existing sewage treatment plants and consider more stringent standards for any new plants. In addition, a renewing funding mechanism should be required for any new plants to cover the costs of maintenance and replacement at the end of a plant's design life. Too often these costs have not been budgeted, and the result is sewage treatment plants that are in disrepair that do not meet permit criteria.
- 5) In general it is recommended, as stated in the Pine Barrens Plan, that sewage treatment plants not be sited in the Pine Barrens. Open space preservation and limitations on development density are the preferred methods for water quality preservation in the Pine Barrens.

Land Acquisitions

The Pine Barrens Plan (7.3.1) states, "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."

Ideally, acquisition of a few key parcels would add additional protection for the Carmans River, create contiguous belts of public land, preserve scenic resources, and enhance recreational opportunities. See Specific Site Recommendations and the Summary, below, for details.

Hunting and Fishing

Hunting and fishing are historic and ongoing activities in parts the upper Carmans River area. These should continue where presently allowed, as governed by the relevant agencies' regulations.

Cooperative Management

One of the successes of the PLC's ATV Project was the way in which staff from the Commission and land-managing agencies, as well as volunteers, worked together. Given the varied jurisdictions and the diversity of environmental and civic groups in the upper Carmans River region, this same pooling of resources would make everyone's lives easier and effect cost savings in the process.

Cooperative management can work only if there are mangers with whom to cooperate. The Town of Brookhaven, in particular, needs to assign personnel dedicated to managing open spaces and preserves. Ideally, each land-managing agency should have personnel assigned specifically to addressing Pine Barrens issues and interacting with their counterparts in the other governmental entities. If the various agencies differ in their procedures and allocation of personnel and resources, the PLC could explore ways of making operations more consistent.

Agencies and user groups already are cooperating in trail building, maintenance and reporting of illegal activities in the Central Pine Barrens. Working agreements should be kept up to date.

Signage

NYSDEC, OPRHP, Suffolk County Parks and the Town of Brookhaven use distinctly different park signs, each long familiar to the general public. Adopting a single design for signs would thus likely be impractical. However, the various managing agencies could adopt more consistent signage standards, as called for in the Pine Barrens Land Use Plan (7.5.2.8). Suggestions—for the Carmans River area and elsewhere—include:

- Signs at larger parking areas should indicate permitted and prohibited uses and display the logo of the managing agency.
- If a park features one or more trails, the lengths of the routes should be stated on the sign.
- For long-distance trails that span multiple jurisdictions, signs should include the logo of each agency.

- Trail intersections should be clearly marked.
- Any park sign placed in the Core Preservation Area or the Compatible Growth Area should contain the logo of the Pine Barrens Commission.
- In cases where signs show multiple logos, each should be of the same modest size, such as a 3x3" square.
- The agencies should make efforts to consolidate as much information as possible onto as few signs as possible, to avoid "sign pollution." They should also consider adopting a design standard that makes signage in the Pine Barrens more uniform and consistent, creating the same sense of place one feels when traveling in the Catskill and Adirondack Forest Preserves.
- Kiosks containing maps and other information should all be of the same basic design. Kiosks, while necessary and appropriate in certain circumstances, can be subject to vandalism and require regular maintenance. They should be used sparingly and checked regularly to ensure that they are up to date and not damaged.

Blazing (Trail Markers)

All trails should use the same marking conventions, preferably using paint instead of plastic or metal tags. Hiking trails generally employ 2x6 or 4x6 rectangular blazes. Longer point-to-point routes are generally painted white; loops, or loops off a longer trail, are blue; and spur trails are yellow. Double blazes, with the top one offset in the desired direction, indicate sharp turns, while a triangle of three blazes indicates a trailhead. Ideally, trail users standing at one blaze should see one ahead of them, but no more. In ambiguous situations, additional blazes might be necessary for reassurance.

Other user groups might use different symbols (e.g., triangles, circles), but the conventions remain the same.

Volunteers

The Pine Barrens Plan (7.5.2.14) recommends that "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"

For decades now on Long Island, volunteer organizations have constructed and maintained trails, planted trees, picked up garbage and completed many other conservation projects. They have been responsible eyes and ears in our open spaces, often reporting illegal uses to the proper authorities.

The New York State Trails Plan also includes as a goal the promotion of "communication, cooperation, and coordination among all government entities, landowners, user groups, and other non-governmental organizations involved in trail planning, development, management, and maintenance."

The land-managing agencies along the Carman's River—and elsewhere on Long Island—can benefit greatly from close cooperation with volunteers. Ideally, the Pine Barrens Commission should hire a full-time Volunteer Coordinator responsible for:

- Recruitment –establishing regular communication with user-group volunteers and seeking additional volunteers through a link on the Commission's website
- Training and Safety ensuring that volunteers are conversant in basic safety procedures and handling of tools, such as post-pounders and bow saws
- Monitoring linking volunteers with agency staff, who would supervise work other than simple maintenance (pruning, blazing, litter pickup, etc.)
- Record keeping –keeping basic contact data on volunteers; creating a log for completed work; seeking volunteers for work on paths that need attention; recording incident reports and liability issues.
- Recognition devising on an annual basis a simple "thank you" for volunteers

It might be possible to fund the Coordinator's position through grants, at least initially. Also, summer interns would be of great value.

The Towns in the Central Pine Barrens should consider an annual clean-up day or other event to encourage public participation in stewardship.

Information and Promotion

Education and Tourism

One of the goals of the New York State Trails Plan is to "Increase education about, cultivate support for, and promote the use of New York State trails among the general public."

Encouraging trail use requires more signage, maps, booklets, pamphlets and other literature. Some already exists, but paper stocks need to be replenished and signs repaired or installed.

- Trail maps and literature on individual parks should be placed on agency websites, both
 to increase easy access to this material in a digital age and ultimately to save on printing
 costs.
- Eventually, tourism brochures and other web information should be published and distributed in connection with the Long Island Convention and Tourism Bureau.
- Brochures might include information on local lodgings, restaurants, transit and shopping for the benefit of tourists. Listings and advertising could defray the cost of printing.
- Educational brochures might also be directed towards adjacent homeowners in terms of public lands boundary encroachment, proper removal of yard waste and other debris.

Permits

A longstanding requirement of D.E.C. Region 1 for land users to obtain a permit has accomplished little besides discouraging legitimate use of public land and preventing easy access by tourists. The PLC recommends the abolition of these permits.

Funding

The Commission or the individual land-managing agencies should pursue Federally-funded Recreational Trails Program grants. RTP grants enhance trails planning, trail acquisition, development, and maintenance; they would be especially useful in funding for materials and equipment for maintaining ATV barriers and other trail work.

Any land acquisitions would be funded through existing programs.

As acquisitions come to an end, one key recommendation would be that funding of one-quarter of the annual acquisition costs be established as a "Natural Capital" fund for restoration and management of protected lands, specifically for ecological and access work.

Pine Barrens Library and Central Repository for Records

The existing Pine Barrens Library, open by appointment at the Commission office in Great River, began through the efforts of Ray Corwin, who spent many hours of his own maintaining it. The task was getting beyond him, and the Library still needs to be set up and catalogued properly.

A related issue is that over the course of many years, agency personnel retire or transfer, and volunteers come and go. In the process, the institutional memory of work that has already been accomplished and agreements that have been forged sometimes go with them.

The PLC recommends establishing, as part of the Library, a central, multi-agency repository of copies of all management plans, ecological studies, agreements with user groups and volunteer organizations, trail maps, and other relevant information. Such a repository would allow the agencies and the Protected Lands Council to track and plan management projects and enhance cooperation with user groups without "reinventing the wheel."

Ideally, all relevant information should be available on the Internet. The Central Pine Barrens Commission's website might be the best host of this information, with the various agencies submitting material as necessary. A repository fits the spirit of the Pine Barrens Plan, which already calls for a universal, interagency database of cartographic and tabular information for mapping resource inventories (7.3.2), and would greatly enhance management.

This recommendation comes with a very large caveat: both the Library and a central repository need the services of a full-time librarian versed in Information Technology. Such a staff person could prepare and publish data through the existing NYS Data Clearinghouse or a similarly established, accessible digital data library.

Specific Site Recommendations

North-South Trail Corridor

The existing Paumanok Path hiking trail extends from Rocky Point to the Shinnecock Canal and eventually to Montauk Point. At a point in the Rocky Point Preserve near Whiskey Road, a major north-south trail, consistent with the Town of Brookhaven's concept of a Middle Island Greenbelt, could diverge southward to Yaphank, with an eventual connection to Southaven Park. All of the land involved is already in public hands.

This corridor is wide enough in most places to support more than one trail, allowing for a desirable separation of uses. The mileage from the Paumanok Path to the L.I.E. would exceed five miles, depending on the exact route. Components of this system include, from north to south:

Rocky Point Natural Resource Management Area

- This would serve as the northern terminus of the trail. Ideally, the route would begin where the Paumanok Path reaches Whiskey Road, employing the existing D.E.C. lot as a common meeting place for users of both trails. Limited additional parking exists along Wood Lots, Raynor and Ridge Roads. The routes would run eastward concurrently for a mile or so, then diverge. Adequate signage at the trail junction would be essential.
- Existing grasslands in this area should be maintained as such through annual mowing.
- Consider changing the color of the brightly colored yellow steel gates to brown.
- Develop an aesthetic improvement plan for NYSDEC parking lot 18. Considerations should include the kiosk location and content, the telephone poles, the condition of the vegetation immediately surrounding the parking area, and the potential refurbishment of the deteriorated brown RPNRMA sign, using white on brown. Sign pollution should also be rectified by identifying the messages that are essential and finding a way to consolidate them onto one or two signs, also white on brown.
- The PLC, in cooperation with the LEC, should identify and employ strategies to curb the
 ongoing ATV damage and dumping on Whiskey Road and surrounding public lands.
 (These strategies would supplement the ongoing enforcement activity by the LEC
 member agencies.) Consider new barrier designs and locations. The deteriorated steel
 cable barriers should be removed.
- Using native vegetation, narrow Whiskey Road along the sections where dumping is frequent, especially on the north side of the road, west of parking lot 18.
- Change the "Adopt-a-Highway" sign to white on brown. This could be a prototype for other preserves and parks in the Pine Barrens.

• The intersection of Whiskey Road and CR 21 has to be one of the most scenic and bucolic crossroads in the region. The DEC should reconsider the value of the pitch pine trees planted along the roadside edges of the picturesque grassland on the northwest corner. As these trees grow larger, they will obscure the view of the grassland that is the focal point of this intersection. The crossroads area should be evaluated for opportunities to narrow the roads, reduce turning radii, add a handful of shade trees, remove garage sale signs, re-design property barriers, and enhance the existing kiosk (which is well-placed).

Lustgarten Property

- This tract on the north side of NY 25 forms a key connection in the corridor.
- Several decayed or collapsing structures, remnants of its days as a plant nursery, dot the site. The DEC wishes to remove them, pending adequate funding. The Ridge Civic Association has expressed a desire to preserve the main house, but lacks the funding. The site was noted in a 1970's cultural resource and in other literature, and the PLC recommends a thorough investigation before demolition. The historic barn is beyond repair, so it is recommended that the few hand-hewn timbers in this structure be salvaged and offered to the County to use in the restoration projects. If the County is not interested, they could be sold.



Decaying barn poses a danger on the Lustgarten property.

- This property needs to be named if it is not considered a part of the Rocky Point Natural Resources Management Area.
- The well-known inventory of historic resources that took place in the 1970's identified the Lustgarten neon sign as one of the first neon signs produced and a resource to be preserved. The sign appears to have deteriorated beyond the point of repair; however, it should not be destroyed without a diligent research and documentation of its significance.
- The Ridge Civic Association has expressed a desire to preserve the Lustgarten house, but it lacks historic value, and no public funding is forthcoming. The D.E.C.'s desire for

- removal seems the most logical course, but the PLC would not oppose a privately-funded plan to save the house.
- Cleared land on the north side of NY 25 here would make an excellent parking area. As is the case elsewhere, barriers preventing access by ATVs would be needed. In this very public spot, an attractive split-rail fence at the parking pad would probably suffice.
- Connecting this area to open space heading south requires a safer crossing of busy NY 25 than now exists. The ideal solution would be a pedestrian crossing, with a button-actuated light, where trails would likely cross; a much less desirable alternative is to route trails westward to an existing light at Wading River Hollow Road, but this would entail walking on the road shoulder in both directions.

AVR Sections 1-2-3

- These parcels, owned by New York State and jointly by the Town and County, are located along Smith Road from NY 25 southward to Longwood Road. They need a name. We suggest calling the entire area Turtle Rock Preserve as a nod to a large glacial erratic located on the property.
- A NYSDOT Class 2 bike lane (with pavement markings) runs the length of Smith Road from NY 25 to Longwood Road. Longwood, East Bartlett, Ashton and Granny Roads are unsigned but appear on NYSDOT maps as a connecting bike route from William Floyd Parkway to Horseblock Road, west of C.R. 83 in Farmingville, with other connecting routes radiating from this one.
- Where possible, Smith Road should be narrowed between NYS 25 and Longwood Road. All of the road frontage of the AVR properties should be without curbs.
- Hunting is not allowed on Town property. Hunter parking spots are marked on the State owned property on the south side of NY 25.

Longwood Historic District / Smith Road Greenbelt

- Continuing south, the corridor passes through the Longwood Historic District. This corridor comprises the Town of Brookhaven Longwood Estate, the Town's Webb and Knapp Open Space, and a narrow strip of Town-owned land that encompasses the path of historic Smith Road (also sometimes referred to as Longwood Road or private road to Longwood). Together these provide a route to the south, connecting AVR Sections 1-2-3 to the L.I.E. Currently there is intense ATV and 4x4 activity here, with vehicles apparently entering from Longwood Road and also Parr Meadows. Preventive barriers will be necessary, with periodic monitoring such as is used in the PLC's ATV and Dumping Mitigation Project elsewhere.
- Much has been researched and written about the early American history of the Longwood Estate, its associated buildings, its surrounding cultural landscapes, its scenic setting, and the reasons it has been listed on the National Register. Unfortunately, in recent years, there have been modifications to the site that seriously compromise its historic and scenic

integrity. These include, but are not limited to new, historically inaccurate entrance booths and gazebos, some of which even block views of the house from the entrances to the property. These structures should be removed, or, if absolutely necessary for the annual Longwood fair, used for the one weekend and stored off site. Replacements must be planned for the shade trees that used to line the driveway to the house, past a lovely iron fence. The facility should be open to the public and allowed to be appreciated as a place of interest to passing trail users during daylight hours.

- The PLC is aware of a proposal for a bicycle BMX track on the south side of Longwood Road. Placement of a track in this relatively narrow space would negatively impact other uses, and legal restrictions on clearing open space might prohibit this use anyway. Most of this area falls in the Compatible Growth Area, although a small portion on the west side appears to be within the Core Area. Such a BMX facility would also be incompatible with the area's historical setting and scenic beauty, especially if historic Smith Road is restored to its early appearance (see below). The PLC does not at all oppose the concept of a BMX track but recommends that it be located elsewhere. One possibility is an already-disturbed parcel of Town and County land near the south end of Smith Road. As there is an easement on the County piece, the Commission would have to be consulted first.
- The Webb & Knapp open space parcel is located within the Longwood Historic District and should be considered part of the site of the Longwood Estate and named accordingly. It should also be added to the Core for further protection. The Commission should review and consider allowing the Town parking lot, which may have been constructed on this parcel without a permit, to remain to provide public access to the historic district and trails. However this parking lot should never be expanded and should be improved to conform to standards for historic sites and aesthetic resources, *i.e.*, resurfaced with natural Long Island pea stone, natural vegetation restored in islands, and a buffer planted to shield the lot from view from Longwood Road.
- South of the Webb and Knapp open space parcel is a long narrow parcel that extends south to the LIE. Before the Suffolk County Department of Public Works' recent construction of a sewer pipe under a major portion of it, this historic jewel was a formerly narrow and bucolic earthen path, known as Smith Road. Shortly following this construction, the Commission acquired a conservation easement on the land, and the parcel was subsequently purchased by Suffolk County. We recommend allowing gradual natural revegetation to narrow this woods trail to its historic width, thus restoring a sense of early Colonial Long Island. An appropriately designed sign should interpret its historical significance for trail users. The entire "Longwood Greenbelt" parcel should be dedicated to Suffolk County's historic preserve.
- Instances of encroachment by adjacent private land owners need to be addressed.

Parallel Route to the East (AVR Sections 4-6-7-8)

Another trail corridor exists from the Paumanok Path southward through the D.E.C.'s Randall Pond Preserve, then about one-half mile of quiet road walking before reaching

County and State parcels that extend to Longwood Road. Use of this corridor would allow for easy separation of uses for at least four miles. One name should be assigned to the assemblage of public lands north of the Longwood Estate.

Future Connection to Southaven Park

- The PLC recommends linking the upper Carmans River region to Southaven County Park. This would create one of Long Island's longest trail corridors.
- The Webb and Knapp parcel greenbelt section extends southward to the L.I.E. where East Main Street/Moriches-Middle Island Road crosses over. This spot is suitable for a pedestrian and bicycle crossing, and Southaven abuts the road here. Also, a slight jog to the east leads to River Road and a planned on-road cycling route.
- As an alternative, it might be possible to link an existing foot trail at **Weeks Pond** to Southaven by means of an existing underpass. However, a footbridge is needed in the underpass. (The Long Island Greenbelt Trail Conference once obtained a grant for such a passage, but it expired before any construction took place.) A walking trail and some interpretive signs behind the Homan House are already in place at this Suffolk County park, which also contains the foundation of an old octagonal house. Additional signage at roadside and slightly expanded parking would attract more visitors.

East-West Trail Corridor

The north-south corridor described above connects in Yaphank to an east-west system extending westward through public parcels a total distance of seven miles to the Town's Glacier Ridge Nature Preserve adjacent to the Town Hall property. The trail components include:

Dennis Puleston Warbler Woods Nature Preserve

- This large tract offers excellent potential for a system of marked trails connecting
 westward across the river and eastward to the north-south greenbelt described elsewhere
 in this document. Access from the south exists through Fox Lair at a pole gate on East
 Main Street, a short distance from good parking just west of the Yaphank Fire House.
 Limited parking is also available on C.R. 21.
- Tiger salamanders and featherfoil are likely to inhabit shallow vernal ponds here. About thirty species of warbler inhabit the preserve.
- Severe erosion, largely from illegal uses, needs remediation here. ATV use is still present but decreasing. Mile-a-minute vine is present and should be monitored or removed.
- A crosswalk and hiker signs would be desirable on C.R. 21 for a connection to Warbler Woods West, County parkland on the west side of the road. Limited parking exists on either side. Some minor expansion would be welcome, as a little extra maneuvering room would enhance safety.

• The preserve known as "Flower City," an old filed map section in the Core to the north of Warbler Woods, needs an official name.

Fox Lair

- Good access to this Suffolk County property exists at the parking area near the Yaphank Fire House, a short walk to the pole gate on East Main. Marked trails could connect to Warbler Woods, and from there westward or to the north-south greenbelt.
- Fox Lair's connection to the Yaphank Historic District compounds the value of both a trail and the cultural resources here.
- Agalinus acuta is present on the property and requires management through prescribed fire or mowing. Three species of threatened or endangered damselflies have been spotted here. Grasslands on the property should be maintained as such.
- Some ATV use is still ongoing. Invasive barberry and phragmites are also present.

Warbler Woods West

- This County parcel on the west side of C.R. 21 extends to the river. As noted earlier, a footbridge across the river to the Carmans River Headwaters Nature Preserve would anchor a major east-west trail corridor.
- As noted, a crosswalk and hiker signs would be desirable on C.R. 21.
- An alternative name should be considered for this parcel to eliminate confusion with the preserve to the east. Perhaps it can be merged with, and named the Carmans River Headwaters County Nature Preserve.
- As with many of the invasive plant infestations in the study area, the Wisteria in this preserve must be controlled.

Carmans River Headwaters County Nature Preserve

- This disturbed site on Ashton Road offers great potential both as a connection for trails and as a fine scenic resource in its own right. Over the course of about 1,400 feet, the surprisingly-steep contours here descend 150 feet to a lovely bend on the west bank of the Carmans River.
- At the river, crossings of scattered rocks have been placed. A footbridge here would provide a safer traverse and allow connection of an east-west trail corridor. On the east bank lies the protected Warbler Woods West, County land on the west side of C.R. 21, with obvious connections to Warbler Woods across the road. To the west of the Preserve lies a string of Town of Brookhaven and County parcels that offer a route to Independence Hill.



A potential crossing of the Carmans River between the Watershed Nature Preserve and Warbler Woods.

- Unfortunately, illegal ATV use, much of it likely from nearby homes, has severely damaged much of the Preserve. Additional fencing and other barriers should be installed here as necessary.
- The principal east-west trail to the river follows the fall line, which exacerbates erosion. It should be rerouted with winding switchbacks and occasional waterbars. Erosion is severe enough here that many paths need waterbars and fill to return them to a more natural grade.

Deep ruts mar the footpaths at Carmans River Headwaters.



• We suggest marking either an out-and-back trail to the river or a loop through this modest-sized tract. For the sake of habitat restoration, a number of paths need to be closed. The Town of Brookhaven-owned road on the south side of the Preserve is also eroded and needs stabilization. Runoff here and from the eroded trails can adversely affect water quality in the river.

• Large rocks have been placed along the west bank of the river, presumably to forestall erosion. There are now covered with graffiti and should either be cleaned or removed, with some other means of controlling the further widening of the bank a consideration for the future.



Unsightly debris and encroachment adjacent to the Carmans River Headwaters Preserve entrance.

- A small new parking area and signage offer good access. To the south an unpaved Town road provides alternate access. A gate on the Town road is chained, but the chain can be lifted off and the gate opened. A simple modification would more readily forestall illegal access without impeding foot traffic.
- Explore the potential for the creation of a scenic vista from a high point in the Carmans River Headwaters County Nature Preserve looking east across the wide river valley toward the vast expanse of natural woodlands.
- Access to nearby private property needs to be maintained. However, some of the
 properties, especially near the parking area, are unsightly and should be screened from
 view. There may also be issues of encroachment.

Westward Connections to Independence Hill

- Public holdings in the Granny Road-Mill Road area should be connected to Independence Hill in accordance with the Town of Brookhaven's Glacial Ridge Trail plan. Various town and county parcels make this feasible, with a few additional acquisitions possibly needed.
- From Independence Hill it would then be possible to continue eastward across the Carmans River, through Warbler Woods, and on to a connection with a north-south trail.

Cathedral/Prosser Pines Area

Longwood Library area

- The Longwood Library wishes to expand southward and to use an existing house as a
 trail center. The Library envisions a connection from there to the existing Cathedral Pines
 mountain bike trail located to the south. The PLC strongly supports this project and
 recommends making staff expertise available to the Longwood Library at no cost in order
 to further the project.
- The acquisition of the Gene's Four Seasons property, a long strip sandwiched between Cathedral Pines and other public holdings, would be a highly-desirable addition, both for recreational uses and the environmental and management benefits afforded by assembling contiguous parcels. The PLC strongly recommends this parcel be acquired.
- Acquisition of parcels northeast of the Library and north of NY 25 would make possible a contiguous corridor all the way to Rocky Point Preserve. The PLC recommends these acquisitions.
- More shade trees need to be planted on this site, especially along NY 25. Shade trees
 should be native species. If planted under wires, they should be a low-growing, spreading
 type; if planted where there are no wires, they should be large specimen types such as
 White Oak or Red Oak.

Cathedral Pines County Park

- The mountain bike trail in the park is already well-used, and the Longwood link mentioned above would enhance it.
- Hikers also use Cathedral Pines. Acquisition of the adjacent Gene's Four Seasons would allow for better separation of uses here and create a loop connection to public land west of Gene's. It would be possible to walk to West Bartlett Road from here, but poor sight lines and lack of space for parking at the road make a point-to-point trail impractical.
- The PLC should explore a connection from Cathedral Pines southward through the East Bartlett grasslands (see below) and a connection with the Carmans River Headwaters Preserve. Some bridging of the river may be necessary here.
- The parking lot near the entrance to this park should be improved aesthetically by creating islands of vegetation and shade trees to break up its large expanse.
- In the opposite direction, crossing improvements at C.R. 21 would link Cathedral Pines with Prosser Pines.

Prosser Pines County Park

- This peaceful grove of historic white pines is a scenic and cultural treasure. An interpretive sign incorporating some of the information in Suffolk County Parks' Prosser Pines booklet would be useful for visitors.
- Walking is easy here, but a marked loop trail would beckon more visitors into the interior. The Pines are not suitable for mountain biking.
- This park seems to attract dog walkers. A dog cleanup bag station in the parking lot would be a welcome addition but would need regular maintenance.
- The existing chain link fence at the park's frontage detracts from the beauty of the place and should be replaced with a more attractive alternative, such as split rail.
- Tiger salamanders may be present here. Road runoff may affect water quality in a small pond near the parking area. Runoff and excess nutrients may also come from a nearby sod farm.
- Forest management in this preserve should be aimed at sustaining an uneven-aged white pine forest by favoring white pine recruitment where forest canopy openings are created as mature pines die. This is currently occurring in some spots.
- We support restoration of all historic structures on this site.
- The PLC recommends creating a pedestrian crossing to connect Cathedral Pines County Park with Prosser Pines County Park.

Mutz Property

This parcel on the north side of Longwood Road, east of C.R. 21, contains a valuable wetland. The property is separated from Prosser Pines by one private holding. Acquisition of this parcel would create a larger, contiguous belt of parkland and add to the protection of both Prosser and Mutz. This preserve needs a name.

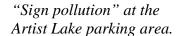
Whiskey Road to NY 25

Artist Lake

Artist Lake, about 30 acres in size, is one of only three bodies of water on Long Island with a year-round bass season. Access lies along NY 25 and on impromptu trails along the lake. The launching of boats is also allowed. Fish populations apparently have rebounded since the implementation of a catch-and-release program in 2004. The D.E.C.'s Regional Fisheries Unit will continue to monitor the fish community in Artist Lake on a triennial basis.

• Adequate parking on NY 25 and a fine view make Artist Lake a popular place. A fishing pier for the lake has been proposed as a public benefit contributed from development elsewhere. The D.E.C. should be consulted on managing the fishery.

- Some species of aquatic flora need to be protected. An as-yet minor encroachment of
 invasive species, milfoil and common phragmites in particular, needs monitoring and
 likely removal.
- Uniform, attractive signage should replace the many haphazardly-placed postings currently dotting the landscape. This is a "sign pollution" spot. The historic cast iron blue and yellow marker should be one of two signs that remain at this site, after the others are removed to eliminate sign pollution.





- Any signage should include education as to why bird feeding is prohibited. This activity continues despite signs to the contrary.
- U.S.G.S. maps from 1903-05 show a stream channel at the south end of the lake. The channel should be explored for its historic and ecological value.
- Any development of the old K-Mart property on the north side of NY 25, upslope from the lake, obviously must consider the effects of runoff and ground and surface water quality. Stormwater flow from NY 25 should be redirected away from Artist Lake to the road edge along the K-Mart property. Redevelopment of the K-Mart property should be used as an opportunity to address stormwater impacts from Route 25 on Artist Lake.
- The PLC should be asked to review and make recommendations regarding alterations to the Lake that are being considered as part of a massive development plan to the north. PLC comments regarding the visual character and landscape plan for the proposed development should also be sought.
- The public access area appears to be overused and in need of restoration and protection for a few sections of the lakefront.

Curran's Road

This unpaved road opposite Artist Lake offers a possible route for a north-south mountain bike trail. The shoulder of NY 25 offers a connection to the Smith Road bike lane mentioned under North-South Corridor.

- A survey should be conducted to see if there is significant migratory bird kill under the Currans Road transmission tower. If so, alternative lighting or other mitigation strategies should be considered.
- An assessment should be made to determine if Currans Road could be narrowed to a long driveway, which seems to be all that is needed to access the existing transmission tower.
 The remainder could be narrowed to become a wooded trail.

Pine Lake

This small lake lies within the Carmans watershed and features a short fishing pier/walkway for observation. The Town completed a project several years ago to capture runoff in a swale bounded by gabion baskets. This treats stormwater from the road and parking lot. Phragmites is an issue in the lake and it is recommended that control or eradication of the Phragmites be completed.

Twin Ponds Nature Preserve

- This 155-acre preserve on the south side of Whiskey Road lies in a sensitive, deep-recharge aquifer and on a groundwater divide. It contains old-growth forest, freshwater wetlands and significant cultural resources. The wetlands are part of a Coastal Plain Pond Shore, a rare and vulnerable ecological community in the State of New York. The preserve harbors a number of species of flora and fauna considered endangered or of special concern.
- In 1995 the Town of Brookhaven outlined a management plan for the preserve, which calls for one formal trail and the closure and revegetation of most of the others that fragment the site. Fences and other barriers should be added to prevent illegal motorized uses, and the preserve needs signs.
- Invasive common phragmites is present on the pond shore and should be eradicated.
- Current permitted uses include walking, birding, hiking and photography. The Town's plan calls for additional analysis to determine if picnicking, limited mountain biking and group tours would be feasible without damaging the preserve.
- Trail access exists on the south side of Whiskey Road, a short distance west of Miller Place-Yaphank Road. The parking pad here needs improvements such as signage, attractive split-rail fencing and some expansion.
- A now-closed, former construction entrance farther west, having been disturbed by clearing, is now lined with invasive mugwort, which should be removed or at least monitored to prevent its spread.

- The nearby sand mining activity must be thoroughly evaluated to determine if it has or will negatively impact the hydrology of the Ponds.
- Protected Lands Council member Larry Paul has long advocated the restoration of a fire observation tower somewhere on Long Island as an educational and historical resource. He notes that a tower placed in Twin Ponds, located about one-half mile south of Whiskey Road off an existing foot trail, would provide a fine view of 5,000 acres of protected state land to the northeast, part of the same viewshed once seen from the old Telescope Hill tower. Larry suggests a sixty-foot tower, though a lift test would be definitive for the ideal height.
- The site also is readily accessible for placement of the tower. There may be some security concerns here, and of course funding is an issue.
- Although gaps in public lands exist south of Twin Ponds, there exists the possibility of creating a trail corridor to Cathedral Pines and southward, as indicated on the "Potential Trail Corridors" map (see Appendix).

Roanoke Sand Mines

When the commercial sand mines operating north of NY 25 eventually close, public access, as originally agreed upon, should be ensured, with restoration and creation of parks a priority and of benefit to the watershed. The white plastic fence should be screened with evergreens,

Spring Lake

A Town parking area on the west side of West Bartlett Road provides a scenic resource overlooking Spring Lake Golf Course. It needs a more attractive fence and surfacing with natural Long Island pea gravel for durability.

River Corridor

Grassland on East Bartlett Road

- A mown field on the south side of East Bartlett Road, just west of C.R. 21 and the river, preserves not only a bucolic scene but excellent habitat for grassland birds. The PLC recommends the continued maintenance of the grassland with a yearly mowing timed to occur after breeding season.
- An earthen dam across the river just off the southeast corner of the grassland provides an easy crossing. A small culvert appears to allow passage of fish here, but the D.E.C. should determine whether it is adequate and suggest improvements if it is not.
- The adjacent Schuster Farm is recommended for acquisition. Steeply upslope on the east side of the river, this parcel is essential to the protection of the river, which would be adversely affected by future development, and which may currently be affected by use of fertilizer and pesticides on the farm.

• This area and the nearby public lands should be given a name.

Upper (Willow) and Lower (Lily) Yaphank Lakes

The Upper and Lower Lakes are subject to stress from reduced connectivity, an altered thermal regime, contaminants, sedimentation, and nutrient loading. Sources of these stresses include the presence of dams, invasive species, surface runoff, surrounding development, and illegal ATV use.

- The Town of Brookhaven's Swezey-Avey House, on the east bank of Upper Lake, offers parking and a fine view. As it is possible to launch a canoe or kayak here, a designated place to do so would be a welcome addition. Fishing from boats with electric motors is permitted.
- For Lower Lake, parking is available at the D.E.C. lot on C.R. 21 north of the L.I.E. Additional parking should be located closer to the canoe/kayak launch heading downstream into Southaven Park.
- Various groups and agencies have been researching options for the management of Cabomba and variable leaf milfoil in Upper (Willow) and Lower (Lily) Yaphank Lakes. Suffolk County has contracted a feasibility study on vegetation management in these waters which will be completed in the spring of 2011. The Town of Brookhaven has also created a task force to review options for managing aquatic invasive plants in the lakes. Some of the options being considered, such as mechanical harvesting and the use of aquatic herbicides, may be of benefit but may also have undesirable effects. The PLC should review the County's report after it has been released and offer recommendations at that time.
- Fish ladders are needed at the dams to restore species connectivity upstream.

Camp Olympia – Connecticut Estates

The PLC should explore the feasibility of connections to other public lands. At the very least, protection of this parcel serves to further protect water quality in the river. A name should be given to this assemblage of parcels.

Yaphank Historic District

With its connections to Fox Lair, Warbler Woods, and Weeks Pond (part of Southaven County Park), the Yaphank Historic District has great potential to provide exceptional interest to recreational users and visitors using the river or traveling along Main Street.

This District consists of two highly visible commercial hubs; one at the Main Street/Rocky Point Middle Island Rd. intersection and the other at the East Main Street/CR 21 intersection. The properties surrounding these hubs are of a more residential character. While significant improvements have been made to the streetscape and some of the historic structures, much more remains to be accomplished. The vision and general strategies outlined here are meant to encourage a sense of connectedness between the surrounding open spaces and the community and to instill an appreciation for stewardship. Private property owners,

commercial interests and government agencies, working together, can transform the Yaphank Historic District from a somewhat charming byway into one of Long Island's true historical and cultural treasures. Specific recommendations include:

• The Sweezey-Avey House and Town of Brookhaven Park is an eyesore in the heart of the District, and a restoration plan, meeting National Historic Site standards, should be developed. Chain link fences should be removed, especially the one in front of the house. Where absolutely necessary, fencing should be historically accurate, and not plastic. This historic house must be restored and maintained and the Town's HDAC should provide expertise to bring it to National standards. The air conditioning units should be removed. The dumpster at the entrance to the park should be removed or relocated to an area screened by vegetation. Snow plowing personnel must not hit and further damage park trees. Provide islands of vegetation in the park that cannot be destroyed by trampling.

An unscreened trash bin greets visitors at the Swezey-Avey House parking lot.



- Mitigate or eliminate sign pollution. For instance, the excessive signs for the nursery school at the nearby, Nationally-recognized church should be reduced to one sign, appropriately designed. The Town and community should work toward consistent and appropriate standards for signage and encourage the removal of overly-large or garishly illuminated signs. Traffic control signs should be evaluated to see if unnecessary ones can safely be removed.
- Plant street trees and vegetation to screen all unattractive elements and remove blighted fencing. The Verizon site is one of the most degraded features in the District, especially the tall, slatted chain link fence and unattractive building. The fence needs to be removed or replaced, or if it must remain, the tattered vinyl slats should be removed and evergreens planted as a screen.
- Shade trees, evergreens, and wide roadside tree lawns should be planted throughout the District and roadsides, including, but not limited to, the firehouse frontage, the school entrance, the Verizon building, the median above the upper lake dam, the motel, the

island in front of the post office, and the Sweezey-Avey House. Vegetation can make unattractive buildings less visible.

• At the Lower Lake dam near the site of the old mill, create a pedestrian walkway to the DEC parking area to the south, as the existing conditions are very dangerous. At this crossing, refurbish or replace the old bridge railing to meet historic design standards, and remove the abutting chain link fence.



Vine-covered chain link fencing makes C.R. 21 at Lower Lake unattractive and unfriendly to users.

- Provide funding and other support to restore the Nationally-recognized Homan Gerard
 House. The historic shipmast locusts in front of this house should also be preserved and
 replaced with the same when they die. Make the entrance to the Weeks Pond trail more
 inviting.
- Remove the chain link fence and gate at the County's fishing access and allow more frequent access. If a gate is necessary, replace it with one appropriate for an historic district.
- Plant a few shade trees and more vegetation in islands at the historic gas station on the corner of East Main Street and C.R. 21. Remove adjacent clothing donation bins, or screen with vegetation.
- Determine if public access is available at the Mill Pond Inn parking lot. The owner should be encouraged to complete any resurfacing of this parking area with Long Island natural pea stone. Vegetated islands should be added, as well as vegetation along the lakefront. The DEC Fisheries Unit has discussed this with the restaurant owners, and they are amenable to an agreement that would allow angler parking on their property in conjunction with assistance in maintaining their parking lot. Unfortunately, the DEC is not able to provide the level of assistance that the owners desire. This project might work better with additional partners (the Town, County and or private stakeholders).

- Explore the possibility of removing weedy shrubs along Main Street in order to create a scenic vista of the picturesque Fox Lair grassland, to be enjoyed by passing motorists and pedestrians.
- The historic structures and their settings in the vicinity of the sand mine on East Main Street should also be preserved and restored to standards consistent with the district, and the dumping and junk in this area must be remediated.

Tallmadge Trail

Portions of the historically significant and irreplaceable Tallmadge Trail have been obliterated in recent years, either from neglect or insensitivity. The entire length of this Revolutionary War trail, which stretches from Mount Sinai to the Manor of St. George in Mastic, should be assessed and a protection and restoration plan developed. Features to be assessed should include, but not be limited to: conditions of the trail surface, conditions and locations of existing interpretive signage, scenic quality along the trail, and opportunities for re-routes around portions that have been built upon.



Some of the existing Tallmadge Trail interpretive signs (see right) are poorly located and deteriorated. The restoration plan should consider

using a modest number of new or refurbished interpretive signs that conform to one of the two design themes recommended earlier (either white on brown, or historically accurate). These signs should be placed where recreational users and other visitors are likely to see them, but should not be excessively large or block important vistas.

Additional Analysis and Recommendations Needed

Lack of time and resources prevented the Protected Lands Council from comprehensively analyzing and providing recommendations for public land stewardship across the entire study area. There are many important resources that were missed, but that are in great need of protection and restoration. Ecological and water quality issues especially need a hard look. Light pollution mitigation and many other important aspects of stewardship were not addressed. Some of the public land areas and public rights-of-way within the study area that were not even visited include the westerly side of the study area between Spring Lake Golf Club and the Mill Road Area, Siegfried Park Historic District, Middle Island Historic District, sections of the River, and many other areas.

While many of the general recommendations in this report apply to public rights-of-way, the two major highway corridors—Middle Country Road and the Long Island Expressway—were not comprehensively assessed. Scenic vistas from these roads and the quality and nature of roadside vegetation should be evaluated and recommendations made for improvements. Historic early-American mile markers that are (or were) located along NY 25 should be located, preserved, and protected on their original sites. Bicycle and pedestrian routes on NY 25 need to be examined, drainage structures need to evaluated, and more.

Summary

- 1. Any recommendations for the management and public use of lands in the Carmans River watershed must be consistent with the protection of natural resources, habitat and water quality.
- 2. Existing and new trail corridors for varying uses are feasible in the upper Carmans region and will provide a public benefit, help to drive out illegal uses, and create greater public awareness of the need to protect our resources.
- 3. Greater cooperative management among agencies and with volunteers will reduce redundancy, thereby providing efficiencies and cost savings.
- 4. An ecological management plan is needed for the entire Carmans River area—and indeed the entire Central Pine Barrens.
- 5. The Core Preservation Area should be expanded to include all public lands in the study area, in order to further their protection and improve management.
- 6. An updated Pine Barrens Library and a central repository for databases, working agreements and other records would greatly enhance management practices. It would be necessary to hire a full-time staff person.
- 7. A few key land acquisitions or easements should be considered for the integrity of the river corridor.
- 8. As acquisitions wind down, a "Natural Capital" fund should be created to finance management of our open spaces.
- 9. Investment in the scenic and cultural resources in the upper Carmans area will better connect the community to the open spaces in its midst and visually enhance several historic districts.
- 10. The protection, restoration, and enhancement of scenic and cultural resources will transform the Carmans River headwaters, and in fact the entire Pine Barrens, into a place that looks, feels, and functions more like the preserve that it is, as envisioned in the LI Pine Barrens Maritime Reserve Act (ECL Art. 57).
- 11. A comprehensive cultural and scenic resource inventory and assessment, at the local level, should be conducted. Following this, a site-specific restoration and protection plan should be developed, implemented and funded for future management.
- 12. It is anticipated that when the Town of Brookhaven completes plans for the preservation of the Carmans River that this document may be updated in order to ensure that efforts among landowners and regulators are coordinated.

