Final Master Plan/
Final Environmental Impact Statement

For

Grafton Lakes State Park

January 25, 2012

Andrew M. Cuomo
Governor

Rose Harvey
Commissioner

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SEQR

Notice Of Completion Of A Final EIS

Date of Notice: January 25, 2012

Lead Agency: New York State Office of Parks, Recreation and Historic Preservation (OPRHP)

Title of Action: **Adoption and Implementation of a Master Plan for Grafton Lakes State Park**

SEQR Status: Type I

Location of Action: Grafton Lakes State Park is located at 100 Grafton Lakes State Park Way in the Town of Grafton in Rensselaer County.

This Notice is issued pursuant to Part 617 of the implementing regulations pertaining to Article 8 (State Environmental Quality Review) of the Environmental Conservation Law. A Final Plan and Final Environmental Impact Statement (FEIS) on the proposed action has been prepared and accepted by OPRHP. The Executive Summary of the Master Plan/FEIS describes the proposed action, the environmental setting, alternatives, potential environmental impacts and mitigation and the agency's responses to comments on the Draft Plan/DEIS.

Agencies and the public are afforded the opportunity to consider the FEIS. This consideration period ends on February 8, 2012. Copies of the Draft Plan/DEIS are available for review at the Park Office; at the offices of the agency contacts; and at the Grafton Community Library, 2455 NY Route 2, Grafton, NY and the Troy Public Library, 100 2nd Street, Troy, NY. The online version of the Master Plan/DEIS is available at the following publically accessible web site: **http://www.nysparks.com/inside-our-agency/master-plans.aspx**

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Final Master Plan/
Final Environmental Impact Statement

for

Grafton Lakes State Park

Town of Grafton, Rensselaer County

Prepared by
The New York State Office of Parks, Recreation
and Historic Preservation

Completed: January 25, 2012

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Acknowledgements

The Grafton Lakes Final Master Plan/Final Environmental Impact statement is a result of a cooperative effort by many persons. The Office of Parks, Recreation and Historic Preservation (OPRHP) acknowledges the time and effort of each individual, public agency and interest group who participated in the development of the park and this Final Master Plan Document.

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Executive Summary

Introduction

The Commissioner of the Office of Parks, Recreation and Historic Preservation (OPRHP) is proposing the action of adoption and implementation of a Master Plan for Grafton Lakes State Park. The Final Master Plan/Final Environmental Impact Statement (FEIS) was written to provide the opportunity for individuals, organizations and other government agencies to participate in the development of a State Park.

One public scoping/information meeting was held to gather information, concerns and issues surrounding the development and management of Grafton Lakes State Park. The meeting was held at Tamarac High School in the Town of Brunswick, NY on January 27, 2011. There was one public hearing regarding this final master plan at the Everett Wager Senior Center in Grafton, New York on November 29, 2011.

The Commissioner has decided that a Master Plan/EIS is necessary to guide the management and development of the resources at Grafton Lakes State Park. At this time the Commissioner has also decided that the final plan is to be made available for public review and comment. There has not been any decision regarding the adoption of the Final Master Plan.

Park Background

Grafton Lakes State Park is a day use park. It encompasses 2,545 acres in the Rensselaer County town of Grafton, New York. The park was established in 1963 with the purchase of land and lakes from the city of Troy which were no longer necessary for the city's water supply. The park was opened to the public in 1971.

The park is mostly forested and is within the Rensselaer Plateau Forest Legacy Area which was established in 2011. With the recent addition of land to the east of the main body of the park, including access to the White Lily Pond area, there are six lakes in the park, four of which are man made and two are natural. The central recreation area of the park is at the south end of Long Pond, the site of a beach and bath house complex. The park also has approximately 21 miles of trails, five picnic areas, seven pavilion and tent sites, boat rentals, snowshoe rentals and an environmental education & interpretation program. People also come to the park for fishing and hunting and to enjoy scenic views and wildlife observation.

Recently the Dickinson Hill Fire Tower was added to the park. This structure was put on the National Register of Historic Places in 2010. The park also has three local family cemeteries.

The park's swimming beach has often been cited in local newspapers as the most popular beach in the capital district (Albany, Schenectady and Troy, NY and the surrounding urban and suburban areas). This popularity, combined with its proximity to Albany and Troy, and its lakes and natural beauty, have made the park a prime location for urban dwellers to spend the day swimming and picnicking.

Environmental Setting

Physical Resources

Grafton Lakes State Park is located on the Rensselaer Plateau region of eastern New York State, which lies between the Taconic and Hudson Valleys. The bedrock under the park is mostly

Rensselaer Graywacke, a shale formation from the Cambrian period, with small, scattered occurrences of Nassau Formation. A poorly sorted sand-rich sedimentary glacial till of variable texture overlies the entire park. The main soils of the park are *Brayton very stony silt loam*, *Buckland very stony loam* and *Glover very stony loam*. Grafton Lakes State Park lies mostly between 1400 and 1600 feet above mean sea level and is mostly hilly with the majority of the slopes ranging around 15 percent.

Water Resources

Most of the park, including its lakes, is in the Poestenkill watershed. The lakes have good water quality, being located in watersheds that are mostly forested. Plant survey results indicate a balance of macrophyte biodiversity in all of the lakes. All of the lakes are mesotrophic or oligo-mesotrophic except for White Lily Pond which is eutrophic. Shaver Pond is also classified as an Oligotrophic-Dimictic Lake by the Natural Heritage Program for the purpose of describing its ecological community.

There are several un-named streams within the park, all are tributaries of the Quacken Kill, which is a tributary of the Poestenkill, and are classified "A" by the New York State Department of Environmental Conservation (DEC).

Wetlands

There are several wetlands regulated by DEC in or partially in the park. Numerous National Wetlands Inventory classified wetlands are located throughout the park.

Air

Rensselaer County is within the Capital Region Nonattainment Area for Ozone. Local emissions in the Albany area are the primary driver for the ozone exceedances. DEC maintains monitoring apparatus in the park at the Shaver Pond Nature Center. This installation records air quality and acid rain factors.

Climate

Grafton Lakes State Park enjoys a climate that is conducive to year-round recreation of many types. Summers are warm enough for enjoyment of the swimming beaches, picnicking and hiking the trails and the winter is conducive for all forms of winter activities on snow and ice.

Natural Resources

The Rensselaer Plateau is a regionally unique, largely forested area of over 100,000 acres. It is one of the largest and most ecologically intact native habitats in New York State. New York State's Open Space Plan includes the plateau as a priority project for acquisition. In December of 2010 the US Department of Agriculture Forest Service approved designation of the plateau as a forest legacy area. Upland forests dominate the park and include roughly equal portions of spruce-northern hardwood forest, hemlock-northern hardwood, and beech-maple mesic forest. Spruce-fir swamps and beaver impounded wetlands and meadows occupy area lowlands. The predominant terrestrial natural communities in the park foster habitats for mammal species similar to those in the Adirondacks. Many common species found in the Capital District area may be found in the Park. The park's lakes and wetlands provide habitat for a range of animal species, including native and managed fish populations and amphibians. The park is part of the "Rensselaer Plateau Important Bird Area" of the National Audubon Society and hosts nesting

activity of a variety of birds. Grafton Lakes State Park has had known nesting sites of three State Special Concern woodland raptors as recently as 2003.

Significant Ecological Communities

Four of the communities found in the park are identified by the Natural Heritage Program (NHP) as significant ecological communities. They are the *beech maple mesic forest*, the *hemlock-northern hardwood forest*, *spruce-northern hardwood forest* and *oligotrophic dimictic lake*.

Terrestrial and Aquatic Invasive Species

No large stands of terrestrial invasive species are present in the park, however Japanese barberry, bush honeysuckle, garlic mustard and multiflora rose have all been found in the park at various locations.

In terms of aquatic environments, a large stand of common reed is located around White Lily Pond, but only small populations have been found in other wetlands in the park. Eurasian watermilfoil is found in two of the park's lakes.

Cultural Resources

Cemeteries

There are four family cemeteries within the park. These four burial grounds vary in date and condition of the landscaping and monuments.

Dickinson Hill Fire Tower

Built in 1924, the tower was part of the network of fire protection observation posts until the 1970's. The city of Troy contributed funds for the original construction in order to protect its watershed. The tower also saw duty as part of the Aircraft Warning Service during World War II. For 18 years, beginning in 1943, the tower was operated by New York State's first woman fire observer, Helen Ellett, a Grafton resident.

Scenic Resources

The park is set amidst rolling hills and moderate slopes and valleys that are typical of the Rensselaer Plateau. These landforms produce scenic qualities that are of high value. Expansive lake views and views from hilltops enhance the scenic desirability of the park. The major vista in the park is that from the Dickinson Hill Fire Tower. The tower's cab, 60 feet above the ground atop Dickinson Hill, commands a sweeping three hundred sixty degree view of the surrounding lands. In other parts of the park lake views take in surrounding shorelines and unbroken hilltop profiles that express the nature of the rolling topography in this area.

Recreation Resources

Grafton Lakes State Park is currently a day use park. The park supports swimming, boating, picnicking -, with playgrounds, pavilions and large format canopy tents for group picnics, court and field games, hunting, fishing, environmental education and interpretation, geocaching, orienteering, ice-skating, ice-fishing and trail activities. Trail activities include equestrian, hiking, bicycling, snowshoeing, cross-country skiing, and snowmobiling. Snowmobile trails include several trails that connect to the statewide snowmobile trail network.

Vision and Goals

The vision for Grafton Lakes State Park is to serve the residents of, and visitors to, New York State by identifying, preserving, protecting and interpreting the natural, scenic and cultural resources in Grafton Lakes State Park while providing a variety of high quality year round recreation and environmental education opportunities. The park will serve as a statewide model for education and interpretive programming of the natural environment.

In order to accomplish this vision OPRHP must strive to:

- Achieve a balance between providing diverse recreational opportunities and the protection of natural and cultural resources of Grafton Lakes State Park
- Make available compatible public environmental and historic education and interpretive programs
- Provide the facilities and staff necessary to establish the park as a statewide education and interpretation model.
- Promote underutilized areas, off season attendance and less attended activities in the park using education staff the friends group and volunteers.
- Maintain the park to provide a safe and enjoyable recreation experience
- Promote the gathering of information about the resources in the park for the purpose of proper management or scientific research.

The goals set forth for the park and this master plan protect, maintain and expand open space opportunities adjacent to and connected with the park and make access to the park safe and convenient for patrons using all modes of transportation.

Additionally the park and its facilities will be operated and maintained in a cost effective way that is sustainable, and exhibits a high degree of professionalism, to establish links between the park and surrounding community and to promote partnerships between the park and its users.

Analysis & Alternatives

The master plan presents a series of “preferred alternatives” for future development and operation of the park. Cumulatively, the actions described below present OPRHP’s long term vision for the enhancement of the park.

The Master Plan

The Master Plan alternative presents several park improvements which pertain to resource protection and recreation development. The items in the following list are more extensively described in Chapter 6 – The Master Plan. The alternatives and analysis used to arrive at these decisions are depicted in Appendix A – Alternatives and Analysis.

Natural Resource Protection

- Park area south of NYS Route 2 will be named a Park Preservation Area.
- The park will be named a Bird Conservation Area.
- The entire park will be identified as an Invasive Species Prevention Zone (ISPZ) (A park or an area in a park that has little or no populations of invasive species. Special efforts are made to remove any that exist and to keep out new invasives.)

- A water quality testing program, including nutrient loading will be continued in all the park's lakes.
- Stormwater runoff at the beach area will be directed to constructed rain gardens before entering the stormwater drainage system and Long Pond.
- Aquatic invasive species will be closely monitored. Boat washing stations, invasive species containers, and user education will be implemented at all lakes and at the park entrance.

Recreation Resource Development/Management

- Camping will be initiated in the park at an area on the north side of the beach area along the road to the water tower. A conceptual plan has been developed. The site has several limitations due to soil type, slope, vegetative cover and proximity to Long Pond. The actual number of sites will be determined through more detailed design that will assure protection of the park's natural resources while addressing demand for camping.
- Cabins will be installed at the site of the former YMCA campground at the White Lily Pond area entrance and across the access road to the new campground. Those at White Lily Pond area will be all season cabins and will be accessible from the park trail system as well as Babcock Lake Rd. The cabins at the new campground area will only be operated during the park's regular season.
- A new, all season, nature center will be constructed on the main park road near the area of the trailhead of the Woodland Trail. The nature center will accommodate the Environmental Education & Interpretation functions of the park.
- A Feasibility study is being recommended for trail crossings on the outflow of Martin Dunham Reservoir.
- If needed, a feasibility study will examine the possibility of adding a second beach to Long Pond
- The south picnic grove will be rehabilitated, the Amphitheater Pavilion will be replaced with a larger structure and a new playground will be installed. The north picnic grove will be dismantled and allowed to revert to natural community.
- All large canopy tents will be replaced with permanent pavilion structures and a new, second pavilion, will be installed at Deerfield.
- Full basketball courts will be installed at Rabbit Run and Deerfield. A Bocce court will be installed at Deerfield.
- The Dickinson Hill Fire Tower will continue to be restored and will be open to the public when the restoration is complete.
- Shaver Pond nature center will be converted for other uses. The DEC monitoring station will become part of the new nature center, providing the public with another educational opportunity.
- Implement the Grafton Lakes State Park Trails Plan (Appendix B). Key components of the plan include:
    - Maintain the trail system for designated uses including hiking, biking, horseback riding, snowshoeing, cross-country skiing and snowmobiling.

- Provide increased trail opportunities and connections within the park's trail system as well as external connections to trails on nearby public lands.
- Enhance trail opportunities and accessibility in high-use areas.
- Improve trail signage including trailhead and trail intersection signage throughout the park to enhance the visitor experience and increase patron safety.
- Enhance interpretation of natural, cultural and historical resources along trails.

Park Operations

- A new park office will be built on the main park road north of the current contact station. It will include facilities for camper registration (including adequate parking and traffic circulation), park information services, and park administration offices.
- Upgrades will be made to several park maintenance buildings.

Implementation

Priorities

The Master Plan sets forth OPRHP's vision for capital improvements, operational enhancements and natural resource stewardship projects in Grafton Lakes State Park for the next ten to fifteen years. As stated at the beginning of this chapter, the agency has not developed detailed cost estimates for each of the proposed actions. Cumulatively they will cost tens of millions of dollars to implement. The pace and sequencing of recommended actions will be determined by the availability of funding, which is a function of the size of OPRHP's annual capital budget and the need to balance investments throughout the entire State Park System. The master plan will be reviewed annually to select projects that will be added to the park's budget for implementation and to assess the progress of plan implementation.

The implementation of the Master Plan for Grafton Lakes State Park is divided into three priority phases. The priority groupings described below are conceptual and subject to reorganization based on available funding for specific components in any given group.

Table 1 Implementation Priorities (projects within the priority levels are not in any particular order)

Implementation Priorities	**Description/Development Component**
Immediate	• Park Preservation Area creation • Bird Conservation Area creation • Invasive Species Prevention Zone creation
On Going	• Water quality monitoring of Park's lakes and ponds • Invasive species monitoring • Reduced mowing program • Replace all tents with permanent pavilion shelters • Follow implementation priorities in the trails plan
Priority 1:	• Design and install new nature center • Nutrient monitoring in Long Pond post campground construction. • Install invasive species protection measures (boat wash station, IS disposal bins) and inventory the park for existing invasive species • Rehabilitate south picnic area • Rehabilitate existing facilities • Install new playgrounds in south picnic area and campground • Finish restoration of Dickinson Hill Fire Tower and open to public • Install new rain gardens at beach area • Detailed aquatic plant survey • Survey park for rare plants and animals (prior to development of new trails or facilities)
Priority 2:	• Design and install new campground • Design and install new cabins • Build new park office/camper registration at main park entrance • Nutrient monitoring in Shaver Pond post nature center construction • Install new full basketball court at Rabbit Run

Priority 3:	• Replace south picnic area Amphitheatre pavilion with larger pavilion • Install second pavilion at Deerfield • Expand existing ½ court to full basketball court at Deerfield • Install Bocce court at Deerfield • Convert Shaver Pond Nature Center to other park uses • Begin feasibility study for outflow of Martin Dunham Reservoir • If needed conduct feasibility study for additional beach on Long Pond

Environmental Impacts

Environmental impacts associated with implementation of the master plan have been addressed under general categories.

The plan will result in some physical change to land particularly where new recreation facilities and trails will be constructed. Proposed developments in areas of the park that are already developed will result in minimal new disturbance. Proposals potentially involving new land disturbance include the introduction of camping, new nature center, new cabins and some new trails. Since soils in the park are limiting factors for recreational development, careful planning and site-specific design will be applied as mitigation for all facilities to minimize the potential for erosion.

The master plan will result in beneficial impacts to Long Pond and Second Pond by reducing stormwater runoff into the lake from the beach through the installation of rain gardens and improvement of the drainage system. Projects with the greatest potential to impact lake water quality include the new Nature Center in the Shaver Pond watershed, the introduction of camping in the Long Pond watershed, and the proposed cabins in the White Lily pond watershed. The existing water quality monitoring at the park's lakes will continue in order to help detect and mitigate changes due to development. Wide vegetated buffers will be retained between these developments and the lakes. Pervious pavements and green designs such as rain gardens will be used to reduce the velocity of stormwater runoff. Design of new trails will minimize stream crossings and provide buffers between trails and water bodies. A more detailed survey will be conducted to determine the locations and extent of Eurasian watermilfoil and steps will be taken to remove it from Long and Mill Ponds and prevent their spread to other park lakes.

Some minor, localized and temporary impacts to air quality may occur. These impacts will be mitigated through design and operational elements.

The Bird Conservation Area and Park Preservation Area will provide recognition, increased recreation and an additional natural resource protection.

Approximately 16 acres of vegetation could be impacted by proposals within the master Plan. This amounts to approximately 0.6 percent of the parkland. Some of the proposed developments will impact significant ecological communities. The total area impacted will likely be reduced through designing facilities and trails to minimize the amount of tree removal wherever possible. Surveys for rare plants and animals will be conducted prior to development of any new trails or facilities. Grafton Lakes SP is part of the Rensselaer Plateau which contains the fifth largest unfragmented forest in the state, an important habitat for many wildlife species. New developments proposed in the master plan were carefully located to minimize forest fragmentation to the extent possible. The park currently has considerable diversity of native

plants and animals and also very limited invasive species population as a result, the Master Plan calls for creation of an ISPZ for the entire park where efforts will be made to eliminate the existing invasives and prevent new invasions.

The Master Plan calls for continuing the restoration of the historic Dickenson Hill Fire Tower and surveying and protection of the four cemeteries in the park. A Phase 1A archeological survey will be conducted prior to any new ground disturbing development. Scenic resources will be protected though the development of a scenic resource management plan.

Implementation of the Master Plan will result in substantial beneficial recreation and open space impacts through improved and expanded recreation facilities and amenities.

Introduction of camping into the park could increase traffic during the summer months. As mitigation, camping patrons will be encouraged to walk to day use facilities on improved trails and day users will be encouraged to take the bus to the park. New facilities will be designed to meet all applicable health and safety codes as well as incorporate sustainability principles and energy efficiency.

As part of the Agency's responsibility under SEQR, all proposed master plan implementation projects will be reviewed for consistency with the Master Plan/EIS. Projects not adequately covered within the Master Plan/EIS may need additional environmental review.

Response to Comments

The Draft Master Plan/DEIS was issued on November 9, 2011 A Public Hearing was held in Grafton, New York at the Everett Wager Senior Center on November 29, 2011. The comment period ended December 16, 2011.

During the Public Hearing 16 people spoke out of approximately 50 attendees. During the comment period the Agency received 22 written comments by letter and email.

Responses to these comments are found in Chapter 8 and were considered in the revisions found in this Final Master Plan/Final Environmental Impact Statement (FEIS).

Significant Changes to the Draft Master Plan in the Final Master Plan

- Campground has been moved from Long Pond Road to the area north of the Long Pond beach at the end of Water Tower Rd. Master plan pages xvii and 60. Appendix A page A-22 to A-24, Figure A5 and Master Plan Map.
- The implementation tables have been changed to include rehabilitation of existing facilities in Priority 1 (pages xix and 65).
- Changes have been made to the Environmental Impacts and Mitigation Chapter on pages 68, 69, 74, 75,78 and 80 to reflect the change in location of the proposed camping area. These changes reflect a smaller area of parkland potentially being impacted (16 acres instead of 23) and changes in: the amounts of new impervious surfaces, ecological communities impacted, and fragmentation discussion. Additional information has also been provided under Public Health and Safety.

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Chapter 1 – Introduction

The New York State Office of Parks, Recreation and Historic Preservation (OPRHP) administers over 200 state parks and historic sites encompassing more than 330,000 acres of parkland. Under Section 3.02 of the Parks, Recreation & Historic Preservation Law, OPRHP is directed "…to conserve, protect and enhance the natural, ecological, historic, cultural and recreational resources contained therein and to provide for the public enjoyment of and access to these resources in a manner which will protect them for future generations." Master planning is a critical element in the process to meet the substantial responsibilities to provide recreation while at the same time protecting and interpreting resources. The Master Plan process explores the parks' or sites' existing physical, natural, cultural, recreational and structural resources. It evaluates the condition of these resources to provide recreation and interpretive opportunities within healthy and productive environments. The process calls for the development and consideration of alternatives that enhance the stewardship of natural, cultural and historic resources and improve the recreational opportunities and experiences offered at the park. The master plan is the selection of preferred alternatives that best meet OPRHP's mission and the vision for the park or site.

OPRHP has determined that the preparation of a master plan for Grafton Lakes State Park will further its mission to provide safe and enjoyable recreational and interpretive opportunities for all New York State residents and visitors and to be responsible stewards of our valuable natural, historic and cultural resources.

Establishment of the park

Grafton Lakes State Park was established in 1963 with the acquisition of the City of Troy's former reservoir properties located in the Town of Grafton. The acquisition comprised four lakes and Dunham Reservoir, totaling about 480 acres of water area, and approximately 675 acres of adjacent land. Before the creation of Grafton Lakes State Park there was no state park in Rensselaer County and public demand for one was strong. The park was opened in 1971. Subsequent acquisitions have brought the total park acreage to 2,545 acres.

Planning that has been done in the past

In 1965 a general development plan was completed by Blauvelt Engineering Company for the portion of the park north of NYS Route 2. The plan included picnic areas, buildings, roads, maintenance areas, camping, two swimming beaches located on the north and south ends of Long Pond, and a golf course. Parts of the plan, notably the southern beach and some picnic areas, were constructed. The golf course and camping areas were never built.

In 1968 Blauvelt Engineering Company was hired to draw up a plan for the development of the southern end of Long Pond including an entrance from NYS Route 2 and internal park roads and parking lots. Epping, Whitney & Fox was retained to draw up plans for the beach and concession complex on Long Pond in 1969.

In their 1969 plan, *Outdoor Recreation for the Capital District New York*, Vollmer and Associates documented that the initial stage of park development (presumably the 1968 Blauvelt plan and the 1969 Epping Whitney & Fox plan) was under construction including a major road to the future bathhouse, beach complex, parking areas and sewage and utility plants. The Vollmer document also stated that the design of major park structures was in process. (Vollmer, 1969)

In addition to documenting the current status of development at Grafton Lakes State Park at the time, the 1969 plan included a section on Grafton Lakes State Park that suggested direction for acquisition, access and recreation facilities. The plan did not include the golf course and some of the camping areas that were in the 1965 Blauvelt plan. The plan did include another beach at the north end of Long Pond.

In 1971 plans were created by Vollmer Associates for a camping area on the east side of Long Pond and in 1974 OPRHP created plans for improvements at various day-use areas.

In the 1980's plans were again submitted by the Region to provide camping at the park. As of the writing of this master plan no camping areas have been developed at the park.

Planning and Environmental Review

The environmental review of proposed master plans for state park facilities is conducted in accordance with the State Environmental Quality Review Act (SEQR). Under SEQR, agencies consider environmental impacts with social and economic factors early in decision-making and the planning/project design process. Land use or resource management plans are considered Type I actions under SEQR, or likely to have a significant impact on the environment and require preparation of an Environmental Impact Statement (EIS). OPRHP fully integrates the planning and environmental review processes. This document serves as both the Master Plan and the EIS for Grafton Lakes State Park.

Guiding Principles and Policies

The OPRHP planning process adheres to three basic principles:

- Planning must be coordinated and provide for public participation: Cooperation among appropriate governmental organizations, the public at large, special interest groups and the private sector is not only desirable but necessary.
- Planning is a continuing process: Assumptions for the classification and management of park resources must be constantly reevaluated in light of new information, changing needs and priorities, and resource character.
- Planning must be comprehensive: The information base, and pertinent additional research, should support the planning process and should encompass relevant social, economic and physical factors relating to the management and operation of the park and its resources.

Overarching OPRHP program principles, policies, and goals and objectives provide a foundation for planning, development, and operation and management decisions made during the master plan process. The following sections summarize current directives considered throughout the planning process for Grafton Lakes State Park.

OPRHP Policies

OPRHP has developed a number of agency-wide policies to address management issues commonly faced by the park system. Policies cover topics such as the management of trees and other vegetation, pesticide use, wildfire and controlled burns, oil, gas and mineral rights, wildlife management and native plants. Visit our website and go to the following links to view our Agency policies. **http://nysparks.com/environment/documents.aspx**

Sustainability

Sustainability is a philosophy on how to improve, operate and maintain State Parks and Historic Sites, while at the same time, minimizing or reducing the impacts of State Parks and Historic Sites have on the natural environment.

Sustainability looks at the whole rather than the individual parts to maximize energy efficiency and minimize environmental impact; reduce use of fossil fuels; reduce or eliminate hazardous substances; protect biodiversity and ecosystems; and use resources carefully, respectfully and efficiently to meet current needs without compromising the needs of other living creatures and the use of those resources by future generations.

OPRHP is committed to reducing its impact on the environment and to becoming more carbon neutral by adopting more sustainable practices in park development, improvement, operation and maintenance. Sustainable practices and alternatives were considered in the planning process and incorporated throughout the Master Plan.

Ecosystem-Based Management (EBM)

OPRHP has embraced the principles of ecosystem-based management (EBM) that support master plans in providing direction for the conservation and protection of coastal and water shed ecosystems. The principles of EBM are included and represented with the master plan. These principles are: to start with a place based focus, base management decisions on the best available science, have measurable objectives to direct and evaluate performance, use adaptive management to respond to new knowledge and changing conditions, recognize interconnections within and among ecosystems, and involve stakeholders to incorporate local knowledge. An EBM approach to management ensures that decisions are made holistically focusing not on a single species or resource, but considering all parts of the ecosystem, including humans.

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Chapter 2 – Park Background

The Region

New York State is divided into 12 Park regions. Eleven of these regions are under the jurisdiction of the Office of Parks, Recreation and Historic Preservation (OPRHP). The twelfth region is composed of the Adirondack and Catskill Forest Preserves and is administered by the Department of Environmental Conservation (DEC). Grafton Lakes State Park is in the Saratoga-Capital District park region. This region covers Albany, Rensselaer, Montgomery, Schenectady, and Schoharie counties as well as parts of Fulton, Saratoga, Washington, Greene, and Warren Counties.

Location and Access

Grafton Lakes State Park is located in the Town of Grafton in Rensselaer County on the Rensselaer Plateau between the Taconic and Hudson Valleys. (Figure 1) New York State (NYS) Route 2 divides the park into north and south sections. Grafton Lake State Park Way, the main summer entrance to the northern part of the park, the lakes, and the day use areas is on NYS Route 2 and is accessible by vehicles, pedestrians and bicyclists. Vehicles coming from the west use a right-hand pull off known as the "jug-handle" to cross Route 2, effectively making a left turn into the park without blocking traffic on Route 2. Vehicles coming from the east simply turn right onto Grafton Lake State Park Way (Figure A7). During the winter patrons are directed to the entrance on Long Pond Road approximately 0.7 miles to the east of Grafton Lake State Park Way, in the Grafton town center.

During the summer months the park is accessible from Troy by bus operated by the Capital District Transportation Authority (CDTA, 2010). Two other vehicular, pedestrian and bicycle entrances to the park are provided off of NYS Route 2 at Shaver Pond Road and North Long Pond Road.

Dunham Reservoir and the southern portion of the park are accessible by motor vehicle, on foot and bicycle from NYS Route 2 on Dunham Reservoir Road and Johnson Road. A boat dock located at the southern end of the reservoir is accessible from Dunham Reservoir Road while a boat launch at the northern end of the reservoir is accessible from Johnson Road.

Equestrian trailer parking is provided at several parking lots to provide for their access to the park. The main parking lot at the beach area is not used for this purpose during the summer. Equestrians use the Mill Pond parking lot, the parking lot at the north end of Long Pond and an open field across from the Second Pond boat launch. On the south side of NYS Route 2 equestrian trailer access is available at parking areas on Johnson Road and Dunham Reservoir Road. For riding access between the northern and southern sections of the park, equestrians typically cross Route 2 while utilizing Grafton Lakes State Park Way and Gartler Trail. Snowmobile access to the park is by trailer and by connections to external snowmobile trail systems through Corridor 9 (C9) to the north and south. Secondary snowmobile trails access the park on Fire Tower Road, Johnston Road and Long Pond Road. The main park entrance road is not plowed from Rt 2 to the office/shop intersection and becomes a wide section of the C9 snowmobile trail. More information about snowmobile access can be found in Appendix B – Trails Plan.

Snowmobile trailers can be accommodated at several parking areas in the park. These parking areas are:

- Main parking lot
- Parking area at the shop
- Mill Pond parking area,
- Parking area at the end of Long Pond Road
- DeRocco's house on Long Pond Road (the "Stone House")
- Two parking areas on Dunham Reservoir Road

Economic Contribution

In March 2009, a study prepared for Parks & Trails New York by the Political Economy Research Institute (PERI), University of Massachusetts-Amherst, found that the combination of annual state and visitor spending at all New York State Parks supports up to $1.9 billion in economic output and business sales and up to 20,000 jobs throughout the state. For the Saratoga-Capital District park region, which includes Grafton Lakes State Park, the figures are $249 million and 2,929 jobs. State expenditures in the Saratoga-Capital District park region during fiscal year 2008-9 were $47.6 million (this number includes the central administrative activities that are located in Albany) for operating expenses and $11 million for capital expenditures. Visitor expenditures within the region for the 2007/8 season were estimated to be between $56.1 and $115.5 million based on an attendance of 3,300,000. The low-end estimate is calculated by assuming that park visitors spend, on average, $17 per person. The high-end estimate is calculated by assuming that spending levels amounted to $35 per visitor. (Heintz, Pollin and Garrett-Peltier, 2009)

When available, OPRHP conducts analyses of the economic impact of individual state parks on their communities drawing upon information provided by the National Park Service in their "Money Generation Model" and from OPRHP park visitor surveys. No recent survey of economic contributions at Grafton Lakes State Park has been conducted.

Ecosystems within state parks provide many support services to communities, such as reducing negative effects of pollution, supporting soils and providing erosion control, protecting water quality, providing flood and storm protection, and supporting critical ecosystems and wildlife habitats.

Recreational Needs Assessment

Grafton Lakes State Park is a popular regional park which serves the public mostly from Rensselaer County, including the City of Troy, and Albany County. According to the latest user survey of the park, taken in the summer of 2010, the majority of park users come from Rensselaer and Albany counties with a few patrons from northern Columbia county, southern Washington county and southeastern Saratoga county. Based on the survey findings, the master plan identifies Rensselaer and Albany counties as the service area of the park.

The "Relative Index of Needs" (RIN) compares the service area need relative with the statewide level of need for each activity. This is expressed with a numerical scale, 10 being the highest relative level of need and 1 the least. Five is considered the statewide average in the current year (in this case the most recent numbers available are for 2005). For each activity in the service area there is a future need for all activities but the relative level will vary depending on the activity and the county. (OPRHP, 2008)

The Relative Index of Needs for Rensselaer and Albany counties is summarized in Table 2. (OPRHP, 2008) The index of needs over the entire service area was calculated using a weighted average of the two counties based on population. The resulting figure expresses demand for a

particular activity within the service area. A score of 5 is equal to the state average for that activity. Those activities which score a weighted average of 5 or more (indicating that they are at or above the statewide average) are bolded in the table to highlight their ranking.

Table 2 Relative Index of Needs
(Results with weighted averages of 5 or greater are bolded)*

Activity	Albany	Rensselaer	Weighted Average
Relaxing in the Park	3	3	3
Swimming	**5**	**5**	**5**
Biking	**6**	**5**	**5.66**
Golfing	**5**	**5**	**5**
Walking for Pleasure	**6**	**5**	**5.66**
Tennis	4	4	4
Court Games	3	3	3
Field Games	4	4	4
Equine Activities	**6**	**5**	**5.66**
Visiting Historic Sites	4	4	4
Camping	**6**	**5**	**5.66**
Hiking	**6**	**6**	**6**
Boating	**7**	**6**	**6.66**
Fishing	**6**	**5**	**5.66**
Local Winter	4	4	4
X-Country Skiing	**6**	**5**	**5.66**
Downhill Skiing	**5**	**5**	**5**
Snowmobiling	**5**	**5**	**5**

***Source: 2009-2013 Statewide Comprehensive Outdoor Recreation Plan (OPRHP, 2008)**

The Park

Park Boundaries

The entire park lies within the Town of Grafton (Figure 2) and is divided into north and south sections by NYS Route 2. The boundary of the north section extends north from NYS Route 2 along Shaver Pond Road for approximately 1.5 miles. The boundary then heads east irregularly for approximately 3 miles. It then turns south to Babcock Lake Road where it follows that road for a little more than .5 miles. It then turns north again, past White Lily Pond and then for .3 miles where it turns south again. It then turns approximately west, paralleling NYS Route 2 until it turns south to NYS Route 2 and heads west to the starting point at Shaver Pond Road.

The south section boundary is very irregular and is bounded on the north by NYS Route 2, on the west by Dunham Reservoir Road. The eastern boundary runs approximately north-south irregularly.

A recently acquired outlying parcel of approximately 120 acres lies to the north of the park on Couch Hollow Road Ext. The boundary is not contiguous with the rest of the northern section of the park. It is bordered on the west by Couch Hollow Road Ext. and on the East by Couch Hollow Creek.

The park has also acquired the Dickinson Hill Fire Tower. The tower sits on land that remains in the ownership of the New York State Police (NYSP). A memorandum of understanding between OPRHP and NYSP (OPRHP, 2010a) enumerates the rights and responsibilities of each party.

Surrounding Land Uses

Grafton Lakes State Park is situated approximately in the center of the Town of Grafton. The immediate surrounding land uses are primarily rural residential and agricultural. The town center of Grafton is adjacent to the park on NYS Route 2 and contains some commercial uses. Light industrial and commercial enterprises exist along the Route 2 corridor east and west of the park. (Figure 3)

The New York State Department of Environmental Conservation (DEC) operates Pittstown State Forest to the north of the park. Rensselaer County operates Dyken Pond Environmental Education Center south of the park. Rensselaer Polytechnic Institute owns much of the land on the northern boundary between the park and Pittstown State Forest. The institute uses this land primarily for research purposes.

Area Resources

Points of interest in the vicinity of Grafton Lakes State Park include the Berkshire Bird Paradise, Dyken Pond Environmental Education Center, and the Grafton Peace Pagoda (See Figure 1 – Vicinity Map).

Programs and Partnerships

Grafton Lakes State Park lies within a portion of the Rensselaer Plateau which has been identified as an Important Bird Area by The Audubon Society (Audubon, 2010). DEC has also proposed the Rensselaer Plateau Forest Legacy Area under the Forest Legacy Program (FLP); a federal grant program that protects forest lands from conversion to non-forest uses (NYSDEC, 2010d).

The Rensselaer Plateau Alliance is working on developing a comprehensive conservation plan for the plateau and is supporting the establishment of the Rensselaer Plateau Forest Legacy Area (Rensselaer Plateau Alliance, 2010).

The park plans to continue working with these (above) and other agencies and organizations for conservation collaboration.

The park maintains a relationship with the Friends of Grafton Lakes State Park through a Memorandum of Agreement (MOA). The friends volunteer in the park to support and promote the environmental education programs and other activities.

OPRHP and the Division of Air Resources of DEC have a Memorandum of Understanding (MOU) for operation of an acid deposition monitoring site at the Shaver Pond Environmental Center (SPEC).

The concessionaire for Grafton Lakes State Park is Brunswick Barbecue & Brew has a 3 year contract (2011-2013) with State Parks to provide food service at the beach concession stand in the park.

OPRHP and the New York State Police (NYSP) have signed an MOU for transferring the Dickinson Hill Fire Tower ownership and management to OPRHP while maintaining NYSP ownership of the land surrounding the tower.

The yearly “Trout in the Classroom” program is a cooperative effort between the park and Trout Unlimited. This program raises trout with a local school group for eventual release into Shaver Pond.

Partnering with user groups is an important part of the management of Grafton Lakes State Park. The Grafton Trail Blazers, the Grafton Trail Riders, the Empire Orienteering Club, the Mohawk Hudson Cycling Club and Capital MTB and local scouting organizations work with the park on service projects and maintenance programs.

On-going Planning

Rehabilitation of Martin Dunham Reservoir Dam and Dike. The Dunham Reservoir Dam is scheduled to be rehabilitated and is a part of the Saratoga-Capital District capital plan. The design report was completed in 2008. (Civil Dynamics, 2008)

Legal Considerations

Deed Restrictions

Cemeteries – There are deed restrictions for the Hicks cemetery. The deed for that cemetery states:

> *"The vendors reserve the right of ingress and egress by foot over Shaver Pond Road from the east line of Parcel No. 1 as shown on said map to the cemetery plot shown on north side of Shaver Pond Road;*
> *The vendors reserve the right to enclose said cemetery plot with a suitable fence not to exceed 4 feet in height and not to exceed an area of 300 square feet.*
> *Said cemetery plot shall be preserved.*
> *The vendors, their heirs or assigns, shall have the right to remove the remains of deceased herein interred and grave markers, and if this is accomplished, the right of ingress and egress shall terminate."* (Deed, 1967)

No other cemeteries in the park have restrictions or are mentioned in the property deeds.

Utility Right-of-way – A power line runs in between Long Pond Road and Long Pond. It was used to supply electricity to the cottages that once existed along the road. Deeds for the properties along the route consistently say "*Subject to public utility easements*." The park maintains a trail along the route of the power line.

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Chapter 3 - Environmental Setting

Physical Resources

Geology

Grafton Lakes State Park is centrally located in the Town of Grafton, Rensselaer County on the Rensselaer Plateau region of eastern New York State (Figure 4). The plateau lies between the Taconic and Hudson Valleys and covers approximately 105,000 acres. It sits above the lower-elevation surrounding lands bounded by a steep escarpment. (Rensselaer Plateau Alliance, 2010).

Bedrock

Almost the entire park is underlain by Rensselaer Graywacke, a shale formation from the Cambrian period. In small, scattered portions of the park the bedrock is Nassau Formation, a formation of shale, slate, and thin quartzite containing Stuyvesant Conglomerate, Diamond Rock Quartzite, Curtis Mountain Quartzite and Bomoseen Graywacke members. (USGS, 2010)

Graywacke is valued as a source of crushed stone and is mined in the surrounding area.

Surficial Geology

A glacial till of variable texture overlies the entire park. This till is a poorly sorted sand-rich diamict (sediment) deposited beneath glacial ice, with a variable thickness from a little over 3 feet to 165 feet. (Figure 5)

No faults traverse the park itself but several faults occur within one mile of the park boundary and the Rensselaer Plateau is bordered by thrust faults on the west and east sides (Rensselaer Plateau Alliance, 2010). Little seismic activity has occurred in Rensselaer County from 1970 through 2009 (only one occurrence of a less than magnitude 2.) (NYSDEC, 2009)

Topography

The topography of Grafton Lakes State Park is mostly hilly with the majority of the slopes ranging around 15 percent. Approximately 10% of the slopes in the park are 15 to 20 percent. The elevations of the park are mostly between 1400 and 1600 feet above mean sea level with the high point of the park in the northeast and the low point in the southwest part of the park. (Figures 6 and 7)

Soils

Brayton very stony silt loam and *Buckland very stony loam* comprise the majority of the soils at the park. The third most prevalent soil is *Glover very stony loam*. (Figure 8) All of these soils have limitations to certain types of development such as small commercial buildings, recreation uses, and trails. (NRCS, 2010) A description of the soils and these restrictions can be found in Appendix C.

Water

Watershed

Most of the park, including all of the lakes, is in the Poestenkill watershed, which is part of the larger Middle Hudson watershed. A small portion of the northern section of the park is in the Hoosick River watershed.

Each lake has its own drainage basin (sub-watershed). These basins have an effect on the water quality in the lakes and vary in size, vegetative cover and level of development. The larger watersheds and the individual lake drainage basins are shown in Figure 9.

Lakes

There are six lakes at Grafton Lakes State Park (Figure 10): Long Pond, Second Pond, Mill Pond, Shaver Pond, the area around White Lily Pond and Martin Dunham Reservoir. Shaver Pond and White Lily Pond are natural. All the other lakes are man-made and formed by dams. Before acquisition by OPRHP the lakes in the park were part of the water supply of Troy, New York.

Water quality monitoring and aquatic plant surveys were conducted at these lakes by the OPRHP Environmental Management Bureau (EMB) Water Quality Unit from 2002 through 2010. In addition, data was also collected by OPRHP for select lakes in the 1970s and 1980s and through the New York Citizens Statewide Lake Assessment Program (CSLAP) from 1994 through 2003. A report of the summary of monitoring as of 1999 in Long Pond is cited in Kishbaugh and Hohenstein, 2000.

Overall, the lakes have good water quality, being located within mostly forested watersheds. The park boundaries encompass the entire watersheds for almost all of the lakes, except Martin Dunham Reservoir and White Lily Pond. All of the lakes are mesotrophic or oligo-mesotrophic, with moderate nutrient loads and water clarity, except White Lily Pond, which is eutrophic, with high nutrient loads and low water clarity. Plant survey results indicate a good balance of aquatic plant diversity in all of the lakes. An invasive, Eurasian Watermilfoil (Myriophyllum spicatum) was found in Long Pond and Mill Pond and is of concern. Additional monitoring is needed to confirm the locations and abundance of Eurasian Watermilfoil in these two lakes. Based on this additional information, early action control measures will be recommended. (Husson, Lyons and Terbush 2011)

The classification of Shaver Pond as oligo-mesotrophic is based on indicators commonly used for describing the water quality and the trophic status of a lake. Shaver Pond is also classified as an Oligotrophic-Dimictic Lake by the Natural Heritage Program for the purpose of describing its ecological community. These two classifications are not incompatible and, although similar sounding, are simply different names to describe the lake under different systems.

Information on the individual lakes is summarized in Table 3.

Streams

There are several un-named streams in the park, all are tributaries of the Quacken Kill and are classified “A” by DEC. A tributary to the Poestenkill, the Quacken Kill below the park is classified “A” with the “TS” standard (A(TS)). The “A” classification is assigned to waters that can be used as a source of drinking water. The “TS” standard indicates that the waters may support trout spawning.

Groundwater

The glacial till which overlies the park is a source of groundwater. This layer varies in thickness depending on the depth to the bedrock.

Table 3 Basic Lake Characteristics at Grafton Lakes State Park

	Long Pond	Shaver Pond	Second Pond	White Lily Pond	Mill Pond	Martin Dunham Reservoir
Surface Area (acres)	114	44	27	25	17	73
Watershed (acres)	556	342	222	274	158	6,370
Depth (ft)	33	56	25	17	25	42
Lake Type	Man-made Earth and rip rap dam (1918)	Natural	Man-made Earth and concrete dam (1910)	Natural	Man-made Earth and concrete dam (1918)	Man-made Earth and concrete dam (1913)
Inlets	Tr-Quacken Kill (1)	-	Tr-Quacken Kill (1 from Long Pond)	-	Tr-Quacken Kill (1 from Second Pond)	Quacken Kill (1)
Outlet	Tr-Quacken Kill (1) (drains into Second, Mill, and Martin Dunham)	Shaver Stream, Tr-Quacken Kill (1) (drains into Martin Dunham)	Tr-Quacken Kill (1) (drains into Mill and Martin Dunham)	Quacken Kill (1) (drains into Martin Dunham)	Tr-Quacken Kill (1) (drains into Martin Dunham)	Quacken Kill (1)
Trophic Status	Oligo-meso trophic	Oligo-meso trophic	Meso trophic	Eutrophic	Meso trophic	Meso trophic

Source: Husson, Lyons and Terbush, 2011.

Wetlands

There are several wetlands regulated by DEC in the Park or partially in the Park. These wetlands, with their acreage and classification, are listed in Table 4. Numerous National Wetlands Inventory classified wetlands are located throughout the park. (Figure 11)

Table 4 New York State Regulated Wetlands at Grafton Lakes State Park

Wetland ID	Class	Size (acres)
G-19	II	18.9
G-24	I	36.8 (adjacent to park)
G-28	I	39.1 (partially in the park)
G-27	I	22.2 (part of the checkzone[1] is in the park)
G-33	III	31.8 (part of the checkzone is in the park)

Source: DEC Website (NYSDEC, 2010a, NYSDEC, 2010b)

Air

DEC maintains an air monitoring apparatus in the park at the Shaver Pond Nature Center which records air quality and acid rain factors so air quality at the park is locally measured.

Rensselaer County is within the Capital Region nonattainment area for ozone. Local emissions in the Albany area are the primary driver for the ozone exceedances. Since winds are predominantly from the S to SW on the warm days that are conducive to ozone formation, the highest ozone readings are often seen to the north and east of the core of the Albany metro area, i.e. at Grafton Lakes and Stillwater. Exceedances are far less common at the Schenectady monitoring station, which is normally upstream of most of the Albany metro area during high ozone events. This shows the strong influence of local emissions on ozone levels. Emissions from the New York City and Connecticut areas often contribute as well.

Rensselaer County is not within a nonattainment area for particulates. (NYSDEC, 2010c)

Climate

Grafton Lakes State Park enjoys a climate that is conducive to year-round recreation of many types. Summers are warm enough for enjoyment of the swimming beaches, picnic areas, and hiking trails and the winter snowfall is conducive for all forms of winter activities.

The average temperature at the park is typical of the Upper Hudson River valley and foothills of the Taconic Mountains. Average yearly temperatures are usually around 40 degrees (F) with January averages around 16 to 20 degrees. Typically, in the upper Hudson Valley, below-zero temperatures are observed on about 15 days in most winters and on more than 25 days in notably cold seasons.

Precipitation in the form of rain averages approximately 3 inches per month and snow averages a minimum of 40 to 50 inches per year. Snow can cover the ground from December to March. More severe winters have been noted with snowfall to 70 inches and snowstorms have been

[1] A “Check Zone” is an area surrounding a wetland that may also contain wetlands and may need more precise delineation if a project is proposed within that area.

noted from October to May although the snow cover typically does not last at these times. (Cornell, 2010)

Natural Resources

Introduction

The Rensselaer Plateau, which Grafton Lakes State Park is a part of, is a regionally unique, largely forested area of over 100,000 acres. It is one of the largest and most ecologically intact native habitats in New York State. The plateau has been recognized in several ways for this. The Audubon Society has recognized it as an Important Bird Area (Audubon, 2010), New York State's Open Space Plan includes the plateau as a priority project for acquisition (NYSDEC, 2009a) and in December of 2010 the US Department of Agriculture Forest Service approved designation of the plateau as a forest legacy area. (NYSDEC, 2010)

Due to high elevation (1000-1800 feet), a cooler climate and poorly drained acidic soils, the habitats of the plateau and the park are more similar to the Adirondack Mountains in their biodiversity than the nearby Capital Region. (Rensselaer Plateau Alliance, 2010)

Extended (though not necessarily comprehensive) lists of Flora, Fauna and Endangered Species can be found in Appendix D of this document.

Flora

Upland forests dominate the park and include roughly equal portions of spruce-northern hardwood forest, hemlock-northern hardwood, and beech-maple mesic forest. Spruce-fir swamps and beaver impounded wetlands and meadows occupy area lowlands. Many of the forests and wetlands in the park are relatively young and still show signs of past land use, including brushy understories, open areas denoting old camp sites, and exotic species that likely originated in the gardens of the early homesteads. Some areas of the park are kept open through repeated or periodic mowing, providing habitat for grasses and meadow species. Beaver have been active in and around Grafton since the 1930's and are responsible for many of the open wetlands and flooded forests, especially in the south half of the park. (Evans et al, 2003)

Rare Plants

There are no known populations of state listed rare plants found within the park boundary at this time. (Evans et. al. 2003)

Invasive Plants

No large stands of terrestrial invasive species were known in the park prior to 2011. Japanese barberry (*Berberis japonica*), bush honeysuckle (*Lonicera sp.*), garlic mustard (*Alliaria petiolata*) and multiflora rose (*Rosa multiflora*) have all been found in the park at various locations (O'Brien, 2011 and O'Brien, 2011a). A 1998 botanical survey tallied the percentage of non-native species in the park to be 26.7% of total flora species (Weatherbee and Deitz, 1998).

One of the more common aquatic invasives in the park at this time is common reed (*Phragmites australis*), inserting itself in some wetlands and competing with common cattail (*Typha latifolia*). In addition, Eurasian watermilfoil (*Myriophyllum spicatum*) is found in Long Pond and Mill Pond.

Fauna

The predominant terrestrial natural communities in the park (beech-maple mesic forest, spruce-northern hardwoods forest, and hemlock-northern hardwood forest) foster habitats for mammal species similar to those in the Adirondacks. Many common species such as white-tailed deer, groundhog, beaver, fox and coyote, black bear, mink, fisher, river otter, porcupine and the occasional moose may be found in the Park and the surrounding Rensselaer Plateau's forests. Raccoon populations, once a fairly common species, were decimated approximately ten years ago by a rabies epidemic. Raccoons are now beginning to return to the park in small numbers.

The park's lakes and wetlands provide habitat for a range of animal species. Managed fish populations support an active angling community throughout the year. Native fish species found in the lakes include small mouth and large mouth bass, pickerel, yellow perch, brown bullhead, sunfish and pumpkinseeds. Common amphibians include wood frog, green frog, spring peeper, pickerel frog as well as red spotted newts and red-backed salamanders.

The Plateau is considered an "Important Bird Area" by the National Audubon Society (Audubon, 2010). Grafton Lakes State Park hosts nesting activity of a variety of birds. Goshawk, sharp-shinned hawk, broad-winged hawks, red-shouldered hawk, wood duck, and eastern bluebird have been found in recent years (Evans et al, 2003 and McGowan and Corwin, 2008). Great blue heron, Canada goose, mallards, ruffed grouse and wild turkey are also found in the park. The Hudson Mohawk Bird Club's (HMBC) bird checklist records 193 bird species, including over 20 warblers, migrating Bicknell's Thrush, and Swainson's Thrush (HMBC, 1997). (See Appendix D for a more complete faunal list.)

Rare, Threatened, Endangered and Special Concern Species

Grafton Lakes State Park has had known nesting sites of three State Special Concern woodland raptors (sharp-shinned hawk, red-shouldered hawk and northern goshawk) (Evans et al, 2003). These sites are monitored in the spring for signs of active nesting activity. Additionally, the presence of migrating Bicknell's thrush, another State listed Special Concern species, was documented by the Hudson Mohawk Bird Club (HMBC, 1997). (Appendix D contains information on some species that are on the state list of Species of Special Concern.) A number of county rare and state watch-list plants have been documented in the park (David Hunt, personal communication) and these should be considered when developing specific conservation plans or projects.

Invasive Fauna

No surveys have been done to evaluate the presence or absence of terrestrial or aquatic invasive fauna species.

Ecological Communities

Ecological community types in this plan are defined by the New York Natural Heritage Program (NHP). The communities at the park were analyzed in 2003 by NHP and the White Lily Pond area land acquired since that time was surveyed in 2010. (Figure 12) Additional surveys and/or documentation of state significant communities are warranted.

The land in the park has a long history of recorded human use dating back to the late 18th century. Settled soon after the Revolutionary War, the land was extensively timbered and farmed through the 1800's and was essentially treeless by the 1890's. Thus, forests in Grafton Lakes State Park are second growth. Some areas have only begun the process of returning to a natural state after the opening of the park in 1971.

The three dominant community types (Figure 12) are spruce-northern hardwood, hemlock-northern hardwood, and beech-maple mesic forest. Common species found in these forests include red spruce (*Picea rubens*) and eastern hemlock (*Tsuga canadensis*) as well as northern hardwood species including sugar maple (*Acer saccharum*), American beech (*Fagus grandifolia*), yellow birch (*Betula alleghaniensis*) and red maple (*Acer rubrum*). In addition to the dominant natural communities, the park contains areas of successional northern hardwoods, old fields and shrub lands (including formerly cultivated blueberry plantings), red pine plantations, small wetlands, as well as streams, and lakes (Evans et al, 2003).

Four of the communities found in the park are identified by NHP as statewide significant ecological communities (Figure 13). They are the beech maple mesic forest, the hemlock-northern hardwood forest, and spruce-northern hardwood forest, which are noted for their large size and high quality, and Shaver Pond, which is an oligotrophic dimictic lake noted for its rarity (Evans, et al, 2003).

Cultural Resources

Historic

Cemeteries

There are four family cemeteries within the park. These four burial grounds vary in date and condition of the landscaping and monuments. They are located at various points in the park. (Figure 14)

The cemeteries are known locally as the Hicks, Frances West, Thomas West and Snyder (#2) cemeteries. They were associated with homesteads established during the late 18th and early 19th centuries. After the City of Troy acquired the lakes as part of its water supply, many of the homes, fishing and hunting camps that had been established were abandoned. As a result, these four burial grounds are among the few remaining features of early post-colonial occupation. (Flagg, 2002)

One of these cemeteries retains rights of access and use by the previous owners of the land. These rights are described in Chapter 2 – Legal Constraints, Designations and Other Programs – Deed Restrictions. Rights on the other cemeteries or are not mentioned in the deeds.

Dickinson Hill Fire Tower

In 2010 OPRHP acquired the Dickinson Hill Fire Tower from the New York State Police. The tower is located to the northeast of the main body of the park and is separated from the park by private land. The tower is eligible for listing on the State and National Registers of Historic Places (Shaver, 2010.) Built in 1924, the tower was part of the network of fire protection observation posts until the 1970's. The City of Troy contributed funds for the original construction in order to protect the watershed that supplied the city's water supply. The tower also saw duty as part of the Aircraft Warning Service during World War II. For 18 years beginning in 1943, the tower was operated by New York State's first woman fire observer, Helen Ellett, a Grafton resident. (Leahy Institute, 2010)

Pre-historic

There are no known pre-historic sites in the park.

Archaeological

There are two areas of archaeological sensitivity associated with the park. They are both located in the southern portion (south of NYS Route 2). One of these areas is adjacent to the park, and the second is on park property.

There are sites of former homesteads in the park.

Scenic Resources

The park is set amidst rolling hills and moderate slopes and valleys that are typical of the Rensselaer Plateau. These landforms produce scenic qualities that are of high value. Expansive lake views and views from hilltops (often blocked by existing trees) enhance the scenic desirability of the park.(Figure 14)

Vistas

The major vista in the park is that from the Dickinson Hill Fire Tower. The tower's cab, 60 feet above the ground atop Dickinson Hill, commands a sweeping three hundred sixty degree view of the surrounding lands. The view encompasses the Tomhannock Reservoir towards the Adirondack Mountains, the impressive folds of Petersburg Pass and Berlin Mountain rising to the east, down the long forested spine of Grafton Plateau to the south, and across the Hudson Valley to the Helderbergs and the Catskill Mountain peaks to the southwest. The tower has been placed on the National Register partly due to the historic views available.

The MOU for acquisition of the tower with the New York State Police specifically states

> *"…the Fire Tower also offers views of the surrounding area that are unavailable from other viewpoints close to Grafton Lakes State Park and would constitute an excellent recreational and historic interpretation opportunity for the citizens of the State of New York…"* (OPRHP, 2010a)

Other vistas at the park include views at either end of Long Pond and the expansive views from the shore of Martin Dunham Reservoir. These views take in surrounding unbroken hilltop profiles that express the nature of the rolling topography in this area.

Recreational Resources/Activities

Recreational resources are summarized on Figure 15.

Swimming

Beaches

Grafton Lakes State Park offers a large, sandy beach and adjacent lawn areas at the southern end of Long Pond. This beach provides patrons with swimming and sunbathing opportunities. The large swimming area is very accommodating and can become quite warm throughout the summer. The sandy beach area creates much enjoyment for visitors who at times use the sand to create works of art and dig for treasure.

Boating

Boating is allowed on all six lakes in the park. Only electric trolling motors and human-powered craft are permissible.

Boat rentals are available from Memorial Day to Labor Day. Row boats, paddle boats, canoes and kayaks are available.

Launching ramps/sites

Long Pond, Mill Pond, Second Pond, and Dunham Reservoir all have drive-in boat launch sites. Shaver Pond and White Lily Pond offer walk-in boat launch sites.

Day use areas

Picnic Areas

There are five picnic areas located around the beach and throughout the park. The north area and parts of the south area are overgrown and not currently used. Each operating picnic area provides picnic tables and charcoal grills. Grills and tables are also provided at the Second Pond and Mill Pond boat launch sites and at Deerfield and Rabbit Run.

Playgrounds

The Park has two playgrounds. One is located on the northern side of the beach parking lot, and the other is near the Deerfield pavilion. Each playground has equipment appropriate for children ages 2 to 5 & 5 to 12, including swing sets, slides, twirlers, and climbing walls.

Pavilions and Tents

Seven pavilion sites are available for rent. Three of the sites have wood pavilions and four have large format canopy tents. The capacity of the pavilions ranges from 30 to 150 people. The tents range from 35-40 people in the smaller tents to 75-80 in the largest.

Five of the pavilions have other recreational facilities associated with them. Deerfield has a baseball field, ½ basketball court, volleyball court, a horseshoe pit, and grassy areas for unstructured activities such as Frisbee or soccer. Table 5 lists the amenities for each site.

Table 5 Pavilion and Tent Rental Amenities

	Large 125-150	Mid Size 75-80	Small 30-40	Electric	Volley Ball	Basketball	Horseshoe Pits	Playground Close by	Softball Field
Pavilions									
Amphitheater			x	x			x		
Rabbit Run	x			x	x		x		
Deerfield	x			x	x	x	x	x	x
Tents									
Beach Tent		x		x					
North Area Tent		x		x			x	x	
South Tent			x						
Boat House Tent			x	x					

Court and Field Games

The Deerfield Pavilion area has a ½ court basketball court, volleyball court and a softball field. These are utilized only by rental groups or day-use patrons and are not meant for use by

organized leagues. Volleyball courts are also located at the Rabbit Run Pavilion rental area and the Beach Tent area.

Hunting and Fishing

Hunting is allowed in designated areas. Bow, rifle, and muzzleloader are permitted in season, Trapping is prohibited. All hunters are required to obtain a free permit at the park office before hunting. The designated area around White Lily Pond is restricted to bow hunting only.

Ice fishing is allowed on any of the six lakes located in the park when ice conditions reach 4" in thickness. The lakes are monitored frequently to maintain safety. Ice depth is posted at the park office. Unsafe ice conditions are posted with signage at the lakes in early winter and spring. Motorized vehicles are not allowed on the lakes. Hand-powered augers are allowed. The park hosts a popular annual ice fishing tournament that offers prizes for the longest fish.

The park also offers after-hours fishing by permit only in designated areas from April 15th – June 15th. This permits anglers to fish between sunset and 11 p.m. on Long Pond and Mill Pond via Long Pond Road along with Dunham Reservoir. Shaver Pond, White Lily, and the Main Park Areas are prohibited. After-hours fishing must be performed from shore only; the use of boats is prohibited during these hours. Permits are available at the park office.

Geocaching

Geocaching is a permitted use in the New York State park system. This means that users must first obtain a permit before placing a geocache and must comply with certain rules and regulations regarding geocaching. Permit applications are submitted to the park manager and are available on the OPRHP public website http://www.nysparks.com/inside-our-agency/public-documents.aspx. There are currently 22 permitted geocaches located in Grafton Lakes State Park. These are placed by local geocachers and listed on the website www.geocaching.com. Using coordinates found on this website, geocachers utilize a GPS unit to find these hidden caches in the park.

Orienteering

Orienteering is a permitted use in the New York State park system and requires a permit from the park. Orienteering is a popular sport at the park. Orienteering uses specialized maps combined with a compass to find off trail "controls" in the woods. The park works with the local Empire Orienteering Club to put on orienteering meets and has several courses of varying difficulty that groups can be led through to improve their map and compass skills. There is also a course with intermediate and advanced loops that includes 10 control points.

Winter Activities

Ice Skating

Ice skating is allowed during regular park hours when ice conditions allow. Two skating rinks located on Long Pond are groomed. One is a regular skating rink and one designated for hockey. Parking is available in the main parking lot.

Snowmobiling

There are 12 miles of groomed and well marked snowmobiling trails in the park. These trails are connected to the larger, regional snowmobile trail network. A map is available which was created by the Grafton Trail Blazers, a local snowmobile club. Members of this club created and

now maintain the popular trails that connect Grafton Lakes State Park to Cherry Plain State Park located in Berlin, NY and trail connections through Pittstown State Forest. More information about the snowmobile trails is available in Appendix B – Trails Plan.

Cross-Country Skiing

The park has 12 miles of cross-country skiing trails, which include novice and intermediate skill levels and wind through a variety of hardwood and softwood forests.

Snowshoeing

When snow conditions allow, the park rents snowshoes for patrons of all ages including children's sizes. Snowshoeing trails are shared with cross country ski trails and accommodate easy to intermediate abilities.

Trails

There are over 21 miles of trails throughout the park. Trails are designated for hiking, mountain biking, horseback riding, cross-country skiing, snowshoeing, and snowmobiling. Trails in the park are discussed more extensively in Appendix B – Grafton Lakes Trails Plan.

Environmental Education and Interpretation

Grafton Lakes State Park offers interpretative and recreation programming year round. The interpretative programs endeavor to create a sense of wonder about the natural world. Programming serves day use patrons, camps, beach visitors, community residents, schools and other community organizations. In addition, a diversity of outdoor recreational programs encourages participants to challenge themselves physically.

Summer. The Beach Nature Center serves an average of over 1000 people during July and August. The Park Interpreter also organizes public programs such as sand sculpture contests, native wildlife programs and fishing clinics. Volunteers are brought in to help staff the Beach Nature Center as well as to teach several of the public programs.

Autumn. Programs continue to bring patrons to the park in the fall season after the beach closes. Orienteering, an annual park lake shoreline cleanup, a Hudson River Ramble outdoor event as well as the Trick or Treat Nature Trail are some of the family-friendly activities offered. The "Art in the Park" program brings all levels of artists into the park on Sundays in late September and October to artistically capture the beautiful fall foliage. The park hosts boating events in September, such as kayak demos with a local paddling business and the Barge Chaser Canoe and Kayak race.

Winter. Snowshoe, animal tracking and winter birding programs are offered regularly throughout the winter.

Spring. Spring is busy with schools visiting. Pre-Kindergarten through third graders are the primary ages that come to the park for the popular amphibian life cycle programs. The park raises trout from October through April, when they are stocked into Shaver Pond with the assistance of local school classes participating in Trout Unlimited's Trout in the Classroom program. Regional scout troops perform service work on the parks' trails and shorelines in the spring. The National Trails Day event (held on the first Saturday in June) typically has nearly 100 trail users give back to Grafton's extensive trail system with a morning of trail work followed by a barbecue and prize raffle donated by local businesses.

Events. Two large recreational events are annual traditions as well. The nationally known Xterra Triathlon brings triathletes from all over the country in mid-July. The 5k Run for the Roses benefits the Grafton Community Library while filling the park with hundreds of community residents the second Sunday in August, completing its 25th run in 2010. The largest park event of the year, the Winter Festival, has been held annually for a quarter century. An ice fishing contest, polar plunge, kids' contests, information tables and activities from regional outdoor organizations are offered.

Emergency Plans and Services

Fire

Grafton Volunteer Fire Department
Route 2, Grafton, NY
518-279-1388
Jim Goyer, Chief

The park's emergency response plan is located in the Park Office

Police

State Park Police

The State Park Police operate a police station in Grafton Lakes State Park. The main function of the State Park Police is to provide safe and enjoyable recreation, and interpretive opportunities for all New York State residents and visitors.

State and Local Police

Although the Park Police are the primary agency handling police related incidents in Grafton Lakes State Park, there are times when other police agencies are called upon to assist the Park Police with certain incidents. Due to limited staffing, there are times when Sheriff Deputies or State Police have the quickest response time to Grafton and will respond to a complaint or a disturbance before the Park Police can arrive.

Rensselaer County Sheriff's Department
4000 Main Street
Troy, NY 12180
518-270-5448

Ambulance/Rescue

Grafton Ambulance Squad
Grafton, NY
518-279-4923
Sharon Lecce, Captain

Samaritan Hospital
Troy, NY

Emergency Response

An *All Hazards Emergency Operations Plan* is on file at the park.

Evacuation Plans

Two Emergency Action Plans (EAP) are in place for the dams at Grafton Lakes: One for the Martin Dunham Reservoir Dam, and one for the Long Pond – Second Pond – Mill Pond Dams. Each of these dams is categorized as "High Hazard" by DEC due to the potential downstream impacts should they fail.

Infrastructure

Water Supplies

The Park contains 5 independent water systems:

- **Day Use Area:** Three groundwater wells, disinfected with sodium hypochlorite, storage in a 55,000 gallon steel tank. Serves beach, picnic areas, and contact station.
- **Maintenance Area:** One groundwater well, disinfected with sodium hypochlorite, minimal storage in pressure tank. Serves Maintenance Shop, Park Office, and Manager's Residence.
- **Park Police Substation:** One groundwater well, disinfected with sodium hypochlorite, minimal storage in pressure tank. Serves Park Police Substation.
- **Shaver Pond Nature Center:** One groundwater well, no disinfection, minimal storage in pressure tank. Serves Shaver Pond Nature Center. Sinks are posted with "Do not drink this water" signs.
- **Long Pond Road House:** One groundwater well, disinfected with sodium hypochlorite, minimal storage in pressure tank. Serves Long Pond Road house, leased to local snowmobile club.

Waste Water and Sewerage Systems

- **Day Use Area:** 30,000 gallons per day package plant with sand filters and sodium hypochlorite disinfection. Indirect discharge into Shaver Pond.
- **Maintenance Area:** Individual septic tanks at Park Office, Maintenance Shop, and Managers Residence, treated by a common sand filter and chlorinated. Discharge into Quacken Kill tributary.
- **Individual Septic Systems:** Park Police Substation, Contact Station, Long Pond Road House, Shaver Pond Nature Center.
- **Composting Toilets:** Long Pond Boat Launch, North Picnic Area (winter only)

Utilities

Telephone services to the park are provided by Verizon and Electricity is provided by National Grid. Petroleum products are provided by area fuel services. See Appendix E for details.

Roads and Parking Areas

The park owns and maintains approximately 1.5 miles of road within the park. Other roads within the park boundaries are maintained and owned by the Town of Grafton.

There are more than 750 formal parking spaces in designated parking areas through out the park. A number of smaller informal parking areas throughout the park are used as trail head parking and seasonal parking areas. See Appendix E for details.

Dams

Long Pond, Second Pond, Mill Pond and Dunham Reservoir each have a dam that is registered with and regulated by DEC. They have all been assigned a hazard class of C-High and inspections are required. See Appendix E for details.

Accessibility (Americans with Disabilities Act (ADA))

All buildings, park operations and park facilities comply with the ADA.

Operations and Maintenance Overview

Park Season and Hours

The park is open year round daily from 8:00 a.m. to sunset. The White Lily Pond area section opens at 8:00 a.m. and closes 1/2 an hour before sunset.

Beach

The beach is open May 28 to Labor Day, Friday through Tuesday from 10:00 a.m. to 6:00 p.m..

Special Events/Permits

The park hosts annual events co-sponsored with the various interest groups.

Fall: Shoreline Cleanup cosponsored with American Littoral Society

Winter: A very popular Winter Festival cosponsored with Grafton Library.

Buildings

A complete listing and description of buildings at the park is available in Appendix E.

Solid Waste Management and Recycling Programs

Solid Waste is collected by contract with Waste Management, Albany, NY. The waste is collected monthly in the off season and weekly during the season.

Sustainability Programs

Recycling

Glass and plastic items are brought directly to the town. Paper products, including all paper and cardboard, are included in the Green Fiber program.

Scrap Metal is delivered to Green Island Scrap Yard. The scrap yard pays the park for these materials by weight.

Batteries are delivered to the regional headquarters in Saratoga Spa State Park to be recycled.

Other Operations and Maintenance Elements

Wildlife

The park controls nuisance geese populations through an egg oiling program. Other wildlife issues are controlled through various measures according to the agency's Wildlife Policy.

Tobacco-free Playgrounds and Swimming Areas

The beach at the end of Long Pond and all playgrounds throughout the park are designated as tobacco-free areas.

Thin Ice Guidelines

The park monitors ice thickness and posts appropriate access points with "Thin Ice" signs until uniform ice thickness reaches 4 inches. No vehicles are permitted on frozen water bodies except snowmobiles on Martin Dunham Reservoir.

Winter Entrance and Snowplowing

In the winter Grafton Lakes State Park Way is closed and signs are posted on Route 2 directing people to enter the park through the winter entrance on Long Pond Road. Until Winterfest (end of January) Long Pond Road is plowed all the way to the north parking area. After Winterfest it is only plowed to the Stone House. This plowing is done by the Town of Grafton with help from park staff. The park staff maintains the main park road running from Long Pond Road to the main parking lot by the beach area at the southern end of Long Pond.

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Chapter 4 - Park Vision and Goals

Agency Mission Statement

The mission of Parks, Recreation and Historic Preservation is to provide safe and enjoyable recreational and interpretive opportunities for all New York State residents and visitors and to be responsible stewards of our valuable natural, historic and cultural resources.

Park Vision

Grafton Lakes State Park will serve the residents of, and visitors to, New York State by providing year round opportunities for recreation and for appreciation of its natural, cultural and physical resources while operating the park in such a manner as to preserve and protect those opportunities and resources. The park will serve as a statewide model for education and interpretive programming of the natural environment.

Overall Park Goal

In order to accomplish this vision OPRHP sets forth the following objectives:

- Achieve a balance between providing diverse recreational opportunities and the protection of natural and cultural resources of Grafton Lakes State Park
- Make available compatible public environmental and historic education and interpretive programs
- Provide the facilities and staff necessary to establish the park as a statewide education and interpretation model.
- Promote underutilized areas, off season attendance and less attended activities in the park using education staff and friends groups.
- Maintain the park to provide a safe and enjoyable recreation experience

Natural Resources

Goal

To identify, preserve, protect and interpret the natural resources in Grafton Lakes State Park.

Objectives

- Preserve and/or improve the water quality in the lakes and streams of the park
    - Monitor water quality in the lakes and streams on a regular basis
    - Use best management practices for stormwater management
- Identify environmentally sensitive areas within the park and develop management strategies to preserve their unique qualities
    - Inventory the park flora and fauna for rare, threatened and endangered species
    - Accurately map wetland resources within the park

    - Preserve contiguous forest resources in the park as part of the Rensselaer Plateau Legacy Forest
- Prevent the introduction and spread of invasive species in the park
    - Develop an early detection and rapid response plan
    - Increase education about the spread of invasive species
- Preserve and improve the biodiversity of the park through appropriate management strategies
    - Develop a strategy for grassland habitat management

Recreation Resources

Goal

To provide a variety of year round recreation opportunities which fulfill the needs of park patrons.

Objectives

- Maintain a healthy fish population in all water bodies in the park
- Maintain hunting and fishing opportunities in the park
    - Provide hunter safety education classes
    - Improve information sources for hunting zones, seasons and park specific regulations
- Maintain status as the pre-eminent beach destination in the Capital District
    - Increase beach operation hours
    - Improve pedestrian connection between beach and picnic areas
- Improve amenities to pavilion and tent rental areas
    - Provide water and electric services
    - Add recreational amenities to pavilions including fire pits, court and field sports, playgrounds, etc.
- Provide enough pavilions to meet user demands
    - Convert tent rental areas to pavilions
- Support winter recreation activities
    - Construct warming hut(s)
    - Expand snowshoe rentals
    - Increase ice skating opportunities
    - Keep Grafton Lakes State Park as a hub in the statewide snowmobile trail system
- Increase equestrian resources
- Improve boating opportunities

- Explore camping opportunities at the park.

Trails (from the Trails Plan)

- Build and maintain all trails to Agency trail standards.
  - Utilize user groups to help with trail maintenance issues such as erosion
- Develop a cohesive looped trail network.
- Accommodate a broad range of user groups.
- Maintain cooperation among user groups and park management.
- Continue to develop and maintain trails to provide access to natural (wilderness) experiences while preserving and protecting the natural resources that we're providing access to.
- Mark all trails and provide accurate maps to the public.
- Provide diversity in trail experiences including a range of trail difficulty levels.
- Create destination locations of cultural, natural, and historic resources.
- Provide interpretive and educational experiences using kiosks, signage, and self-guided tours.
- Use trails as outdoor classrooms

Cultural Resources

Goal

To preserve and interpret the cultural resources and history of Grafton State Park.

Objectives

- Stabilize and maintain cultural and historic resources
- Improve interpretation of local history and cultural resources
  - Utilize local resources such as historians and libraries

Scenic Resources

Goal

To protect the quality of the scenic resources in the park

Objectives

- Minimize external threats to the existing scenic beauty of the park
  - Large scale wind power development
  - Residential development
- Limit new shoreline development to maintain scenic quality of the lakes

Open Space Protection

Goal

To protect, maintain and expand open space opportunities adjacent to and connected with Grafton Lakes State Park

Objectives

- Explore opportunities for recreational connections to Pittstown State Forest, Dyken Pond, Cherry Plain State Park, and the Taconic Crest Trail.
- Follow the guidelines in the New York State Open Space Plan (NYSDEC, 2009a) when considering parkland buffering, development and connectivity.
    - Protect open space using tools such as conservation easements
    - Acquisition from willing sellers

Access/Circulation and Parking

Goal

To make access to the park safe and convenient for patrons using all modes of transportation.

Objectives

- Increase park access via public transportation
- Improve the safety of access from Route 2
    - Work with NYS DOT to raise the priority of improvements
- Improve winter entrance/connection to the Grafton town center
- Maintain and improve parking lots and roads in the park
- Improve bicycle and pedestrian circulation in the park
- Provide better trailer parking for equestrians and snowmobilers
- Consider acquiring town roads inside the park boundary

Education and Interpretation

Goal

Make Grafton Lakes State Park a leader in environmental education for the Rensselaer Plateau

Objectives

- Take advantage of the park's natural features as an outdoor classroom
- Raise awareness of invasive species issues
- Develop a park nature/education center close to high use activity center
- Establish the park as one of the premier environmental education destination for school groups and other organizations in the Capital District area

- Improve and maintain relationships and communication with other regional environmental education centers
- Increase accessibility to education and interpretation programs

Operation and Maintenance

Goal

To operate and maintain all facilities in the park in a cost effective way that is sustainable, and exhibits a high degree of professionalism.

Objectives

- Develop a comprehensive preventative maintenance program
- Institute equipment sharing agreements with local and state agencies in the area
- Improve communication for reaffirmation of park regulations
    - Reduce need for enforcement
    - Reduce alcohol abuse in the park
- Explore revenue generating opportunities that benefit the park
- Update the survey and boundary marking of the park
- Improve marketing for winter park activities
- Upgrade outdated infrastructure, facilities and equipment

Sustainability

Goal

Operate and maintain the park and its support facilities in as sustainable a manner as possible

Objectives

- Reduce the carbon footprint of park vehicle fleet
- Manage stormwater through best management practices when rehabilitating facilities and parking areas including the use of appropriate green infrastructure.
    - Use porous pavement where possible
- Improve and expand park recycling and composting program
- Reduce energy usage in park buildings
    - Explore use of alternative energy sources
- Improve and increase public awareness of sustainability
- Reduce maintenance demands, fossil fuel use and carbon dioxide emissions through sustainable landscape management practices.

Facility Development and Capital Investment

Goal

To re-use or develop new facilities that can house the broad range of activities and operational requirements of the park

Objectives

- Explore alternative funding sources for programs, projects and infrastructure improvements in the park
- Improve entry experience
    - Park visitor center near entrance
- Develop a nature / environmental education center

Communication and Partnerships

Goal

To establish links between the park and surrounding community and to promote partnerships between the park and users

Objectives

- Increase communication between park staff and community leaders (elected and voluntary)
- Utilize local resources for historic and cultural information
- Build partnerships with interest groups for volunteer projects
- Improve communication and partnerships with regional environmental education centers
- Strengthen Friends Group
- Improve community involvement in the park
- Improve marketing and promotion of the park

Inventory, Monitoring and Research

Goal

To promote the gathering of information about the resources in the park for the purposes of proper management and scientific research

Objectives

- Continue monitoring lake water quality
- Develop a wildlife population monitoring program
- Identify and inventory invasive species populations

- Continue monitoring programs as required by DEC and DOH regulations (dam safety, petroleum bulk storage, bathing beaches, drinking water supplies and SPDES.)
- Monitor visitor satisfaction and demographics to meet patron needs
- Inventory and assess park facilities for ADA compliance
- Promote use of the park for scientific research
- Continue partnership with DEC for air monitoring station at Shaver Pond Nature Center.

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Chapter 5 - Analysis and Alternatives

Introduction

One of the important aspects in the master planning and environmental review process is the identification of alternatives and associated analysis. This section essentially represents a concise summary of a detailed report on Analysis and Alternatives evaluated as part of the planning process for Grafton Lakes State Park. The detailed report is contained in Appendix A.

The planning team used information contained in Chapter 2 – Park Background, Chapter 3 – Environmental Setting and Chapter 4 – Vision and Goals during the analysis of alternatives. Plan elements were identified and alternatives for each element were evaluated. All of the preferred alternatives were then reviewed in concert to determine if any additional adjustments were needed. The end product of this effort on plan element analysis was two master plan alternatives: Status Quo and Preferred Master Plan Alternative.

Analysis and Alternatives of Master Plan Elements

For each plan element the resource and inventory information was analyzed, identifying opportunities and limits of the resources and existing facilities. The findings from this analysis were used in developing and defining element alternatives pertaining to the stewardship of resources, recreation opportunities, and facility development.

Appendix A provides a thorough description of alternatives considered for natural resource stewardship strategies, recreation resource development/management, cultural resource protection, scenic resource protection and infrastructure development. The discussion of each element includes: 1) a background section with analysis, 2) a list of alternatives including the Status Quo alternative along with a listing of considerations for each alternative, and 3) identification and description of each preferred alternative.

Master Plan Alternatives

There are two Master Plan alternatives that have been considered for this plan. The first is the Status Quo Alternative which is a compilation of all the Status Quo element alternatives listed in Appendix A. Under this alternative, the park would continue to operate as it is now. The Status Quo alternative proposes no changes to natural resources protection strategies, recreation resource development/management, cultural or scenic resource protection and infrastructure improvements.

The second alternative is the Preferred Master Plan alternative. This alternative is a compilation of the preferred alternatives identified for each element discussed in Appendix A. OPRHP staff reviewed the listing of each preferred master plan element to determine if any adjustments were needed in arriving at the Master Plan. This synthesis review did not identify the need for any substantive changes in the set of preferred master plan elements. The master plan alternative is preferred over the status quo because it provides recreation development opportunities for the park that will increase visitation and patron satisfaction as well as increased awareness and new strategies for natural resource protection. Thus, the Preferred Master Plan Alternative represents the master plan itself which is fully described in Chapter 6 – The Master Plan.

Major Master Plan Elements and Basis for Selection

Before the start of this master plan process, the park had been undergoing continued improvements such as trail reconfigurations, park office renovations and the addition of maintenance buildings and a new police headquarters.

This ongoing improvement and maintenance is important and is not overlooked as a significant factor in the analysis of master plan alternatives. Many of the recommended directions chosen in analyzed elements are consistent with the ongoing projects. In addition, projects designed to improve on current functions and provide for new opportunities are included. These include changes to trail configurations and designations, natural resource protection strategies, recreation resource development and infrastructure not currently in the park.

A significant change to the park recommended in this master plan is the addition of camping facilities. This addition will afford traditional camping in an area where no other commercial campgrounds that offer traditional camping opportunities are close by. The addition of camping will increase visitation to the park and patron satisfaction.

Another important addition to the park is the new nature center. Currently there is no central resource for the Environmental Education & Interpretation program at the park. The new nature center will house offices, exhibit spaces, classrooms, and an outdoor amphitheater. It may also include the DEC air quality monitoring station. The nature center will connect to the park's trail system and act as a meeting place for groups going on educational and interpretive walks in the park.

Natural resource protection is an important part of the plan. The creation of three resource protection areas is recommended as well as water quality monitoring, improved stormwater management at the beach and invasive species protection protocols.

The plan also recommends building a new park office at the main park entrance. This office will provide camper registration, park information, and administrative offices for better contact with patrons. The existing contact point will remain for information distribution and collection of vehicle use fees from day users. The existing intersection with Route 2 will be examined and talks regarding re-design of that intersection will be initiated with DOT and the town to improve safety.

The maintenance area will also be improved and expanded to provide adequate storage, workshop, and staff space. This is important in light of increased staffing and maintenance duties expected with the addition of camping and the new nature center.

In choosing the Master Plan Alternative over the Status Quo Alternative OPRHP is providing an overall direction for improvements and changes which will have a positive impact on the recreation and natural resources within the park.

Chapter 6 - The Master Plan

This chapter provides a description of what will be done in the park in terms of recreation resource development, natural resource protection, management and operations. The actions described here, the preferred alternatives, and the rationale for the choices that were made are based on the analysis that is described fully in Appendix A.

Natural Resource Protection

Park Preservation Area

A Park Preservation Area (PPA) will be created for the parkland south of NYS Route 2, including Martin-Dunham Reservoir (Figure 16). The existing C9 snowmobile trail will remain and its corridor will be excluded from the PPA. The S99F snowmobile trail will be eliminated. A new non-motorized multi use trail will be created over Dunham Hill. (Details of trail changes can be found in Appendix B – The Final Trails Plan.)

Bird Conservation Area

The entire park will be a Bird Conservation Area (BCA). The entire park was chosen because most of the park fits with the BCA criteria. Separating out small parts of the park would have created an unmanageable patchwork. The BCA provides recognition on a statewide level which adds to the overall significance of the park relative to other parks and open spaces within the state. The BCA will encourage the public not only to support or visit the park because of the bird species that may exist there but also to be more sensitive to their habitats during their stay. The BCA will not prohibit existing or future recreation uses or operational needs. Instead, the BCA will inform the planning process for future actions in the Park. A management guidelines summary will be prepared for the BCA.

Lake Water Quality

The regular water quality monitoring of the park's lakes will continue. Additional nutrient monitoring will be conducted periodically in Long Pond and Shaver Pond following the construction of new facilities to confirm that there are no impacts and to address impacts if they occur. White Lily Pond will be studied more closely to determine if its eutrophic status is natural or man-made.

Stormwater Runoff

Beach Area

The existing trench drain system will be rehabilitated and upgraded to include a new system of rain gardens that will be designed and installed in the lawn area swales above the beach. The rain gardens will receive water from the trench drains. This system will be designed to handle all runoff from most rain events. Any excess water will be funneled into the existing stormwater system via an overflow connection. Rain gardens will be designed to retain and infiltrate stormwater and provide primary treatment of excessive stormwater flows before release to the lake.

Invasive Species Management

Aquatic Invasives

The current regimen of monitoring of all lakes for invasive species will continue. An Invasive Species Prevention Zone (ISPZ) will be created for the entire park, including the lakes. Patron education concerning the threat of invasive aquatic species will be increased using pamphlets and signage at boat launch sites. Power washing stations will be installed at the park contact station and the Long Pond boat launch. Invasive species disposal bins will be installed at all boat launches.

Terrestrial Invasives

No large stands of terrestrial invasive species were known in the park prior to 2011. An ISPZ will be created for the entire park, including the lakes. The park will be inventoried for existing invasive species and a monitoring program will be implemented to detect new invasions, especially in the Hemlock communities where the Wooly Adelgid may appear. Removal of existing patches of invasive species will occur where feasible. Increased education of invasive species will be given to park staff and patrons, including the use of the iMapInvasives data entry website, an all-inclusive invasive species mapping and data entry clearinghouse operated by The Nature Conservancy.

Wildlife Resources and Nuisance Wildlife

The park will continue to follow the agency policy on wildlife and will continue its relationship with OPRHP partners as a part of these policies, including nuisance wildlife on a case by case basis.

Rare, Threatened and Endangered Species

Guidelines will be established based on NHP reports and DEC recommendations.

Reduced Mowing

The existing reduced mowing protocol at the park will be continued. Other lawn areas will be added to the program as appropriate.

Recreation Facility Development and Programs

Camping

Campsites – Traditional and Carry-In (Primitive)

Camping will be added to the park. The exact configuration and location will be determined in a final design. The new camping area will be located north of the beach area along the road to the water tower (Figure A5). The camping area location was chosen after carefully considering site factors such as topography, soils, road access, ecological communities and proximity to the beach area. The conceptual design was developed to illustrate a possible layout for the campsites. This conceptual design takes into account standard agency spacing requirements for each individual campsite within the loop as well as New York State Department of Health (DOH) requirements for distances to potable water and toilet facilities. The total number of campsites may vary and range higher or lower when a final design is created for implementation. One new shower/comfort station building will be constructed along with the new campground.

Improvements to the Water Tower Trail will provide pedestrian access between the camping area and the beach. A new playground will be considered for inclusion in the camping area.

Cabins

Several new four-season cabins will be constructed in the White Lily Pond area at the site of the former YMCA camp (Figure A6). This site was chosen because it has easy road access, connections to the trails year round, proximity to White Lily Pond, and involved little disturbance of forested areas or significant ecological communities. The number of cabins, exact floor plans and placement will be determined in final design. The cabins are meant to offer year round accommodations close to road and trail access.

A cabin colony will also be constructed across the Water Tower Road from the new campground (Figure A5). These cabins will be seasonal in nature and only operate while the campground is in operation.

Nature Center

A new, year round nature and environmental education center will be built for the park (Figures A1-A3). The agency feels that the existing environmental education and interpretation (EE&I) facilities are not adequate, given the importance and priority given to these programs at the park (see Chapter 3, page43). It was also decided that other centers in the surrounding area, while very high-quality, would not be able to serve park patrons in the same way that an on-site nature center could.

The site that was chosen is near the trailhead of the Woodland Trail. (Site D on Figure A1). This site was chosen above the others because it has easy year round access, is close to existing utilities and connects with the park's trail system. The connection to the trail system is important because many programs will now be able to meet at the new center and easily move outdoors to the park's environments. A new pavilion/tent structure at the beach will act as an "ambassador site" to the new nature center.

The center will include spaces that will serve the public as well as provide a home for the EE&I program at the park. Suggested facilities include exhibit space, classroom, library, and laboratory. A small outdoor amphitheatre (seating for 40-50 people) will also be part of the center. In the winter the center will act as a "warming hut" for those patrons participating in outdoor winter sports.

Beaches

The existing beach will remain as is. If needed, a feasibility study will be undertaken to investigate the possibility of adding a new beach on Long Pond.

Picnicking

Picnic Groves

The north area will be dismantled and allowed to revert to a natural community. The south area will be rehabilitated and a new playground will be added. New picnic tables with grills will be installed at the proposed pavilion at Deerfield.

Picnic Pavilions/Tents

All current canopy tents will be replaced with permanent pavilions. A new pavilion will be installed at Deerfield between the existing pavilion and the road (see Figure A9 location A). A larger pavilion will be installed to replace the current Amphitheatre Pavilion.

Court and Field Games

A new full basketball court will be installed at Rabbit Run. The existing ½ court at Deerfield will be expanded to a full basketball court. A Bocce court will be installed at Deerfield.

Playgrounds

A new playground will be installed as part of the south picnic area rehabilitation. A new playground will be considered as part of the development of the camping area.

Hunting

Hunting will continue to be allowed at the park under the existing regulations. The boundaries of the restricted zone for hunting may be changed to accommodate new recreation facilities in the park.

Fishing and Ice Fishing

Improved fishing access areas will be selected in the park. This will improve public access for a larger segment of the population. Current fishing regulations at the park will remain.

Trails

Implement the Grafton Lakes State Park Trails Plan (Appendix B). Key components of the plan include:

- Maintain the trail system for designated uses including hiking, biking, horseback riding, snowshoeing, cross-country skiing and snowmobiling.
- Provide increased trail opportunities and connections in the park's trail system as well as external connections to trails on nearby public lands.
- Enhance trail opportunities and accessibility in high-use areas.
- Improve trail signage including trailhead and trail intersection signage throughout the park to enhance the visitor experience and increase patron safety.
- Enhance interpretation of natural, cultural and historical resources along trails.

Cultural Resource Protection

Cemeteries

The park will proceed with recommendations made by the State Historic Preservation Office (SHPO) in a 2002 report (Flagg, 2002) and will update information on the cemeteries through additional survey and assessment.

The general recommendations include:

- managing the landscape toward slowly re-establishing an open clearing (except the Hicks cemetery), preserving and protecting the historic character of the burial grounds
- initiating a comprehensive and detailed survey of all four cemeteries

- instituting a cyclical maintenance and inspection program
- re-set toppled, loose and severely leaning gravestones
- research and develop interpretive materials for the cemeteries.

Dickinson Hill Fire Tower

The tower will continue to be restored and, when completed, will be open for public access. The tower will be interpreted with signage for education of patrons. Some changes will be made to the trail system leading to the Fire Tower (see Appendix B – Final Trails Plan). It will also be recommended to provide a parking area for fire tower visitors coming by automobile from the east on Fire Tower Road.

Scenic Resource Protection

The scenic resources in the park will be protected. The lake shorelines and hilltop views will be managed by limiting visibility of new development in the park.

The view from the Dickinson Hill Fire Tower is an important resource of the park. Given its important, it was decided to make every effort to protect this view. Therefore it is recommended that a comprehensive scenic resource management plan be developed for the fire tower view. The plan should include action items for viewshed protection including:

- An assessment of the fire tower viewshed.
- An pro-active stance of protection where proposed projects may diminish the value of the resource
- Identification of priority land acquisitions within the viewshed where willing sellers exist
- Management of trees and vegetation on park land close to the fire tower which may impinge in the view

The park, the region and the agency will maintain a policy of commenting on and protecting the park from development outside the park which may negatively impact the scenic resources.

Infrastructure Development

Shaver Pond Nature Center

The building will be adapted for other park uses. The DEC monitoring station will be moved to the new nature center.

Maintenance Area

The new camping area and the new nature center will require enhanced maintenance facilities for equipment, shop functions and staff. The Maintenance Shop will be expanded to include an additional workshop bay, maintenance supervisor office, staff accommodations and additional staff restrooms.

A new stand-alone woodshed will be constructed west of the maintenance shop and the makeshift shed will be replaced with a permanent addition for equipment and tool storage.

The Old Maintenance Shop will be upgraded to increase storage space

Vehicular Entrance Control/Access and Park Office

The main park entrance will remain where it is. A new “satellite” park office which will provide camper registration, parking for office visitors, park information, public contact, and

administrative offices will be built on the main park road north of the existing contact point. The existing contact point will remain to serve park day users. Talks will be initiated with DOT and the town concerning the safety of the existing intersection with Route 2 and alternatives to the current configuration.

Martin Dunham Reservoir Outlet Trail Crossing

There will be no changes to the reservoir outlet trail crossing at this time. A feasibility study for trail alternatives is recommended. The outlet will be rehabilitated to be in compliance with DEC regulations.

Implementation

Priorities

The Master Plan sets forth OPRHP's vision for capital improvements, operational enhancements and natural resource stewardship projects in Grafton Lakes State Park for the next ten to fifteen years. As stated at the beginning of this chapter, the agency has not developed detailed cost estimates for each of the proposed actions. Cumulatively they will cost tens of millions of dollars to implement. The pace and sequencing of recommended actions will be determined by the availability of funding, which is a function of the size of OPRHP's annual capital budget and the need to balance investments throughout the entire State Park System. The master plan will be reviewed annually to select projects that will be added to the park's budget for implementation and to assess the progress of plan implementation.

The implementation of the Master Plan for Grafton Lakes State Park is divided into three priority phases. The priority groupings described below are conceptual and subject to reorganization based on available funding for specific components in any given group.

Table 6 Implementation Priorities (projects within the priority levels are not in any particular order)

Implementation Priorities	**Description/Development Component**
Immediate	• Park Preservation Area creation • Bird Conservation Area creation • Invasive Species Prevention Zone creation
On Going	• Water quality monitoring of Park's lakes and ponds • Invasive species monitoring • Reduced mowing program • Replace all tents with permanent pavilion shelters • Follow implementation priorities in the trails plan
Priority 1:	• Design and install new nature center • Nutrient monitoring in Long Pond post campground construction. • Install invasive species protection measures (boat wash station, IS disposal bins) and inventory the park for existing invasive species • Rehabilitate south picnic area • Rehabilitate existing facilities • Install new playgrounds in south picnic area and campground • Finish restoration of Dickinson Hill Fire Tower and open to public • Install new rain gardens at beach area

	• Detailed aquatic plant survey • Survey park for rare plants and animals (prior to development of new trails or facilities)
Priority 2:	• Design and install new campground • Design and install new cabins • Build new park office/camper registration at main park entrance • Nutrient monitoring in Shaver Pond post nature center construction • Install new full basketball court at Rabbit Run
Priority 3:	• Replace south picnic area Amphitheatre pavilion with larger pavilion • Install second pavilion at Deerfield • Expand existing ½ court to full basketball court at Deerfield • Install Bocce court at Deerfield • Convert Shaver Pond Nature Center to other park uses • Begin feasibility study for outflow of Martin Dunham Reservoir • If needed conduct feasibility study for additional beach on Long Pond

Sustainability

OPRHP, the region and the park are committed to developing and operating our state parks in a way that is environmentally sustainable and economically prudent. Several aspects of the plan contribute to these principles:

- Adaptive re-use of the Shaver Pond Nature Center
- Reduced mowing program
- Green infrastructure stormwater management practices
- Renewable energy sources used where possible, including hydroelectric when economically feasible
- Removal of vegetation kept to a minimum
- Use of renewable and sustainable materials in construction

Ecosystem-Based Management (EBM)

The master plan is consistent with ecosystem-based management (EBM). EBM is an emerging, integrated approach to managing natural resources and human activities. The EBM approach has six components and is 1) placed based, 2) science based, 3) has measurable objectives, 4) uses adaptive management, 5)recognizes interconnections, and 6) increases stakeholder involvement. Master planning is consistent with the principles of EBM and the agency has formulated this master plan based on the knowledge of the local ecosystem. The public was also involved early in the planning process and the local knowledge and comment helped to inform decisions made in this plan. In addition, the park resources are connected to adjoining ecosystems that are also considered within this plan and will be considered in implementation of objectives in this plan. As proposals pursuant to the master plan are advanced, and developed they will be based on the best available science using current scientific understanding of impacted ecosystems and the advancement of scientific investigation. Measurable objectives for implementation will provide a

basis for gauging the impact of activities on the health of the ecosystem. Further, an ethic of adaptive management will be developed to respond to new knowledge and changing conditions will allow us to consider how adjustments can be made to reflect new information to accomplish goals and local knowledge and expertise will enhance these activities.

Relationship to Other Programs

Grafton Lakes State Park staff will continue to be committed to partnering with groups that are interested in furthering the mission of the park. The park staff is also interested in working with other outside planning groups to further the park's contribution to and participation in the recreation resources of the area.

The park, through the regional office, continues to reach out to the larger service area to encourage individuals, groups and agencies to contribute to the park.

The park will continue to work with state and federal agencies, such as New York State Department of Environmental Conservation (DEC), the Army Corps of Engineers (ACOE), the US Fish and Wildlife Service (USFWS), as well as county and regional governments.

Chapter 7: Environmental Review

Introduction

This chapter focuses on environmental impacts and mitigation of adverse effects. For the purposes of SEQR compliance, however, the entire document (Master Plan/FEIS) satisfies the requirements for an environmental impact statement as specified in Part 617, the rules and regulations implementing SEQR. Chapter 6 contains a description of the proposed action. The environmental setting is discussed in Chapter 3. Chapter 5 and Appendix A contain the alternatives analysis.

This chapter has two primary parts: a summary of environmental impacts associated with alternatives, and a more detailed analysis of impacts associated with implementation of the Final Master Plan, including a discussion of mitigation measures.

Environmental Impacts of Alternatives

Alternatives were developed (Appendix A) for various recreation and support activities at the park, as well as natural resource issues. These alternatives were based on information about existing conditions, an analysis of recommended directions for various activities and constraints, and considerations identified in the resources analysis. The preferred alternative for the entire park (i.e. the Final Master Plan) consists of the preferred alternative for each identified activity.

Much of the information on the environmental impacts of alternative actions is discussed in Appendix A. This chapter summarizes the findings from the impact analysis which make up the preferred alternative and the Status Quo alternative.

Status Quo

This alternative consists of the current facilities, programs and practices at the park as described in Chapter 3. Under this alternative, current resource protection, operation, and facility management practices would continue. The increasing recreational demand on the park would not be addressed, or impacts mitigated, nor would opportunity for conservation of the resources under recent changes to Environmental Conservation Law or Parks Recreation and Historic Preservation (PRHP) law be addressed.

The Status Quo alternative would not result in any additional adverse environmental impacts. The potential for long-term indirect adverse environmental impacts is likely, however, since there would be no plan to guide use, protection or development of the park. As more park visitors seek to use the park, additional demands will be placed on the natural, cultural and recreational resources. Without the guidance provided by the Master Plan, which directs more intensive use and development toward areas with capacity for such use and away from the more sensitive areas of the park, the potential for adverse impacts on environmental resources increases.

Trail proposals would occur and be addressed on a case-by-case basis without the guidance of an overall trails plan for the entire park. Undesignated trails would continue to proliferate in areas of the park that might not support their use. Issues such as the introduction of invasive species of plants and wildlife into the park would be handled on a case-by-case basis as they arose. Without a plan in place, monitoring that would enable a rapid response would most likely not occur.

Preferred Alternative and the Final Master Plan

The preferred alternative is the compilation of the preferred recreation activity and support facility options identified in Appendix A. This compilation was subject to a final evaluation (or synthesis) to assure that there was consistency among the various alternatives. This final assessment resulted in the Draft Master Plan. Following the public comment period on the Draft Master Plan, additional alternatives were considered for some of the options discussed in Appendix A resulting in the Final Master Plan (Chapter 6). The final plan provides considerable recreational and resource protection benefits. The final plan identifies potential adverse impacts, both short and long term, and ways to, if not eliminate them, minimize them to the fullest extent possible through appropriate mitigation measures. From a long-term perspective, implementation of the park master plan will result in a beneficial environmental impact by insuring that the most sensitive areas of the park will be identified, monitored and provided appropriate stewardship. Environmental impacts of the final master plan are discussed more fully in the rest of this chapter.

Environmental Impacts Associated with Implementation of the Final Master Plan and Proposed Mitigation

Land (Topography, Geology and Soils)

The master plan for Grafton Lakes State Park seeks to provide improvements to existing recreation while providing additional protection of sensitive natural and cultural resources within the park. Planning for new facilities in the park reflects this and the proposed locations of new facilities avoid sensitive resources to the extent practicable. Implementation of the plan, however, will result in some physical change and disturbance to the land, particularly where new buildings, camping, recreation facilities, parking and trails are proposed. Much of the park will continue to remain in a natural, forested state.

The final master plan calls for continued rehabilitation and maintenance of the parks existing day use facilities including the beach and picnic facilities. New buildings and facilities proposed in the plan include: a new nature center and amphitheater in the area between the beach parking lot and the Deerfield Pavilion area; a new camping area to the north of the Long Pond Beach complex, a new 4 season cabin area in the White Lily Pond area, replacement of rental tents with permanent pavilions and construction of a new pavilion in the Deerfield Pavilion Area, new playgrounds in the Rabbit Run picnic area and in the camping area, a new full basketball court in the Rabbit Run Area and increasing the size of the basketball court in the Deerfield area from a ½ court to a full court, expansion of some of the maintenance buildings, a new park office/camper registration building near the existing park entrance contact station, and new roads and parking associated with some of the new facilities.

Another potential impact on land would result from the construction of new trails. The Final Trails Plan for the park (Appendix B) will increase the total mileage of designated trails by 5.5 miles. This increase includes development of 1.5 miles of previously approved trails (Lyons, 2008), 4.5 miles of new trails (including 0.9 miles of reroutes), designation of 0.9 miles of existing but undesignated corridors, and closure of 1.7 miles of trails. The trails planning process allowed OPRHP to take a comprehensive look at the park's trail system, evaluate the condition of existing designated and undesignated trails, and evaluate proposals for new trails. The proposed new trails provide new recreational opportunities, offer loops of varying lengths for different abilities, and reroute some poorly designed sections of existing trails. In addition, evaluation of the entire trail system as a whole has resulted in recommendations for

improvements to trail drainage in some locations and closure of some trails that were no longer needed.

Some of the proposed new developments such as new picnic shelters, new park office, and additions to the maintenance facilities will occur in areas of the park that are already developed or were previously developed and will require minimal new land disturbance. Other new developments such as the new camping area, cabins and the proposed nature center may require some grading and could result in larger areas of new land disturbance.

As shown in Figure 8 and discussed in Appendix C, most of the areas proposed for new development consist of Buckland (BuC) very stony loam, sloping, and Glover (GIC) very stony loam (NCRS, 2010). The Buckland soils in the areas proposed for development are somewhat limited for camp site, picnic area and trail development. The Glover soils are very limited for development of camp areas due to large stone content, slope and depth to bedrock. The limitations will be minimized through proper site planning, design and installation. The Buckland soils are also moderately suited for roads and the Glover soils have only slight to moderate limitations for roads and trails (NRCS, 2010). Both soil types have severe limitations for septic tank absorption fields due primarily to their depth to saturated zone and restricted permeability (NRCS, 2011). The absorption fields will be designed at a later date after percolation tests are conducted. If necessary, imported fill material will be used to elevate the absorption trenches to at least 24 inches above the limiting soils in accordance with NYS DOH regulations.

Steep slopes have been avoided in selection of locations for new proposed developments. Most of the proposed new developments are located in areas with moderate slopes from 0-8% with a few areas of 8-12% slope. Careful planning and site-specific design will be applied to all new facilities to minimize the potential for erosion.

The construction of some new trails will result in some vegetation removal and soil disturbance depending on the type and location of the trail. Disturbance will be limited primarily to the required width of the trail corridor (i.e. 4 feet for hiking, single track mountain biking and equestrian and 12 feet for snowmobile trails). As noted in the Final Trails Plan (Appendix B), trail construction will follow the policies and guidelines for trail building that have been established by recognized trail organizations and government agencies. Adherence to these guidelines will assure that work is completed in a manner that maximizes protection of park resources.

An erosion control plan will be prepared for all construction projects proposed in the Master Plan that have the potential to disturb park soils or result in erosion. Any projects that disturb one acre or more will be subject to the State Pollution Discharge Elimination System (SPDES) General Permit process. This process includes the development of a site-specific Stormwater Pollution Prevention Plan (SWPP) and sedimentation and erosion control plans. Best management practices (BMP's) as described in the New York Standards and Specifications for Erosion and Sediment Control (NYS Soil and Water Conservation Committee, 2005) will be used to reduce impacts to soils on the project sites. Some measures which will be used include minimizing soil disturbance and vegetation clearing, the use of silt fencing and straw bales where needed, preservation of vegetated buffers, and seeding and mulching of disturbed areas as soon as possible following work.

No new buildings or facilities are proposed in flood-prone areas within the park. All areas proposed for new development are in FEMA Zone C – above the 500-year flood level (FEMA, 1978).

In all, within the roughly 2,545 acre park, a maximum area of approximately 16 acres (0.6%) may be modified. This includes about 2.5 acres of new impervious surfaces (roof areas, pavement and gravel roads and parking areas), approximately 1.5 acres in new semi-pervious development (tent pads) or other facilities, and approximately 2.5 acres in new trails with either a natural or stone dust surface. Overall, much of the park will remain undeveloped.

Water

The Master Plan will result in some beneficial impacts to Long Pond. As discussed in Appendix A, the concrete paths near the bathhouse and beach often result in runoff onto the beach and transport of beach sand and warmer water into the lake during storm events. The master plan recommends the installation of a series of rain gardens in the beach area so that most stormwater runoff can be funneled slowly back into the ground. The trench drains would also be restored and redirected into the rain gardens. Existing catch basins and drainage pipes would be incorporated as an overflow system for very large storm events in the event that the rain gardens reach capacity, redirecting excess water through the existing stormwater system. As discussed in Chapter 3 and Appendix A, there are six lakes in the park which currently all have good to excellent water quality overall (Husson, Lyons and Terbush,, 2011). Shaver Pond has been identified by the NY Natural Heritage Program as a significant ecological community (Evans et. al., 2003). Concern has been expressed that new development in the watersheds of the park's lakes could result in additional nutrient loading that could lead to eutrophication and algae blooms (Hartney, 1981). One of the goals of the Final Master Plan is to protect the quality and quantity of surface and subsurface water resources of the park.

Projects proposed within the final Master Plan with the potential to impact water quality include construction of the new Nature center in the Shaver Pond watershed, construction of new camping areas in the Long Pond watershed, construction of cabins in the White Lily Pond watershed, some new trails or trail improvements near some of the lakes and 2 new fishing/viewing platforms, one each on Shaver and Long Ponds. As these new developments all have the potential to impact water quality in the park's lakes, additional lake monitoring has been conducted during the summer of 2011 to establish baseline levels of nutrients in the lakes. For these projects and others that will occur close to water resources, efforts will be taken to reduce the runoff of stormwater from construction sites into streams and lakes. The New York Natural Heritage Program (Lundgren and Smith, 2010) recommended maintaining a buffer of natural vegetation of at least 30 meters (approx. 98 ft.) between the shore of Shaver Pond and any new roads and developed areas to protect the water quality of this significant lake. Vegetated buffers between any new buildings or parking areas and lakes will be retained, with additional native buffer plantings as needed. For the protection of water resources all new facilities will be set back at least 250 feet from the lakes.

Current pavement and impervious surfaces in the park are fairly limited consisting mostly of the major roadways, the picnic and beach parking areas, maintenance area, and park buildings including the beach buildings, park office, park police building, picnic shelters, and comfort stations. New pavement proposed within the final master plan includes approximately 1 acre for roads and parking in the proposed camping area, new road and parking for the Nature Center (0.1 acres), new drive and parking near new park office (approx. 0.1 acre), 1½ new basketball courts (0.15 acres) and potentially up to 0.5 acres for roads and drives in the White Lily cabin area. In addition, surface area of new buildings with impervious roofs will include the new nature center, new building at the park entrance, new cabins at the White Lily Pond area and potentially in the new camping area, a shower building for the camping area, a new pavilion in the Deerfield

picnic area and expansion of maintenance buildings (approximately 0.5 acres). The total maximum acreage of all of these new impervious surfaces is approximately 2.5 acres.

An increase in impervious surfaces could result in an increase in the quantity and velocity of runoff generated during storm events. Permeable materials will be used whenever practical with respect to cost and operations, especially for parking areas and for areas that will not need to be plowed in the winter time, such as camping area roads. As mitigation, use of pervious materials will help prevent runoff from reaching the lakes following storm events. All new roads and parking areas will have drainage infrastructure designed to mitigate stormwater runoff. Green design will be utilized for the buildings as much as possible. Rain gardens will be installed at the new nature center to help reduce runoff into Shaver Pond. Proper design of roads, trails and facilities is essential to reduce the risk of runoff and erosion.

Based on the current trophic status of the park's lakes it is not likely that new developments will result in eutrophication of the lakes. However, careful site planning and design will be used to help protect lake water quality. Wastewater treatment systems for these new facilities will also be very carefully designed to minimize impacts to the lakes. Due to the poorly drained soils in the park, fill may be needed to construct leach fields for the new facilities. The new leach fields will be located as far as possible from the lakes while still allowing for gravity flow. The master plan calls for continuation of lake monitoring. If impacts on water quality are detected, steps will be taken to address any sources of pollution potentially affecting the lakes.

The Master Plan also calls for construction of two small fishing and viewing platforms, one on Long Pond and the other on Shaver Pond. Construction of these platforms may be subject to DEC and/or US Army Corps of engineers permits. The amount of work to be performed in the water will be minimized and no work will occur during fish spawning and propagation periods. Proper sedimentation and erosion control measures will be implemented during construction and disturbed shoreline areas will be immediately revegetated following construction to reduce sedimentation into the lakes. Beneficial impacts of these platforms include the concentration of fishermen in one small area which reduces trampling impacts on the rest of the shoreline.

Work on trails including improvements to existing trails and undesignated trails, as well as proposed new trails, have the potential to impact water resources in the park. The Final Trails Plan identifies several trails with drainage problems, including standing water and seasonal wet areas. Standard water abatement techniques may help remediate these concerns. Work on existing trails and upgrades to undesignated trails will be undertaken using the established guidelines referenced in the Final Trails Plan. Trail areas that require more than routine measures will be identified through the approval process described in the plan and remedies, such as construction of culverts, bridges or boardwalks, will be planned in conjunction with regional and park staff. Regional staff will review proposals and consult with NYS Department of Environmental Conservation and/or the US Army Corps of Engineers as appropriate.

During field layout of trails, the agency will attempt to minimize stream crossings to the extent possible and retain a buffer between new trails and water bodies. All new trail work will be designed to control stormwater and minimize erosion.

One of the largest potential threats to the park's lakes is the introduction of invasive aquatic species. Small amounts of Eurasian watermilfoil (*Myriophyllum spicatum*) were found in both Long Pond and Mill Pond during recent surveys. OPRHP will conduct more detailed surveys of the lakes to determine the locations and extent of the milfoil and determine the best control actions. The Early Detection Rapid Response process will be applied to this invasive species. Signage will be installed at all boat launches informing patrons about the need to clean boats and

equipment when travelling from one lake to another to prevent the spread of invasive aquatic species and boxes will be available for disposal of aquatic plants at all boat launch areas. In addition, boat wash stations with a power washer will be installed at the Long Pond boat launch and at the main entrance contact station for the park.

Wetlands

There are 2 NYS DEC designated wetlands (G-19 and G-28) located within or mostly within the park. In addition, portions of G-24, G-27, and G-33 are adjacent to the park and portions of their check zones include parkland. Several smaller National Wetland Inventory wetlands have also been mapped in the park (Figure 11). These wetlands are an important contribution to the biodiversity of the park. The locations of proposed new facilities in the master plan were selected so as not to impact any wetlands or their buffer areas.

A major threat to all wetlands is the expansion of invasive species, particularly purple loosestrife, *Phragmites australis,* and Japanese knotweed. Removal of invasive species and allowing for regeneration of native species of plants, and providing restoration plantings where needed, will restore and protect this biodiversity.

Air

The addition of camping to the park has the potential to result in some impacts to air quality as a result of more vehicle use on park roads. As discussed in the Environmental Setting section, Rensselaer County, including the park, is within the Capital Region nonattainment area for ozone. Vehicle emissions are one of the primary factors in the creation of ozone. Although most of the ozone pollution in the park is a result of being downwind of major emissions in the Albany area, the increase in vehicles in the park could worsen the ozone levels, especially during high ozone events. This impact would only occur during the camping and beach season (95 days/year) and would be likely only on a limited number of days.

Air quality was considered in the location of the camping area to the north of Long Pond as it is within easy walking distance of the beach. Potential mitigation measures include encouraging patrons in the camping area to use the improved trails to walk to the beach and day use areas instead of driving and promotion of CDTA bus use for day users.

DEC maintains an air monitoring station at the park. It is proposed that this monitoring equipment be relocated to the new nature center and interpreted there. Education on air pollution and ozone may result in reduced vehicular use by park patrons. The park will work closely with DEC air quality staff regarding monitoring results and any mitigation steps that might be deemed appropriate.

Construction of new cabins in the White Lily Pond area could also have a minor impact on air quality since patrons would have to drive to reach any of the day use facilities. The small number of vehicles using this area at any given time, however, is not expected to result in a significant impact.

Additional impacts may occur from use of the new nature center. However, it is expected that the primary users of the nature center during the summer season will be park patrons already at the park for camping or day use. During the rest of the year, this center will bring more cars into the park. Impacts to air quality, however, are expected to be minor as most ozone events occur during the summer months. The new nature center will have very limited parking – only 5 spaces, and buses and cars will need to park in the main beach parking lot. Patrons will be

directed to walk on the nature trail from the parking lot. Buses will be required to turn off their engines while in the parking lot.

Other potential air quality impacts as a result of master plan implementation will be minimal. Temporary impacts that may occur as a result of master plan implementation could include minor increases in vehicle exhaust and some generation of dust during construction. Construction of projects proposed in the Master Plan will take place over several years, however, so impacts would be widely spread out both in space and time. Air quality impacts from construction vehicles will be mitigated by assuring that these vehicles are in good running condition and are not producing excessive exhaust.

Biological Resources/Ecology

Grafton Lakes State Park is part of the Rensselaer Plateau, a 196,000-acre forested plateau in eastern Rensselaer County which includes the fifth largest unfragmented forest in New York State. The Plateau also supports several unique wetland communities, "an impressive mammal diversity not typical of the greater Capital District" (NYS DEC, 2011), and is listed as an Important Bird Area by the National Audubon Society based on its bird diversity and the abundance of forest breeding bird species, some of which are on the state "at-risk" species list. The importance of the natural resources within the park is recognized by the proposed designation of the southern portion of the park as a Park Preservation Area, and designation of the entire park as a Bird Conservation Area. The Park Preservation Area includes the entire area of the park south of Route 2 (Figure 16). This designation recognizes that this area is an invaluable and irreplaceable part of the state's natural heritage, which warrants special recognition and protection for future generations. In general, this area of the park is almost entirely natural. Consistent with Article 20 of PRHP, this designation provides recognition of the resources and a framework for their conservation and use in environmental education. Article 20 indicates that uses within Park Preservation Areas will be limited to passive uses, and amount to no more than 15% of the area. Proposed development within the proposed Park Preservation Area includes only 0.9 acres of new trails. The total development of this area (existing and proposed) is estimated at less than 5%.

Ecological Communities

Over one half of Grafton Lakes SP contains natural communities that have been documented as significant by the Natural Heritage Program (Lundgren, 2010, Evans et. al, 2003) (Figure 10). The significant forest communities are part of a larger block of matrix hemlock-hardwood and beech-maple mesic forest that extends far beyond the park's boundaries to Cherry Plain State Park and beyond. The spruce-northern hardwood forest is the largest of this type outside of the Adirondacks and Catskills and also extends beyond the boundaries of the park (Evans et. al, 2003).

Master Plan implementation will necessarily result in impacts to some of the natural communities in the park. Table 12 provides a breakdown of the maximum total parkland areas impacted in each Ecological Community type. Approximately 16 acres would be impacted. Of this amount, about 0.35 acres are currently developed or lawn area and 3.4 acres are not ecological communities of statewide significance. Of the 1,692 acres of natural communities of statewide significance identified in Grafton Lakes State Park, approximately 12.2 acres (0.7%) could possibly be impacted by construction of new facilities or trails.

Table 7 Ecological Community types affected by Master Plan implementation*

Ecological community type	Maximum Acres Impacted
Beech-Maple Mesic Forest	**7.17**
Conifer Plantation	0.07
Developed and Lawn	0.35
Hemlock Northern Hardwood Forest	**4.3**
Spruce Northern Hardwood forest	**0.75**
Red maple hardwood swamp	0.17
Successional northern hardwoods	0.53
Successional Old Field	2.59
Total area impacted	15.93
Total Sig. ecol. communities	**12.22**

***Bold indicates significant ecological communities**

Development of the proposed new camping area and Nature Center will have the greatest impact on significant natural communities in the park. The ultimate footprint for the camping area is unknown, but could impact approximately 3 acres of Hemlock-Northern Hardwood forest, and approximately 7 acres of Beech-Maple Mesic Hardwood forest. These are maximum estimates, however, based on a footprint of the entire potential area to be developed. During site specific design of the camping area, the agency will make every effort to protect large specimen trees and maintain forest canopy cover in the area to the extent possible.

The proposed Nature Center and associated amphitheater could impact up to ½ acre of Hemlock Northern Hardwood forest. Again, while a large clearing will be necessary for the main building, site specific design and layout will work to avoid large, healthy specimen trees to the extent possible.

Alternative sites were considered for both of these new developments as discussed in Appendix A. Overall, the sites selected provided the best locations for the facilities based on proximity to existing utilities and other facilities thus reducing impacts of other kinds.

Trail use is one of the primary recreational opportunities in the park. There are 21.1 miles of existing designated trails in the park. These existing trails are located in practically every ecological community type in the park. As recommended by the Natural Heritage Program (Lundgren and Smith, 2010), the amount of new trail construction proposed in the park has been limited in order to maintain the integrity of the natural communities and protect sensitive areas. Significant ecological communities that could be impacted by new trail construction include approximately 0.17 acre of Beech-Maple Mesic Forest, about ¾ acre of Spruce-Northern Hardwood Forest, and 0.8 acre of Hemlock Northern Hardwood Forest. It is likely, however, that impacts to these important communities will be lower once the new trails are actually laid out in the field. Estimates used for determining acreages assumed that the entire corridor width for each trail type (i.e. 4 feet for hiking, single track mountain biking and equestrian and 12 feet for snowmobiles) would be cleared. In many cases, it may not be necessary to clear such a wide area in order to locate a trail. Proposed routes for new trails and other facilities will be carefully placed using appropriate design and construction methods to minimize impacts. Final trail alignment will be chosen in order to keep grading and vegetation clearing to a minimum.

Vegetation/Plants

Designation of the entire park as an Invasive Species Prevention Zone (ISPZ) will be beneficial to native vegetation in the park. The Agency's invasive species team reported that very low levels of invasive species are currently present in the park. Invasive species have been documented in only a few locations and no areas of heavy infestations were found (O'Brien, 2011). The ISPZ designation of the park will result in added awareness of the need to prevent invasive species from becoming established in the park through the development of an ISPZ kiosk, signage and other educational materials for the public and park staff. The master plan will provide more formal recognition of management strategies to control invasive plants, particularly those affecting sensitive species and habitats. Eradication of existing invasive species and prevention of new occurrences are included as elements of invasive species management within the plan. Invasive species control will benefit native plants and communities by providing them more opportunity to persist in the park. Once they are established, native plants require less maintenance and have far greater ecological value than non-native alternatives. Since these native species have adapted together over many years in this area, the mutual relationships that have evolved will be a benefit to both native plant and animal populations.

The Master Plan calls for restoration of native vegetation in certain areas of the park. Any new plantings will be native or historically appropriate non-invasive plants. Landscape planting will use plants indigenous to the area wherever possible. Selection of plant species or communities of species will be site specific, taking into consideration the natural, ecological, historic, archeological, and aesthetic elements in the immediate areas as well as the management goals of the park.

Much of the proposed Master Plan emphasizes rehabilitation and upgrade of the park's existing and day use recreation facilities and support facilities such as improvements to picnic areas, replacement of tents with pavilions, drainage improvements in the beach area and expansion of some maintenance buildings. In addition, there are some proposed new facilities in currently developed areas of the park.

Exceptions to this include the proposed new camping area, cabin area and nature center. The proposed cabin loop near White Lily Pond is expected to result in minimal tree removal as it is located at the site of a former YMCA camp. The area to be developed is primarily successional old field with some younger trees interspersed. Impacts to trees from development of the new camping area and nature center are addressed above. All the work in facility and trail location and site design will be in keeping with OPRHP's tree management policy (OPRHP 2009b). Tree removal will be minimized through careful siting of roads, trails and facilities.

Although no state listed rare plants are currently documented within Grafton Lakes SP (Evans et. al., 2003) the Natural Heritage Program recommends that a thorough search for rare plants be conducted prior to any management practices that alter plant habitat. Site-specific surveys will be conducted to assure that there are no rare species or habitats present in any areas to be developed for trails or facilities. Findings from these surveys will be used to develop site designs that minimize impacts on natural resources.

OPRHP will continue to monitor trail use and recreation sites for impacts to vegetation and natural communities. Impacts will be monitored to ensure rapid response to trail degradation from overuse. Consideration will be given to adding boardwalks to bridges on trails in seasonally wet areas that receive heavy use.

Animals

Overall, the proposed Master Plan will result in beneficial impacts to the park's fish and wildlife resources. Designation of the park as a Bird Conservation Area will provide added recognition of the importance of the park for migratory and nesting birds. A Management Guidance Summary will be developed for the BCA which will provide more specific recommendations for protection of birds, especially woodland raptors nesting in the park. Additional funds may also be available through the BCA program for bird survey work, construction of kiosks and other educational materials. Development of a new year-round nature center at the park will provide a permanent location for exhibits and displays aimed at educating park patrons about the BCA and the park's other wildlife and habitats.

Current wildlife policies and practices such as fish stocking, hunting and control of nuisance wildlife as needed will continue in consultation with DEC. OPRHP is developing a wildlife manual that will provide additional guidance to facility managers and other staff regarding these and other wildlife issues. Part of this manual will address damage caused by wildlife, and when and how to take action to address such damage concerns.

The construction and use of new facilities and trails in the park has the potential to impact wildlife. Wildlife can be impacted either directly during construction activities or indirectly through the effects associated with use of the areas following construction. Sensitive habitats were considered during site selection for facilities and trails so that these areas are avoided. Timing of construction activities will be scheduled to avoid wildlife breeding periods. The NY Natural Heritage program does not contain any records of endangered or threatened animals from Grafton Lakes SP (Evans et. al. 2003, Lundgren and Smith, 2010). However, site-specific design of new facilities and trails will include surveys for sensitive or rare species or habitats. If needed, proposed facilities or trails will be re-located to avoid or minimize any adverse impacts.

The Natural Heritage reports (Evans et. al, 2003 and Lundgren and Smith, 2010) indicate that the park has had nests of state special concern raptors including red-shouldered hawk, Cooper's Hawk, Northern Goshawk and Broad-winged hawk in the past. Since these species frequently use the same nest tree for many years, OPRHP will avoid cutting of nest trees during construction of new facilities or trails. There will be an annual spring search for active nests and if any are found, park staff will consult with DEC to determine the best measures to protect these species including possible temporary closures of sections of trails if necessary.

The Rensselaer Plateau contains the fifth largest unfragmented forest in New York State and supports an impressive diversity of wildlife. Large unfragmented forest areas provide habitat for native mammals with large ranges and birds that are sensitive to disturbances. Forests that are unfragmented by roads and development have less edge areas and fewer corridors which helps protect them from invasive species (NYS DEC, 2010). The construction and use of new camping, cabins, a nature center and trails in the park has the potential to impact wildlife, especially through fragmentation of the forest. Large areas of undisturbed and unfragmented forest support an abundance and diversity of forest breeding songbirds, including some species that are known to be area sensitive. The Natural Heritage Program (Lundgren and Smith, 2010) recommended minimizing further fragmentation of large forest areas in the park that are part of the relatively unfragmented area of the Rensselaer Forest tract. This recommendation was taken into consideration during evaluation of alternatives for locations of new facilities. Several of the new facilities proposed in the Master Plan are not located in interior forest areas and will not contribute to additional fragmentation. The area selected for development of the new camping facility to the north of Long Pond can already be considered partially fragmented by the road and water tower. This new proposal will result in increased fragmentation of approx. 10 acres of

forested area. However, selection of this alternative location for camping instead of the area to the south of Long Pond protects a much larger area of relatively undisturbed forest and lakes that are contiguous with additional undisturbed forest areas outside of the park boundary.

Invasive Species

Trail uses, boating and other recreational uses can facilitate the spread of invasive species. Invasive plant seed can be inadvertently introduced on construction equipment and through the use of mulch, imported soil, gravel, and sod. In the past, throughout the state, some invasive plant species have been intentionally planted for erosion control, landscaping, or wildflower projects. In addition, firewood poses significant risk of movement of invasive forest pests. Firewood for camping, is often collected from trees that have died or are weakened or damaged by invasive insects or diseases. As such, the transport of firewood into the park can potentially be a major pathway for the introduction of invasive species.

It is important to implement Best Management Practices (BMP) to minimize spread of invasive species. Practices such as proper material disposal and equipment cleaning methods limit the potential of invasives to establish in new locations within and beyond a site. DOT has developed useful BMPs for invasive plant control (NYSDOT 2009) that can be tailored to agency or park-specific projects and operations.

The largest invasive species threat to the forests in Grafton Lakes State Park is forest insect pests. The Emerald Ash Borer, Asian Long-horned beetle, and the Hemlock Woolley Adelgid have the potential to result in major damage to the forests if they are introduced into the park. Precautions such as surveying and monitoring for such species should be included as part of the invasive species strategy. Since camping will be introduced to the park for the first time, enforcement of firewood regulations and providing local sources of firewood to campers will be critical. Educational information for campers should be provided, including brochures, posters, bookmarks and other materials as available.

Historic and Archeological Resources

Historic Resources. The Master Plan will have no adverse impacts on historic resources either listed on or determined eligible for listing on the National Register of Historic Places. As recommended by the State Historic Preservation Office, the four cemeteries in the park will be surveyed, preserved and protected. The Dickenson Hill Fire Tower will continue to be restored and will then be open for public access. Educational materials will be developed to interpret the historic resources in the park.

Archeological Resources. There are no new development proposals in the Master Plan near any known areas of archeological sensitivity in the park. However, the State Historic Preservation Office has requested that a Phase 1A archaeological survey of the park be conducted prior to any new development to identify any potential resources and prevent impacts to them (Adams, 2011). Future proposals affecting the dam for the Martin Dunham Reservoir may require a site-specific archeological survey as this is within an area of known archeological sensitivity.

Scenic Resources

Implementation of the Master Plan will not result in any significant adverse impacts on scenic resources in the park. The plan calls for protection of scenic resources along lake shorelines by limiting views of new development. A comprehensive scenic resource management plan will be developed to protect the viewshed from the fire tower.

Recreation/Open Space

Implementation of the Master Plan will result in substantial beneficial recreation and open space impacts. The plan provides for a wide variety of new and improved recreation facilities and visitor amenities including a new park nature center with an amphitheater, a new camping area, a new park office near the entrance for camper registration and patron information, new 4-season cabins near White Lily Pond, new and improved picnic shelters as well as other amenities. The trails planning process has resulted in a comprehensive assessment of the existing trails at the park as well as an opportunity for evaluation of new trail uses and routes. Implementation of the Trails Plan will result in a better organized trail system which will accommodate a variety of uses including hiking, biking, equestrian, snowshoeing, skiing and snowmobiling. Trail plan implementation will also result in improved trail maintenance including drainage and an improved trail signage system. The proposed new trails provide new recreational opportunities, such as single-track mountain biking and offer loops of varying lengths for patrons of different abilities.

Designation of the southern portion of the park as Park Preservation Area will not result in adverse impacts to current recreation opportunities provided at the park. The areas of the park not designated Park Preservation Area will continue to support more intensive recreation activities such as the bathing beach and day use activities and environmental education and new activities such as camping and cabins will be added to this area. The area proposed as a Park Preservation area was carefully selected to accommodate recreational and operational needs while assuring the long term protection of the park's forested landscape and diverse plants and wildlife.

Transportation, Access and Traffic

The introduction of camping in the park has the potential to increase the number of cars using the park during the summer months by up to 18% as discussed in the section of this chapter under Air. However, it is felt that the existing and proposed park roads have the capacity to handle this increase. The existing jug handle park entrance on Route 2 will allow queuing space during the busiest times when campers are waiting to register. There will continue to be a few weekends during the summer when the beach parking lot is full. The plan proposes better advertisement of the public CDTA bus that brings patrons to the park during the summer to help mitigate some potential traffic issues on these days. In addition, campers will be limited to 2 vehicles per site and will be strongly encouraged to walk or bicycle to the beach and day use areas.

Public Health and Safety

Public health and safety are important elements in park operations. New or substantially rehabilitated facilities will be designed and constructed to meet all applicable health and safety codes including compliance with the Americans with Disabilities Act. Design and rehabilitation of infrastructure systems such as electric, water, and sewer will ensure public health protection. Improvements to the trail system near Long Pond will allow campers to access the beach via trails rather than walking or bicycling on the roads which will facilitate safer recreation for families staying in the camping area.

The Agency has been working with NYS DOT with respect to the safety of the park entrance along Route 2. The speed limit has been lowered in this area and speed sensor signs will be put in place to alert drivers to their speeds in this area. The Agency will continue to work with DOT on other potential ways to make this entrance safer.

The introduction of camping to the park will necessarily increase the potential for incidents affecting public health and safety. More park staff and park police or rangers will be needed to ensure compliance with park rules and protect public safety, especially at night.

Energy, Noise and odor

Energy efficiency and sustainability of the park is discussed in Chapter 6. Sustainability principles and energy efficiency will be incorporated into the design of all new park buildings, especially the new park nature center.

Master Plan implementation may result in some minor temporary increases in noise during construction.

The introduction of camping into a park that is currently day-use only will result in increased noise at night. No significant adverse impacts to the local community are anticipated as the proposed location of camping is a considerable distance away from neighboring residences. Standard park rules and regulations with respect to quiet times will be applied and enforced in the new camping and cabin areas.

Unavoidable Adverse Effects

The proposed Master Plan will result in some unavoidable adverse impacts. There will be some minimal permanent loss of pervious soil surface and vegetative cover as a result of construction of the new nature center, camping area, cabins, trails and other proposed new facilities. This will be monitored by park staff and action will be taken, if necessary, to prevent any significant impacts from occurring.

In addition to the impacts outlined above, there will also be temporary adverse air and noise impacts (e.g. fugitive dust, noise from construction equipment and vehicles, etc.) associated with construction of proposed improvements.

Irreversible and Irretrievable Commitments of Resources

The planning, development and implementation of this Master Plan including construction of a new nature center, camping area and cabins and other new proposed facilities, infrastructure and trails has and will involve the irreversible and irretrievable commitment of public resources in the form of time, labor and materials. It will also require a commitment to the long-term operation and maintenance costs of the park.

Growth Inducement

Implementation of the Master Plan will result in some increased recreational use of the park. This increased recreational use will be carefully managed in an effort to support the vision and goals established to maintain the quality of the park's important natural, scenic and historic resources. There will be positive, on-going, economic impacts to the communities surrounding the park in the form of increased business to gas stations, restaurants and convenience stores. Tourism related expenditures for activities such as camping and day-use are a major element in the economic vitality of localities. With the addition of camping and winterized cabin facilities, Grafton Lakes State Park, with its significant natural resources and location near major state and county roadways, helps to make this a reality.

Supplemental Environmental Review

Portions of this Final Master Plan/EIS are somewhat general or conceptual. Decisions regarding the type and extent of certain actions will be dependent on the findings from more specific studies or analysis still to be completed. The findings from these site specific evaluations may identify impacts that were not adequately addressed in this plan/EIS. Under such a circumstance, an additional or supplemental environmental review will be required. As part of the agency's responsibility under the State Environmental Quality Review Act, OPRHP will review proposed implementation projects with respect to consistency with this plan and EIS. Projects found by OPRHP to be consistent with the plan and EIS can go forward without any additional review. Other types of proposals may require additional review ranging from completion of an environmental assessment form to perhaps a site specific environmental impact statement.

To assist in this consistency evaluation, the following types of actions have been identified as likely to require additional review under SEQR:

- Any new actions not addressed within the Master Plan that do not meet the Type II categories with Part 617, the rules and regulations implementing SEQR;
- Any change from the preferred alternative for recreational and facility elements of the plan which would result in significant environmental impacts;
- Any leases, easements, memoranda of understanding, or other agreements between OPRHP and private entities or other agencies that affect resources in a manner that is not sufficiently addressed in this plan;
- Any proposals for new trails, trail segments or trail uses not addressed within the Trails Plan that is a part of this master plan.
- Any proposals for a new beach generated from the proposed feasibility study.
- Proposals to address a trail crossing of the Martin Dunham Reservoir outflow.

Chapter 8 – Comments and Responses

Introduction

This chapter contains the responses to the comments received by OPRHP on the Draft Master Plan and Draft Environmental Impact Statement (DEIS) for Grafton Lakes State Park. The Draft Master Plan/DEIS was issued in November 9, 2011 A Public Hearing was held in Grafton, New York at the Everett Wager Senior Center on November 29, 2011. The comment period ended December 16, 2011.

During the Public Hearing 16 people spoke out of approximately 50 attendees. Their comments were recorded. During the comment period for the Draft Master Plan/DEIS, the Agency received 22 written comments by letter and email. A list of persons providing comments is included at the end of this chapter.

OPRHP appreciates the time and effort that persons interested in the future of Grafton Lakes State Park have invested in their review and comments on the Draft Master Plan/DEIS and their participation in the public hearing.

The types of comments received included document editing suggestions, requests for clarification of information presented in the document, and comments related to specific aspects of the plan. All comments were reviewed and organized by categories.

Responses to these comments are found in this section and were considered in the revisions found in this Final Master Plan/Final Environmental Impact Statement (FEIS).

Significant Changes to the Draft Master Plan in the Final Master Plan

- Campground has been moved from Long Pond Road to the area north of the Long Pond beach at the end of Water Tower Rd. Master plan pages xvii and 60. Appendix A page A-22 to A-24, Figure A5 and Master Plan Map.
- The implementation tables have been changed to include rehabilitation of existing facilities in Priority 1 (pages xix and 65).
- Changes have been made to the Environmental Impacts and Mitigation Chapter on pages 68, 69, 74, 75,78 and 80 to reflect the change in location of the proposed camping area. These changes reflect a smaller area of parkland potentially being impacted (16 acres instead of 23) and changes in: the amounts of new impervious surfaces, ecological communities impacted, and fragmentation discussion. Additional information has also been provided under Public Health and Safety.

Responses to Comments

The following section contains a detailed list of comments received from the public during the comment period and public hearings and the responses. The comments are organized by category. Following each category heading, there are summarized comments. Following each summarized comment is the Agency's response.

General Plan Comments

Comment: Construction Schedule for Nature Center

The commenter wanted to know if an RFP or RFQ, estimated construction cost, bidding or construction schedule or scope of work had been developed for the new Nature Center

Response:

The plan is only in the conceptual stage at this point so there are currently no RFP's, cost estimates or construction schedules, etc. This would only happen after the plan is adopted, and when funds are available to begin implementation.

Comment: Cost of Funding the Plan

Concern was expressed that given the current lack of funds, deteriorating infrastructure, budget cutbacks and layoffs in New York State, how can the state afford to pay for the items in this plan?

Response:

As it is stated on page 64, this plan sets forth a vision for the park over the next 10-15 years. The pace and sequencing of the recommended actions will be determined by availability of funding (which is balanced over the entire State Park system) over that time span, including funding for rehabilitation and maintenance.

Comment: Agree to the Master Plan Alternative

Agreement was expressed that the master plan alternative is more desirable than the status quo. The status quo will not prevent deterioration of the park nor equip it for increased future use.

Response:

Your comment is noted.

Comment: Priority Phases

Suggestion was made to include paving, sealing and building maintenance in the on-going priorities. Further suggested that the Nature Center should only be in the priority one level if funding and implementing it does not impact the implementation of other items and ongoing maintenance.

Response:

The implementation tables have been changed to include rehabilitation of existing facilities in Priority 1 (pages xix and 65). The nature center is considered to be essential to fulfilling the park's goal of providing world class environmental education & interpretation which will benefit all park patrons and the surrounding community. As such, it is given a high priority when funding becomes available.

Comment: Appreciation

Appreciation was expressed for the hard work that people put into the plan, do not detract anything from the plan except possibly holding off on the camping until other infrastructure needs are met.

Response:

Your comment is noted. Camping will be developed as funding is available.

Comment: Beach at Martin Dunham Reservoir

A comment was received expressing the commenter's disagreement with doing a feasibility study for a beach at Martin Dunham Reservoir.

Response:

There is no plan for a feasibility study for a beach on Martin Dunham Reservoir. However, the way the feasibility studies were described in the Draft Plan on page xvii may have caused one to misunderstand the statement. The meaning of the statement is that two feasibility studies are proposed, one to study the possibility of adding another beach on Long Pond, and the second to study the feasibility of trail crossing at the Martin Dunham Reservoir Outlet. This confusion has been corrected in the final plan, page xvii.

Comment: Is the park utilized?

Uncertainty was expressed that facilities at the park are utilized. Specific mention was made about the park police building. Further that the community should be informed about the utilization of the park facilities before dollars are spent on new facilities. It would be better to invest in existing facilities than start building brand new.

Response:

Grafton Lakes State Park is one of the most visited parks in the Saratoga-Capital District park region. In 2010-2011 the park served 230,000 people. This attendance is dependant on utilizing all the facilities in the park. The park police building serves several parks in the park region in addition to Grafton Lakes State Park. These parks would not be served adequately without modern police facilities that are available at the park police headquarters.

New facilities that are planned in this master plan are being proposed to better serve the patrons and fulfill the park's many recreation and preservation goals.

Comment: Hydroelectric production at Martin Dunham Reservoir

Suggestion was made to develop hydroelectric resources at the park at Martin Dunham Reservoir.

Response:

The planning team did study the possibility of developing hydroelectric generation facilities at the park. It was determined that due to the cost of such a development, and the small amount of electricity that would be produced, the project would be economically unfeasible.

Comment: Design with historic nature of the area

Suggestion was made that the design of new buildings reflects the architecture historically linked to this area.

Response:

Your comment is noted; as specific new facilities are designed it may be possible to link the old and new through attention to the historic architecture.

Comment: Re-order the priorities table

Concern was expressed that the order of priorities dealing with Long Pond water quality monitoring is incorrect as stated in the draft master plan.

Response:

The priority levels are correct, the implementation tables are meant to indicate importance rather than sequencing. In addition to ongoing water quality monitoring in all the park's lakes, water quality monitoring in Long Pond would be essential after campground construction in order to compare it with the baseline information gathered before the campground is built.

Comment: Climate description needs to be revised

The comment was made that the climate description in Chapter 3 of the draft master plan underplays the amount of snow. Recent total snowfalls have been more than those stated.

Response:

The snowfall description is an average over a number of years given at the Cornell University website cited in the master plan. Individual years may be above or below that average.

General Park Comments

Comment: Deteriorating Pavement/Use resources to maintain and improve existing structures

Concern was expressed that pavement throughout the park is in a much deteriorated condition. Repair of this should be part of the ongoing priorities and that future resources should be used to maintain and improve existing structures.

Response:

The implementation tables have been changed to include rehabilitation of existing facilities in Priority 1 (pages xix and 65).

Comment: Alcoholic Beverages

There should be an implementation of no alcoholic beverages on the park property.

Response:

Your comment is noted; however policies of this type are formulated at the state level and are beyond the scope of this master plan. More information about rules regarding alcoholic beverages in New York State Parks can be found on the agency website **www.nysparks.com/inside-our-agency/public-documents.aspx**

Comment: Preserve Blueberry Fields

Hope was expressed that the park will continue to maintain the unique blueberry fields which are historic to Grafton.

Response:

The park will continue its current protocol regarding the blueberry fields.

Comment: Preserve Cemeteries

The hope was expressed that the park will continue to maintain and upgrade the four cemeteries.

Response:

The cemeteries in the park are considered an important part of the history of the Town of Grafton and its people. As such, the agency intends to follow recommendations made by the State Historic

Preservation Office regarding those cemeteries. The master plan includes a reference to this on pages 41 and 64-65.

Comment: Stargazing

A request was made to keep Deerfield open at night for stargazing and to build new bathrooms that have lighting conducive to night observation.

Response:

Night time activities such as stargazing at the park will continue under the current protocol. If any new bathrooms are constructed at Deerfield, lighting conducive to night observation will be considered.

Park Entrance

Comment: Park Entrance Unsafe/needs to be redesigned/study what changes can be made.

Comments were made concerned that the current main park entrance intersection on Route 2 is the site of many collisions and is dangerous. The comments suggested that the current "jug handle" left turn solution needs to be eliminated or redesigned. It was suggested that a study be initiated to determine an alternate design for the park entrance, especially to provide an alternative for park patrons travelling east who need to make a left turn into the park entrance road.

Response:

The agency has already initiated work with the New York State Department of Transportation (DOT) to review the situation. Permanent solar powered radar speed signs have been approved by DOT and will be installed on Route 2 in both directions. These signs have been shown to act as traffic calming devices where the speed limit is posted. OPRHP is ready to work further with DOT to come up with an alternative solution. These new signs are also discussed in revisions to Chapter 7 on page 80.

Comment: Use RPI students to study the intersection

The suggestion was made that one way to study this intersection would be to enlist students at RPI where they might use this as a study project for a course.

Response:

This possibility will be looked into by the agency.

Nature Center

Comment: Put nature center in a different location

The opinion was expressed that the proposed nature center be located somewhere with a view of one of the lakes in the park.

Response:

After careful review of several siting possibilities, the planning team feels that the currently proposed location is the most appropriate for the new nature center. This location is easily accessible, has year-round utilities, making it useful as a warming hut in the winter, and is reasonably close to the main park activity area without taking it over. Other locations were

considered, including some with a closer view of a lake than the chosen spot, but they were inadequate for the planned facility in one way or another. Placement of this building closer to a lake could also result in greater environmental impacts.

Comment: Partner with school district/town for nature studies

The comment was made that children in the school district would benefit from nature/environmental studies, and a request was made to consider a joint development of the nature center in the elementary school building partnering with the Town of Grafton, which may have plans to develop a municipal center there.

Response:

The park already works with the school district to plan curricula which include nature studies and environmental education with the Berlin Central School District being given a break on paying for programs. This relationship has been formalized with a Memorandum of Understanding for service exchange with the Outdoor Club. The park naturalist presented to faculty of the Berlin Elementary School covering utilization of the outdoor classroom. School groups regularly visit the park and participate in several projects. The new nature center's purpose is to provide superior facilities at the park where these programs can flourish. The stated goal of the planning team to provide this type of facility is to connect the environmental education program directly with the opportunities available at the park. Although the idea of re-using the empty elementary school is a laudable one, it does not meet the requirements for a park nature center.

Comment:

Support was expressed for increase in environmental education at the park. But the commenter questioned how a balance between the facility and adequate staffing will be achieved.

Response:

Staffing of the park facilities is beyond the scope of this master plan. However, the park has been operating an environmental education program now for many years. Staffing has always been adequate through a combination of full time, part time and temporary employees. It is the physical facilities that have been lacking.

Flora and Fauna Lists

Comment: Add red squirrel

Request was made to add Red Squirrels to the list on D-11

Response:

The list was not meant to be an exhaustive list of all plants and animals found at the park, however, red squirrel has been added to the list.

Camping

Comment: Re-locate proposed camping to Martin Dunham Reservoir area

The suggestion was made that camping should not be located on Long Pond Road, and proposed to relocate the proposed camping to around the Martin Dunham Reservoir.

Response:

The area around the Martin Dunham Reservoir was determined by the planning team to be included in a new Park Preservation Area, which would not support traditional camping facilities such as those proposed for Grafton Lakes State Park. Additionally, the area has many natural constraints, such as slope, access and soil types which would make establishment of camping difficult.

Comment: 75 sites are too many

Comments were received suggesting that 75 campsites were too many for the park and the area close to Long Pond and would detrimentally alter the current beauty and tranquility of the park, especially in the north segment of Long Pond.

Response:

The number of sites that can be supported at a campground is determined by examining the natural features of the site. The area that has been selected for camping has been changed in the final master plan and the number of sites will be determined when a detailed design is produced.

Comment: Impact of camping on the town

Concern was expressed that addition of camping would have a negative impact on the surrounding town's residents, businesses, volunteer fire department, rescue squad and ambulance squad.

Response:

One effect of a larger population of park patrons and ones who would stay overnight and for a few days would be to provide a new source of customers for town businesses. Campers would need groceries, equipment and other types of supplies which could be made available through entrepreneurial activities of the local townspeople. This would have a positive effect on the economy of the town.

The park employs full time staff members who have training and certification in emergency medical services, first aid, and law enforcement. This includes general park staff, lifeguards and park police. Additionally the park has several Automated External Defibrillator (AED) devices throughout the park, and staff members trained to use them. These staff members are called upon for first aid and emergency services before any calls are made to external services.

Comment: Will camping/cabins support the additional staff?

The comment was made that with new cabins and overnight camping there will be a need to pay for more employees, security, etc. This will probably cost more than the state will make on the fees to rent such facilities.

Response:

The type of camping and cabins being proposed for the park is similar to other sites around the state so the additional staff needed is a known quantity. These other facilities are able to meet the needs of the additional staff and so will the facility at Grafton Lakes State Park.

Comment: When funding is limited/is there demand for camping?

Concern was expressed that OPRHP is turning a day use park into one where camping will be developed at a time when funding is limited. Could these limited resources be better used for maintaining/developing non-motorized trails and open space funding to expand parks and acquire buffer areas?

Another commenter expressed doubt that there is a demand for camp sites and cabin rentals.

Response:

The addition of camping at Grafton Lakes State Park is in response to several factors, including consistent requests from park patrons, the high calculated index of needs for camping in the area (see chapter 2, Park Background), and a lack of existing tent, tent-trailer and cabin camping opportunities in the vicinity of the park (Chishti, 2011 – Appendix F). These factors indicated that providing such camping at the park would serve a presently underserved group of park patrons and potential park patrons. Camping therefore is considered an appropriate expenditure of resources. However, any construction of new facilities will only be able to occur if and when funding is available.

There is no plan to further expand the park area through acquisition of buffer zones.

Comment: Alternate location for proposed campground

Requests were made to consider locating the new campground to the right side [north side] of the beach area and along the road close to the water tower.

Response:

The camping proposal has been moved to the north side of the beach area and extending along the road that leads to the water tower. The new location is illustrated in Figure A5 and is described in Appendix A, pages A-22-24; and in the master plan document on pages xvii and 60. Impacts of the new location and mitigation measures are also discussed on pp. 68, 69, 74, 75 and 78.

Comment: Equestrian camping

A request was made for the consideration of overnight horse camping facilities at the park.

Response:

The planning team has decided that, there will be no overnight equestrian camping at Grafton Lakes State Park. The park continues, however, to welcome equestrians on many miles of trail open for day use.

Comment: New campground design and implementation

The comment was made that the new camping area will need to be designed according to Department of Health standards and to provide waste water treatment systems to handle the load of the campground. Given the rocky terrain and soils this may be difficult. It is to be hoped all of that is being considered, especially given that the park has not been able to keep up with its entire existing infrastructure.

Response:

Because the campground site has been moved, see Appendix A pages A-22 to A-24, the new location will be able to utilize the park's sewage treatment and water supply facilities, which will be upgraded to accommodate the camping. This eliminates the need for septic systems. The agency is aware of all Department of Health standards and the campground will be designed to meet those standards, and other existing standards. Detailed design of the campground will also take into account grades, rocky terrain and soils, which will, in part, dictate the configuration of the implemented design.

Comment: Camping at Rabbit Run picnic area

A suggestion was made to implement a small tent only pilot project in the Rabbit Run/South Picnic area, then expand in the future toward Second Pond and North Long Pond Road.

Response:

These two areas are actively used by park patrons and will be developed as per the master plan. They would not be appropriate for camping facilities.

Comment: Wildlife corridor impacted by proposed camping

The opinion was expressed that the riparian corridor that exists between the connected waterways of Mill Pond, Second Pond and Long Pond is not adequately addressed in the Draft Environmental Impact Statement. Mink, beaver, fisher and most recently otter, regularly move up and down between these ponds. The north end of Second Pond is where many waterfowl settle for the night. The proposed campsite locations along the isthmus between Second and Long Ponds will act as a barrier to this movement. Whereas darkness now descends with wildlife having free reign, lights and alert dogs will await their crossing and hunt of the shoreline.

Response:

Based on public comments, including the potential impacts discussed above, the camping proposal has been moved away from this site.

Comment: Light pollution from camping

Concern that lights, spreading down the lake rather than being limited to areas closer to the existing beach and parking lot street lights will detract from camper's ability to experience GLSP glorious night sky famous for its lack of light pollution as any member of the star observatory group can attest.

Response:

The camping proposal has been moved away from the Long Pond Road site. The problem of light pollution in the park will only affect the overnight campers since the day-use portion of the park closes at dusk. But to minimize this effect the design of the campsite will consider including lighting fixtures designed to reduce light pollution. Additionally, camping would only occur from approximately Memorial Day – Labor Day so darkness would prevail for most of the year.

Comment: Carry In, Carry Out

The opinion was expressed that the park would cease to be a 'carry in, carry out' environment with the addition of overnight stays. Additionally, the commenter noted that 'carry in, carry out' is not enforced or respected by many of the current patrons and that frequently the commenter has to pick up litter on the paths around the three main ponds Shaver, Second and Long Ponds.

Response:

Carry in, carry out will not be a part of any new campground opportunities. Campgrounds are serviced by regular trash collection from central deposit sites which are animal proofed and located for easy access to campers. The day use areas of the park would continue to be carry in, carry out. Enforcement of rules and regulations regarding trash disposal are part of the park operations and are not in the scope of this master plan.

Comment: Recreational demand

The opinion was expressed there has not been sufficient demand to keep the Long Pond beach open everyday in the summer, thus showing that there will not be enough demand for camping.

Response:

The shortened hours of available swimming at the park are not an expression of the demand for that activity. On the contrary, the shortened hours were greeted with dismay and consternation by park patrons. There is a demonstrable demand for more swimming hours than are currently provided. The reduction was entirely due to budget cuts.

Comment: Camping near Mill Pond

Opinion was expressed that camping nearer to Mill Pond and Second Pond might provide more economic benefit for the town as well as lessen the reliance of automobiles. Since there were houses in these areas historically, there may also be areas that may better sustain development.

Response:

This area was considered but found not to be feasible due to certain site constraints. The campground has been moved to the area north of the beach and along the road to the water tower.

Cabins

Comment: Support for 4 season cabins

Support was expressed for the proposed 4-season cabins since there is only one place in all of Rensselaer County where you can rent this type of cabin.

Response:

Your comment is noted. This information is supported by the research done on camping facilities in the area. (Chishti, 2011 – Appendix F)

Comment: Ecological effects of cabins

Support was given to siting cabins in the area formerly used as a YMCA camp. Noted was the fact that the cabins are far from While Lily Pond. The commenter anticipates no impact to the lake water quality, no impacts to known rare plants, only minimal impact from invasive species, little or no impacts to the forest landscape integrity and no impacts to important community examples, only to common natural communities.

Response:

Your comment is noted.

Comment: Cabin location on Babcock Lake Road

Concern was expressed about locating cabins on Babcock Lake Road. Access to the cabins along the road would stress the road. Additional comments were made indicating the concern that security is a problem far from the central part of the park. The suggestion was made that the cabin location be in the main part of the park.

Response:

The location that has been chosen for cabins is the site of a former YMCA camp. This area has previously been the site of active recreation and was felt to be the best area in the park to sustain this

type of development. The road is a county road, built and maintained to those specifications. The entrance to the cabin area will be gated and locked when not in use and park police patrols will monitor the area. There are no other appropriate locations in the main part of the park for all-season cabins.

Comment: Impact of cabins

The concern was expressed that the proposal to build cabins in the former YMCA camp would destroy the areas pristine beauty and that buildings of any kind would not be desirable. Further, that White Lily Pond has several ecosystem examples that are classified as exemplary and state significant as well as a number of rare plants. Concern was expressed that campers will not respect or even recognize these. The area is home to deer, bears, foxes, porcupines, turkeys and more, which would be impacted by the development. Snowmobile trails would require the building of paths and increasing the noise level. ATVs would use them at other times of the year.

Response:

There is no evidence to suggest that the proposed cabins would displace wildlife or in any way have more of an impact than the existence of houses in the area. While the area immediately surrounding White Lily Pond might be considered pristine by some, even though there are residences nearby, the area where the cabins will be built is a former YMCA camp and the vegetation, and ecological community represents a disturbed area which has not developed into mature forest (Figure 12). This area is not considered a significant ecological community by the National Heritage Program (NHP) (Figure 13). The area surrounding the proposed cabin colony may contain significant communities and possibly rare plants, but these have not been documented (see responses under Ecological Comments.) These areas will not be subject to cabin development. Further, park regulations require that patrons stay on designated paths and roads. This rule is enforced by park staff and park police.

The proposal does include new trails that would connect the cabin colony with the main part of the park's trail system. Site specific surveys for rare plants will be conducted prior to construction of any new trails and buildings. These trails will be open to hikers and bikers in the main season and to snowmobiles in the winter. ATV's are not allowed in any park in the State Park System. Exceptions to this rule include cases where qualifying people with disabilities are issued permits by the Department of Environmental Conservation (DEC) to access designated routes under their jurisdiction by cars, trucks or ATV's, and in cases where it is deemed safe and appropriate for a person with a mobility disability to operate an other power-driven mobility device (OPDMD) (which may include ATVs) on state park property (per the Department of Justice September 15, 2010 ruling regarding OPDMDs). Use of an ATV on state park land in the latter case may also require a permit. The general prohibition will continue to be enforced by Park Police, as it is now.

Comment: Cabin renters

It was commented that renters of these cabins might be looking for a place to party away from the college campuses in the Capital District and not people who want to enjoy the park for its natural beauty. It would require a staff member there 24/7 to keep it under control. The Grafton Inn - a bed and breakfast on Route 2 - is close by and is rarely filled so there may be no demand for overnight accommodations within the park.

Response:

The agency makes every effort at all campgrounds and cabin areas to enforce the rules and regulations which govern the safety and enjoyment of the campers and neighboring residents. These

rules will be enforced at Grafton Lakes State Park as well. Staffing levels will be decided by park management and are beyond the scope of this master plan.

Staying in a cabin is an entirely different experience than staying in a room at an inn and attracts a different clientele. The decision to provide cabins at the park was made by considering various demand factors including park patron requests, high demand for this type of activity demonstrated in the relative index of recreational needs for the county (Chapter 2-Park Background), and the lack of similar accommodations in the area (Chishti, 2011 – Appendix F).

Comment: Forever green

The comment was made that when the Troy housing authority closed their summer day camp on this property they made it clear to the Grafton Community that this property, even if sold, would remain forever green. Placing cabins on this property will increase traffic on a narrow winding county road. Also cabins will necessitate increased security issues for this area. Increased traffic and increased security issues are not keeping an area forever green.

Response:

There are no deed restrictions on this property or discussions documented with the seller when the property was purchased as to keeping the property “Forever Green.” However, in an attempt to minimize environmental impacts as much as possible, the only part of the property that is being proposed for development is the area disturbed by the previous camp.

Comment: Put cabins where former cottages were

The recommendation was made to use one of the areas that used to have cottages for a smaller 10-20 site area. Since the cottage areas are not quite grown over, there would be less damage to the forestland.

Response:

This area was considered by the planning team (Appendix A, Camping) but was found not to be suitable for the goals being considered. In addition, cabins will be placed in an area that was previously developed as a YMCA camp and would also result in minimal damage to forestland.

Relation of Town and Park

Comment: Master plan will impact town residents

The comment was made that no impact study was done on the Town of Grafton or its residents who are the ones who be affected the most from the implementation of this "master plan.”

Response:

Master plans and environmental impact statements often include socio-economic factors. In the case of this document, existing conditions of park contributions to the economy of the region are included in Chapter 2-Park Background. Changes to the park will most likely result in positive changes to the park’s contribution because of increased number of patrons who will need supplies such as groceries, and equipment, which could be provided by local businesses.

Additionally, other factors which will be impacted by the master plan (such as traffic and air quality) were considered and are discussed in Chapter 7- Environmental Review.

Comment: Expansion of park land

The opinion was expressed that the agency continues to acquire property in the area surrounding the park, and that right now there is an attempt to purchase a large area encompassing White Lily Pond.

Response:

The agency's policy on land acquisition is to negotiate only with willing sellers. There are no such negotiations currently underway.

Comment: No taxes paid to Grafton from the state

The observation was made that since the State does not pay taxes on any of the property it owns, in essence it is bankrupting the already poor town of Grafton. Further, that no consideration was given to pay the Town some kind of camper fee.

Response:

The setting of policy regarding the payment of taxes or payment in lieu of taxes is done at the state level and is beyond the scope of this master plan.

Comment: Eliminate entrance fees for Grafton residents

The suggestion was made to eliminate or reduce entrance fees for Grafton residents. This would be similar to the Empire Pass program or reduced fees for senior citizens.

Response:

Setting of entrance fees (vehicle use fees) is beyond the scope of this master plan.

Comment: Park expansion

Concern was expressed about what the park's expansion will do for the town of Grafton, and that Grafton state park as it is, is more than adequate to fit within the town of Grafton. Additional growth would be in excess and will eventually put additional tax burdens on New Yorkers and burdens on the Grafton community. The greater concern is the growth and change of the community structure of this small town. Please stop the excessive growth and let us enjoy what we have and can afford.

Additionally, concern was expressed that more people may mean more trespassing on surrounding private property

Response:

The agency is planning no excessive expansion or land expansion of Grafton Lakes State Park. The agency is not in negotiation on any parcel at this time and will deal only with willing sellers if and when they offer land for sale. Increased numbers of park patrons will mean some increase in traffic (see Chapter 7 – Environmental Review) as well as a greater demand for local sources of groceries, equipment and eateries.

Additional facilities within the park are being planned to meet the needs of park patrons and have been evaluated as to the level of recreational need and the ecological impacts they may create. Each of these impacts has been found to be able to be mitigated, as is outlined in the plan Chapter 7 – Environmental Review.

Park regulations state that (except under certain conditions) patrons are prohibited from leaving designated trails and roadways and entering into off trail park lands. These regulations are enforced by park staff and park police.

The park clearly posts its property line, which is also the responsibility of each adjacent individual property owner.

Ecological

Comment: Water condition at Long Pond beach

Comment was made that the beach area has changed much from when it was newly established. It has become very distasteful to see what it has evolved into. The water is dirty and discolored; many of the visitors show little respect for the environment or their fellow visitors. It is not conducive with the residents of Grafton.

Response:

The beach is monitored weekly for bacteria according to the New York State Sanitary Code, EPA guidance and the Agency protocol. Water quality at the beach has been consistently excellent. The water quality is so high that the beach has only been closed once in the past 10 years due to poor water quality and has not been closed for water quality concerns for the past three years.

Comment: Addition to invasive species list

The opinion was expressed that wild parsnip should be added to the list of invasive species present at the park.

Response:

The agency invasive species staff has been made aware of this request. To be listed as an invasive species at the park, the occurrence would have to be documented. The list of invasive species at the park was not meant to be exhaustive and will change as new species introductions occur or existing populations are managed. This comment, as well as future invasive species surveys, will be taken into account when developing the details of the Invasive Species Prevention Zone and invasive species protocols for the park. The input of knowledgeable park patrons will be much appreciated as this process moves forward.

Comment: Boat power washers

The comment was made that power washes for boats are an excellent idea and should be implemented as soon as feasible.

Response:

Your comment is noted. The implementation of invasive species program elements will happen according to the list of priorities and available funding.

Comment: Chemical control of invasives

The commenter stated that they were not against using chemical control of terrestrial and aquatic invasives where no other alternative is sufficient.

Response:

The agency's policy regarding the use of pesticides is stated in *OPRHP Policy on Pesticide Reduction in State Parks and Historic Sites*, released in April of 2009. You can view and download a pdf copy of this policy statement at the agency web site **www.nysparks.com/environment/documents.aspx**.

Comment: Invasive Species Prevention Zone (ISPZ)

Agreement was expressed that the park should be designated an Invasive Species Prevention Zone.

Response:

Your comment is noted.

Comment: Park Preservation Area

Comment was made that the area to be designated as Park Preservation Area should be called a reserve instead of a preserve because once it is a preserve it cannot go back. If the Grafton area grows, more resources may be needed at Grafton Lakes State Park (GLSP) and this area may be needed. Also, will the Martin-Dunham Reservoir dam still be allowed if there are no structures allowed in a preserve? Lastly, will motor boats still be allowed on the reservoir? Will the area affect hunting in that part of the park, or other currently allowed activities?

Response:

Park Preservation Areas are part of New York State Park Law (Article 20). They are established to recognize that the area is an invaluable and irreplaceable part of the state's natural heritage, which warrants special recognition and protection for future generations. As such, the very reason for this designation is to prevent future development which would impair the natural resources. If more recreational resources are needed at GLSP in the future, they would have to be located elsewhere.

Park Preservation Areas are not the same as the Wilderness areas in the Adirondacks and Catskills where structures may be prohibited. Therefore this designation will not exclude the Martin Dunham Reservoir dam or its maintenance.

All activities, including hunting, fishing and the use of electric motors which are currently allowed on the reservoir and in the area now being designated as Park Preservation Area, will continue to be allowed.

Comment: Sustainability recommendations

The suggestion was made to

- Employ rainwater harvesting and use that for flush water, and to reduce stormwater runoff on sidewalks and such.
- Plant shade trees on walkways and parking lots to provide cool shady spots and cool off the pavement on sunny, hot days.
- Use a green roof on the new nature center.
- Use permeable paving for new basketball courts to deaden the sound of dribbling.

Response:

All green infrastructure methods for stormwater control, including raingardens (which are already in the plan), rain barrels, green roofs and permeable paving are considered, where appropriate, when designing or rehabilitating facilities.

Shade tree planting is part of the ongoing improvements at the park.

Comment: Mapping of wetlands

The opinion was expressed that one of the first activities that should be taken before any construction occurs is the mapping of federal wetlands. The early mapping and certification of existing wetlands will allow bulldozing and use of other heavy equipment without the ramifications of possible wetland creation.

Response:

Any construction activity at the park will require wetland delineation at the construction site before construction begins. Mapping the entire park would be unfeasible and economically prohibitive.

Comment: State rare plants

The comment was made that the 2003 Natural Heritage report overlooked state-rare plants. (The commenter went on to list several plant species)

Response:

This is inaccurate. Plants described in the commenter's letter are not considered rare enough from a state-wide perspective to be actively tracked. Some of the plants that are mentioned as being considered state-rare are records that have not been verified with specimens, and are therefore considered leads and not confirmed records. For data quality assurance purposes, the New York National Heritage Program (NYNHP) does not enter unconfirmed data into the database, so these records can only be treated as leads until a specimen is verified. NYNHP does not have the resources or capacity to track plants that are not listed as state-rare, including those that are on the Watch List, Review List, or those considered 'county-rare'. However, these observations are valuable and could be considered in park management activities.

Comment: Rare jellyfish

The comment was made that the Freshwater Jellyfish has been observed in Shaver Pond as recently as 2003, but has not been noticed in recent years. The commenter believes that this species is county rare/vulnerable.

Response:

The NY Natural Heritage Program does not track freshwater jellyfish, but this is an interesting observation and does further emphasize the significance of Shaver Pond. Observations such as this are important and will be considered if and when the opportunity arises to conduct assessments for tracking species in this group. Shaver Pond has been identified as a significant natural community (Figure 13) and as a unique high value natural area in the park, so all species of interest – whether of county or statewide significance – should be considered in management actions to protect this pond and the immediate watershed.

Comment: Invasive species

Disagreement was expressed with the statement that there are no areas in the park where invasives area abundant. Bushy rock cress, a very recent introduction to the county and plateau, is already entrenched in the west end of Hicks Trail near Shaver Pond Road. An attempt was made at eradication but the population still exists.

Response:

The 2010 NYNHP report recommends development of an invasive species plan for the park. The detailed information provided by the commenter on specific invasive species and locations should be utilized in the development of the invasive species plan and other management-specific plans. The master plan cites the NYNHP recommendation (Lundgren and Smith 2010) and other sources and outlines a strategy for addressing both aquatic and terrestrial invasives.

Comment: Ecological communities

The comment was made that the ecological communities map is only 85% accurate for community type and boundary and that it would be good to clarify the importance of community examples in the text of the plan, such as interpretation of the term "significant communities" as meaning state-significant.

Areas with the greatest disagreement are – wetland communities surrounding White Lily Pond, lowlands north east of Martin Dunham Reservoir and scattered small isolated wetlands.

Response:

The commenter notes errors in the NYNHP ecological community map. These suggestions are based on more detailed information than were available when the maps were compiled. NYNHP maps are based on limited field survey and orthoimagery interpretation and some community types are subject to different interpretations, these maps are never described as 100% correct The NYNHP map is also at a coarser scale than some of the mapping that the commenter may be aware of and thus does not delineate small patches of uplands or wetlands. As with the rare species, detailed documentation is welcomed. The commenter should submit (via the NYNHP reporting forms) information for communities that are felt to be of statewide significance. Updating the maps and records would be outside the scope of the master plan, but could be included in a future update of the NHP database and reports.

The commenter correctly interprets the use of the term "significant" in the master plan to mean of statewide significance based on NYNHP criteria and this distinction has been added to the master plan (page 41). This does not negate the importance of county-significant features and these can be considered in more detailed planning or education efforts. Many of the county-significant features are encompassed within NYNHP significant communities noted in the master plan, however, as with rare species, the NYNHP does not have the resources to track and map communities at this fine scale.

White Lily Pond itself is outside the park boundaries and therefore can not be included in NHP survey, evaluation, master plan considerations or management recommendations.

Comment: Landscape context

The comment was made that while there is general mention of the park on the Rensselaer Plateau in the plan and some descriptive is provided about the plateau, the plan lacks mention or detail about intermediate-level landscape features such as forest interior areas. Details about specific areas of the park were given and a request was made to include such a description in the master plan.

Response:

The master plan does describe the importance of the intact forest area, some of the associated values, and the park's efforts to minimize impacts to these areas (p 76-78 and Appendix A various sections). The NYNHP recommendations were cited (Lundgren and Smith 2010) as well as other documents which provide more detail and guidance. The park plays a very important role in maintaining these large forest areas in the region and in a number of places the master plan cites this as a consideration for their decisions, but the details provided by the commenter go beyond the scope of the master plan.

Comment: Park preservation area

Support was expressed for the proposed park preservation area (PPA). The commenter also suggested three other areas for consideration to be so designated:

- The forest interior area that extends north west of the park
- The Shaver Pond complex and the adjacent Quacken Kill Headwaters (north of Route 2)
- The White Lily Pond complex

Response:

The forest area was considered for designation by the planning team but was found to contain too high a level of activities which are excluded from PPAs. Therefore it was decided not to propose designation for that area. However the forest is already protected in part by OPRHP Tree Management Policy (which excludes logging) and the master plan text that identifies the high value of the intact forest.

The agency agrees with the commenter as to the ecological importance of Shaver Pond. This importance is noted in the master plan (p. 39 & 70) citing its rarity (Evans et al 2003) and the need for conservation measures citing Lundgren and Smith (2010).

The planning team sincerely considered designating a PPA around Shaver Pond but found that the existing level of development including the Deerfield Picnic area and Shaver Pond Nature Center, as well as the proposed new Nature Center and the need to expand the sewage treatment plant to accommodate the new camping area location, would reduce the size of a PPA to a level that would not be effective. Although we are not recommending a PPA designation, there are several recommendations from the Natural Heritage Program (Lundgren and Smith, 2010) and the Water Quality Unit which are considered part of the master plan; these are:

- Monitoring the lake for water quality issues and aquatic invasive species.
- Maintain a buffer of 30 meters (100 feet) or more of natural vegetation from the lakeshore or from wetlands adjacent to the lake wherever possible.
- Prohibiting motorized boats, fish stocking, and chemical treatments, and,
- Providing education on ways to prevent the spread of invasive exotic species into the lake, such as cleaning off boats and boots prior to accessing the lake and providing a boat cleaning station at the lake access point.

White Lily Pond is outside of the park therefore cannot be designated.

Comment: Ecological impact of campground

The opinion was expressed that a newly proposed campground on Long Pond represents the one largest potential impact to important biodiversity features of the park.

Response:

The new camping area has been moved to the area north of the beach and along the water tower road. The new location will result in reduced environmental impacts as discussed on pp. 68, 69, 74, 75 and 78.

Comment: Ecological impacts and alternatives

Comment was made concerning several factors, including forest cover, important ecological communities, roadedness, real property/land ownership, forest maturity and ecological rehabilitation, rare species, invasive species and forest/wildlife corridors.

Response:

In general this comment includes a number of details that are covered in sections of the master plan and contains a number of details that are more relevant to site specific management plans. Specifically concerning forest maturity, OPRHP's tree policy does address the concept of allowing forests to mature and these goals are also provided in the introductory sections of the master plan.

Hunting

Comment: Hunting area boundaries

Interest was expressed to know the details of modification of the boundaries to the hunting area.

Response:

The hunting restriction area will change when the installation of new recreational facilities makes that necessary. Information of these changes will be available at the park and will be distributed to individuals applying for hunting permits.

Trails

Comment: Trails Plan Support

Comments were received supporting various aspects of Appendix B – Trails Plan.

Response:

Your comment is noted

Comment: Support for new trails

Support was expressed for new trails that will provide new recreation opportunities such as single track and loops of varying lengths.

Response:

The Trails Plan includes new varied opportunities such as the development of the Dunham Hill Trail and the Beechnut Trail as single track. New loop trail opportunities include the Fruit Loop Trail, White Lily Trail with Beechnut Trail, and a few shorter family loop trails in proximity to the high-use beach area.

Comment: Proper Trail Siting

Concern was expressed that undesignated trails may cause erosion and disturb ecological communities and support was expressed for designating properly sited trails and closing improper ones.

Response:

The Trails Plan included an assessment of all trails in the park. The plan calls for closure of 1.7 miles of trail most of which is considered unsustainable. New trail construction will follow the policies and guidelines for trail building that have been established by recognized trail organizations and government agencies (refer to Appendix 1 of the Trails Plan). Adherence to these guidelines will assure that work is completed in a manner that maximizes protection of park resources.

Comment: Winter Use of the Chet Bell Trail

Concern was expressed that the plan called for removal of snowmobiling on the Chet Bell Trail. It was noted that the Chet Bell Trail is an important connector from Fire Tower trail to C9 as a loop trail, and that loop trails provide use to family and young riders who enjoy park trails for short rides for family leisure who do not wish to venture further down the trail system and outside of the park. It was noted that this will not adversely affect other users as this trail is only accessible by the above mentioned connector trails that permit snowmobile use.

Response:

Upon further consideration, the Chet Bell Trail will remain open for snowmobile use and will accommodate all winter trail uses allowed in the park. The Alternative table on pages B-19 and 20 and Figures 9 and 11 of the Trails Plan have been modified to reflect this decision.

Comment: Fruit Loop Trail

A comment noted that it was not clear in the Trails Plan whether the Fruit Loop Trail would be open to snowmobile use, and that if it was open to snowmobiles, it would create an additional loop trail with the above mentioned benefits for families.

Response:

The majority of the Fruit Loop Trail will not be designated for snowmobile use. All of the park located south of Route 2 will now be considered a Park Preservation Area excluding the C9 snowmobile corridor. The short northern section of the Fruit Loop Trail located between Route 2 and the Gartler's Trail overlaps with the C9 corridor, and it will continue to be designated for snowmobiling as well as other winter trail uses.

Comment: Upgrade the Network of Trails

Support was expressed to invest in resources and efforts to upgrade, improve and expand the network of sustainable multi-use trails in the park and to improve trail maintenance.

Response:

The Trails Plan provides specific trail maintenance recommendations for each trail in the park and Phase I priority trail projects (page B-29) to help focus available resources to upgrading, improving and expanding the trail system. OPRHP will continue to work closely with and enhance relationships with volunteer groups to help develop and maintain the trail system. As funds are made available, improvements will be made by OPRHP. Trail groups may also provide funding or other resources to make improvements to trails.

Comment: External Connections

A comment suggested that there should be a proposal put forth to Rensselaer Polytechnic Institute's (RPI) real estate division to develop a conservation easement that would allow a corridor and multi use trail to be constructed and maintained on the RPI property for recreational connections to Pittstown State Forest. It was noted that Long Pond Road Extension and Ward's Hollow Road are unsuitable for connections to Pittstown State Forest and that new well designed trails should be implemented instead.

Response:

OPRHP is willing to work with RPI to explore trail easement opportunities to provide a new connection between the park and Pittstown State Forest. Note that OPRHP policy is to acquire property from willing sellers only, including conservation easements.

Comment: Trail Connection to Grafton

A recommendation was made for a foot trail to lead people into the community in Grafton. Presently, people on foot need to walk on Long Pond Road which is very narrow between the Park property and Owen Road. This trail would need to be located on private property and an easement would probably be needed for permanency.

Response:

Development of a hiking trail on private property is beyond the purview of this master plan. OPRHP is willing to work with the Town to have "Share the Road" signs posted along this section of Long Pond Road.

Comment: Trail construction and priorities

Move forward as soon as feasible to construct the proposed new trails and set up a timeline for the execution of different phases of the draft master plan with the intent of prioritizing activities to achieve short term goals and garner public support. The following goals would be first priority for implementation:

1. Trail maintenance and upgrades to existing trails to fix erosion.
2. Upgrades and repairs to existing physical plant/facilities.
3. Construction of new trails for multiple users.
4. Design/construction of new nature center.

Response:

Rehabilitation and maintenance of existing park facilities has been added to Priority 1 in the implementation table (pages xix and 65).

Comment: Signage at RPI property

In favor of more signage to identify when exiting the park onto RPI property.

Response:

The agency posts the boundary line of all state parks, including Grafton Lakes State Park. It is also the responsibility of adjacent neighbors to post their property. That notwithstanding, signs and/or gates are placed on trails wherever the park boundary is reached.

Persons/Organizations Who Provided Comments

(Listed alphabetically by last name)

Name	Title	Organization
Donna Baldwin	Captain	Grafton Rescue Squad
Paul Bouchey		General Public
Alex Brooks		General Public
Stan Brownell	Vice Chair	Rensselaer County Legislature
David Buckley		General Public
Rosie Carelli		General Public
Bernard Cognon	Representing	Albany Astronomy Association
Jim de Waal Malefyt		General Public
David Fry		General Public
Jill S. Fry		General Public
Steve Godlewski	President	Saratoga Mountain Bike Association
Lester Goodermote	Member	Rensselaer County Legislature
James Goyer	Fire Chief	Grafton Volunteer Fire Department
Rick Goyer		General Public
Herb Hasbrouck	Highway Superintendant	Town of Grafton
Cathy Hewitt		General Public
Helen Hemendinger		General Public
David Hunt		General Public
Anne Kiely		General Public
Tom Kiely		Grafton Trail Blazers
Viola Leskinen		General Public
Sarah Longacker		General Public
Barbara Messenger	Member	Grafton Town Council
John Nash		General Public
William Nugent, Jr.		General Public
Dan O'Brien		General Public
David Pisaneschi	Conservation Chair	Adirondack Mountain Club
Kathy Prather		General Public

Name	Title	Organization
Chris Roe	Board Member	Friends of Grafton Lakes State Park and
	Organizer	Capitol MTB Association
Rob Swider		General Public
Rick Ungaro	Member (elect)	Grafton Town Council
Linda von der Heide	Principal Planner	Rensselaer County
Sandy (no last name given)		General Public

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