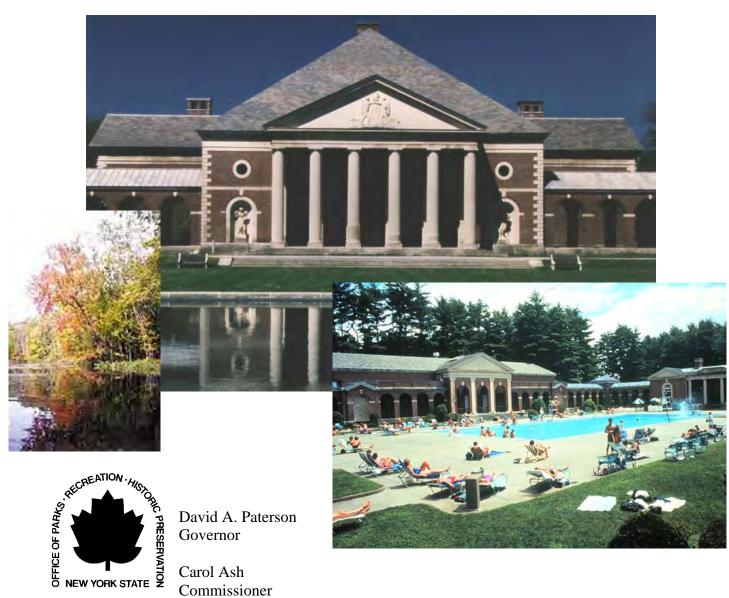
Final Master Plan/ Final Environmental Impact Statement

For

Saratoga Spa State Park December 16, 2009



Office of Parks, Recreation and Historic Preservation



SEQR NOTICE OF COMPLETION OF A FINAL EIS

Date of Notice:	December 16, 2009
Lead Agency:	New York State Office of Parks, Recreation and Historic Preservation (OPRHP)
Title of Action:	Adoption and Implementation of a Master Plan for Saratoga Spa State Park
SEQR Status:	Type I
Location of Action:	Saratoga Spa State Park is located in the City of Saratoga Springs and Town of Malta in Saratoga 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 Environmental Impact Statement (FEIS) has been completed and accepted on the Adoption and Implementation of a Master Plan for Saratoga Spa State Park. Copies of the Final Plan/FEIS are available from the agency contacts.

The Executive Summary of the Master Plan and FEIS is attached. It contains a brief summary which describes the proposed action, the environmental setting, alternatives and potential environmental impacts and mitigation.

Availability of FEIS: Copies of the Final Plan/FEIS are available for review at the Park Office, at the offices of the agency contacts and at the Saratoga Springs Public Library, 49 Henry Street, Saratoga Springs, NY 12886. The online version of the Final Plan/FEIS is available at the following publically accessible web site: http://www.nysparks.state.ny.us/inside-our-agency/public-documents.aspx/

Alane Ball Chinian Regional Director Saratoga-Capital District Region NYS OPRHP 19 Roosevelt Drive Saratoga Springs NY 12866 Phone (518) 584-2000 x204

Email: SaratogaSpa.Plan@oprhp.state.ny.us

Thomas B. Lyons, Director Director Resource Management NYS OPRHP Agency Building 1, Empire State Plaza Albany, NY 12238 (518) 474-0409

Final Master Plan/ Final Environmental Impact Statement

for

Saratoga Spa State Park

City of Saratoga Springs and Town of Malta, Saratoga County

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

Completed:	December 16, 2009
Contact:	Alane Ball Chinian, Regional Director Saratoga-Capital District Region NYS Office of Parks, Recreation and Historic Preservation 19 Roosevelt Drive Saratoga Springs, NY 12866 (518) 584-2000 x 204 (518) 584-5694
	Thomas B. Lyons, Director of Resource Management NYS Office of Parks, Recreation and Historic Preservation Empire State Plaza Agency Building 1 Albany, NY 12238 (518) 474-0409 Fax: (518) 474-7013
Email:	SaratogaSpa.Plan@oprhp.state.ny.us

Table of Contents

Table of Contents	vii
Acknowledgements	xi
OPRHP Core Plan Team Members	xi
Executive Summary	xiii
Introduction	
Environmental Setting	
Vision and Goals	
Analysis and Alternatives	XV
The Master Plan	XV
Implementation	xvii
Environmental Impacts	.xviii
Chapter 1: Introduction	
Planning and Environmental Review	
Questions and Answers about This Plan	
Introduction to the Park	
Chapter 2: Park Background	25
The Region	
The Park	
Chapter 3: Environmental Setting	
Physical Resources	
Cultural Resources	
Scenic Resources	
Subsurface Resources	
Recreational Resources/Activities	
Interpretive/Educational Programs Emergency Plans and Services –	
Infrastructure	
Operations	
Vacant Properties	
-	
Chapter 4: Park Vision and Goals	
Agency Mission Statement	
Park Vision	
Overall Park Goal	
Natural Resource Goals Recreation Goals	
Cultural Resource Goals	
Scenic Resource Goals	
Access Goals	
Education and Interpretation Goals	
Operation and Maintenance Goals	
Communication and Partnership Goals	
Facility Development and Capital Investment Goals	
Inventory, Monitoring and Research Goals	
Sustainability Goals	

Suraiogu Spu State F and Master F fail. Tuble of Contents	
Concessions and Tenants (Partners) Goals	
Chapter 5: Analysis and Alternatives	
Park Classification	
Resource Assessments	
Resource Analysis and Alternatives	
Operations/Maintenance	
Master Plan Alternatives	
Chapter 6: The Master Plan	
Existing Context	121
Classification	121
Designations	121
Natural Resource Protection	122
Open Space Protection	122
Recreation Facility Development/Management	123
Cultural Resource Protection	
Operations and Infrastructure	
Sustainability	131
Implementation	
Relationship to Other Programs	
CHAPTER 7 - Environmental Impacts and Mitigation	
Introduction	
Impacts of Alternatives	
Potential Environmental Impacts associated with Implementation of the Master Plan	
Supplemental Environmental Review	
Chapter 8 - Comments and Responses	145
Introduction	
Response to Comments	
Comments Received During the Consideration Period for the Final Plan/FEIS	
Persons / Organizations Who Provided Comments	
References and Appendices	
References	
Appendices	165

List of Tables

Table 1 Priority Phases	xvii
Table 2 Archaeological Survey Projects Completed in Saratoga Spa State Park	
Table 3 Picnic Pavilions at Saratoga Spa State Park	
Table 4 Petroleum Bulk Storage at Saratoga Spa State Park	
Table 5 Saratoga Spa State Park Fees	
Table 6 Priority Phases	

List of Figures

Unless otherwise specified, all figures are contained in a separate Map Atlas.

- Figure 1 Vicinity
- Figure 2 Community Context
- Figure 3 Park Boundary
- Figure 4 Adjacent Land Use
- Figure 5 Surficial Geology
- Figure 6 Topography
- Figure 7 Soils
- Figure 8 Wetlands
- Figure 9 Ecological Communities
- Figure 10 Mineral Springs and Pump Wells
- Figure 11 Structures
- Figure 12 Recreational Resources
- Figure 13 Off Leash Area
- Figure 14 Park Preservation Area
- Figure 15 Natural Heritage Area
- Figure 16 Bird Conservation Area
- Figure 17 Lincoln Bath Visitor Center
- Figure 18 Peerless Pool Complex
- Figure 19 Roosevelt II Bathouse Conceptual Plan
- Figure 20 Endangered Butterfly Management Units
- Figure 21 Geyser Brook Erosion Measurespage 70 Master Plan Map

Trails Map

Acknowledgements

The Saratoga Spa State Park 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 that participated in the development of the park and this Final Master Plan Document.

In a cooperative effort, the Agency worked with and coordinated input from the following agencies:

New York Natural Heritage Program New York State Department of Environmental Conservation City of Saratoga Springs

> Carol Ash, Commissioner

Tom Alworth Deputy Commissioner for Natural Resources

Alane Ball Chinian

Regional Director, Saratoga-Capital District State Park Region

OPRHP Core Plan Team Members

Saratoga-Capital District Region Staff

Kurt Kress, Capital Facilities Manager Michael Greenslade, Park Manager

Albany Office Staff

Thomas Lyons, Director of Resource Management Robert Reinhardt, Director of Planning Nancy Pierson, Assoc. Environmental Analyst Salim Adler, Park Planner Diana Carter, Assoc. Natural Resource Planner Marcia Kees, Assoc. Planner

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 Saratoga Spa 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 park planning process.

A public information meeting was held on June 14, 2008 to gather information, concerns and issues surrounding the development and management of Saratoga Spa State Park. Oral and written comments were solicited from the public at that meeting. Written comments were accepted until July 18, 2008. The Draft Master Plan/Draft Environmental Impact Statement was published on August 26, 2009 and a public hearing was held on September 17, 2009 at the Gideon Putnam Hotel Ballroom in Saratoga Springs, New York. Cutoff for the public comment period was on October 9, 2009.

This Master Plan sets forth OPRHP's vision for capital improvements and operational enhancements to Saratoga Spa State Park for the next ten to fifteen years. 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, balancing the benefits of creating new public amenities against the need to invest in rehabilitation of existing park infrastructure, much of which is showing the affects of an extended period of deferred maintenance resulting from insufficient financial resources. Moreover, decisions on investments in Saratoga Spa State Park need to be balanced with other pressing needs in the Saratoga-Capital Region and the entire State Parks System. Some actions will be undertaken in the next one to three years; many others will be implemented further in the future if and when funding becomes available. Some projects are dependent on financial participation from public and private partner organizations.

The Commissioner has decided that a Master Plan/EIS is necessary to guide the management and development of the resources at Saratoga Spa State Park. At this time the Commissioner has also decided that the final plan is to be adopted.

Environmental Setting

The park is located in the City of Saratoga Springs and the Town of Malta within the Saratoga-Capital District State Park Region. The park contains approximately 2500 acres of which 60 are developed and 390 are actively managed, with the balance being natural area.

The general topography of the park is flat to gently sloping with some rolling hills and an area of steep slopes into a creek gully. The park shows typical characteristics of both the southern foothills of the Adirondack Mountains and northern extent of the Glacial Lake Albany sand plain. The ecological communities occurring in the park vary greatly from open and forested wetlands to mature upland forest.

The Kayaderosseras Creek and its tributary, Geyser Brook, are the two main water bodies within the park boundaries. Kayaderosseras Creek empties into Saratoga Lake which eventually drains to the Hudson River.

Saratoga Spa State Park Master Plan: Executive Summary

Recreational resources in the park include two pools, two golf courses, eight tennis courts, eight picnic shelters and miles of trails. The park is open year round and offers many winter activities including snowshoeing, cross-country skiing, and ice skating.

The park is also home to several major facilities – the Saratoga Performing Arts Center (SPAC), the Gideon Putnam Hotel, the National Museum of Dance, the Saratoga Auto Museum and the Spa Little Theatre.

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

Saratoga Spa State Park will be a place for the public to visit, enjoy and appreciate the natural, cultural and physical resources and the recreational opportunities that the park offers. Balance will be achieved between recreational use, and protection of the biological, physical and cultural resources of the park.

Overall Park Goal

Saratoga Spa State Park will build on its status as a premier park in the region for the public to visit, enjoy and appreciate the recreational opportunities and the natural and cultural resources that are offered. Saratoga Spa State Park will become a community leader in sustainable park operations, education and interpretation, provision of recreational opportunities to the public and protection of natural and cultural resources.

Natural Resource Goal

Identify, protect, manage, and interpret the natural resources within and associated with the park.

Recreation Goal

Provide recreational facilities and programs that are compatible with the park's natural, cultural, and physical resources.

Cultural Resource Goal

Identify, protect, preserve and interpret buildings, sites and areas significant to the history, archaeology and culture of the local community, region, state and nation.

Scenic Resource Goal

Protect the scenic quality of the park, its classic landscape architecture and views of natural areas.

Access Goal

Provide appropriate access to the park and its recreational, cultural and natural resources.

Education and Interpretation Goal

Provide opportunities for education and interpretation of the natural, cultural and recreational resources of the park.

Operation and Maintenance Goal

Operate and maintain the park in a safe, clean, and sustainable manner that protects the natural, cultural, and recreational resources of the park.

Communication and Partnership Goal

Develop partnerships with organizations, federal, state and local agencies, not-for-profit organizations and the private sector. Ensure open and transparent communications with the public.

Facility Development and Capital Investment Goal

Maintain, improve, and invest in the built infrastructure of the park to meet the needs of the recreation and operation goals of the park in a sustainable manner.

Inventory, Monitoring and Research Goal

Encourage scientific research into the natural and cultural resources of the park.

Sustainability Goal

Integrate sustainability considerations into all aspects of the park's operation, management and stewardship; make this park a leader in sustainability for the region.

Concessions and Tenants Goal

Ensure that existing and any new agreements with partners, including special events, in the park are consistent with and enhance the overall goals of the park.

Analysis and Alternatives

The Master Plan presents a series of "preferred alternatives" for future development and operation of Saratoga Spa State Park. Cumulatively, the actions described below present OPRHP's long-term vision for the rehabilitation and enhancement of the park.

The Master Plan

The master plan considers the historic, natural and recreational resources of the park and responds to recreational needs and safety of park patrons, protection of cultural and natural resources and principles of sustainability. The plan sets forth a long-term vision to guide future development of new and enhanced park facilities. The initiation of each specific action will be determined by the level of funding available to OPRHP in future years.

The plan provides protection of natural resources through several means.

- Designation of Park Preservation, Bird Conservation and Natural Heritage Areas
- Erosion management measures for Kayaderosseras Creek and Geyser Brook.
- Control strategies for invasive species management
- Management measures for successional old fields in the southern part of the park
- Management and restoration practices for the Karner blue butterfly habitat areas

Recreation facility development has been extensively reviewed and recommendations made:

Saratoga Spa State Park Master Plan: Executive Summary

- A new playground and improvements to existing playgrounds
- Improvements to picnic areas including new pavilions, improved comfort stations, program areas, improved utility and potable water access, new softball fields, and rehabilitated paths and parking
- Rehabilitation of asphalt tennis courts and landscaping improvements
- New nine hole disc golf course in the Peerless Pool area
- Rehabilitation and improvements to the Peerless Pool complex using sustainable practices.
- New program area at Peerless Pool complex
- Removal of the Golf Cart Barn at the Victoria Pool to return the building to its historic context
- Other rehabilitation and improvements to the pool deck and kitchen facilities at the Victoria Pool
- New Trails Plan (Appendix A) which designates seven loop trails and their uses extends some existing trails and creates a new off road trail along the East West Road
- A new off leash area for dogs in the eastern portion of the park

Saratoga Spa State Park is a jewel in the history of the Capital District, and as such the protection and interpretation of the cultural resources found there is also an important part of the master plan. These include:

- Creation of a new mineral waters museum and visitor center in the Lincoln Bath House
- Continued interpretation and education programs about the waters, buildings and landscapes
- Further investigation of any actions that may impact archaeological sites
- Maintenance of buildings within the Historic Landmark District in accordance with the Secretary of the Interior Standards for Historic Preservation and the State Historic Preservation Office
- Repairing the roof of the LaTour house and mothballing for preservation and future use
- Rehabilitating the Roosevelt II Bath House for park services

Park operations, maintenance and infrastructure are improved in this master plan. Several actions taken will increase the efficiency with which park staff serve the patrons and care for the park. Among these are:

- Moving the park offices to more appropriate accommodations in a newly renovated Roosevelt II Bath House
- Rehabilitating 45 and 79 Kaydeross Avenue to provide space in existing buildings for park services.
- Renovating the Dormitory building for maintenance space
- Improving storm water management to reduce impacts to Geyser Brook
- Rehabilitating and relocating spring houses as necessary
- Continuing and expanding the reduced lawn mowing protocol as appropriate
- Repairing the maintenance building and warehouse
- Developing a new signage plan throughout the park for wayfinding, interpretation and trails
- Repairing aging utility infrastructure such as the 1960's era gas mains and the 1930's era cast iron water mains

In addition to the park development actions listed above, significant capital investments will be required to maintain the park's basic infrastructure. Examples include:

Saratoga Spa State Park Master Plan: Executive Summary

- Ongoing maintenance of building structures and roofs
- Upgrades to electric, natural gas, fire detection and prevention, and other utility systems
- Rehabilitation of the Geyser Dam
- Maintenance and rehabilitation of park roads and parking areas

Implementation

Implementation of all of the above actions will require the investment of tens of millions of dollars of state funds, along with additional funding from other public and private sources. While implementation of certain actions will begin in 2009, OPRHP anticipates it will require ten to fifteen years – and perhaps longer – to accomplish all of the actions recommended in the plan. The implementation of the Master Plan for Saratoga Spa State Park is divided into three priority phases (Table 1). The initiation and completion of these priority phases will depend upon funding and demand and will parallel priority projects for the maintenance of the park. The priorities groupings are conceptual and subject to reorganization based on available funding for specific components of any given group. Maintenance projects will be prioritized and scheduled in the three phases by the capital facilities manager.

Implementation Priorities	Description/Development Component
Priority 1:	Renovate Lincoln Bathhouse for visitor center and mineral water museum
	• Implement plan for off leash dog area.
	• Improvements to picnic areas and pavilions including new pavilions, water and electric service, playing fields and activity areas
	• Implement Phase 1 of park infrastructure maintenance projects
	Expand reduced mowing areas
	• Begin improvement of trails according to trails plan (on going)
	• Work with Spa partners on sustainability issues (recycling, energy conservation, etc.)
	Begin implementation of invasive species plan
	• Begin management actions at Karner blue butterfly habitat areas
	• Improve existing playgrounds and install new playgrounds
	• Implement signage plan
	• Improve asphalt tennis courts and lighting
	• Expand/improve interpretive program (on going)
	• Install erosion control measures on Kayaderosseras Creek and Geyser Brook
	Mothball the LaTour house

Implementation Priorities	Description/Development Component
Priority 2:	Begin renovation of Roosevelt II for park office, education/interpretive center and public restrooms
	Improve Peerless Pool Complex
	• Remove loop at Peerless Pool entrance and install new picnic pavilion
	• Implement phase 2 of park infrastructure maintenance projects
	• Remove Golf Cart Barn and move function to Dormitory building
	• Expand maintenance building and renovate Dormitory building
	• Implement improvements to maintenance building and warehouse
	• Improve parking lots on Route 50
Priority 3:	Complete renovation of Roosevelt II and move park office
	Rehabilitate vacant wings of Lincoln Bathhouse for lease
	• Renovate 45 and 79 Kaydeross Avenue buildings for park services
	• Implement Phase 3 of park infrastructure maintenance projects
	Construct nine hole disc golf course.
	• Implement plan for park spring houses
	• Build new public spring source behind Roosevelt II if needed

Environmental Impacts

Environmental impacts associated with the implementation of the Master Plan have been addressed under eight general areas: traffic/access, recreation/open space, land, water resources, biological resources/ecology, cultural resources, scenic/aesthetic resources, and public health.

The Master Plan does not significantly change the traffic patterns or access to the Park. Traffic circulation and access will remain the same. There is adequate parking to accommodate new recreational uses such as expanded picnicking facilities and the improved trail system. The SPAC parking lots will be expanded slightly while parking in other areas will be reduced, such that overall the number of parking spaces within the Park will remain the same. Implementation of the Trails Plan will result in an organized trails system which will accommodate a variety of uses including walking/hiking, biking, equestrian, and cross-country skiing.

The plan will result in substantial beneficial recreation and open space impacts. It provides for a variety of new and improved recreation facilities and visitor amenities including new and expanded picnic areas, disc golf, playgrounds, and improvements at the Peerless Pool and the Victoria Pool. A

Saratoga Spa State Park Master Plan: Executive Summary

fenced, off leash dog area will provide a safe recreation area for dogs and their owners. The improved trail network will provide a better visitor experience by creating an organized trail system with designated trail uses and improved signage. A new visitor center, park office and nature/interpretive center will provide improved visitor services, while also incorporating sustainable design. The use of existing park buildings allows for the expansion of recreation opportunities without the loss of open space required by new construction.

There will be some physical change to the land, particularly where new recreation facilities and trails will be constructed or segments of trails relocated. Most new recreation facilities, such as new picnic pavilions and the disc golf course will be located in lawn areas and require little ground disturbance. New trail sections may require some vegetation removal and leveling. Disturbance will be limited primarily to the required width of the trail corridor.

Water bodies and watercourses within the park will be improved. Creek bank erosion and expansion of invasive species are the two major concerns along both the Kayaderosseras Creek and Geyser Brook. Geyser Brook is also impacted by increased temperatures. The plan proposes to use native vegetation, bioengineering, stormwater and erosion controls, and invasive species removals to stabilize stream banks, provide shade to cool the waters and improve water quality. The park's famous and historic mineral water springs will be restored to assure continued public access and safety. The park contains several important wetland complexes; improvements in stormwater management and stream water quality will have beneficial impacts on these wetlands.

Overall, the Master Plan will have a positive impact on the natural resources within the park. Direct impacts associated with proposed improvements, such as the new picnic pavilions, playgrounds and disc golf course, will be minimal since the proposed improvements have been sited in areas with previous development, limited environmental sensitivity and which generally possess accessibility to, and use of, existing infrastructure. The importance of the natural resources within the park is recognized with the proposed designation of portions of the park as Park Preservation Area, Bird Conservation Area (BCA) and as a Natural Heritage Area (NHA). Native plants in the park will benefit from the plan to manage invasive plant species. Historic landscapes in the park, including the Avenue of the Pines, will be managed under a framework that recognizes their significance as a historical/cultural resource. The park is home to two protected wildlife species, the Karner blue butterfly (state and federally endangered) and the frosted elfin butterfly (state threatened). The plan provides for the protection of the butterflies through the restoration of their habitat. The long term goal of this restoration is to establish enough suitable habitat and a large enough population of butterflies to assure their long term survival. The fenced off leash dog area will provide a safer location for activities, while restricting dogs from the butterfly management area will eliminate the impacts from dogs walking into and trampling the butterflies' habitat.

The park contains a large number of major historic structures both large and small. OPRHP will continue its work repairing and restoring these structures. The LaTour House will be secured and mothballed until an appropriate use can be found. Existing and historic mineral springs will be restored and improved with new signage and interpretation. Improved signage and interpretive materials throughout the park will highlight the history and the importance of the mineral waters and the Spa complex. Several archaeological surveys have identified that the park contains important cultural resources. Any project that could affect the cultural or historic resources of the park will be reviewed by OPRHP's State Historic Preservation Office in compliance with the State Historic Preservation Act. Any recommendations or mitigation measures provided by the SHPO will be implemented.

Scenic resources, both the formal landscapes and the natural settings, will be protected and maintained through the actions recommended in the plan. Public health and safety are an important

element in park operations. Facility design and development will meet all applicable health and safety codes as well as the Americans with Disabilities Act.

Chapter 1: Introduction

Planning and Environmental Review

Planning

The New York State Office of Parks, Recreation and Historic Preservation (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 re-evaluated 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.

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). OPRHP fully integrates the planning and environmental review processes. This document serves as both the Master Plan and the Environmental Impact Statement for Saratoga Spa State Park.

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 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.

Questions and Answers about This Plan

Q: What is the action?

A: The action is the adoption and implementation of a Master Plan for Saratoga Spa State Park.

Q: Who is proposing to do this?

A: The Commissioner of the NYS Office of Parks, Recreation and Historic Preservation is proposing this action.

Q: Why was the report written?

A: The Master Plan/ Environmental Impact Statement (EIS) was written to provide the opportunity for individuals, organizations and other government agencies to participate in the development of a State Park.

Q: How much opportunity has there been for public participation?

A: One public information meeting was held to gather information, concerns and issues surrounding the development and management of Saratoga Spa State Park.

A public hearing was held to allow the public, interest groups, and state and local government agencies the opportunity to provide comments on the draft plan.

Q: What has been decided?

A: The Commissioner has decided that a Master Plan/EIS is necessary to guide the management and development of the resources at Saratoga Spa State Park. At this time, the Commissioner has also decided that the plan should be adopted.

Q: How to comment on the Plan.

A: People who wish to comment on this plan may write, email, fax or call the contacts listed on the title page of the plan.

Introduction to the Park

Establishment of the Park

Saratoga Spa State Park would not exist today if not for the presence of the mineral waters. The healing properties of the mineral springs of the Saratoga area were well known to the Native Americans long before the appearance of the European settlers. In the mid 1700's, a group of Native Americans introduced an ailing settler to the springs, prompting interest in the Saratoga area.

Saratoga Spa State Park, distinguished by its architecture and listed as a National Historic Landmark, is noted for its diverse recreational, natural, and cultural resources. The park offers a multitude of traditional recreation opportunities in addition to the nationally-known Saratoga Performing Arts Center, the Spa Little Theater, the National Museum of Dance, the Saratoga Automobile Museum, and the Gideon Putnam Resort and Spa.

Timeline

- Pre 1800s. Native Americans use the mineral springs in the area for the healing properties. In the late 1700's, Sir William Johnson was brought to the springs for healing.
- 1800s The springs were an attraction and people travel long distances to partake of the waters.
 - In the mid 1800's, bathing in the waters was popular and several bathhouses were in operation in Saratoga Springs. Additionally, waters from the springs were shipped around the world.

Saratoga Spa State Park Master Plan: Introduction

- By 1880, over 200 mineral wells were in operation; most were used to extract carbon dioxide from the water.
- 1900s. Saratoga Spa Reservation was established by state legislation in 1909, after a 1908 ban on pumping failed to protect the mineral water resources. At that time, New York State also secured ownership of the wells and capped most of them. This legislation provided the public free access to the mineral waters.
 - 1915 work was completed on the original Lincoln Bath House. The Lincoln Bath House was expanded in 1922-23.
 - 1920 Washington Bath House opened.
 - o 1928-1930 Lincoln Bath House destroyed by fire and rebuilt.
- 1920s Simon Baruch (died 1921) was a hydro-therapist, a medical doctor who believed in the healing powers of mineral waters. He and others advocated for the development of the springs into a health spa. While Franklin D. Roosevelt was Governor of New York (1929-1932), he hired an architect to study the spas in Europe and to design the grandest spa in the world at Saratoga.
- 1930s Saratoga Springs Commission formed to take control of the Saratoga Reservation; later replaced by the Saratoga Springs Authority.
 - In 1930, construction began on the "New Spa" including the Roosevelt Bathhouses, Hall of Springs, Simon Baruch Building (now the Administration Building), Victoria Pool complex, and the Gideon Putnam Hotel. Some programs instituted by Franklin D. Roosevelt after his election as President in 1933, were used to assist in building the Spa.
 - 1935 The complex of buildings and landscaped malls, as they are seen today, was dedicated by President Roosevelt and opened to the public.
- 1940s. Peak usage of the spa was 1946-47.
 - o 1942-1951 Roosevelt Bathhouse #1 used as Veterans Administration Hospital.
- 1950s Roosevelt Bathhouse #2 used to store Civil Defense medical supplies. Spa treatments decline through the decade.
- 1960s Conference center added to Gideon Putnam Hotel, golf courses expanded. In 1962 Roosevelt #1 was rehabilitated as a health club.
 - o 1964 Comptroller's report recommends closing Washington or Lincoln Bathhouse.
 - 1966 SPAC Amphitheatre constructed, housing the New York City Ballet and the Philadelphia Orchestra in the summer months. Other concerts and local events, such as high school graduations, also take place at the amphitheatre.
- 1971 New York State Legislature closes Lincoln Bathhouse.
- 1987 Saratoga Spa State Park designated as a National Historic Landmark.
- 1999 Friends of Saratoga Spa State Park formed.

Most of the buildings in the upper park, the original Saratoga Reservation, are listed on the National and State Registers of Historic Places.

Since the original reservation, other acquisitions have occurred, including the most recent at the southern end of the park, which have increased the present size to 2500 acres. The park now extends south of the Kayaderosseras Creek and includes land in the Town of Malta as well as the City of Saratoga Springs.

Several of the buildings at the park are currently used as museums and office space. This includes the Hall of Springs, which houses the administrative offices of SPAC and a catering function; the Simon Baruch Building, which serves as the park administration offices; and the auditorium, which is now the Spa Little Theatre and is home to the Home Made Theatre, an opera festival and the Saratoga Chamber Music Festival. The bottling plant now serves as the home of the Saratoga Automobile Museum; the Washington Bath building is now the home of the National Museum of Dance.

Previous Planning Efforts

In the 1930s a major planning effort produced the landscape and buildings in the center of the park. This complex includes the current administration building, Hall of Springs, Gideon-Putnam Hotel, Victoria Pool, Roosevelt I and II and the landscaped mall area.

A major planning effort occurred in the 1960s when picnic areas were added as well as the Gideon Putnam conference center and the SPAC amphitheatre.

Documents compiled in the 1970s analyzed the viability of the baths and other resources associated with the waters and gasses of the park.

Planning done in the early 1980s culminated in a Management Analysis Plan. This plan was never implemented but contains important historical information.

What has prompted the preparation of this report?

Saratoga Spa State Park is one of the crown jewels of the New York State Parks system and is one of the most visited parks in the Saratoga-Capital Park Region. New acquisitions, increased numbers of park users, development around the park, increased regional recreation needs and user conflicts have moved the need for a master plan for this park to the forefront of OPRHP's master plan schedule.

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. The twelfth region is composed of the Adirondack and Catskill Forest Preserves and is administered by the Department of Environmental Conservation (DEC). Saratoga Spa State Park is located in the Saratoga-Capital District Region administered by the Office of Parks, Recreation and Historic Preservation (OPRHP).

Location and Access

Saratoga Spa State Park is located in Saratoga County in the southern part of the City of Saratoga Springs with a portion of the park in the Town of Malta (Figures 1 and 2).

The park can be accessed by motor vehicle, bicycle, canoe/kayak, on foot or by bus. The park has several vehicular entrances: Route 9 (South Broadway) and on Route 50 (Ballston Ave.), Kaydeross Avenue, Northline/Grays Crossing Road and Driscoll Road. Access to the park on canoe or kayak is available from Kayaderosseras Creek. Foot traffic can enter the park from Route 9, Route 50, West Fenlon Street, Crescent Street, Crescent Avenue. Numerous trails within the park connect to surrounding neighborhoods.

Economic Contribution (Impact of the Park)

The citizens of Saratoga Springs are well aware of the impact that money from outside the region can have on the economic well-being of the community. Public and private entities in both the city and the county have worked for many years to develop the region as a world-class attraction. Summer attractions such as the Saratoga Racetrack and SPAC infuse the city with seasonal visitors and workers and are an important contributor to the economy from mid-July to the first week in September. Year-round facilities such as Saratoga Gaming and Raceway, Skidmore College and the Saratoga Springs City Center attract visitors and business clientele to the city. Although the greatest proportion of park attendance occurs from Memorial Day to Labor Day, Saratoga Spa State Park is a year-round facility generating economic benefits that contribute to a stable year-round economy.

One factor used to determine the extent of economic impact that the park or facility has on the surrounding area is how many people are attracted to the park from outside the local community. Studies have shown that Saratoga Spa State Park is heavily used by local residents but also draws visitors from a wide area. A report done by OPRHP in 1997 estimated the economic impact of individual state parks on their communities. Drawing upon information provided by the National Park Service in their "Money Generation Model" (MGM1) and from a 1994 Park Visitor Survey, it was estimated that Saratoga Spa State Park had an impact on the local economy of \$38.3 million. This was sufficient to create approximately 1,015 full-time equivalent (FTE) jobs and generate approximately \$1.0 million dollars in local sales tax revenues.

A more recent survey, done in the summer of 2007, indicated that visitors from outside the Saratoga Springs region make up 20% of total park visitors. Attendance for fiscal year 2007-2008 was 1.7 million visitors. Using the same methodology applied previously in the MGM1 model, and updating the input variables to be consistent with recent survey and attendance data and adjusting dollar figures to account for inflation, it is estimated that the current economic impact of Saratoga Spa State Park is \$32.1 million. This amount should generate approximately \$964,000 in local sales tax revenues and 803 FTE jobs.

Recreational Needs Assessment

Because of its size and the variety of recreational opportunities, Saratoga Spa State Park is a regional park with a service area of not only the City of Saratoga Springs and Saratoga County but also Warren, Washington, Schenectady, Albany, and Rensselaer Counties. While users come from long distances to attend events at SPAC, visit the museums, cross-country ski, play golf and take advantage of all the resources the park has to offer, recent OPRHP visitor surveys in 2007 and 2008 have shown that the largest percentage of park visitation is from these six counties. This Master Plan relies on the 2009 Statewide Comprehensive Outdoor Recreation Plan (SCORP) and these OPRHP visitor surveys to provide an estimate of the recreational needs for the service area for Saratoga Spa State Park.

SCORP assesses the statewide supply and demand for recreational resources.

The Relative Index of Needs data (RIN) in SCORP assigns a number to each type of recreational activity by considering the supply of recreation facilities and the demand for those facilities now, and estimating how that demands, compared to the current supply, will change in the future. (In SCORP, the target year for the future is 2025). Numbers are calculated for each county in the state.

The Relative Index of Need for the Service Area of Saratoga Spa State Park shows the RIN numbers for the seven counties in the service area (10 being the highest need and 1 being the lowest). The weighted scores illustrate that the activities with highest relative index of need in the service area are, in descending order: boating, hiking, camping, fishing, snowmobiling, cross county skiing and walking. These are the activities that will, over the period 2005 to 2025 experience the greatest growth in the seven county region relative to the existing supply of resources. (OPRHP 2009)

Public comments received verbally and in writing at the public information meeting and by postal mail and email weighed heavily toward aspects of the master plan other than recreation needs. It is unclear whether this indicates a general public satisfaction with the recreation facilities at the park or the perception that other issues are more pressing. The recreation needs that were commented on include: adding a disc golf course; adding tennis courts and improving existing courts, improving swimming pool conditions and hours, improving the trail system, adding a botanical garden to the park, building a new visitor center/nature center, and providing an off-leash dog area.

The Park

Existing Maintenance Context

The master plan comes into the park planning in the context of an ongoing process of maintenance and park operations. The background of this context is an extended period of deferred maintenance due to budgetary constraints. Although the safety of park patrons and staff has never been in question, some important rehabilitation has been delayed. Although the plan presents a clear vision for the development of the park over the next ten years, it also assumes that maintenance of the park's infrastructure, buildings and grounds needs to be integrated into the master plan implementation from the earliest stages.

Park Boundaries

The park lies mostly between West Fenlon Avenue on the North and Kayaderosseras Creek on the South, Route 50 on the West and Route 9 on the East. However, some portions of the Park exist to the east of Route 9 and south of Kayaderosseras Creek. Most of the park is within the City of Saratoga Springs with a portion to the south of Kayaderosseras Creek in the Town of Malta. (Figure 3)

Adjacent Land Uses

The primary land uses immediately adjacent to the park are mixed commercial/industrial/agricultural to the west and a mix of commercial and suburban residential to the east. The Saratoga Harness Racecourse also lies very close to the park on the east side of Route 9. A new YMCA has recently been constructed across Route 50 to the west of the park. The northern adjacent land use is primarily suburban residential in the City of Saratoga Springs. To the south in the Town of Malta there is more rural residential and open land. Other adjacent land uses include the Department of Environmental Conservation Tree Nurseries on the east and west sides and light industrial and agricultural land to the west. Commercial and industrial use is light and limited. The character of the area is urban to exurban to the north and northwest and generally ex-urban, suburban and rural mix to the south, southwest east and southeast. (Figure 4)

Legal Constraints, Designations and Other Programs

Most of the northern part of Saratoga Spa State Park is listed as a National Historic Landmark. Changes that are being considered to any buildings and other contributing factors to the designation need to follow a review process under which all reasonable alternatives to the changes are considered.

As part of the legislation which eventually led to the formation of the park, the mineral waters are required to be available free to the public. Currently this is accomplished at several springs around the park. The Commissioner of OPRHP has full legal authority over all the mineral waters in the original Saratoga Spa Reservation.

Easements exist in the park for county water and sewer lines as well as some city streets which no longer exist.

Planning efforts in the region that affect Saratoga Spa State Park include the Saratoga County Green Infrastructure Plan, Water and Sewer utility plans. The park also is a part of the Saratoga Springs Heritage Area.

Chapter 3: Environmental Setting

Physical Resources

Geology

Bedrock Geology

The bedrock material of Saratoga Spa State Park is primarily Canajoharie Shale. Canajoharie Shale is Ordovician shale formed in ancient seas which covered much of the area during the Paleozoic era. The springs, however, are formed in older, carbonitic dolostones yielding highly mineralized water. Generally, a thick shale layer overlies fracture zones in the water-bearing dolostone. (OPRHP 1983) The water in these older layers escape to the surface through a crack in the shales known as the MacGregor Fault. This fault runs north-south for approximately 60 miles through the Saratoga region.

Surficial Geology

The surficial geology of Saratoga Spa State Park is almost equally divided between Lacustrine sand and Fluvial sand and/or gravel. (Figure 5)

The Lacustrine sand is generally well sorted and stratified quartz sand that was deposited in Glacial Lake Albany. These deposits are permeable with a variable thickness of 2-20 meters.

Fluvial material is sand and/or gravel with laterally continuous lenses of silt which were deposited farther from the glacier as outwash. These deposits are permeable with variable thicknesses of 1-20 meters. (NYSM 2008)

Tufa Formations

There are several tufa formations in the park, two of which are notable. The first, Orenda Spring, has created a cascading formation, the Geyser Tufa, near the pedestrian bridge over Geyser Brook. The second, Island Spouter, has created a large tufa mound.

Tufa is a soft, friable and porous calcite rock, formed by calcium carbonate (CaCO3) deposits from spring water. Over many years, layers of calcium carbonate have built up to form the large mounds of tufa visible today.

Topography

Saratoga Spa State Park is located within the Mohawk Lowlands physiographic region and is bordered on the north by the foothills of the Adirondack Mountains. The Allegheny Plateau lies to the west and the Taconic Mountains to the east.

The park varies in elevation from 220 feet (above mean sea level) in the southern portions to a high of 350 feet in the west. A prominent sand plain, remnant of Glacial Lake Albany, exists at the 300 foot contour which is cut by a ravine formed by Geyser Creek. (OPRHP 1983) (Figure 6)

Soils

The main soil component of Saratoga Spa State Park is influenced by the sandy deposits of glacial Lake Albany. This component consists of sand at the surface and coarser material in the subsoil. Some small rounded gravel may occur on the surface and through out the subsoil. Patches of light

sandy loam soils are also found at the park and some muck soils in the wetland areas. (OPRHP 1983) Refer to the soils map (Figure 7) for specific map unit soil classifications.

The major soil types are Windsor Sandy Loam (WnA and WnB) at 23.9% and Deerfield Loamy Fine Sand (DeB at 13.1%. Other types include Limerick-Saco Complex (Lm) at 9.2%, Palms Muck (Pm) at 7.6%, and Deerfield Loamy Fine Sand (DeA), nearly level at 7.5%.

Water

Streams

<u>Kayaderosseras Creek</u> – Flows into Saratoga Lake and then to the Hudson River through Fish Creek. The entire park falls within the Upper Hudson River Watershed. Approximately 4,500 feet of creek is located in the southern portion of the park. The creek follows a meandering course and the creek bed gradient is very flat. Sand bars, fallen trees and debris are common in the creek bed. The creek is subject to flooding in the spring. The Kayaderosseras is classified "C" by the New York State Department of Environmental Conservation (DEC).

<u>**Geyser Brook**</u> – Flows into Kayaderosseras Creek. Approximately 12,000 feet of Geyser Brook is within the park boundary. Geyser Brook follows a meandering course and has a gradient that varies from flat to moderately flat. Some trout fishing takes place in Geyser Brook which is classified C with a standard of C(T). The brook is subject to spring flooding. The Park hosts a fun and educational trout stocking event annually on Geyser Brook.

The banks of Geyser Brook are sensitive to disturbance because they are floodplain soils susceptible to erosion. This erosion produces sediment load in the brook and downstream in Kayaderosseras Creek. Mitigation alternatives are discussed in the Alternatives chapter.

<u>Coesa Creek</u> - Coesa Creek is a small tributary of Geyser Brook. The stream originates as overflow from a beaver dam in a nearby wetland complex on the west side of Route 50. After crossing under Route 50 the creek enters Coesa Pond. After flowing over the top of the dam, the creek flows almost due east for approximately 0.4 miles before meeting up with Geyser Brook. The creek is well buffered from high use park areas as it progresses through cobble and slate streambed areas. This creek's small watershed has probably protected it from some of the impacts noted for the Geyser Brook and Kayaderosseras Creek.

Ponds

<u>Geyser Pond</u> is an impoundment reservoir of about 3.5 acres, formed by the Geyser dam. The impoundment is split into two ponds by Route 50. Some fishing takes place for warm water species in this pond. Golf course irrigation water is drawn from this pond.

Third Hole Pond is, as its name implies, near the third hole of the championship golf course. This water is pumped from Geyser Brook and then pumped to the DEC tree nursery for irrigation. At one time this pond was also used for golf course irrigation.

<u>Coesa Pond</u> is an impoundment structure on Coesa Creek, approximately 0.6 acres, on the west side of the park near the Coesa picnic area. This is an historic pond with no current utilitarian function.

Wetlands

There are portions of three DEC regulated freshwater wetlands within the boundaries of the park (Figure 8). Two of these are class 2 wetlands on the east side of Route 9; the third is a class 1 wetland which makes up a significant portion of the park that lies south of East West Road. There are 632.9 acres of DEC designated wetlands within the park.

According to National Wetlands Inventory (NWI) mapping, there are 411.8 acres of federally regulated wetlands within the park. Of these, 355.4 acres are also part of the DEC designated wetlands, making the total wetland acreage within the park 689.3.

Air

Saratoga Spa State Park is within the Albany-Schenectady-Troy non-attainment area for 8-Hour Ozone (DEC 2009).

Natural Resources

Flora

Upland forests of Saratoga Spa State Park are categorized in one of four different ecological community types; Appalachian Oak-Pine Forest, Northern Hardwood Forest, Hemlock-Northern Hardwood Forest and Plantation Forest. These forests are typical for the northeastern United States, and are comprised of a diverse assembly of mature trees, shrub and herbaceous plant species. (OPRHP 1999).

The wetland areas of Saratoga Spa State Park are categorized into four different ecological community types: Hemlock-Hardwood Swamp, Red Maple-Hardwood Swamp, Shallow Emergent Marsh and Shrub Swamp.

Rare or Threatened Plants.

Wild Blue Lupine (also known as Sundial Lupine) (*Lupinus perennis*), is present in the park. This plant is the sole larval food plant of the endangered Karner blue butterfly (*Plebejus melissa samuelis*, formerly *Lycaeides melissa samuelis*) and the State listed threatened frosted elfin (*Callyphrys irus*). Habitat for this plant needs to be managed in conjunction with the management and preservation of these butterfly populations.

Fauna

For the most part the park's wildlife is typical of the region and the suburban-urban setting. The park supports a wide diversity of mammals, birds, fish, amphibian, reptile and insect species that are common to the northeastern United States.

Endangered, Threatened and Rare Animal Species.

The Karner blue butterfly (*Plebejus melissa samuelis*) is present in the park. This insect is listed as endangered on both the federal and state lists. Its numbers have declined drastically throughout its U.S. range due to habitat loss and the accompanying loss of its larval food plant, Wild Blue Lupine. The Karner blue butterfly requires open areas with sandy soil which the lupine prefers. Restoration of the habitat at Saratoga Spa State Park where this butterfly and plant exist is important to the preservation of this species.

Restoration of the Wild Blue Lupine habitat is also important to another threatened butterfly species, the frosted elfin (*Callyphrys irus*), which is found in the park. This butterfly is also dependent on Wild Blue Lupine for its larval food plant. The populations of both the frosted elfin and the Karner blue butterfly will continue to decline unless their habitat is restored.

In 2003, the habitat areas in Saratoga Spa State Park were included in a Federal Recovery Plan (USFWS 2003). Since 1993, OPRHP and DEC have maintained a cooperative agreement for the management of Karner blue butterflies at the park. The federal recovery plan is the basis of ongoing revisions to this cooperative agreement for specific restoration and management actions.

Ecological Communities

The New York Natural Heritage Program (2000) has identified fifteen Ecological Community Types at Saratoga Spa State Park. These are Appalachian Oak-Pine Forest, Appalachian Oak-Pine Forest (Successional), Developed Area, Eutrophic Pond, Floodplain Forest, Hemlock-Hardwood Swamp, Hemlock-Northern Hardwood Forest, Midreach Stream, Plantation, Red Maple-Hardwood Swamp, Sand Mine, Shallow Emergent Marsh, Shrub Swamp, Successional Northern Hardwoods, and Successional Old Field. (Figure 9)

In addition, Perched Swamp-White Oak Swamp and Successional Shrubland were found in the Hemlock Trail area in 1999. For further information see the Draft Environmental Impact Statement for the proposed High Rock Golf Course (OPRHP 1999).

The Perched Swamp-White Oak Swamp is a rare and significant community. This community usually occurs in shallow depressions on forested hillsides where the water table is locally perched above the surrounding groundwater level. In this case the community is above a clay lens which the perched water table sits on. The water level fluctuates seasonally. The dominant tree is the swamp white oak (*Quercus bicolor*). The understory is fairly open with black huckleberry (*Gaylussacia baccata*), highbush blueberry (*Vaccinium corymbosum*), lowbush blueberry (*V. angustifolium*), and pinkster (*Rhododendron periclymenoides*). The groundcover is sparse with sphagnum and sedges This community is rated G3G4 S1S2 indicating that it is extremely rare in New York State with very few remaining acres. (DEC 2002)

Cultural Resources

Historic Resources

Saratoga Spa State Park has a rich history due to the presence of the unique and famous mineral springs which occur naturally in this area. (Figure 10) Beginning in 1909 with the establishment of the Saratoga Reservation, the state began acquiring lands in Saratoga to protect and preserve the mineral springs, which were being overexploited by commercial gas companies. By 1915, four parks had been created in Saratoga from these state acquisitions, including Lincoln Park (in the area of the current Lincoln and Washington Bathhouses) and Geyser Park (in the area of the current Geyser picnic area). Future land acquisitions ultimately connected Lincoln and Geyser Parks into a single landholding that would become, in time, the Spa Park. In addition to preserving the springs, the state operated the Washington and Lincoln bathhouses in Lincoln Park. Heated mineral water baths and treatments were a popular therapeutic and medical treatment in those days. By 1930, the facilities were so popular that 100 mineral baths per hour was a common morning schedule at the Lincoln Bathhouse.

Governor Franklin Delano Roosevelt was a strong supporter of the Saratoga facilities. When he was elected governor of New York in 1929, he authorized the appointment of a Temporary Commission to study European spas. The commission's report recommended the creation of a spa at the State Reservation in Saratoga, modeled after the great mineral spas of Europe. Elected U.S. President in 1933, Roosevelt continued to strongly supported the construction of the Saratoga Spa. Development of the spa began in 1931 and was completed in 1936, at a total cost of \$9 million dollars. It was one of the first projects brought to completion in the New Deal program, financed, in large part, by the Reconstruction Finance Corporation (RFC).

The Spa included a drink hall (the Hall of Springs), the Simon Baruch Research Laboratory (which included a research center, doctor's offices, administrative offices, and a teaching auditorium), two new bathhouses (Roosevelt I and II), the Victoria Pool and Recreation Complex, the Gideon Putnam

Hotel, a 9-hole golf course, and a mineral water bottling plant. The new spa was linked to the Washington and Lincoln Bathhouses by the Avenue of Pines, originally a pedestrian connection. The core complex of buildings at the new spa was designed in the Georgian Revival style by architect Joseph Friedlander. The landscape architect was A. F. Brinkerhoff.

With the completion of the project, the Saratoga Spa offered a total life program centered upon various mineral water treatments and cures, and therapeutic programs involving diet, recreation, exercise, and entertainment, all under the care of on-site physicians in a self-contained, campus setting. At its peak of operation, the four bathhouses at the spa were providing close to 200,000 mineral water baths each year, and the spa was an internationally recognized and acclaimed health facility.

In the 1950's, as modern medicine advanced and the curative power of mineral waters was questioned, the popularity of the Saratoga Spa began to decline. Plans for transforming the spa into a park were realized in the 1960's with the construction of the Peerless Pool Complex and picnic pavilions across the southern end of the property. The construction of the Saratoga Performing Arts Center in 1966 added a cultural destination to the northern end of the park, complemented by the later transformation of the Washington Bathhouse into the National Museum of Dance and the Mineral Water Bottling Plant into the Saratoga Automobile Museum. These institutions, along with the golf course, Victoria Pool, Hall of Springs banquet facilities, Roosevelt Baths and Spa, and the Gideon Putnam Hotel, continue to make Saratoga Spa State Park a popular and eclectic destination for more than one million visitors each year.

The northern end of the park, consisting of the original Lincoln Park, Geyser Park, and the Saratoga Spa Complex, was designated a National Historic Landmark in 1987. The designation recognizes Saratoga Spa State Park for its role in the history of conservation, medicine, and recreation; its contribution to the development of the city of Saratoga Springs; and the outstanding architectural design of its buildings and landscapes.

It is important to note that new construction, alterations, and changes in the park during the modern era have not detracted from the historic landmark status of the park, because of the sensitivity with which these changes have been made. This sensitivity to the park's historic character should guide all future development within the boundaries of the National Historic Landmark designation and adjacent portions of the park, as is required by the New York State Historic Preservation Act.

When the Reservation was pieced together in the early twentieth century and the new spa built between 1930-1936 changed the landscape, the earlier historic occupations of the land were all but erased. Early European settlement of the Saratoga area began in the 1770's and during much of the 1800's independent family farmsteads comprised most of the land that is today Saratoga Spa State Park. The LaTour house (c. 1835) on the golf course and the former J. Pemrose farmhouse (c. 1840) at 79 Kaydeross Avenue are almost all that remains extant within the park today of this earlier agricultural history. Commercial development within the park included the extensive Natural Carbonic Gas Company works along South Broadway (Route 9) at the current location of the Lincoln Bathhouse, and the railroad into Saratoga Springs, which paralleled the east side of Route 50. Little evidence of these operations remains in the park today, except for the abandoned railroad bed and the old railroad trolley station (1910) located across from the Saratoga Automobile Museum. The LaTour House and the railroad trolley station are recognized as historic buildings included in the National Historic Landmark designation for the park. (Figure 11)

Archaeological Resources

The 2,700 acre area of land that constitutes the current Saratoga Spa State Park has a history of human occupation probably dating back thousands of years. The above ground evidence of this

occupation is largely limited to 20th century buildings and features. A few 19th century buildings have survived, but very little of earlier periods remains intact upon the landscape. The only evidence of these earlier times is archaeological.

Since the passage of the New York State Historic Preservation Act in 1980, all ground-disturbing projects in the park have been evaluated for potential impacts to archaeological resources. Several archaeological surveys have been completed in advance of construction projects, including the following:

Project	Date
Bathhouse Sewer Line Project	1985
State Seal Spring Project	1985
Golf Course Irrigation Line Project	1991
Gideon Putnam Hotel Sewer Line Project	1992
Spa Park Water System Improvements Project	
Bell Atlantic Telephone Conduit Project 1	
Proposed High Rock Golf Course Project	1999
Spa Park Landfill Closure Project	

In addition, in conjunction with the 1991 golf course irrigation line study, an archaeological sensitivity assessment for the park was prepared by Collamer & Associates. The sensitivity assessment uses existing knowledge of the history, archaeology, geology, soils, landforms, water sources and patterns of human occupation to determine the likelihood of archaeological remains in different areas of the park. The results of the assessment are articulated on an archaeological sensitivity map, which is used to guide future development in the park and determine if an archaeological survey is needed in advance of ground disturbing activities. Currently, the sensitivity assessment only includes the part of the park within the area bounded by the East West Road in the south, Route 9 to the east/northeast, and Route 50 to the west/northwest.

All archaeological reports and the archaeological sensitivity map are on file with the Regional Capital Facilities Unit in Saratoga, and the New York State Historic Preservation Office in Waterford. Locations of known archaeological sites contained in these reports are held confidential, as a measure of site protection.

All determinations regarding the need for archeological surveys in Saratoga Spa State Park are, and will be conducted in consultation with OPRHP's Historic Preservation Field Services Bureau (FSB).

Historic Archaeological Resources

Known historic archaeological sites in Saratoga Spa State Park all date from the 19th or 20th centuries. They include the Gideon Putnam Hotel dump site, the Whitford Farm site, and the locations of unmarked mineral springs throughout the park. The Gideon Putnam Hotel dump site is a 20th century refuse dump associated with the early years of the hotel. The Whitford Farm site is a 19th century farmstead site that was excavated by archeologists in 1978 and 1981. The house foundation and much of the site was destroyed by a road widening and sewer installation project along Crescent Avenue, although remnants of a barn foundation survive. Numerous mineral springs, tapped in the late 19th or early 20th centuries, existed in the park before the state purchased the property and capped or abandoned most of them during the preservation period. An effort is currently underway by the Friends of Saratoga Spa State Park to document and record many of these early springs. It is important to note that even archaeological sites of recent age, including 19th and 20th century sites, can be significant and worth protecting and preserving.

There is a moderate to high potential for unknown historic archaeological sites to exist at locations of existing or demolished 19th century buildings which, in the case of the Spa Park, were typically farmhouses. Most 19th century farmhouses have associated sheet refuse middens and abandoned privies and wells that were used as refuse dumps. These features are usually artifact-rich deposits that can yield significant historical information about the agricultural occupation and use of the property. The archaeology of farmsteads can often yield information not recorded in local histories. Therefore, it has great potential to add to the existing written record of the history of the area.

The areas around the LaTour House, Pemrose House, and other map documented locations of 19th century buildings that once existed in the park are all locations that have the potential to contain important historic archaeological sites. These areas are identified on the archaeological sensitivity map for the park as areas of moderate to high sensitivity. They are protected areas, and an archaeological assessment and survey is required before any ground-disturbing activities can take place.

Prehistoric Archaeological Resources

The Upper Hudson Valley and Saratoga Springs area were occupied by Native Americans prior to the arrival of European settlers. Archeologists have documented a nearly continuous presence in this region dating back as far as 12,000 years ago.

One known prehistoric archaeological site has been identified within the boundaries of Saratoga Spa State Park. The High Rock Prehistoric Site is comprised of five loci, or areas, that have produced stone tools and lithic manufacturing debris. The site was discovered during an archaeological survey conducted for the proposed High Rock Golf Course Project. Phase I and Phase II archaeological investigations were conducted at the site by Hartgen Archaeological Associates in 1999. The site dates to the Orient Phase of the Transitional Archaic period, and is probably about 3,000 years old. The site probably represents a small camp site occupied intermittently by Native American bands. Locus 3 of the site has been determined to be archaeologically significant and has been determined to be eligible for listing on the State and National Registers of Historic Places. The site is protected, and before any ground-disturbing development can occur in the area the potential impacts to the site would have to be thoroughly evaluated.

There is a high potential for unknown prehistoric sites to exist in the park at locations that would have been environmentally conducive to human occupation. These locations include terraces and floodplains within the Geyser Creek and Kayaderosseras Creek watersheds, and elevated landforms bordering wetland habitats. These areas would have been sought after by Native American peoples because of the rich environmental resources they host. These areas are identified on the archaeological sensitivity map for the park as areas of high sensitivity. They are protected areas, and an archaeological assessment and survey is required before any ground-disturbing activities can take place.

Scenic Resources

Formal landscape architecture and near ground natural views make up the scenic resources at Saratoga Spa State Park. In the spa complex the views emphasize the symmetry, scale and spatial relationships of the various landscape elements. This formal treatment of the landscape layout is typical of the landscape architectural vernacular of this period. This classic design offers a human scale view that is beautiful and easy to appreciate.

The natural views at the park are not of long range vistas to far off horizons but rather near views of creek sides and flowing water, flowering fields, and shady forests. These natural scenes offer the close observer a look at the beauty of the natural world.

Subsurface Resources

Mineral Springs (Carbon Dioxide Gas and Water)

The mineral springs of this area are the reason for the creation of Saratoga Spa Preserve and the State Park. These resources were exploited for the mineral and gas content of the water in the late 1800s. Fear that over use would lead to the eventual complete loss of the springs led to the State's action to take them over. The protection and preservation of the mineral springs for public use is part of the Park's mandate and the Commissioner of OPRHP has legal authority over these resources.

All springs at the park are available for free public consumption. The springs can be accessed at several locations around the park. The water in the State Seal spring was tested and found free of contaminants in 2008. The testing was conducted by CNA Environmental (CNA 2008). (Figure 10)

Recreational Resources/Activities

(Figure 12)

Picnic Areas

Unreserved Picnic Areas

The Geyser Picnic Area is available on a first-come-first-served basis and contains grills, picnic tables, parking area and restrooms.

Reserved Picnic Areas

The following table gives information about the park pavilions available for rent by reservation.

Table 3 Picnic Pavilions at Saratoga Spa State Park

Shelter Name	Capacity	Athletic Fields	Horseshoe Pit	Electricity (# of 20 amp circuits)	Lighting Available	Handicap Accessible Restroom	Grills & Firepits
Columbia	250	Α	Х	3	Х	Х	C (2), D, F
Orenda	250	В	Х	3	Х	Х	C (2), D, F
Ferndell	75			2		Х	С
Hathorn	75			2		Х	С
Carlsbad	75	В	Х	1		Х	С
Coesa	75	В		2		Х	С
Karista	75	В		None			С
Peerless	75	В		None		Х	С

. . ..

SHELTER FACT SHEET KEY		
A Softball Field with Backstop		
В	Open Field	
C	Grill Size 3 ft x 2.5 ft	
D	Grill Size 1.5 ft x 2.5 ft	
F	Fire Pits	

Boat launching ramps/sites

Saratoga Spa State Park contains two formal canoe and kayak launches along the Kayaderosseras Creek. The furthest upstream launch is located at the extreme southernmost portion of the park. A short gravel driveway heading south from Northline Road leads to a small gravel parking area in the middle of an old agricultural field. This parking lot, also used for access to the Burl Trail, is suitable for up to eight vehicles. A kiosk at the parking area provides visitors with information about the natural ecology of the Kayaderosseras Creek, safety on New York State waters and provides a map

of the local Kayaderosseras Creek area. The launch consists of a natural, unimproved, low-slope bank on the outside of a 90 degree bend in the creek. Although still suitable as a launch site, this area is highly eroded, which is typical of high velocity stream flow areas on the outside of streambed meanders.

The second launch site, approximately four miles downstream from the first, is located on an approximately 30 acre outparcel owned by the State on Driscoll Road. A gravel parking area suitable for up to eight vehicles is located along Driscoll Road, approximately 0.17 miles west of the intersection of Driscoll Road and Route 9. A kiosk at the parking area provides visitors with information about safety on New York State waters and provides a map of the local Kayaderosseras Creek area. From this kiosk, a set of stairs and an ADA switchback trail lead down to a series of boardwalks constructed to cross the red maple swamp situated between the bottom of the hill and the boat launch site along the Kayaderosseras Creek. These boardwalks traverse approximately 640 ft. until reaching the banks of the creek. The streambank directly in front of the end of the boardwalk is approximately 50 ft. further downstream. The launch is positioned at a point where a downed tree, no longer existing, had caused erosion to create a backwater area. This launch, like the Northline Road site, consists of a natural, unimproved, relatively low-slope bank along the north side of the Kayaderosseras Creek.

Fishing

Fishing is allowed in the park on all streams and water bodies. A DEC fishing license is required.

Hunting

Hunting is not allowed anywhere in Saratoga Spa State Park.

Trails

Improvements to some of the park's existing trails were completed in 2008. Further improvements will be done in accordance with a new OPRHP trails plan.(Appendix A).

As of this date, no specific recreational uses are designated for any of the trails within the park. There are suggested designations in the new trails plan. The park has a variety of trails that include gravel, stone dust, natural surface trails, streamside trails and sidewalks. Trail signage is sparse. These trails are used for several organized runs and cross country meets as well as a certified running course used by clubs, high school and college athletic programs. Winter activities include cross-country skiing and snowshoeing. The trails are also used for educational and interpretive tours given by park staff.

Bicycling is allowed in the park. There are no designated bike lanes on the park roads and no designated bike trails.

There are no existing connections, other than surface roads, with trails or planned trails outside the park. Several opportunities exist to establish these connections. Currently the Railroad Run trail connects West Circular Street to Congress Avenue along a north-south former rail bed to the west of the Price Chopper Plaza on Route 50. This half mile dual-trail (one side is stone dust, the other side is asphalt) connects to the new YMCA and is enjoyed by people of all ages for a wide range of activities including walking, bicycling, roller blading, and skate boarding. This community trail has a planned extension across Route 50 which would connect it with trails in the Park.

Other possible connections to area trails include the Zim Smith Trail at the south of the park, which is planned to extend from Saratoga Springs to Mechanicville and potentially Waterford; and the

Geyser Rd. Trail, which is being designed to traverse the north side of Geyser Rd. from the Milton town line into the park. Development of designated on-road bike routes that fit with the recreational needs of the park and the Saratoga County Green Infrastructure Plan is ongoing.

Interpretive/Educational Programs

Saratoga Spa State Park conducts an average of 300 environmental education programs per year. The park's 2-3 educators account for an average of 5000 visitor contacts. Environmental Education programs include private and public programs, school groups, year-round and seasonal classes, and large events. In addition, the Environmental Education department is responsible for all written environmental interpretation, including brochures, panels and newsletter articles.

Private Programs

Saratoga Spa State Park provides environmental education programs for private groups such as Boy Scouts, Brownies, 4-H, Red Hat Societies, home school groups and various organizations. Audiences vary greatly.

Public Programs

Public programs at Saratoga Spa State Park include (but are not limited to) snowshoeing, astronomy, ecology, tree/wildflower/bird identification, nature hikes, nature appreciation for children, Karner blue butterfly walks, nature games and tours of the mineral springs. Two public programs are on-going.

- Frogwatch USA is a citizen-science frog identification program that runs from early to late spring.
- Preschool Naturalists is a year-round program designed to introduce children ages 3-5 years old to nature exploration. Audiences at public programs vary greatly in age, knowledge and ability.

School Programs

Saratoga Spa State Park offers six environmental education programs to school groups. Each satisfies NYS Learning Standards LS4, The Living Environment: Key Ideas 1, 3-7 and LS6 Interconnectedness: Connected Themes – 1 (systems thinking).

- Exploring the Outdoors (K-2 only): Nature exploration using the five senses
- Keeping the Karner Blue: Students learn about the endangered Karner blue butterfly and view the butterfly habitat.
- Talk about Trees: Students learn why trees are important, how they function, and how to identify species.
- A Taste of History: During guided tours of the park, students learn local history, geology, and taste the waters of six mineral springs.
- Stream Ecology: Students learn about stream flow, ecology and environmental health while studying the animals that live in Geyser Creek.
- Winter Challenges/Introduction to Snowshoeing: Students learn tracking skills and the challenges of the winter season while snowshoeing.

Annual Large Events

Winterfest

In conjunction with the City's Annual Winterfest, Spa Park hosts a candlelit ski and snowshoe program on the first Friday in February. This event typically includes bonfires, sled dogs, ice skating and a one mile candlelit loop. This event is weather-dependent. Educators are responsible for organization and volunteer coordination.

Fish Stocking

In partnership with NYSDEC VanHornesville Fish Hatchery, Saratoga Spa State Park invites the public to stock Geyser Creek with brown trout. This family oriented event attracts over 1,000 people. Educators are responsible for organizing the event and coordinating over 30 volunteers. Other attractions at this event include nature hikes and games, education tables, fishing demonstrations, music and food.

Learn to Swim

This program runs for two weeks each July, beginning the week after Fourth of July. Swimming lessons are offered for approximately 100 children ages 3 to 12 for \$40 per child. Educators are responsible for hiring 8-10 Red Cross Certified Water Safety Instructors, 1 Water Safety Supervisor, 1 EMT and 20 volunteers. Educators coordinate student registration.

Golf

There are two golf courses at Saratoga Spa State Park, an 18-hole championship course and a 9 hole executive course. Both of these courses are managed by Professional Golf Services, an independent concessionaire. The championship course hosts approximately 40,000 rounds of golf annually. The golf course also has a pro shop and restaurant.

The course is used in the winter for cross country skiing.

Pools

The park has two public pools, Victoria Pool and Peerless Pool. These pools are open from the end of June to Labor Day.

The Victoria Pool is part of the 1930s Spa Complex area and, when combined with the surrounding deck area, accommodates up to 344 patrons.

The Peerless Pool complex is part of the park development that occurred in the 1960s. The pool has been upgraded several times since then. A major renovation in 1997 converted the dive pool to a kiddy pool and the kiddy pool to a slide pool and added a zero-depth entry to the main pool. In 2008, the liner was removed and the pool repaired. The total patron accommodation is 2,864 with 1,275 patrons in the main pool, 3 in the slide pool, 86 in the kiddy pool and 1,500 on the decks and lawn areas.

Tennis

The park has one tennis complex consisting of eight courts. Four of the courts have a har-tru (clay) surface; the other four are hard courts (blacktop). During the season the har-tru courts are more popular and are used daily with a wait on many days. They are popular especially in the early mornings, evenings and weekends.

The hard courts are in fair to poor condition and get less use.

All of the courts are operated in cooperation with the Friends of Saratoga Spa State Park. This group is responsible for daily maintenance at the courts and they do a major cleanup of the area several times a year.

Winter Activities

Ice Skating

When temperatures reach freezing, ice skating is offered on the mall to the west of the Victoria Pool Complex. An ice hockey rink is provided in the vicinity of the warming hut.

Cross Country Skiing

Groomed cross county ski trails are provided on the golf course and surrounding areas. Patrons may also use the walking trails for cross country skiing but they are not groomed.

Snowshoeing

Snowshoeing is permitted throughout the park. Snowshoes are available for rent at the Park Office.

Museums

Saratoga Spa State Park is home to two museums: the National Museum of Dance & Hall of Fame, and the Saratoga Automobile Museum.

National Museum of Dance & Hall of Fame

The National Museum of Dance & Hall of Fame was established in 1986 and is the only museum in the nation dedicated to American professional dance. The museum is located in the former Washington Bathhouse. The Museum houses a growing collection of photographs, videos, artifacts, costumes, biographies and archives comprising a contemporary and retrospective examination of seminal contributions to dance. The museum also sponsors dance and arts classes.

The museum established the Lewis A. Swyer Studio in 1989. An integral part of the museum's connection to the dance community, the studios offer choreographers, teachers and tomorrow's performers a venue for study and demonstration. The Swyer studios are home to the School of the Arts Program and offers many styles of dance for all ages and abilities. The studios are host to the New York State Summer School Arts programs in July and August providing intensive pre-professional training with acclaimed artists and artistic companies.

Saratoga Automobile Museum

Housed in the historic Bottling Plant building, the Saratoga Automobile Museum's mission is to preserve, interpret and exhibit automobiles and automotive artifacts. The museum celebrates the automobile and educates the general public, students and enthusiasts regarding the role of the automobile in New York State and in the wider world. In addition to technical and design aspects, the museum's educational focus is on the past, present and future social and economic impact of the automobile. The museum also plans several large outdoor events each year which utilize large areas of the park and draw spectators to the park.

Arts and Culture

Saratoga Performing Arts Center

The Saratoga Performing Arts Center (SPAC) was conceived of and constructed in the early to mid 1960's. The main amphitheatre seats 5200 people with space for an additional 20,000 people on the

Saratoga Spa State Park Master Plan: Environmental Setting

sloping lawn outside. The complex also includes a large parking lot, ticket booths and concessions. SPAC is the summer home of the New York City Ballet, and the Philadelphia Orchestra. SPAC hosts many pop music performances as well as the Saratoga Jazz Festival.

Some of the pop music concerts at SPAC attract crowds much larger than the facility was designed for. During these times the park accommodates parking and patrons in almost every developed part of the park.

Spa Little Theater

This auditorium was originally used by Spa doctors for lectures, as well as for entertainment programs. It is now used by the local "Home Made Theater" which produces several plays each year. In July, the Lake George Opera conducts an opera festival at the Little Theater. During August, when the Philadelphia Orchestra is in residence at SPAC, the auditorium is used for the Saratoga Chamber Music Festival.

Spas

Roosevelt Bathhouses

The Roosevelt I Bathhouse is currently operated under a lease

agreement by Delaware North, Inc., as the Roosevelt Baths & Spa. The spa offers:

- Hydrotherapy
- Massage Therapy
- Shiatsu, Craniosacral and Reiki Therapies
- Facial Care
- Several types of Clinical Treatments including Hydrolifting, Collagen and Botinal treatments
- Spa Healing Body treatments including Spa Salt Glow, Saratoga Sugar Scrub, Algae and Moor Mud Wraps
- Body Waxing
- Hair and Nail Services

The Roosevelt II Bathhouse was last used as a spa in the 1950s. It has been used to house the Regional Warehouse, Park Office, and Regional Restoration Shop. It has been vacant since the 1980s.

Lincoln Bathhouse

The Lincoln Bathhouse ceased operation in 2003. The two bath wings remain unoccupied. Other sections of the Lincoln Bathhouse are used to house the regional park police offices, and offices of the court system.

Hotels and Banquet Facilities

Gideon Putnam Hotel and Conference Center

Built in the 1930s, the Gideon Putnam Hotel and Conference Center is currently operated under a lease agreement by Delaware North, Inc..The hotel has 18 suites and 120 guestrooms. The hotel also features dining and lounge facilities.

The hotel also includes a conference center with facilities for meetings, weddings and other events. The conference center features eight meeting rooms, self-contained ballroom, in house audio-visual services, and can accommodate up to 500 people.

Hall of Springs

Currently operated under a lease agreement by the Glen Sanders Mansion Catering, the Hall of Springs hosts all types of events in the historic setting of this elegant building.

Emergency Plans and Services –

Saratoga Spa State Park currently utilizes several Emergency Action Plans within the Park. One plan focuses on a range of potential emergencies, while two were written to focus on water safety at each of the park's two swimming pools.

Facility specific written safety programs are utilized to maintain safety standards and practices as outlined by Occupational Safety and Health Act (OSHA), Public Employees Safety and Health Act (PESH), American National Standards Institute (ANSI) and the National Institute of Occupational Safety and Health.

These programs include Confined Space Entry, Hazard Communications, Personal Protection Equipment Hazard Assessment and the Blood borne Pathogens Exposure Plan. The Spa Park also collects and posts Material Safety Data Sheets for all chemical substances used within the park and its related facilities.

Security within the park is provided by the NYS Park Police whose regional headquarters are located in the Lincoln Bathhouse. The Park Police provide year round coverage in cooperation with local, county and state police agencies. Night watchmen who are in direct communication with the park police, local police and EMS are also employed to patrol the park after hours.

Police, Fire and EMS Services Contact information

- NYS Park Police, 518-584-2004
- NYS Police, 518-899-2225
- Saratoga county Sheriff's Office, 518-885-6761
- Saratoga Springs Fire Department, "911" (518-587-3599 Non Emergency)
- Emergency Medical Service (EMS): SEMS Saratoga Emergency Medical Services, "911" (518-584-2109 Non Emergency)
- DEC Spill Hotline 1-800-457-7362

All-Hazard Emergency Operations Plan

The Spa Park, in cooperation with the NYS Park Police, local and state emergency services and park concessionaires, are currently working to create a risk based All- Hazards Emergency Operation Plan (EOP). The EOP will be developed based on guidelines provided by the Federal Emergency Management Agency (FEMA). This plan will serve as a basis for effective response to any natural or man-made hazard which threatens the park and its facilities. The plan will also guide coordination with local, state and federal emergency management agencies during emergency/disaster situations.

Infrastructure

Water Supplies

Potable Water

Potable water is supplied to the park by the City of Saratoga Springs municipal water system. Waterlines within the park boundary are owned and maintained by OPRHP. Water usage is metered and the park is invoiced by the City of Saratoga Springs. The Saratoga County Water Authority water main traverses the west side of the park.

Mineral Water

There are currently 10 individual mineral water wells providing mineral water for tasting throughout the park. There are also three mineral water wells which feed into the 'Lincoln Grid' which supplies mineral water to the bathhouses. All of the springs are tested quarterly for bacteria contamination. All mineral water wells and lines are owned and maintained by OPRHP.

Spring Water

The State Seal Spring is supplied by several driven well points. As part of this master plan process the State Seal Spring was tested for contaminants. The water was found to be below all levels of Maximum Contaminant Levels (Subpart 5-1 Testing, CNA Environmental Inc., November 18, 2008)

Irrigation

Geyser Pond provides irrigation water for the two golf courses and the SPAC lawn seating area via a pump station on the eastern shore. SPAC irrigates the rest of their grounds with municipal water. Flower beds maintained by OPRHP are watered using municipal water. Irrigation water for the DEC Tree nursery is pumped from Geyser Creek to the Third Fairway Pond, and then pumped from the pond to the Tree Nursery.

Waste Water and Sewerage

Sewage is conveyed to the Saratoga County Sewer District (SCSD) facilities and is treated at their plant in Mechanicville. The park maintains nine sewage lift stations (Karista, Geyser, SPAC, Hall of Springs 1 & 2, Administration, Gideon Putnam, Lincoln, Victoria). Except for the SCSD trunk lines and lift station, sewer lines within the park boundary are owned and maintained by OPRHP.

Utilities

The park is serviced by private utilities including natural gas, electricity, telephone, and fiber optic service. All gas lines within the park boundary are owned and maintained by OPRHP, as are the electric lines after the electric meters and the phone lines after the point of demarcation. There is a cellular antenna array mounted to the unused brick smokestack adjacent to the Regional Warehouse which is owned by Verizon.

Roads and Bridges

There are approximately seven miles of paved road within the park, including the Avenue of the Pines, owned and maintained by OPRHP.

There are three vehicular bridges within the park, all spanning Geyser Creek. There are two significant pedestrian bridges serving SPAC, one spanning Geyser Creek and one spanning Route

50. There are two significant stone arch culverts on the former D&H Railroad grade, one spanning Geyser Creek and one spanning Coesa Creek. All of these structures are maintained by OPRHP.

Accessibility

The park makes every attempt to be in compliance with current indoor and outdoor accessibility standards.

Dams

There are three dams located within the park: Geyser Pond Dam, Coesa Pond Dam, and the Third Fairway Dam.

Petroleum Bulk Storage

OPRHP owns and maintains the following regulated PBS facilities:

Table 4 Petroleum Bulk Storage at Saratoga Spa State Park

retroleum Dun	Storage at Saratoga Spa State Fark	
Tank #	Location	Capacity
011	Aboveground on Rack	275
013	Aboveground on Rack	275
016	Aboveground on Rack	275
017	Aboveground on Rack	500
018	Aboveground on Rack	500
019	Aboveground on Rack	2,000
020	Aboveground on Rack	1,000
021	Aboveground on Rack	275
022	Aboveground – in contact w/impervious	1,000
	surface	
023	Aboveground on Rack	550

The following facilities are located within the Park, but are not regulated by the NYS DEC Petroleum Bulk Storage program:

- Three 500 gallon propane tanks behind the Regional Warehouse to serve the Lincoln backup generator
- One 100 gallon propane tank on the northeast corner of the Hall of Springs
- SPAC concession propane storage is seasonal and the total number of tanks varies depending on vendors
- Catherine's Restaurant at the Victoria Pool has two 250 gallon propane tanks which are removed in the winter
- One 250 gallon propane tank at the Hall of Springs; one 500 gallon unleaded fuel tank and one 500 gallon diesel fuel tank at the golf course equipment storage area near Gideon Garage

Chemical Bulk Storage

- 500 gallon double-wall plastic tank for storage of liquid sodium hypochlorite in Victoria Pool filter room
- 1,000 gallon plastic storage tank with concrete block secondary containment for storage of liquid sodium hypochlorite in Peerless Pool chlorine room

Operations

Personnel

Saratoga Spa State Park currently has a permanent year-round staff of 15 employees. This includes the park office staff of five and ten grounds/maintenance workers and supervisor. The job titles include a Park Manager 3, Park Manager 1, Maintenance Supervisor 1, Park Worker 2's and Park Worker 3's. There are as many as 73 temporary/seasonal employees performing functions such as cashiers, patron assistants, lifeguards, night watchman and maintenance.

Maintenance

The Regional maintenance shop is located behind the Lincoln Bathhouse, and is staffed by skilled trades workers, supervisors and supporting staff. The trades people conduct work within the park and at other parks and historic sites in the Saratoga–Capital District Region. Regional Maintenance also operates workshop space in the Restoration Shop adjacent to the Par 29 Golf Course.

Park Season and Hours

The park is open year round, but roads in the southern (picnic) area of the park are closed to traffic from the first "real" snowfall until the spring thaw. Toll booth hours are generally from 8:30 AM to 4:30 PM or 6:30 PM depending on the day of the week.

Park Fees

Table 5 Saratoga Spa State Park Fees

Vehicle Entrance Fees

Vehicles: \$6.00 Bus – Nonprofit: \$35.00 Bus – Commercial: \$75.00 Seniors (62 yrs & older, NYS Resident): excluding holidays) Access Pass Holders: No Charge Empire Passport Holders: No Charge

Empire Passports available at park office for \$65.00

Victoria Pool

Adults: \$8.00 Children (5 – 11yrs.): \$4.00 Children (under 5 yrs.): No Charge Seniors (62 yrs & older, NYS: Discount (Monday – Friday, Resident): excluding holidays) Access Pass Holders: No Charge

Peerless Pool Adults: Children (5-11 yrs): Children (under 5 yrs.):

\$2.00 \$1.00 No Charge Saratoga Spa State Park Master Plan: Environmental Setting

Seniors (62 yrs. & older, NYS Resident): Access Pass Holder: Discount (Monday – Friday, excluding holidays) No Charge

Nuisance Wildlife Interactions

Pigeon populations at the park cause damage to park property and promote unsanitary conditions due to droppings. Deterrent methods have been used in the past such as roosting deterrent spikes and inflatable owls, but the problem persists.

White tailed deer cause some damage to ornamental plantings around the park.

Groundhogs have been known to cause problems such as destruction of lupine (the sole larval food plant of the Karner blue butterfly) and damage to playing fields and lawn areas.

Park Equipment and Vehicles

OPRHP maintains a significant vehicle fleet for park management and operations purposes, including passenger cars and vans, pickups, heavy trucks, tractors, and other construction equipment.

Staff Parking

Park and administration staff parking is located in the parking area across from the Administration building. Parking for the grounds and regional maintenance staff is located at the maintenance facility behind the Lincoln Bathhouse.

Solid Waste Management and Recycling Program

Solid waste is collected by park staff. The park owns a 1999 International garbage truck which compacts the waste, which is then shipped off site for disposal. Office generated recycling materials are collected in a central area in the Administration building and in small collection areas in other occupied buildings. Source separated paper, plastic, glass and aluminum are transported by park staff to the City of Saratoga Springs transfer station. The park recently developed a relationship with a private scrap metal recycling company to collects scrap metal at the maintenance shop.

When large concerts are scheduled at SPAC, the park contracts with a local refuse hauler to provide for 30 cubic yard containers for garbage and waste generated by the large crowds. In most cases two of these containers are sufficient. Some of the larger events require as many as five of these containers.

Gideon Garage

The Gideon Garage operates as a regional maintenance garage and repairs and inspects vehicles and equipment from the park as well as other parks and historic sites in the Saratoga-Capital District Region. The staff consists of a Motor Equipment Mechanic, three Park workers and two temporary/seasonal employees.

Regional Administration

The administrative offices of the Saratoga Capital District Region are located in the Administration building. Offices for the Regional Director, Assistant Regional Director Engineering, Business, Grants, Regional Operations, Safety, Water Safety and Nature Resource Stewardship are housed in this building.

Regional Warehouse

The regional warehouse serving the parks and sites in the Saratoga Capital District Region is located in the area behind the Lincoln Bathhouse. The warehouse staff orders, stores, inventories and distributes many of the bulk supplies used by the park facilities in the region.

Vacant Properties

45 Kaydeross Ave

The building at 45 Kaydeross Ave is located within the city limits of Saratoga Springs. The property abuts the Hemlock Trail on its northern boundary. It was originally a private two-story brick residence. The original structure has a basement and attic and a garage was added to the north side in the 1990's. The building is approximately $3,500 \pm$ square feet and is in fair condition. The building had been used in the past for park housing and as a residential group home for girls.

The building, which had stood vacant since 2002, was recently licensed to the Waldorf School.

79 Kaydeross Ave

The building at 79 Kaydeross is located within the city limits of Saratoga Springs. The property abuts the Hemlock Trail on its northern boundary. The building was originally a private one-story residence. It is a wood framed structure with a basement. The property has a small detached one car garage and a stable that houses five horses belonging to the NYS Park Police. The residence is approximately $1,000 \pm$ square feet and is in poor condition due to repeated basement flooding and the mold growth. The building has been used in the past as park housing but has been vacant since 2003. There are currently no plans for this building.

Dormitory

The former Dormitory building is located north of the Gideon Putnam Hotel and directly east of the Gideon Garage. The building is a one story wood framed structure with a partial basement. It is 8200 square feet and in fair condition. It was originally used as summer housing for hotel staff and subsequently used as training and meeting space for park personnel. The interior of the building was gutted in the 1990s for use as storage. Interior walls were removed and a new roof installed but funding was not provided to complete the project.

Roosevelt II

The Roosevelt II was built in 1935 and at the time was considered to be one of the most modern bathhouses in the world. It has been vacant since the 1980s. It is a one-story brick building with a partial basement. It measures 19,000 square feet and is in poor to fair condition. It is located approximately 200 feet due south of the Administration building, across the mall from the Roosevelt I. The Roosevelt II operated as a bathhouse from 1935 until 1942, when it became a VA hospital. It was used as a VA hospital until 1951. In 1962 it was rehabilitated to serve as a health club. Over the years it also served as Park Police headquarters and the Saratoga Spa State Park office. The Saratoga Automobile Museum currently rents a small portion of the building for storage.

Lincoln Bathhouse

The Lincoln Bathhouse has extensive space available for adaptive reuse. This two-story, steel and masonry structure was built in 1929 and underwent extensive renovations in 1989. Current occupants of the building include the New York State Park Police, New York State Court of Claims and NYS Office of Court Administration. The west end of the first floor was used as a mineral bath

spa until 2003, when the newly renovated Roosevelt I Baths and Spa reopened, satisfying current market demand. The second floor has approximately 12,000 square feet of vacant space that has been cleared and is ready for renovation

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

Saratoga Spa State Park will be a place for the public to visit, enjoy and appreciate the natural, cultural and physical resources and recreational opportunities that the park offers. A balance will be achieved between recreational use and protection and interpretation of the biological, physical and cultural resources of the park.

Overall Park Goal

Saratoga Spa State Park will build on its status as a premier park in the region for the public to visit, enjoy and appreciate the natural, cultural and physical resources and the recreational opportunities that are offered. Saratoga Spa State Park will become a community leader in sustainable park operations, education and interpretation, protection of natural and cultural resources and providing recreational opportunities to the public.

Natural Resource Goals

Overall Goal

To identify, protect, manage, and interpret the natural resources within and associated with the park.

Goals

- Design and locate recreational facilities to assure that they do not exceed the parkland's capacity to withstand use.
- Protect, manage and maintain areas important as habitat for rare, threatened, endangered or protected plant and animal species and community types.
- Identify areas with environmental sensitivity, such as wetlands, and direct intensive development away from such areas.
- Use plantings of native species in a manner that facilitates reduced energy consumption (i.e. native deciduous trees that shade windows in summer but allow sunlight and heat in, in the winter).
- Maintain, restore and/or enhance the natural environment, where appropriate, to improve the quality of natural resources and support biodiversity of plant and animal species.
- Develop education and interpretive programs that focus on the plants, animals and natural communities of the park.
- Encourage the propagation of species of plant and animals considered native and indigenous to the area.
- Control the impacts of invasive species on the biodiversity of plants and animals.
- Protect and maintain the quality of water resources both on and associated with the park.

Recreation Goals

Overall Goal

Provide recreational facilities and programs that are compatible with the park's natural, cultural, and physical resources.

Goals

- Provide year-round facilities and programs for the public.
- Implement programs and facilities that are consistent with regional and local needs and demands as identified in the Statewide Comprehensive Outdoor Recreation Plan, and other federal, state, and local plans and programs.
- Develop physical activity programs in partnership with area schools, and other organizations.
- Encourage appropriate use of park recreational facilities by local and regional sports interest groups.
- Design recreational facilities to be compatible with the character of the park and its resources.
- Develop and maintain a sustainable trail system that is compatible with the park's natural, cultural, and physical resources, provides recreational and educational opportunity for a diversity of trail users and links to regional trail systems.

Cultural Resource Goals

Overall Goal

Identify, protect, preserve and interpret buildings, sites and areas significant to the history, archaeology and culture of the local community, region, state and nation.

Goals

- Protect and preserve all the historic resources of the park.
- Ensure that actions and proposals impacting the park (internal and external) are consistent with the historic status of the park.
- Identify archaeologically sensitive areas and protect those areas by minimizing or avoiding disturbances within them.
- Preserve and interpret cultural resources.
- Develop programs and activities which educate the public about, and interpret the history and culture of the area and the park.
- Restore and renovate historic buildings and structures when necessary using and incorporating sustainable energy sources (such as geothermal heating and cooling and photovoltaic cells) when appropriate.

Scenic Resource Goals

Overall Goal

Protect the scenic quality of the park, its classical landscape architecture, structures, and views of natural areas.

Goals

• Design and locate all activities, structures and infrastructure to minimize visual impacts and to fit into the park's setting.

• Provide, protect and maintain views of the Kayaderosseras Creek and other natural features, using topography or existing clearings whenever possible.

Access Goals

Overall Goal

Provide appropriate access to the park and its recreational, cultural and natural resources.

Goals

- Provide and maintain connectors to local and regional trail systems designated as access routes.
- Enhance opportunities for alternative transportation routes to and within the park.
- Provide access to natural/passive recreation areas.
- Improve internal non-vehicular access to developed areas within the park.
- Provide and develop access to water resources.
- Provide access to park resources for persons with disabilities in accordance with the Americans with Disabilities Act.
- Provide and maintain access to the Park and associated recreation facilities.

Education and Interpretation Goals

Overall Goal

Provide opportunities for education and interpretation of the natural, cultural and recreational resources of the park.

Goals

- Design and develop a dedicated education and interpretive center in the park.
- Continue and expand year-round educational and interpretive programs that:
 - o focus on the park's natural, cultural and recreation resources
 - are designed for the general public and for organized groups.
- Continue and expand programs that are compatible with, and encourage the public's understanding of, the protection of park resources.
- Continue and expand programs designed for local schools and other organizations.
- Foster partnerships with other providers that can offer interpretive programs designed for the park visitors and groups.

Operation and Maintenance Goals

Overall Goal

Operate and maintain the park in a safe, clean, and sustainable manner that protects the natural, cultural, and recreational resources of the park.

Goals

- Integrate sustainability practices into all areas of Operations and Maintenance.
- Develop a set of design, maintenance and operation guidelines, including sustainability practices.
- Foster partnerships for maintenance and operation of the park facilities.
- Identify specific approaches to address resource protection within the operation and maintenance programs.
- Enhance revenue generation opportunities.

• Consider long range fiscal sustainability of the park in all operations practices.

Communication and Partnership Goals

Overall Goal

Foster partnerships with public and private entities to advance the vision and goals for Saratoga Spa State Park.

Goals

- Promote and support the *Friends of Saratoga Spa State Park* in their efforts to raise funds and recruit volunteers to undertake projects that advance the park vision and goals.
- Coordinate with local and state agencies in the management of the natural, cultural and recreational resources of the park.
- Develop mutually beneficial leases and contracts for entities operating within the park to ensure furtherance of the park's goals. Provide effective contract management and coordination of partners.
- Consider the plans and policies of other local, state and federal agencies as facilities and programs are developed for the park.
- Provide opportunities for input from the public regarding program and facilities planning.
- Provide constructive and timely comment to other public entities managing the review of developments that may impact the park.

Facility Development and Capital Investment Goals

Overall Goal

Develop, improve, and invest in the built infrastructure of the park to meet the needs of the recreation and operation goals of the park in a sustainable manner.

Goals

- Highest priority is to ensure the health and safety of park patrons and employees.
- Integrate a sustainability ethos into the design of new facilities and redevelopment of existing facilities.
- Correct public health and safety deficiencies, building code and universal accessibility compliance and meet environmental mandates.
- Expand, improve and enhance existing facilities to meet documented visitor needs.
- Initiate and support general repair and rehabilitation of existing facilities based on current conditions and usage.
- Develop ongoing preventive, corrective and scheduled major repair and improvements to meet long range infrastructure needs.
- Develop a list of priorities of uses needing space.
- Preference should be given to the rehabilitation and adaptive reuse of existing structures over the construction of new facilities when feasible.

Inventory, Monitoring and Research Goals Overall Goal

Advance scientific research into the natural and cultural resources of the park.

Goals

- Honor the scientific legacy that is the park's foundation by being responsible stewards of past research.
- Facilitate scientific research to enhance the long-term viability of the park's natural and cultural resources.
- Advance the public's understanding of the medical research conducted at the park.
- Provide a coordinated approach to inventory, monitoring and research that facilitates data exchange.
- Conduct and encourage research by individuals, interest groups and institutions.
- Develop and implement a monitoring program that measures changes within the park.
- Assure that all monitoring and research programs are compatible with the protection of park resources.

Sustainability Goals

Overall Goal

Integrate sustainability considerations into all aspects of the park's operation, management and stewardship to make this park a leader in sustainability.

Goals

- Develop a comprehensive waste management and recycling plan, including concessions, tenants and special events.
- Encourage best "green management" practices on the golf courses including reduced water use, integrated pest management and reduced herbicides.
- Develop a comprehensive energy management plan.
- Follow best management practices for water conservation.
- Where possible, incorporate LEED principles in retrofitting existing facilities and design of new ones.
- Encourage alternative means of transportation such as pedestrian, bicycle and public transportation to the park and within the park.
- Incorporate the fiscal sustainability of the park in any long range operations plan.

Concessions and Tenants (Partners) Goals

Overall Goal

Ensure that existing and any new agreements with partners in the park, including special events, are consistent with and enhance the overall goals of the park.

Goals

- Require concessionaires and special event permitees to be proactive stewards of the park within the framework of their agreements.
- Include sustainability requirements in all new and renewing concession and tenant agreements and in all special permits.
- Consider overall park vision and goals when evaluating new uses for building spaces.

Chapter 5: Analysis and Alternatives

Park Classification

The land classification system for parks has been in existence, with revisions over time, since 1974. The purpose of this system is to identify the capability of parkland to support various park functions and thus provide guidance for the protection of environmental resources, use and management practices. The current system utilizes natural and cultural resources characteristics, land uses, levels of improvements, physical capacity and other management related data to identify appropriate activities and classifications for a park. The master planning process presents the opportunity to reevaluate a park's current classification and modify it, if necessary, based on the most recent inventories.

Saratoga Spa State Park is currently classified as a Recreation Park. The characteristics of this classification are:

- Natural surroundings in suburban or rural areas
- A mix of natural and developed areas, significant natural areas are not essential
- High level of use
- 0-15% developed areas
- 0-100% managed areas
- 0-100% natural areas

Another classification that Saratoga Spa State Park could be considered for is Scenic Park. The Scenic Park classification is described as:

- Natural setting with limited development
- Scenic attractions within urban, suburban or rural areas
- Mix of natural and developed areas with significant scenic features
- High Level of use
- 0-5% developed areas
- 0-50% managed areas
- 50-100% natural areas

When comparing the available resources and character of Saratoga Spa State Park with the criteria established for the Scenic and Recreation classifications, it is clear that the park predominantly falls within the Recreation classification with some overlap into the Scenic classification. That being said, the types and mix of current and future uses in the park leads to the recommendation to maintain the classification as a Recreation Park.

Resource Assessments

Natural Resources

Protection of natural resources is an important part of the OPRHP's mission. Additionally it is recognized that the natural areas within Saratoga Spa State Park are important to its history and character. There are several significant natural areas within the park including the Karner blue butterfly area, the Hemlock Trail area and the wetlands and associated uplands bordering the Kayaderosseras Creek. The pine forest along the Avenue of Pines, the historic landscape around the

historic buildings, and the lawns and treed picnic areas are also important features. These all contribute to the history and the ecological diversity within the park.

Forests

Natural Forested Landscapes

- **Typical northeastern NY forests** These are found throughout the park in areas such as the Hemlock trail area, the picnic area near the Geyser Brook, and areas along the Geyser Brook and Kayaderosseras Creek south of the East West Road. These areas of natural forest are typical of most natural forests in the surrounding area. The park's forests in general are relatively young, due to past history of clearance for agricultural activities. There is, however, an area of old growth hemlock forest in the Hemlock Trail section of the park. The trees in this area of forest predate this agricultural clearing trend. Whether relatively young or old growth, all forest areas in the park are threatened by the spread of invasive species such as honeysuckle species, Japanese barberry, and oriental bittersweet, among others.
- Pitch pine-scrub oak forests Remnants of this forest community type, specially adapted to withstand periodic wildfires, exist in the area of the threatened/endangered butterfly habitat near Rt. 9. This community type represents the typical forest type associated with habitat for these two butterflies. Historical photographs suggest that many of the forest stands in the southern half of the site were planted sometime in the 1970's. The forests today are classified as Appalachian oak-pine forests; however, most pines consist of plantation type species which are atypical for this association, and only the occasional remnant of the more typical pitch pines and scrub oaks remain. As part of the overall threatened/endangered butterfly restoration effort, areas of forest along the edges of the threatened/endangered butterfly Habitat Management Units will be restored to a sparse forest dominated by pitch pine and scrub oak; a forest type commonly associated with the butterflies' traditional habitat.

Historic Treed Landscapes

- Avenue of the Pines This area of the park is a significant and historic landscape feature of the park. The trees along the original route of the Avenue of the Pines are eastern white pine while the trees along the more recent alignment near the Avenue's intersection with Route 9 are red pine. All of these trees are affected by their proximity to the roadway as well as the limited age class distribution of the trees. This lack of age variability could mean that multiple trees might die within a short time span. While clearly a natural resource, the trees along the Avenue of the Pines will be managed under a framework that recognizes their significance as an historical/cultural resource.
- **Civilian Conservation Corps (CCC) Plantations** Pine plantations planted by the CCC in the 1930's are located throughout the park. These plantations were part of a reforestation effort but have not been managed for timber production. These dense stands tend to be areas of low biodiversity but could also be viewed as part of the historic landscape and part of the park's historic development.

Successional Old Fields

Many areas of Saratoga Spa State Park are open fields; a remnant of the area's agricultural past. These are found primarily along the Kayaderosseras Creek, but smaller remnant fields are also found in the Hemlock Trail area. These areas have ecological value. Decisions on management are based on a number of factors including location, the vegetation present, and the size of the field, among others. Decisions made about the management of these fields also affect operational considerations.

Water Bodies

- **Geyser Brook** Geyser Brook flows from the park's northwest corner into the Geyser Pond at the corner of Route 50 and the Avenue of the Pines. After flowing over the dam, the brook flows behind SPAC and through the Geyser Picnic Area before crossing under the East West Rd. and entering into a large wetland complex. This brook, similar to other area streams, is impacted by an increasingly developed watershed, streambank erosion, and invasive species.
- **Kayaderosseras Creek** Kayaderosseras Creek is a major Saratoga County watercourse that flows through the southern portion of the park. Most of the creek within the park is bounded by undeveloped wetland complexes. Two boat launches have been created for access to the creek. As with Geyser Brook, Kayaderosseras Creek is also impacted by an increasingly developed watershed, streambank erosion, and invasive species.
- **Coesa Creek** Coesa Creek is a small tributary of Geyser Brook. The creek appears to be in a relatively pristine condition as it exists within an almost entirely undeveloped watershed for most of its entire course of 0.4 miles. The often solid slate streambed and banks, also comprised predominately of slate, have limited erosion along this stream. Several large impoundments (1 to 5 ft. tall), although providing aeration for the stream, are also a hindrance to fish passage.
- **Geyser and Coesa Ponds** are impoundment structures of about 3.5 and .6 acres respectively. Some fishing takes place for warm water species in Geyser Pond. Golf course irrigation water is drawn from Geyser Pond.
- **Third Hole Pond** acts as storage for irrigation water for the Department of Environmental Conservation (DEC) tree nursery. The water is first pumped from Geyser Brook. At one time this pond was also used for golf course irrigation.

Wetlands

- **Geyser Brook wetland complex** As the Geyser Brook passes south of the East West Road, the channel splits into two separate watercourses that traverse a very large complex of red maple-hardwood and shallow emergent marshes. Surveys of this wetland complex have revealed a well-functioning wetland. A major threat is the expansion of invasive species, particularly purple loosestrife and phragmites australis.
- **Kayaderosseras Creek riparian wetlands** The Geyser Brook wetland complex is a part of the overall Kayaderosseras Creek riparian wetland system. Riparian wetlands are wetlands adjacent to and affected by surface or ground water of perennial or ephemeral waterbodies. The majority of the Kayaderosseras Creek riparian wetlands on park property exist at the Driscoll Road boat launch site and in the southern portion of the park. The protection of these wetlands through recent acquisitions by OPRHP has a positive impact on the water quality of Kayaderosseras Creek from potential impacts from within the watershed. As with the Geyser Brook wetland complex, these riparian wetlands are well-functioning wetlands whose major threat is the expansion of invasive species, particularly purple loosestrife, *Phragmites australis*, and Japanese knotweed.
- Hemlock Trail wetland complex The Hemlock Trail area contains approximately 87 acres of wetlands. These wetlands are comprised primarily of red maple-hardwood swamps and hemlock-northern hardwood swamps. Portions of the hemlock-northern hardwood swamps also represent old growth forests, an ecologically rare occurrence in the area. Another rare and significant ecological community in the Hemlock Trail area is a perched swamp-white oak swamp. Although a small example of such a habitat, the area is quite impressive with several oaks of large diameter. As with the other wetlands discussed here, these wetlands appear to be well

Saratoga Spa State Park Master Plan: Analysis and Alternatives

functioning with threats consisting primarily of the spread of invasive species, particularly purple loosestrife and *Phragmites australis*.

Fauna

As mentioned in Chapter 3, wildlife is typical of the region and the suburban-urban setting of the area. A wide variety of mammals, birds, amphibians, reptiles, and fish can be found within the park from the upland pine plantations to the extensive wetland areas. The park's significant open space areas south of the East- West road along the along the Kayaderosseras Creek and Geyser Brook and the areas east of Route 9 provide habitat for many of these animals. However, the entire park, including the golf courses and picnic areas, is home to wide range of animals, providing opportunities for public viewing as well as education and interpretation.

The habitat provided by the park's protected lands is particularly important for these species due to the open space provided in a rapidly developing area. Park designations will be utilized to recognize and protect the most important areas for wildlife habitat and are discussed below. However, the park is home to two species that require intervention beyond land preservation; the Karner blue and the frosted elfin butterflies. Options for the protection and restoration of habitat for these two species are discussed below.

- **Karner Blue Butterfly** As described in Chapter 3, the federally endangered Karner blue butterfly is present in the park. Restoration of the habitat in the Park is important to the preservation of this species.
- **Birds** A wide variety of birds are found throughout the Park. It is recognized that the Park provides important stopover habitat for migratory songbirds during spring and fall migration. At least 54 species of Neotropical migratory songbirds use the park as a stopover site during migration. The birds concentrate in the wetlands associated with Geyser and Kayaderosseras Creeks. These wetlands also provide breeding habitat for waterfowl and wading birds such as Wood Duck, Common Merganser, Virginia rail, and Great Blue Heron. A heron rookery is located in the forested wetlands associated with Geyser Creek. Alternatives for habitat preservation are discussed below.
- **Fish** Geyser Brook and the Kayaderosseras Creek are habitat for a variety of fish. Trout fishing takes place in both streams and Geyser Brook is stocked with trout annually by the Department of Environmental Conservation. Fish habitat is increasingly affected by shoreline erosion and expanding invasive species such as Japanese knotweed. Efforts to prevent further erosion and invasive spread are discussed below.

Recreation Resources

Provision of recreation resources is a primary goal of OPRHP and of Saratoga Spa State Park. The park has a wide variety of four season recreation opportunities for patrons. This variety as well as the quality of the park environment adds substantially to the park's popularity.

Resource Analysis and Alternatives

Designations

The Saratoga Spa State Park planning process addresses three laws that allow state agencies to designate lands under their jurisdiction as Park Preservation Areas (PPA), Natural Heritage Areas (NHA), and Bird Conservation Areas (BCA).

Park Preservation Areas

Parks, Recreation and Historic Preservation Law Article 20 (Park Preserve Law) outlines the process for designation of entire parks or portions of parks as part of a statewide park preserve system. Portions of parks may be designated as Park Preservation Areas (PPA).

Background for Analysis:

The park's character is a mix of active and passive recreation, historic and cultural significance and natural areas. While a large portion of the park is considered developed, it contains nearly 635 acres of New York State designated class 1 and 2 wetlands. There are also significant old fields in the southern portion of the park. Sections of Geyser Brook and Kayaderosseras Creek support trout. A number of small ponds exist within the park. These ponds are used to irrigation the golf course and the DEC Tree Nursery. The streams and water bodies are used for fishing by the general public.

Alternatives	Considerations
Alternative 1 Status Quo (No Park Preserve/Preservation Area)	 Does not recognize the significant natural features within the park Sensitive areas could continue to be susceptible to more intensive uses/development
Alternative 2 Designate (re-classify) the entire park as a Park Preserve	 May designate areas that do not meet the criteria/intent of the Park Preserve Law May designate areas/use areas not eligible for designation under the Park Preserve Law May be considered incompatible with the recreational character and spa-like atmosphere of the park
 Alternative 3 Designate a Park Preservation Area in selected locations within the park. Property south of East West Road Driscoll Road Parcel Property east of Route 9 between Kaydeross Ave and Crescent Ave (Hemlock Trail Area) Property east of Route 9 between Crescent St. and Crescent Ave (Endangered butterfly habitat area) 	 Designated areas would protect important natural resources Passive and low intensity recreational activities would be supported Impacts to resources by more intensive recreational uses will be minimized Management and use of existing high intensity recreational areas/uses will be maintained and enhanced by the Park Preservation Area designation

Preferred Alternative: Alternative 3 - Designate a Park Preservation Area in selected locations within the Park

Designating selected areas within the park that are significant for natural resource protection will meet the criteria and intent of the Park Preservation Law. The areas proposed for designation include: the property to the south of East West Road, excluding the recreation and maintenance areas; the Driscoll Road parcel; the property east of Route 9 between Crescent Ave and Kaydeross Ave (Hemlock Trail area); and the property east of Route 9 between Crescent St. and Crescent Ave (Endangered Butterfly habitat area), excluding the off leash dog area. The area south of East West Road contains a significant wetland area, demonstrates natural succession, protects popular trout

Saratoga Spa State Park Master Plan: Analysis and Alternatives

streams and has important habitat for both resident and migratory birds. The Driscoll Road parcel continues the protection of the significant wetland area and provides shoreline protection to the Kayaderosseras Creek. The Hemlock Trail area protects large wetland areas, old growth hemlock area and a small significant ecological community. Lastly, designating the Endangered Butterfly habitat area will afford additional protection to the state and federally endangered Karner blue butterfly and the state threatened frosted elfin and their habitat. See Figure 15 for the proposed boundary of a Park Preservation Area.

Natural Heritage Areas

The New York Natural Heritage Areas Program (NHA) was established in 2002 in amendments to the Environmental Conservation Law (§11-0539.7). The goal of the NHA Program is to provide state land managers with a tool to highlight and ensure the protection of rare animals, rare plants, and significant natural communities on state-owned land. Agencies must consult with the Commissioner of the Department of Environmental Conservation before designation of an NHA. Unlike the Park Preserve Law (which provides some reference to recreational uses) there is no definitive statement on existing uses or recreation. There is an implicit responsibility in the administering agency to assure that existing uses will not be detrimental to the viability of the identified rare, threatened or endangered species or significant natural communities. No provision in the NHA legislation is made to prohibit or hinder future recreational uses. The type and extent of any new proposal would be evaluated in the context of the scientific criteria (that led to designation) and site characteristics and management recommendations.

In order to be eligible for NHA designation an area must meet any one of the following criteria.

- provides habitat for "endangered species" or "threatened species" of animals or plants;
- provides habitat for rare species as defined by the Natural Heritage Program; or
- contains "significant ecological communities" where such term means all rare ecological communities as well as the best examples of common communities.

Background for Analysis:

Areas of the park support a population of the state and federally endangered Karner blue butterfly and the state threatened frosted elfin butterfly. A small example of Perched Swamp White Oak Swamp, a significant and rare community, exists in the park.

Alternatives	Considerations
Alternative 1 Status Quo – No NHA designation.	 Significant areas will not be recognized A greater awareness of the significance of the resources will not be created Significant natural communities and habitat for rare, threatened and endangered species will still be recognized and managed, but they not designated as a Natural Heritage Area
Alternative 2 Designate an NHA that includes all existing and potential endangered butterfly habitat within the Park.	 Designates all areas that currently support federally endangered butterfly species as it is currently managed Designates areas that, with restoration and management, could support federally endangered butterflies Creates greater awareness of the significance of the resource Current habitat and potential habitat areas are not necessarily contiguous With the exception of a few isolated habitat areas the boundaries could coincide with other potential designation boundaries (BCA and PPA) Conflicts exist in some areas with other uses within the park Designates areas that meet the criteria of the law
Alternative 3 Designate existing and potential endangered butterfly habitat that is located to the east of Route 9 and between Crescent St. and Crescent Ave, with the exclusion of the proposed off leash dog area.	 Creates greater awareness of the significance of the resource The boundaries could coincide with other potential designation boundaries (BCA and PPA) Designates areas that meet the criteria of the law The area is a contiguous block within the Park and provides an identifiable area for concentrated management and restoration efforts
Alternative 4 Designate the small Perched Swamp-White Oak Swamp community located in the parcel east of Route 9 and between Crescent Ave and Kaydeross Ave. (Hemlock Trail Area).	 Designates areas that meet the criteria of the law Creates greater awareness of the significance of the resource The community is rare This community depends on the surrounding natural communities The boundary would not necessarily coincide

Saratoga Spa State Park Master Plan: Analysis and Alternatives
--

Alternatives	Considerations
	 with other designations Another designation could provide the same protection
Alternative 5 Designate the entire Hemlock Trail Area which includes the small Perched Swamp-White Oak Swamp community	 Designates an area that contains only a small community that meets the criteria of the law Creates greater awareness of the significance of the resource This is a fair example of this rare community The boundary could coincide with other designations

Preferred Alternative: Alternative 3 – Designate existing and potential federally endangered butterfly habitat located on the parcel east of Route 9 between Crescent St. and Crescent Ave. as a Natural Heritage Area (with the exclusion of the off leash dog area).

This alternative designates the federally endangered and state threatened butterfly habitat, which is currently being managed by OPRHP, plus potential areas of new or expanded butterfly habitat. Other areas that historically supported the Karner blue butterfly and frosted elfin butterfly were also considered for designation as an NHA. These areas, located to the west of Route 9 and north of Crescent St., do not currently support these species. It would require significant habitat restoration efforts to make these areas suitable for butterfly habitat.

The Perched Swamp-White Oak Swamp area is a small example of this rare and significant community type which depends on the surrounding natural communities for its viability. The overall Hemlock Trail wetland complex would have to be designated in order to provide adequate protection for this rare community. Since the rest of the wetlands in the Hemlock Trail area do not meet the criteria for designation under the law, it was decided not to designate the entire area as part of a NHA. Also, recognition of this particular occurrence under the NHA designation is not necessary to assure protection of the area. The entire area will have additional protections afforded it under its designation as a PPA. Therefore, the Perched Swamp-White Oak Swamp and its surrounding communities will not be designated as part of the NHA. The area proposed for designation is shown in Figure 16.

Bird Conservation Areas

Background for Analysis

The bird community at the park was assessed to determine if it met any of the criteria for designation as a Bird Conservation Area (BCA) as described under Article 11, Title 20 of the Environmental Conservation Law (ECL). Although no formal bird surveys have been conducted at the park, there are a number of resources available which document birds at or in the immediate vicinity of the park. Resources consulted include the New York Breeding Bird Atlas, the Saratoga Spa Christmas Bird Count, the park's Bird Checklist, and independent bird checklists provided by park staff.

The BCA program aims to integrate bird conservation into agency planning, management and research projects, within the context of agency missions. While it is expected that bird conservation

Saratoga Spa State Park Master Plan: Analysis and Alternatives

will remain a high priority within designated areas, designation does not place any explicit restrictions on future land use decisions. In addition to emphasizing bird conservation within the planning process, BCA designation can create hightened public awareness of the site's bird community, as well as funding opportunities for bird-related publications, research and management.

In order to qualify for designation as a BCA, a site must meet at least one of the nine criteria outlined in the ECL. Following staff evaluation of the bird community and habitat, it was determined that the park meets two of the nine BCA criteria.

- Migratory Bird Concentration Site The forests of the park, particularly those along Kayaderosseras Creek and Geyser Brook, provide important stopover habitat for migratory songbirds during spring and fall migration. At least 54 species of Neotropical migratory songbirds use the park as a stopover site during migration.
- Diverse Species Concentration Site The upland and wetland forests at the park provide significant habitat for a variety of forest-breeding bird species that are sensitive to habitat fragmentation. Many of the bird species supported by the forests of the park have been listed as Species of Greatest Conservation Need, including Sharp-shinned Hawk, Wood Thrush, Louisiana Waterthrush, and Scarlet Tanager. In addition, the extensive wetland complex associated with Kayaderosseras Creek and Geyser Brook provide important habitat for numerous wetland-dependent and wetland-associated species, including Great Blue Heron, Green Heron, Wood Duck, Common Merganser, Virginia Rail, and Common Yellowthroat. In total, 170 bird species have been sighted within the park, 97 of which were identified as breeding in the park.

Alternatives	Considerations
Alternative 1 Status Quo	 No BCA designation Does not create a greater awareness of the significance of the resource
 Alternative 2 Designate a Bird Conservation Area in selected locations within the Park. Property south of East West Road Driscoll Road Parcel Property east of Route 9 between Kaydeross Ave and Crescent Ave (Hemlock Trail Area) Property east of Route 9 between Crescent St. and Crescent Ave (Endangered Butterfly habitat area) 	 Meets requirements for BCA designation BCA Management policy will guide protection of the resource

Preferred Alternative: Alternative 2 - Designate a Bird Conservation Area in selected locations within the park.

The areas proposed for designation include: the property to the south of East West Road, excluding the recreation and maintenance areas; the Driscoll Road parcel; the property east of Route 9 between Crescent Ave and Kaydeross Ave (Hemlock Trail area); and the property east of Route 9 between Crescent St. and Crescent Ave (Endangered butterfly habitat area), excluding the off leash dog area.

Natural Resource Protection Strategies/Management

Although Saratoga Spa State Park is best known for its cultural and historical resources, roughly two-thirds of the park consists of natural areas accessible only by foot trails or with no designated access at all. The park also boasts miles of land along two important Saratoga County stream courses, the Geyser Brook and the Kayaderosseras Creek. The management of these lands and stream courses not only impacts the natural environment of the park but visitor enjoyment of the park, naturalists ability to educate visitors through the interpretation of the park's natural ecosystems, and the health of all park ecosystems.

Kayaderosseras Creek Management

Background for Analysis

The Kayaderosseras Creek is a major watercourse, traversing from the Town of Corinth, approximately 30 miles to its outlet into Saratoga Lake. The Kayaderosseras is well used as a recreation resource by boaters and anglers. A not-for-profit group, Friends of the Kayaderosseras, has formed to "conserve the creek." OPRHP has made efforts to protect the Kayaderosseras Creek and its watershed through the acquisition of land bordering approximately 3.4 miles of the creek's banks. To date, the park has established two boat launches on the creek to provide public access for boating and fishing. The Burl Trail was also established along the creek's banks to provide recreation and interpretation opportunities to hikers.

The two primary natural resource concerns most impacting the Kayaderosseras Creek within the park are erosion of the creek banks and invasive species. Through most of its course through the park, the creek is well buffered by vegetation on both sides and exhibits normal rates of erosion. However, erosion appears to be occurring at an accelerated rate at the two boat launch sites as well as along the length of creek adjacent to the Burl Trail area.

The boat launch sites are very basic, low slope entries made of natural materials in areas with minimal vegetation. A lack of vegetation, due to the action of launching of boats, coupled with the launch sites' locations in backwater and outside bend areas, have lead to increased erosion. The length of streambank along the Burl Trail area exhibits increased erosion due to a lack of adequate riparian vegetation. This is accelerated due to the presence of Japanese knotweed, an invasive plant species. In addition to providing reduced habitat value to local wildlife, this species shades out native vegetation whose roots better work to hold the bank soils in place. As Japanese knotweed spreads well through fragmentation, broken pieces of Japanese knotweed threaten to spread the invasion downstream along alluvial floodplains throughout the stream course.

To date, Saratoga Spa State Park has allowed the Friends of the Kayaderosseras to perform some minor streamside management along the creek in the Burl Trail area. This management has consisted mainly of garbage pickups and small-scale invasive species removals. This group has also coordinated volunteer creek clean-up days throughout the Kayaderosseras Creek stream course. Other than creating public access, OPRHP has yet to undertake any management of the creek or its banks.

Alternatives	Considerations
Alternative 1 Status Quo Alternative 1 Status Quo Alternative 2 Native vegetation restoration. • Erosion is currently accelerated in some areas due to a lack of appropriate vegetation adjacent to the Kayaderosseras • Native riparian vegetation would be planted along the creek. Once grown, roots will form a natural, protective binding agent to help resist erosion of the streambank • Plantings would occur in conjunction with the removal of invasive vegetation along streambank	 Minimum maintenance requires very little cost and manpower Potential for a net loss of Park land in areas where the park only owns one side of the stream course Increased erosion could lead to damage or unsafe conditions at park recreational facilities such as nature trails or boat launches Associated soil disturbance will likely enhance the spread of invasive species, such as Japanese knotweed (already established at the site). Accelerated siltation of the stream bed may impact spawning sites for fish or habitat for macro-invertebrates Erosion will be moderately slowed; bringing erosion forces back to more natural levels Establishment of native vegetation benefits wildlife that depend on riparian habitat Provides enhanced aesthetics along nature trail Provides opportunity for interpretation of native riparian vegetation Wards against future establishment of Japanese knotweed Erosion may be enhanced immediately following revegetation efforts, due to soil disturbance during planting/removal activities Streambank stabilization benefits will not be fully realized until root systems are well established, approximately one year following revegetation efforts Removal of knotweed is very labor intensive and can take several years; treatment of a large area would require significant time and funds

Alternatives	Considerations
 Alternative 3 Bioengineering streambank stabilization. Engineered solutions are available which utilize natural materials and mimic natural systems to slow water flow, protect stream banks, and capture transported sediment Natural materials such as logs and stones are used to redirect hydraulic forces. A series of log or rock vanes could be used to redirect flows away from the bank, providing a more stable center channel flow These areas would then be planted with native vegetation 	 Provides more immediate and robust erosion minimization Provides an opportunity to interpret bioengineered streambank restoration techniques Use of natural materials would reduce aesthetic impact More labor and material-intensive and greater up-front cost Heavy machinery is required for some installation Installation of semi-permanent structures in a largely natural area OPRHP ownership of only one side of the creek will limit the effectiveness of work that can be done Requires coordination with adjacent landowners
 Alternative 4 Hardscape bank stabilization. Traditional engineering solutions to armor stream banks using anthropogenic materials and techniques (i.e. rip rap, rock walls, or concrete barriers) 	 Simple installation would result in quick project completion Project would halt erosion at the project location Simple materials are universally available Elimination of exposed soil would limit potential for Japanese knotweed establishment and greatly reduce the need for native plant reestablishment Entire bank would need to be armored to avoid erosion issues up and downstream of project Project would increase stream velocities, increasing erosion and flooding potential on opposite banks and downstream areas without protection Armoring with non-natural materials would reduce habitat for many species that utilize the riparian or stream habitat

Preferred Alternative: Combination of 2 and 3-4 – Native, Bioengineering and Hardscape The meandering of streams is a natural process and, in this instance, this meandering is not threatening any expensive infrastructure. This alternative would combine the benefits of invasive species removals and riparian vegetation restoration with some kind of engineered solution to protect the boat launch sites.

Bioengineering techniques are the preferred option for reducing erosion and improving safety and accessibility at the boat launch sites. Traditional or hardscaping techniques may be required, but would require more evaluation and review. Once Japanese knotweed is controlled along the banks, a

Saratoga Spa State Park Master Plan: Analysis and Alternatives

mix of potted native shrubs could be planted in areas that aren't under sever erosion pressures while bare root stock, poles, and whips could be planted closer to the water with minimal added disturbance to the soil. As an additional bioengineering option, a biodegradable erosion control blanket could be installed and then planted to further protect the banks with a very natural look and result. This blanket would biodegrade over time, replaced by rooted vegetation. Following the restoration, interpretative signage documenting the restoration, invasive species threat and stream ecology, would be installed at site.

The Burl Trail area, which contains one of the two car-top launch sites, is a priority location for stream restoration. The area includes a small gravel parking lot, a launch site consisting of a dirt slide, and a short nature trail in an old agricultural field in various states of ecological succession. Along this section of the Kayaderosseras Creek substantial, but not severe, erosion is occurring which poses problems for streamside trails and the boat launch. This riparian area is also becoming dominated by Japanese knotweed. Restoration plans would consider both native vegetation restoration and bioengineering streambank stabilization.

Geyser Brook Management

Background for Analysis

Currently, information about water quality in the Geyser Brook is limited. Initial surveys show that the creek is impacted by increasing temperatures related to the water impoundment behind the Geyser dam and Coesa pond, as well as the elimination of shade through bank vegetation removal. The elimination of bank vegetation has also accelerated erosion of the creek banks in the Geyser picnic area. Direct input of large quantities of untreated stormwater runoff were noted which can be expected to result in increased sedimentation, increased temperature, increased peak flow volumes, and the introduction of common chemicals and nutrients. In the northern section, upstream of the picnic area, erosion is minimized by abundant stabilizing tree roots holding the streambank soils. Most of the creek in the picnic area appears to have been armored at some time; however, a large erosion area currently exists around an area called the horseshoe, just upstream of the bridge that carries the Geyser Loop Road over the creek. Once the creek crosses under the East West Road, the creek separates into two distinct channels and many side channels as it makes its way to the Kayaderosseras Creek. Erosion in this area is quite common as the stream courses meander across the wide wetland complex. Currently, erosion issues are dealt with on a case by case basis, usually when an important infrastructure resource is threatened. Analysis and recommendations for erosion problems along the brook are discussed below. Analysis and alternatives regarding the impacts to Geyser Brook from stormwater runoff are discussed in the infrastructure section of this chapter.

Alternatives

Alternative 1 Status Quo Erosion problems exist along several sections of Geyser Brook. Undercut banks are fairly common along the length of the creek.

Considerations

- Spot treatment of erosion potentially requires relatively little cost/manpower
- Small problems, left untreated, often turn into large problems
- Larger problems, such as that at the horseshoe, have arisen
- Large problems, in the long run, cost more money and require more manpower to solve

Alternatives	Considerations
	 Soil disturbance can lead to the introduction and spread of invasive species such as Japanese knotweed, which is already on the banks of the creek Accelerated erosion can also lead to increased sediment load beyond the brook's ability for transport, causing the degradation of fish and macroinvertebrate habitat
 Alternative 2 Native vegetation restoration. Erosion in the forest north of the picnic area and to the south in the wetland complex is occurring at natural rates Erosion in the picnic area is occurring at an accelerated pace. Erosion is currently accelerated due to lack of appropriate vegetation adjacent to the brook Native riparian vegetation would be planted along the creek. Once grown, roots will form a natural, protective binding agent to help resist erosion of the streambank Plantings would occur in conjunction with the removal of invasive vegetation along streambank 	 Erosion process would be brought back to more natural levels Establishment of native vegetation benefits wildlife that depends on riparian habitat Vegetation provides the basis of the food web, which benefits fish and macroinvertebrate populations Restoration of vegetation provides an opportunity for interpretation of native riparian vegetation and habitats n a highly used area of the park Thick vegetation would help ward against future establishment of Japanese knotweed and limit the sedimentation of in-stream wildlife habitat Increased riparian vegetation along the creek limit patron access to the creek, visually and
	physicallyVegetation alone is likely not enough to halt erosion at the horseshoe area
 Alternative 3 Selective use of bioengineering streambank stabilization (See Figure 21) Engineered solutions utilizing natural materials and mimicking natural systems to slow water flow protect stream banks, and capture transported sediment in severe erosion areas. Natural materials such as logs and stones are used to redirect hydraulic forces. A series of log or rock vanes would be used to redirect flows away from the bank, providing a more stable center channel flow. 	 Provides more immediate and robust erosion control Once installed, the system is self maintaining Provides opportunity for interpretation of the engineered streambank restoration techniques and the process and consequences of erosion Use of natural materials would reduce aesthetic impact In-stream structures provide additional fish and macroinvertebrate habitat Vegetation provides the basis of the food web, benefitting fish and macroinvertebrate populations Installation would allow for the realignment of the stream section, restoring some lost picnic area This option is more labor and material-intensive

Alternatives	Considerations	
	 Greater up-front cost Heavy machinery would be required for some installation Impact to site users 	
 Alternative 4 Hardscape bank stabilization Traditional engineering solutions to armor stream banks using anthropogenic materials and techniques (i.e. rip rap, rock walls, concrete barriers, etc.). 	 Simple installation, less design considerations, quick project completion Project would halt erosion at project location Simple materials are universally available Elimination of exposed soil would limit potential for Japanese knotweed establishment Entire bank would need to be armored to avoid erosion issues up and downstream of project Project would increase stream velocities, increasing erosion and flooding potential on opposite banks and downstream areas without protection Armoring with non-natural materials would reduce habitat for many species that utilize the riparian or stream habitat Visual impact of non natural materials 	

Preferred Alternative: Combination of 2 and 3 – Native Vegetation and Bioengineering The meandering of streams is a natural process, but in this instance it is threatening an expensive piece of infrastructure, the Geyser Loop Road Bridge. This alternative will combine invasive species removals and riparian vegetation restoration along much of the banks of the Geyser Brook within the picnic area with bioengineering bank stabilization practices along the bend of the horseshoe. Both forms of restoration will involve the removal of Japanese knotweed. Native vegetation establishment will provide the basic protection for relatively minor erosion problems that exist at sites infested with Japanese knotweed, while bioengineering techniques will be utilized to protect areas experiencing severe erosion pressures. The log vanes will become access points for the public on the eastern side of the brook, while the western side of the brook remains in its current, open condition. The natural structures and use of native vegetation will enhance in-stream structure and provide additional organic matter that will benefit fish and macroinvertebrate populations. This site will also become an ideal site for interpretive signage and outdoor classroom discussions of stream dynamics, erosion, and the value of natural stream restoration.

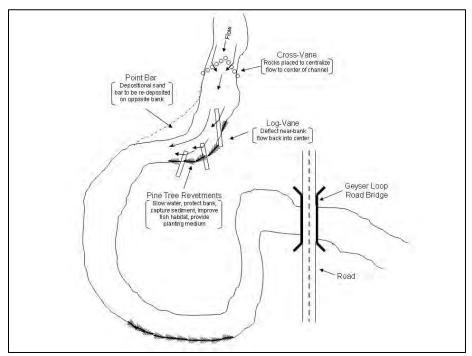


Figure 21 Geyser Brook Erosion Control

Successional Old Field Management

Background for Analysis

Formal management plans for old agricultural fields only exist for fields associated with the Karner blue butterfly. All other former agricultural lands are either being mowed or abandoned on an ad hoc basis. Abandoned agricultural lands are being allowed to succeed back to shrub and forest habitat. Such areas include small (< 1 ac.) openings in forests, but primarily consist of a series of large fields near Old Post Rd. and Northline Rd. in the southern portion of the park.

Alternatives	Considerations
Alternative 1 Status Quo.	 Cost is minimized Cropland and fields reverting back to shrubs and forests provides additional habitat for shrub and forest dwelling wildlife Forest stands are more efficient sinks for carbon dioxide (CO2), which improves the park's ability to sequester greenhouse gasses and reduce the park's overall carbon impact Throughout the northeastern United States, the percentage of land area devoted to forests continues to increase while the percentage of land area devoted to grasslands decreases. Preserving grasslands could be viewed as preserving a dwindling landscape type in terms of aesthetics, history, and habitat Grasslands, which are an increasingly uncommon habitat type, present a unique visual setting for many people Grassland fields being lost to succession are habitat for a different suite of wildlife species that do not principally utilize the forest environment
Alternative 2 Maintain all current fields through occasional mowing.	 Preserves opportunities to protect species and interpretive opportunities that are unique to grassland areas Cooperative agreements could be entered into with the Natural Resources Conservation Service (NRCS) to pay for appropriate management of these grasslands Cooperative agreements could be sought for management by a local farmer, reducing or eliminating costs to the park There is an additional cost (monetary and environmental) associated with mowing large areas of grasslands Fields are far from current park operating areas

Alternatives	Considerations
	 Ticks, particularly those responsible for carrying Lyme disease, are more common in open areas with tall grasses Grassland maintenance could perpetuate/increase tick risk Opportunities to sequester additional CO2 through the establishment of more trees would be lost Many of these areas are wetlands, making management more difficult Mowing has a negative impact on the wetlands' plant communities, which play a
	crucial role in providing a wetland's documented functions and benefits
Alternative 3 Maintain only large fields in southern portion of Park.	 clocumented functions and benefits Large scale grassland habitats would remain intact, preserving opportunities to protect species and interpretive opportunities unique to large grassland areas Cooperative agreements could be entered into with the NRCS to help pay for appropriate management of these grasslands Cooperative agreements could be sought for management by a local farmer, reducing costs to the park and providing a source of hay for a local farmer Alleviates the difficulty of maintaining small fields in forests Allows for the future cultivation of these fields (i.e. victory gardens, native seed cultivation, etc.) Without agreements with the NRCS and/or a local farmer, additional costs (monetary and environmental) are still associated with mowing the remaining large areas of grasslands Logistically these areas pose a maintenance difficulty due to their distance from standard park operating areas Risks associated with the maintenance of Lyme disease areas These southern fields are the major areas mapped as wetlands; therefore, the management of these lands is still difficult. The negative impacts associated with mowing a wetland still remain
	 Opportunities to sequester additional CO2 through the establishment of more trees would be lost

Alternative 4 Maintain only Burl Trail field.	 The existence of a parking area makes mowing this area much easier The trails already located on this parcel provide a ready space for interpretation of grassland and successional ecosystems and processes Allowing the other large fields to succeed to forest will provide an improved buffer to the Kayaderosseras Creek Substantial increase to the number of trees in the park, thus increasing the park's capacity to sequester CO2 Open visual environment provided by yearly mowing may be desirable for many trail users Maintaining this area as grassland, without an adequate buffer of woody vegetation along the Kayaderosseras Creek would lead to increased streambank erosion Additional cost (monetary and environmental) associated with mowing large areas of grasslands Distance from standard park operating areas There is a risk that maintaining habitat for
	ticks, a potential carrier of Lyme disease
Alternative 5 Allow all old agricultural fields to revert to forest.	 Requires the least maintenance and cost for the Park Buffers along the Kayaderosseras Creek would be almost complete, resulting in improved water quality Maximizes the number of trees in the park, thus increasing the park's capacity to sequester CO2 to the greatest extent The persistence of rootstock throughout the floodplain of the Kayaderosseras Creek would work to maintain the creek in its current course and could eventually lead to the development of a large riparian wetland complex with numerous beneficial functions and benefits Opportunities to preserve and interpret a diminishing habitat type, supporting unique flora and fauna species, would be lost

Preferred Alternative: Alternative 3 - Maintain only large fields in southern portion of Park The original purchase of these agricultural fields was based largely on their location surrounding the Kayaderosseras Creek, and the protection of the agricultural heritage of the area. The carbon

Saratoga Spa State Park Master Plan: Analysis and Alternatives

sequestration capabilities of the area will be diminished when compared to a forest of the same size, but will be greater than that of a lawn area. Impacts from the act of operating the mowing equipment will be minimized by mowing this area, at most, once a year. A local farmer will be sought to cut the fields. OPRHP will seek to enter into a lease agreement in where the farmer can keep the hay in exchange for performing the mowing after August 1st of each year. If no such agreement can be reached, the park's operations staff will maintain the grassland nature of the fields by performing mowing once every three to four years.

Park management will ensure that the fields' agricultural character will remain intact and the largest grassland complex in the park will remain viable to grassland bird species and available to the public to appreciate and enjoy. The maintenance regimes described above will be accomplished in such a way as to minimize environmental impacts.

Federally Endangered and State Threatened Butterfly Habitat Area

Background for Analysis

As mentioned previously in this document, two species of protected butterflies, the federally endangered Karner blue butterfly and the state threatened frosted elfin butterfly, inhabit several specific old field areas where wild blue lupine grows in the park. Since wild blue lupine is the only food source for their caterpillars, these fields must be maintained for these two butterfly species to survive at this site. Current permitted uses at the site include walking and leashed dog walking on trails throughout the parcel and habitat.

Under current management agreements with the New York State Department of Environmental Conservation (DEC) and the National Fish and Wildlife Service (NFWS), these fields, approximately 20 acres, are mowed once a year in order to maintain habitat for these butterflies. Mowing prevents woody vegetation from invading the site and overcrowding or overshadowing plants such as wild blue lupine, which are critical to the butterflies' survival. Despite this management regimen, butterfly numbers have continued to fall. Butterfly numbers are small enough that even seemingly insignificant impacts, such as a temporary disturbance of a lupine patch, could have a disproportionately large impact on the overall population. Park staff work to limit, to the greatest extent possible, any disruptions to the butterflies' life cycles.

Alternatives	Considerations
Alternative 1 Status Quo.	 Mowing the fields once a year maintains the open nature of the fields Possibility for the continuance of the butterflies' habitat and, presumably, the butterfly populations that currently exist there Mowing, although limiting woody vegetation growth, does not remove the built up biomass (a thick mat of thatch that makes it very difficult for wild blue lupine or other important habitat plants to germinate) that is left once the material is cut

Alternatives	Considerations
	 Incomplete mowing of the area has allowed woody vegetation to creep in from the edges and treed islands to become established within the fields decreasing the maintained area over time It is assumed that if this management regime is continued, although it would possibly be delayed, the extirpation of these butterflies
	from the park is inevitable
Alternative 2 Restore all habitat within the bounds of current fields.	 Expands the area suitable for these endangered butterfly species, presumably making it more likely that their population would persist and grow in the Park Allows for a one-time removal of most biomass and ground thatch, improving conditions for the necessary host plants Restoring habitat is expensive The one-time removal of thatch would aid the desired host plants only for a limited time Utilizing mowing as the primary method for maintaining the overall meadow ecosystem will eventually lead to a build-up of thatch that will threaten the restoration Since woody vegetation has crept into the fields, reducing their overall size, limiting the restoration to these fields may not provide enough habitat to support a viable population of butterflies Successful restoration may require the limitation of patron use of the endangered butterfly habitat
Alternative 3 Restore all habitat within the bounds of the Habitat Management Units outlined in the Draft Management Agreement with the DEC.	 Provides further expansion of the area suitable for these endangered butterfly species, presumably making it even more likely that their population would persist and grow in the park Restoration beyond the edges of the current fields would allow for a one-time removal of most biomass and ground thatch, improving conditions for the necessary host plants to expand into a larger area By restoring a larger area, habitat created in the interior of the site would be buffered by habitat on the edges, protecting it from impacts and allowing that habitat to persist longer

• Since these boundaries were set by taking

Alternatives	Considerations
	 into account population goals for the Karner blue butterfly at this site, it is likely that this area is big enough to support a viable population of butterflies Maximizes the area restored for butterfly habitat while maintaining the current forests separating habitat management units. These forests provide protection; in the event that one population in a given habitat management unit is removed, individuals from another habitat management unit can move in and recolonize This option would be more expensive as it involves more area The one-time removal of thatch would aid the desired host plants only for a limited time Utilizing mowing as the primary method for maintaining the overall meadow ecosystem will eventually lead to a build-up of thatch that will threaten the restoration
	 Successful restoration may require additional limitation of patron use of the endangered butterfly habitat
Alternative 4 Restore the entire site for butterfly habitat.	 This would expand the area suitable for these endangered butterfly species to the greatest extent possible, presumably making it even more likely that their population would persist and grow in the park
	• The expansion of a restoration throughout th entire parcel would allow for a one-time removal of most biomass and ground thatch, improving conditions for the necessary host plants to the largest area
	• By restoring a larger area, habitat created in the interior of the site would be buffered by habitat on the edges, protecting it from impacts and allowing that habitat to persist longer
	 This option would be the most expensive as it involves the entire parcel The one-time removal of thatch would aid the desired host plants only for a limited time.
	 the desired host plants only for a limited time Utilizing mowing as the primary method for maintaining the overall meadow ecosystem will eventually lead to a build-up of thatch that will threaten the restoration The removal of buffering forest habitat from

Alternatives	Considerations
	between the three habitat management units, each with a different sub-population of butterflies, would make the overall population susceptible to a catastrophic incident
	• Areas of non-habitat, more suitable for recreation activities, would be removed in this alternative

Preferred Alternative: Alternative 3 - Restore all habitat within the bounds of the Habitat Management Units outlined in the Draft Management Agreement with DEC

This alternative conforms to the current draft agreement with DEC, which was based on expert knowledge of the site and the habitat requirements of the endangered butterflies. This plan will maximize the suitable habitat for the endangered butterflies while attempting to buffer the overall population from a major catastrophic event. This alternative also allows for the continued use, although reduced, of the parcel and habitat by park visitors.

Invasive Species Management

Background for Analysis

Invasive species are usually defined as non-native plant or animal species that adversely affect the habitats they invade economically, environmentally or ecologically. Although native species can be considered to be invasive in certain circumstances, this usually results from some human impact on the environment as opposed to the physical or genetic traits of the invading organisms. These species, due usually to a lack of competition or predation, can develop extremely large populations, causing severe adverse effects such as a loss of wildlife habitat, reduction of crop yields, personal injury and direct death of other plants and animals.

Currently there are no known populations of invasive animal species inhabiting Saratoga Spa State Park, however, many different invasive plant species do exist in the park. All of these species represent a threat to the native plants and animals of the park. One species, Japanese knotweed, also poses a threat to the stability of stream banks. Currently, the park has limited resources to devote to invasive species management beyond mowing.

Alternatives	Considerations
Alternative 1 Status Quo	 Low cost/staff hours required Natural habitats and park operations will continue to be impacted by invasive species
Alternative 2 Work to eradicate and preclude all invasive species All known occurrences of invasive species in the park would be identified and control work would be initiated to remove them from the park. This plan would restore all of the environs of the park to a natural state with only native species present.	 Removal of these species, followed by native restoration of the area, would result in improved habitat values and functions Once complete, this action would protect the environs of the park to the greatest extent possible If possible at all, high cost of time, money and labor are incurred There are currently no successful eradication techniques known for some invasive species found in the park Some of these species occur in areas (i.e. wetlands) where, under current management guidelines, more harm than good would come from removing the invasive species Constant effort required to keep invasive species from re-invading the park
Alternative 3 Develop an Early Detection/Rapid Response (ED/RR) plan to eradicate and preclude new or recent infestations Some of the invasive species have been present in the park for a long time and exist in large numbers, while others have only recently appeared in the park and currently exist in relatively small numbers. Most of the "historic" invasions are either beyond the agency's ability to control or their effects have already been realized by the ecosystem. New invasions have the potential to spread well beyond their current state in the park and lead to unknown levels of impacts. Under this alternative, park staff would work to eradicate current, known recent invasions and to preclude the establishment of new invasive species.	 Removal of these species, followed by native restoration of the area, would result in improved habitat values and functions Invasions of the parks environs by recent or yet undetermined invasive species would be controlled, reducing the impacts from invasive species or in some cases removing the species before they have a chance to have a measureable impact on the environment Managing invasive species at the early stages of introduction tends to be more successful and less demanding than managing well-established populations of invasive species Limited staffing resources would be targeted where they could be most effective Controlling invasive species, even in the initial stages of exposure, can be difficult and resource intensive Those species determined to be in the initial stages of invasion would have to be eradicated. Then, effort would be required to educate park staff and regularly survey the park for invasive species Once a new invasive species occurrence is discovered, parks resources would be utilized to eliminate the threat

Alternatives	Considerations
	• Successful management of some invasive species requires extensive coordination with landowners beyond the park's boundaries
Alternative 4 Work to eradicate and preclude all invasive species from sensitive habitats In lieu of total control of all invasive species throughout the park, this alternative would focus control efforts on areas where invasive species could have a serious negative effect on a sensitive habitat. The two areas that meet this standard are the endangered butterfly habitat along Route 9 and the perched swamp, white oak swamp in the Hemlock Trail area. In terms of control efforts, these two areas represent relatively small, manageable areas where the presence of invasive species poses a serious threat to the quality of a rare, sensitive habitat.	 Removal of these species, followed by native restoration of the area, would result in improved habitat values and functions Considerable resources would be saved when compared to managing invasive species across the entire park Focusing efforts at these locations would help to ensure that these habitats remain and/or improve their condition if invasive species are currently present Invasive species impacts have been documented at the endangered butterfly habitat but have not yet been documented at the perched swamp, white oak swamp This plan would not take into account the need to manage invasive species with other negative impacts such as Japanese knotweed and its streambank destabilization potential Continued successful management of some invasive species requires extensive coordination with landowners beyond the park's boundaries
 Alternative 5 Work to eradicate and preclude all invasive species with reasonable chances of success This alternative would focus efforts to eradicate invasive species on those species where the park has the greatest chance of success. As new technologies and strategies become available, additional action could be taken to manage those species that were originally deemed to be unmanageable. 	 Removal of these species, followed by native restoration of the area, would result in improved habitat values and functions Efforts to control an invasive species that are known to be futile would not be undertaken, providing for the most efficient utilization of limited resources allocated for invasive species management Some of the most pervasive and difficult invasive species to control are also those with the greatest environmental impact

Preferred Alternative: Combination of 2, 3, and 4 – Work to eradicate all invasive species with a focus on eradicating those within sensitive habitats and developing an early detection/rapid response system to ward against new introductions.

An integrated plan for invasives species control is the long term goal. Short term efforts will focus on eradication of invasives from sensitive habitats, eradication of those invasions where there is a reasonable change of success, and prevention of new infestations.

Recreation Resource Development/Management

Visitor Center

Background for Analysis

Saratoga Spa State Park is a popular tourist destination but there is currently no way for visitors to orient themselves within the park. Patrons usually go to the Administration Building to get information about the park. This is inconvenient because people are already in the park yet have no idea where to go for information. There are cultural and historic facets that are overlooked and no central location to find information about the park museums and performance venues. A visitor center would provide a centralized source of park information, and could potentially house a park gift shop.

Alternatives		Considerations
Alternative 1 S	Status Quo	 The only way-finding sign is located along East West Road Way-finding maps are only available at Administration building, in the center of the park Park partner information is hard to find Park layout is confusing to patrons Missed opportunities for additional revenue No additional resources needed
Alternative 2 F	Roosevelt II.	 Close proximity to current park office Re-use of existing historic structure is sustainable Too far into the park to be effective Other uses for this building may be more appropriate
Alternative 3 I Bathhouse	Lincoln	 Ideal location at main entrance to the park Re-use of existing historic structures is sustainable Cost of renovation would be less than in a vacant building Can be combined with mineral water museum
Alternative 4 C parking area.	Crescent St.	 New building required Location not convenient for entering park Conflicts with off leash dog area and traffic to the harness track Minimal parking Busy road crossing

Alternativ	es	Considerations
Alternative 5	Warming hut.	 Underutilized area Re-use of existing structures is sustainable Other uses for building may be more appropriate Inconvenient location Conflicting uses in winter

Preferred Alternative: Alternative 3, Lincoln Bathhouse

The Lincoln Bathhouse makes the most sense for a visitor center due to its close proximity to the park entrance, its location along Route 9, and nearby parking. Existing space in the lobby of the building could be utilized as a visitor center. With minor renovations, this space could be turned into a useful space for the park. Plans include the improvement of the grounds around the front of the building to make the site more inviting to patrons including new walking paths, interpretive signage, tree and shrub plantings and park benches. Existing trees will be interpreted as an educational tool with small plaques erected to identify the species. The Lincoln Bathhouse is a contributing structure of the National Register listing.

Picnic Areas

Picnicking in the park takes place at the Geyser picnic area or one of the eight rental shelters. On a smaller scale, areas around the Peerless pool playground are popular, as are the main mall or on a blanket beside a shade tree. The Geyser picnic area and playground operates on a first-come, first-served basis and has many individual picnic sites with tables and grills. The shelters may be reserved by groups in advance through annual lottery drawing or by contacting the park office. Of the eight picnic pavilions in the Park, six can accommodate 75 people and two can accommodate 250 people. During the peak summer season, all of the rental shelters are fully booked on weekends, and many are reserved by day camps and other groups on weekdays.

Picnic Areas - Non Rental Picnic Facilities

Background for Analysis

Non rental picnic facilities currently exist in the Geyser Brook area of the park. Other locations within the park may have potential for additional non rental picnicking.

Alternatives	Considerations
Alternative 1 Status Quo.	 Picnicking use concentrated in southern end of park Limited options for small groups/families
Alternative 2 Create new non rental picnic area near Victoria pool.	 More options/capacity for picnickers. May not be enough existing parking to support use. Use may conflict with tennis players and Victoria pool users.

Alternatives

Considerations

• Additional construction and maintenance

Preferred Alternative: Alternative 1 – Status Quo

The Victoria pool area is already heavily used by pool patrons and tennis players and the addition of a new use may conflict with these uses. It would also add pressure to the Victoria pool and administrative building parking lots, which do not meet the current parking demands.

Picnic Areas - Playgrounds

Background for Analysis

The park currently has two playgrounds - one at the Peerless pool, the other at the Geyser Brook picnic area. The Peerless playground, constructed in 2008, is in good condition but has no shade in the immediate vicinity. The Geyser Brook playground, built in the mid 1990's, and rehabilitated in 2005, is not in as good a condition and is outdated. The Coesa, Hathorn, and Orenda picnic areas, located on the western side of the park, are not in the vicinity of these playgrounds.

Alternatives	Considerations
Alternative 1 Status Quo.	 No additional construction cost Inaccessible to some picnic areas Condition variable
 Alternative 2 Improvement Recommendations. Install shade structure next to the Peerless playground Replace Geyser picnic area playground. Install a new playground in the north end of the Hathorn lawn to serve the Hathorn, Coesa and Orenda pavilions 	 Playground access from west side picnic areas would be established Cost of new playground, replacement of Geyser playground and shade structure Safer playground experience More playground options for park patrons Modernize to current ADA guidelines

Preferred Alternative: Alternative 2 – Improvements

Playground improvements will enhance the experience of park patrons, provide a safer play experience, and expand opportunities for more park patrons to use playgrounds associated with the picnic areas.

Picnic Areas - Geyser Comfort Station/Concession Stand

Background for Analysis

The Geyser comfort station is in need of rehabilitation. In addition to rest rooms, the building contains a defunct concessions area.

Alternatives	Considerations
Alternative 1 Status Quo.	 Low cost Underutilized building space Building will continue to deteriorate, increasing future maintenance and rehabilitation costs
Alternative 2 Convert old concession stand to seasonal nature/information center, implementing green technology. Rehabilitate comfort station.	 Utilization of vacant building space Creation of park amenity Opportunity to use green technologies for building rehabilitation Better patron service Cost

Preferred Alternative: Alternative 2 - Convert old concession stand/Rehabilitate comfort station.

A multi use programmable space will enhance opportunities for education and interpretation in a popular, well used area of the park. Adaptive reuse of vacant buildings is consistent with the Saratoga Spa State Park Master Plan vision and goals. The building's small size makes it a good first candidate for sustainable rehabilitation utilizing green technologies, which will foster the park's sustainability goals. Rehabilitation of the comfort station will provide better patron service.

Picnic Areas - Karista Pavilion

Background for Analysis

Located in a particularly low area of the Geyser brook floodplain, this pavilion is subject to periodic flooding and drainage problems. The pavilion is inconveniently located far from both the Karista comfort station and parking lot. In addition, the comfort station is in very poor condition. The combination of these factors results in the Karista being considered for removal and allowing the picnic area to revert to natural wetland vegetation.

Alternatives	Considerations
Alternative 1 Status Quo.	 No new construction cost but ongoing problems with flooding will continue to be a costly maintenance issue Unpopular with patrons because of wet areas
Alternative 2 Rehab comfort station, attempt to improve drainage in the Karista area, and relocate pavilion to be closer to the comfort station.	 Would not need to build new comfort station or parking lot Due to the nature of the location, the flooding and drainage problems would likely persist
Alternative 3 Demolish comfort station and continue to rent the pavilion. Patrons will use the Geyser Creek bathrooms.	 Would keep established picnic area Cost would be lower than demolishing both structures Pavilion would continue to generate revenue

Alternatives	Considerations
Alternative 4 Relocate the picnic pavilion to a more appropriate area in the park.	 The structure would continue to be utilized. Elimination of maintenance problems and need for drainage Area could be re-established as a wetland
Alternative 5 Rebuild comfort station on the other side of the creek, to serve the playground and picnic area.	 Area could be re-established as a wettaild Provision of facilities in a more patronized area of the park Cost of construction

Preferred Alternative:

Short Term:	Alternative 3 – the comfort station will be demolished and the pavilion
	will continue to be rented in its current location.
Long Term:	Alternatives 4 and 5– the pavilion will be relocated elsewhere in the

park and a comfort station built on the other side of the creek.

This particularly low area of the floodplain of Geyser brook is an undesirable area for permanent structures, because any buildings located there will be subject to flooding and drainage issues. Additional wetland area and wildlife habitat would benefit the park. The Master Plan identifies appropriate locations for new picnic areas elsewhere in the park.

Picnic Areas - New Rental Picnic Facilities

Background for Analysis

Eight rental picnic pavilions currently exist in the park. Used consistently throughout the summer season, they generate revenue and draw patrons to the park. Use records indicate that demand would support additional rental facilities.

Alternatives	Considerations
Alternative 1 Status Quo.	 No new development impacts to open space Existing facilities do not meet current demand
Alternative 2 Seasonal Rental Tents adjacent to Coesa, Ferndell and Columbia picnic areas.	 Share comfort stations and parking lots with existing pavilions Low impact Low cost Increased maintenance (putting tents up and down annually) Increases available pavilion space
Alternative 3 Construct new pavilions adjacent to Coesa, Ferndell and Columbia picnic areas.	 Share comfort stations and parking lots with existing pavilions Permanent structures more efficient and sturdier than tents Expansion of development in park Increased available pavilion space

Alternatives	Considerations
Alternative 4 Construct new pavilion and comfort station to the east of the Peerless Pool near the playground.	 Located close to activity areas (pool, playground) Existing parking available Expansion of development in park Increased available pavilion space

Preferred Alternatives

Short Term:Alternative 2 – Seasonal Rental TentsLong Term:Alternatives 3 and 4 – New Pavilions

Due to its lower relative cost and simplicity, alternative 2 is recommended for the near future. Alternatives 3 and 4 are recommended as long term solutions as funds become available. Although the construction of new pavilions will increase the overall developed area of the park, the proposed locations will utilize existing infrastructure and facilities, minimizing the impact of that development. The park will benefit from increased ability to meet patron needs.

Picnic Areas - Accommodation of Picnic Groups up to 500 people

Background for Analysis

Six of the eight picnic pavilions in the park accommodate 75 people and the two accommodate 250. The public has expressed an interest in a facility to accommodate larger groups of up to 500 people.

Alternatives	Considerations
Alternative 1 Status Quo.	• No shelter to support large group needs
Alternative 2 Construct new pavilion designed to accommodate large groups.	 Permanent structure would be more convenient and sturdier than a tent Can also be used for smaller groups Possible sporadic use Cost of new construction New development in park Increased parking area needed
Alternative 3 Expand Orenda pavilion to accommodate large groups.	 Existing comfort station and parking lot Adaptive reuse of existing facilities is sustainable No new park development Cost of construction
Alternative 4 Rent out a tent for large groups, to be set up to the east of the Peerless Pool parking lot.	 Existing comfort station and parking lot Could be added and removed as needed Comparatively low developmental impact on park Close proximity to Peerless Pool amenities Increased labor, as tent would need to be assembled and taken down

Preferred Alternative: Alternative 4 – Rental Tent This alternative is preferred due to its flexibility, low cost, and low impact.

Picnic Areas - Softball field/backstop at the Orenda picnic area

Background for Analysis

There is no softball field and backstop at this picnic area and there is demand for another field.

Alternatives	Considerations
Alternative 1 Status Quo.	• No cost for new construction
	Lack of facilities for park patrons
Alternative 2 Add softball field and backstop to	Cost of new construction
Orenda picnic area.	• Additional maintenance of new facility
	Provision of expanded recreation resources
	for park patrons

Preferred Alternative: Alternative 2 – Add softball field and backstop to Orenda picnic area This alternative will meet a demand for more softball facilities in the park and provide better service to park patrons.

Picnic Areas - Horseshoe pits at Ferndell, Hathorn, Karista, and Peerless pavilions

Background for Analysis

There are currently no horseshoe pits at these picnic areas but there is a growing demand for more horseshoe pits in the park.

Alternatives	Considerations
Alternative 1 Status Quo.	• Lack of facilities for park patrons
Alternative 2 Add horseshoe pits at Ferndell, Hathorn, Karista and Peerless pavilions.	 Additional maintenance of new facilities Provision of expanded recreation resources for park patrons Karista pavilion may be taken down at a future time
Alternative 3 Add horseshoe pits at Ferndell Hathorn and Peerless pavilions.	 Additional maintenance of new facilities Provision of expanded recreation resources for park patrons

Preferred Alternative: Alternative 3 – Add horseshoe pits at Ferndell Hathorn and Peerless pavilions

This alternative will meet a demand for more horseshoe pits at picnic pavilions in the park. No new pit is recommended at the Karista pavilion because it may be relocated in the near futures.

Picnic Areas - Run electricity to the Karista and Peerless pavilions

Background for Analysis

There is currently no electricity at these two picnic pavilions. They would both be more attractive to group rentals if electricity was available. The Karista pavilion may be relocated or removed.

Alternatives	Considerations
Alternative 1 Status Quo.	 No cost for new electric service Pavilions would remain limited in scope of groups they could accommodate
Alternative 2 Run electricity to Karista and Peerless pavilions.	 Cost of new electric service Better service for park patrons Adds versatility to the pavilions for group rentals that need electricity Karista pavilion may be moved or removed
Alternative 3 Run electricity only to Peerless pavilion.	 Cost of new electric service Better service for park patrons Adds versatility to the Peerless pavilion for group rentals that need electricity Does not add electricity to pavilion that may be removed or relocated.

Preferred Alternative: Alternative 3 – Run electricity only to Peerless pavilion. This alternative provides the flexibility of having another pavilion with electric service for groups that require it. At the same time it eliminates the cost of running electricity to a pavilion that may be relocated or removed.

Picnic Areas - Make water available at all pavilions

Background for Analysis

Water is not available at all picnic pavilions. There is a need for water for most of the groups that rent the pavilions.

Considerations

Alternative 1 Status Quo.

No cost for new water service
Pavilions would remain limited in scope of groups they could accommodate

Saratoga Spa State Park Master Plan: Analysis and Alternatives

Alternatives	Considerations
Alternative 2 Run water to all pavilions.	 Cost of new water service Better service for park patrons Adds versatility to the pavilions for group rentals that need water Karista pavilion may be moved or removed
Alternative 3 Run water to all pavilions except Karista.	 Cost of new water service Better service for park patrons Adds versatility to the pavilions for group rentals that need water Does not add water service to pavilion that may be removed or relocated

Preferred Alternative: Alternative 3 – Run water to all pavilions except Karista

This alternative provides the flexibility of having more pavilions with water service. At the same time, it eliminates the cost of running water to a pavilion that may be relocated or removed.

Tennis

Tennis - Opportunities at Saratoga Spa State Park

Background for Analysis

There are currently four clay and four asphalt tennis courts in the park. The clay courts are very popular but require regular maintenance. Volunteers from the park's Friends group, **The Friends of Saratoga Spa State Park**, perform all the routine court maintenance at the clay courts. The asphalt courts are in very poor condition. They are no longer level and have cracks in the asphalt. Players will almost always wait for an available clay court rather than use an open asphalt court. Patrons may come here specifically for the clay courts since asphalt courts are readily available elsewhere in the community.

Alternatives	Considerations
Alternative 1 Status Quo.	 The park would incur no new costs Condition of asphalt courts essentially reduces the number of playable courts in the park to four Long waits for the clay courts during peak play times
Alternative 2 Replace the existing asphalt courts with clay.	 Reduce the wait time for an open court Double the number of the popular clay courts in the park Clay courts are expensive to install Ongoing maintenance requirements to maintain a good standard of play Volunteer group does not have the ability to

Alternatives	Considerations
	provide the labor for maintaining four additional clay courts
Alternative 3 Rehabilitate the existing asphalt courts to improve play conditions.	 Resurfacing the asphalt courts would be much less expensive than replacing them with clay Asphalt courts require much less regular maintenance than clay Two different types of surfaces available for play Extended tennis season and all-weather play
Alternative 4 Install additional tennis courts in a new location in the park.	 Additional tennis courts would lower the demand on the existing clay courts and increase tennis opportunities The existing asphalt courts would still need repair or would be abandoned A new location would mean the loss of an open space or the current use of the space

Saratoga Spa State Park Master Plan: Analysis and Alternatives

Preferred Alternative: Alternative 3 - Rehabilitate the existing asphalt courts to improve play conditions

Alternative 3 is the preferred alternative. Although the clay courts are extremely popular, they are very expensive to install, require an annual investment by the park for seasonal preparation and would add extra work for the park maintenance crew. Rehabilitating the asphalt courts will be far less expensive than installing clay and by improving the play conditions it will offer the tennis community two types of play surfaces. Asphalt courts also require far less ongoing maintenance. Installing new tennis courts in a new location does not resolve the problem of what to do with the existing asphalt courts. It is not felt that there is a need for more than eight courts to supply the demand for tennis in the park.

Tennis - Install lighting at the tennis courts to extend the hours of play

Background for Analysis

There is currently no lighting for nighttime play at either the clay or asphalt tennis courts.

Alternatives	Considerations
Alternative 1 Status Quo.	 The park would incur no new costs Courts are routinely used until dark with no opportunity to extend play beyond daylight hours
Alternative 2 Install lighting for all tennis courts until 10:30 PM.	 The availability of courts would be increased by several hours each day Lighting eight tennis courts would produce a significant amount of light pollution

Alternatives	Considerations
	 Installation of lights and electricity required for eight courts would be costly No regular demand for eight lit courts Lights on a timer would waste electricity when no players were using the courts
Alternative 3 Install lighting for only the clay courts, until 10:30 PM.	 The four clay courts are used more than the asphalt and their availability would be increased by several hours each day Installation of lights and the electricity required for four courts would be costly Lights on a timer would waste electricity when no players were using the courts No nighttime play opportunities on the asphalt courts
Alternative 4 Install pay lighting on two clay courts, until 10:30 PM, with future light additions possible.	 The clay courts are used more than the asphalt The availability of two clay courts would be increased by several hours each day The park would not have to pay for the electricity to run the lights The pay lighting would ensure that electricity would only be used when there was a demand for nighttime play Pilot project starting with only two lit courts, the park could gauge use and possible returns on the pay lighting system and then decide on any other light additions Cost of installation of lighting, even for just two courts, would be expensive

Saratoga Spa State Park Master Plan: Analysis and Alternatives

Preferred Alternative: Alternative 4 - Install pay lighting on two clay courts, available until 10:30 PM, with future light additions possible

This alternative permits the park to start with a smaller investment and expand if necessary. If two lit courts meet the demand for extended play time, then no additional lights will be required. Charging for use of the lights reduces operating costs and limits waste of electricity. Unnecessary light pollution will be mitigated by ensuring the proper positioning of the lights and a timer system will limit the use of lighting when not needed.

Tennis - Create and adopt a landscape plan for the tennis courts

Background for Analysis

At present there is no landscape plan specific to the tennis courts. The park's maintenance forces perform the lawn maintenance in the area. The Friends of Saratoga Spa State Park provide some

Saratoga Spa State Park Master Plan: Analysis and Alternatives

potted plants seasonally and have improved the entrance to the clay courts with paving stones to reduce mud. Poison ivy, growing up the fence that encloses the tennis courts, is a problem. Several large pines adjacent to the asphalt courts drop needles and pitch onto some of the courts.

Alternatives	Considerations
Alternative 1 Status Quo.	 The park would incur no new costs Current approach to managing the aesthesis of the area takes away from the overall experience of the tennis player The problems of poison ivy and falling pine pitch will remain
Alternative 2 Create and adopt a landscape plan, appropriate to the historic character of the area, with recommendations for installing paths from the parking lots, planting new vegetation and pruning/removing problem plants and trees.	 The overall aesthetics of the area would improve Recommendations for correcting current landscape problems would be implemented The paths would provide tennis players a way to access the courts without walking the road shoulder or cutting through lawn areas Cost of implementing a landscape plan A new landscaped area would add more work for the small park "flower crew"
Alternative 3 Prune and remove problem trees and plants, but install no additional landscaping or paths.	 The poison ivy and pine pitch problems would be corrected Park forces, at a low cost to the park, could correct these problems Costs of installing paths and maintaining plantings could be avoided. No additional work would be created for the "flower crew" Current approach to managing the aesthesis of the area takes away from the overall experience of the tennis player There is no designated path to the tennis courts. Players are forced to walk on the road shoulder or cut through lawn areas

Preferred Alternative: Alternative 2 – Develop and adopt a landscaping plan

A landscape plan that is appropriate to the historic character of the area, and which could be implemented in phases as staff size and funding permit, is preferred. Use of species in plantings that require little maintenance is also be preferred. Installing a path from the Administration parking area is recommended since that is where the majority of tennis players park. Park forces will be able to remove problem trees and plants without a landscape plan. If the implementation of other improvements to the area increases use of the tennis courts and more players begin using the Victoria Pool parking area, a path connection could be considered in the future.

Disc Golf Course

Background for Analysis

There is currently no disc golf course located within the park. There has been a proposal written by an outside consultant to design and construct a new course near the Peerless Pool complex. The proposal is for an 18-hole course, most of which would be in the open areas around the pool, however, some of the course was sketched out to utilize the wooded hillside behind the pool. There is a lot of unused space around the complex that can be assigned to recreation uses.

Alternatives	Considerations
Alternative 1 Status Quo.	 This area of the park has the potential for many uses There is a new playground in the area with the potential for additional pavilions and activities The large lawn area to the east of the pool complex is used as a parking area during large events at SPAC This area is used as an informal gathering area as well as an area for formal events, when tents are erected several times during the year There are a few running events that also utilize this section of the park for their races This is a large area that sees many uses, but all of these uses are of a very temporary nature, allowing this space to accommodate more activities
 Alternative 2 Provide an 18-hole disc golf course. An 18-hole disc golf course could be designed and installed in the location around the Peerless Pool Complex. The course could be run by the state or could be run as a concession. 	 Could increase use of an underutilized area of the park during slower times Existing restrooms and parking located nearby Increased park patronage Disc golf players would gain a lot of enjoyment from other uses at the park

Alternatives	Considerations
Alternative 3 Develop a 9-hole disc golf course. A 9-hole disc golf course could be designed and installed in the location around the Peerless Pool Complex. The course could be run by the state or could be run as a concession.	

Alternatives	Considerations
	• Use of this area would provide fewer reduced
	mowing opportunities

Preferred Alternative: Alternative 3 - Develop a 9 hole disc golf course

The addition of a disc golf course to Saratoga Spa State Park is desirable. There is appropriate space for this use in the area around the Peerless Pool complex. The 9 hole course is the preferred alternative because of the lower impact to natural resources and fewer conflicts with adjacent activities such as trails and existing races.

Saratoga Performing Arts Center (SPAC)

Background for Analysis

SPAC is an important component of the cultural resources offered at Saratoga Spa State Park. SPAC is an independent 501(c)(3) organization that operates the performing arts facility under a lease agreement with OPRHP. It is the goal of the Master Plan to:

- support SPAC's mission to cultivate, promote, foster, sponsor and develop among its members and the community at large, appreciation, understanding, and love of the performing arts, and,
- to promote a sustainable future for the arts center through reduced energy consumption, waste reduction, recycling programs and natural resource conservation.

Although SPAC is an important cultural program, its operations create management issues for the surrounding park. Large crowds require OPRHP personnel for parking and directional assistance, crowd control, security and clean up. Litter is a large factor during and after some concerts and requires dedication of park personnel that could be otherwise directed.

Physically, the concerts at SPAC impact the park mostly in the need for parking and with excess litter. At peak times cars are parked in inappropriate places including lawn areas that are severely affected by wheel ruts, compaction and lawn destruction. Other physical impacts include destruction of park vegetation and erosion of stream banks due to patrons not staying on the trails and bridges, and damage to park resources from vandalism and carelessness.

As stated in the goals of this master plan, Saratoga Spa State Park will set an example in sustainable operations. SPAC is a key part of that goal as it is one of the prime contacts that the public has with the park.

Alternatives	Considerations
Alternative 1 Status Quo.	Inadequate parking facilities
	• Impact on park personnel and infrastructure
	• Important cultural facility and park partner
	• Draw of park patrons
	• Litter around park after concerts
	 Impact to lawn areas from parking
	Recycling program not in place

Alternatives	Considerations
	• Traffic impact before and after concerts
Alternative 2 Implement Capital Program Recommendations.	• Implement the <i>SPAC Facility Rehabilitation</i> <i>Plan.</i> An extensive capital improvement plan was commissioned by OPRHP on behalf of SPAC to outline and prioritize the capital needs of this 50 year old facility.(OPRHP 2005)
	 Renovate the concession area by developing permanent concession structures in the areas now occupied by temporary tents The parking capacity, circulation and layout of key parking areas that support SPAC
	events were evaluated by Clough, Harbour & Associates LLP. There are two lots on Route 50 that support SPAC events (referred to as the East 50 and West 50 lots). It was found that the parking capacity of the East 50 lot could be increased by removing a small grove of trees adjacent to the lot. The entire lot could support up to 1,850 spaces if the grass parking area were also paved and striped. Three alternatives were developed for the West 50 lot that could maximize the capacity and improve the internal circulation through the definition of parking aisles. The alternatives could provide up to 1,300 spaces, depending on the layout and if the spaces were to be striped. Updates to the current stormwater management in these
Alternative 3 Implement Operational	 areas would accommodate any modifications Establish exemplary recycling programs, as
Recommendations.	required by New York State's Sustainability Executive Order
	• Establish and maintain a self-contained sustainable irrigation system for the SPAC lawns
	• Produce an Emergency Response Plan for the facility. Review the plan and update it annually in time for the plan to be in place for each summer operating season
	 Offer patrons a non-smoking area that is substantial in size and reliably smoke-free Encourage SPAC's compliance with
	OPRHP's Sustainability Plan in terms of energy conservation and waste reduction

Preferred Alternative: Alternatives 2 and 3 – Implement Capital and Operational Recommendations

The implementation of these recommendations will improve the experience of SPAC patrons and mitigate the impact of large crowds on the infrastructure of the park.

Botanical Garden

Background for Analysis

There is currently no botanical garden at Saratoga Spa State Park. The concept of creating a botanical garden was suggested during the initial public input phase of the planning process.

Alternatives	Considerations
Alternative 1 Status Quo.	 Park has an authentic native character No additional work needed to create natural surroundings Park has many amenities No additional cost or staff time needed No additional botanical educational tool for children as well or horticultural training No added park patronage especially during slower parts of the season
Alternative 2 New Botanical Garden. The Springs Botanical Garden group proposes to create a premier botanical garden for the northeast with a greenhouse glass conservatory providing a home for lush tropical fauna, desert plants as well as the support facilities needed to run such a building. The gardens themselves, located on approximately 15-20 acres, would incorporate perennial, annual, Japanese, water, European and American-style landscapes. Visitors would also be able to learn about our region's unique biosphere through the incorporation of existing ecological elements in the park. For example, the bog meadow wetlands in the southern section of Saratoga Spa State Park serve an integral role in that area's ecology. The plan proposes areas where people can walk through and even underneath these wetlands while viewing the creek or river bottom through a glass walkway.	 A beautiful botanical garden would draw additional visitors to the park. A botanical garden would serve as an educational tool The cost of constructing, operating, and maintaining a facility of this size would be very substantial. Presumably the construction cost alone would be tens of millions of dollars The amount of water, land and energy needed for a facility of this size is substantial Parking constraints are a consideration with a facility this large No 15-20 acre space currently exists at the park where this facility could be sited without major environmental impacts

Preferred Alternative: Alternative 1 - Status Quo

The Status Quo is the preferred alternative. The park already functions as a native botanical garden. There are many hundreds of acres of trees and vegetation, endangered wild blue lupine, wetlands, pine plantations and much more, which are interpreted in the environmental education programs that take place is the park. A formal Botanical Garden as suggested is a major new development and is not in keeping with the goals of the park. Additional interpretive signing is planned as part of the Trails Plan developed with this Master Plan. Volunteers could also be brought in to assist with interpretive programs and work with the native plants already in existence.

Championship Golf Course

Championship Golf Course - Maintenance Facility

Background for Analysis

The golf course maintenance facility is currently located in the Gideon garage and shares space with the OPRHP park garage. The main work area is approximately 1,600 square feet. and is used to repair lawn and maintenance equipment for use on the course. There is a small office/break room which is approximately 182 square feet and a storage area that is approximately 364 square feet.

Alternatives	Considerations
Alternative 1 Status Quo.	 Low cost option No additional work is needed Though not ideal, the maintenance area has operated in this manner for ten years and can continue to do so All of the maintenance operations are located in the same building The existing maintenance facility is undersized for the amount of equipment that is used on the course There is a need for at least an additional work bay and additional storage space There is also a need for a separate pesticide storage area apart from all of the other functions as well as an office for the superintendant and a small break room for employees
Alternative 2 Add to existing maintenance building. The maintenance area could be expanded south towards the Gideon Putnam Hotel. This would allow for the additional functions needed to run the course properly and perform upkeep of the equipment.	 The enlargement of the existing facility would be a cost effective alternative No need to clear and excavate a new site No new building Keeps all the maintenance functions in one location Allows for the façade to be designed to better fit in with the surrounding buildings

Alternatives	Considerations
Alternative 3 The current maintenance area	 Rehabilitating the building would also provide for the opportunity to separate park and golf maintenance functions Sustainable re-use of an existing buildings The work at the maintenance shop would be disrupted due to construction The maintenance area would still be taking room away from OPRHP maintenance Separation of park and golf course
could be turned back over to OPRHP and a new maintenance barn could be constructed solely for golf course equipment. A new location would have to be decided on and an architectural plan would have to be developed.	 maintenance functions New building designed using "green" technologies which would make it much more efficient Allows the current maintenance area to remain in use while the new building is being constructed Cost and impact of building a new maintenance building
Alternative 4 The current maintenance area could be turned back over to OPRHP and a new maintenance area for golf equipment could be constructed in the old Dormitory building.	 The reuse of the Dormitory would separate the two maintenance functions A separate building would also enable the current maintenance area to remain in use while the new space is being constructed The adaptive reuse of an existing building is in line with OPRHP goals and would be a substantial cost savings All of the needed utilities are already run to the building The building would have to be retrofitted for a use in which it was not intended Other opportunities for the Dormitory building would be lost

Saratoga Spa State Park Master Plan: Analysis and Alternatives

Preferred Alternative: Alternative 2 - Add to existing maintenance building

The addition to the existing building is the less expensive option and allows for all of the maintenance functions to remain in one location. The existing maintenance area is located in a central area for the golf course and it is best that it remain in place. An expansion allows for upgrades to the building and incorporation of some "green" technologies. By not building a new structure, an environmental benefit of not having to clear and grade a new site would be gained.

Championship Golf Course – Golf Cart Storage and Maintenance

Background for Analysis

The Golf Cart Barn is currently located in a small building adjacent to the north side of the Victoria Pool building. The location causes some congestion with the carts and is aesthetically unappealing. The carts are stored here to charge overnight and are washed and maintained in this location. Carts are moved to the front of the pro shop each morning so that they will be available as needed. Some deterioration of the lawn adjacent to the barn has taken place due to carts that stray from the path and park on the edges of the asphalt. (Further discussion of the Cart Barn is found under the Victoria Pool analysis below.)

Alternatives	Considerations
Alternative 1 Status Quo.	 Easy access to pro shop and golfers The starter can easily run back and forth to get additional carts if needed Easy access to water and electric in current location aesthetics could be improved with better care Low cost The existing cart barn is unsightly and is aesthetically unpleasing Storage area is a little small Difficult to perform repairs
 Alternative 2 Construct new cart barn in another location. Pre-fabricated structure with electric and water, larger than existing space with room for cart maintenance and repair work Alternate location to be determined 	 A new cart barn could be designed to blend in with the surrounding buildings and would be more up to date The building would have room for cart repairs and a small shop area Moving this function would eliminate carts driving over the turf and creating unsightly dirt patchs. Alleviation of the crowded feeling when all the carts are lined up along the edge of the 10th tee waiting to be put away or taken out Frees up critical space in the vicinity of the Victoria Pool Allows for separate metering of gas No suitable location within close proximity

Saratoga Spa State Park Ma	aster Plan: Analysis and Alternatives
----------------------------	---------------------------------------

Alternatives	Considerations
	 to the club house for the new cart barn Extra time going back and forth to get additional carts Could be prone to vandalism if the barn is too remote Expense of supplying new water and electric to the building
 Alternative 3 Retrofit portion of the old Dormitory into new cart barn. Larger than existing space Space for maintenance and repair work The Dormitory building is currently being underutilized 	 The building would have room for cart repairs and a small shop area Moving this function would get rid of the unsightliness caused by the carts driving over the turf and creating a dirt patch Alleviates the crowded feeling when all the carts are lined up along the edge of the 10th tee waiting to be put away or taken out Frees up critical space in the vicinity of the Victoria Pool Having a separate cart storage building would allow for separate gas meters Locating the cart barn near the maintenance building would be beneficial The building is not in close proximity to the starter area

Preferred Alternative: Alternative 3 - Retrofit a portion of the old Dormitory into new cart barn. This allows the cart barn to be located in the same vicinity as the maintenance area and is a good adaptive reuse of a building.

Peerless Pool

Peerless Pool– Bathhouse Complex Building

Background for Analysis

The Peerless pool complex building was constructed in the 1960s and was last rehabilitated in 1997. The pool is open from late June to early September. Although well used by the public, the complex is outdated and does not function according to its original design intent. The circulation is confusing for patrons and the interior of the complex has various unnecessary walls which create wasted space.

Alternatives	Considerations
Alternative 1 Status Quo.	• Low cost.
	• Inefficient building, wasted space
	Missed opportunity for improvements
Alternative 2 Reconfigure interior of complex.	Improved efficiency of complex

Alternatives	Considerations
Remove some of the interior walls and locker room area to increase courtyard space. Add rental tents and larger restroom facilities. Remove current cashier station and relocate function to front office.	 Opportunity for increased revenue from rental tents Can use green technology in retrofit of existing building Re-use of existing building is sustainable Potential to use improved restroom facilities for large events at other venues in the park Cost
Alternative 3 Demolish complex and rebuild.	 Could build updated efficient and aesthetically pleasing complex using green technologies Opportunity to integrate green technology into new construction in the park High Cost

Preferred Alternative: Alternative 2 - Reconfigure interior of complex building

The current configuration is confusing and is not being utilized according to the original design intent. The demolition of the existing building and construction of a new one is extremely expensive. Adapting the facility to meet current goals in accordance with the Master Plan vision of sustainability will provide more efficient and better service for patrons.

Peerless Pool – Old Concessions Area

Background for Analysis

The old concession building is the most westerly structure of the Peerless Pool complex. It is currently unused and in poor condition.

Alternatives	Considerations
Alternative 1 Status Quo.	 Low short term cost Vacant building space is inconsistent with Master Plan vision and goals High long-term cost of rundown building
Alternative 2 Rehab for program center or rental space, using green technology.	 Re-use of vacant space Opportunity to use green technology May not need program center or rental space Potential locations for these facilities have also been identified elsewhere in the park
Alternative 3 Demolish.	 Removal of unnecessary structure Reduction in size of imposing and anonymous Peerless Pool building frontage Reclamation of open space Cost of demolition

Preferred Alternative: Alternative 2 - Rehab for program center or rental space, using green technology

The alternative offers the opportunity for adaptive re-use of an existing building. This is a sustainable option and one that is in keeping with the Master Plan vision and goals. The need for additional program space at the park has been identified and this building is appropriate because of its location, size and the potential to customize the space for specific needs.

Peerless Pool – Parking Lot Entry Loop

Background for Analysis

The Peerless Pool parking lot has a large turn-around loop on the western side that was originally intended for use by buses. This loop is rarely used since buses generally pull up along the northern edge of the parking lot. The area consumed by the loop is approximately 1 acre in size, including the interior grass section.

Alternatives	Considerations
Alternative 1 Status Quo.	 Low immediate cost. Superfluous impervious surface Unnecessary section of road to maintain
Alternative 2 Demolish and re-establish as wooded area.	 Reduction of total impervious surface in the park Potential habitat and outdoor recreation area restored Distance from paved area to Peerless Pavilion increased
Alternative 3 Reconfigure entrance road to eliminate loop and install picnic pavilion.	 Net loss of pavement Shares parking with Peerless Pool Cost of demolition and construction Addition of picnic facilities for park patrons Adds picnic pavilion near the Peerless Pool

Preferred Alternative: Alternative 3 - Reconfigure entrance road and build picnic pavilion. This alternative provides the park with additional picnic pavilion space close to the Peerless Pool. This picnic pavilion could be a new structure or a relocated pavilion such as the existing Karista Pavilion. Proximity to the pool is desirable to some groups that rent the pavilions and this alternative adds that option.

Victoria Pool

Victoria Pool - Pool Building

Background for Analysis

The Victoria Pool is part of the original 1930's spa complex and is a contributing structure to the National Register listing. It was rehabilitated in 2004-2005. The pool is extremely popular with the public and is currently open from late June to early September.

Alternatives	Considerations
Alternative 1 Status Quo.	Low relative costPool demand exceeds its capacity
Alternative 2 Enclose the pool and make it a year round destination.	 Patrons would have more opportunities to use the pool Incompatible and substantial changes to a historic building High cost Unlikely that pool will get enough use year round to be profitable

Preferred Alternative: Alternative 1 - Status Quo

Enclosing the pool and rehabilitating the facilities to accommodate year round use would compromise the historic character of the building and be extremely costly.

Victoria Pool - Parking

Background for Analysis

The parking currently available at the Victoria Pool is insufficient to meet the needs of pool patrons, golfers, and tennis players.

Alternatives	Considerations
Alternative 1 Status Quo.	Low costPark is not accommodating the needs of its patrons

Alternatives	Considerations
Alternative 2 Use the currently underutilized Roosevelt II parking lot for additional Victoria Pool parking.	 Increases parking capacity without increasing impervious surface Roosevelt II may need its parking lot in the future when the building is rehabilitated and used Roosevelt II parking is quite far from pool
Alternative 3 Expand parking lot to other nearby areas.	 Increases parking capacity Requires tree clearing Increases total impervious surfaces in the park

Preferred Alternative: Alternative 2 - Use Roosevelt II parking lot

The creation of new impervious parking areas is undesirable and inconsistent with the park's sustainability goals. Improvement to the Roosevelt II parking lot will be necessary in any case once the building is rehabilitated for other uses. Drawing attention to the dilapidated building may generate public interest and support in its restoration.

Victoria Pool - Golf Cart Barn

Background for Analysis

The preferred alternative is to relocate the golf cart storage area. This will leave the structure that currently houses the golf carts, an unsightly structure adjacent to the Victoria Pool, vacant. (See analysis on the Golf Cart Maintenance area above.)

Alternatives	Considerations
Alternative 1 Status Quo.	 Low initial cost Preserves incompatible structure that no longer has a use
Alternative 2 Demolish Golf Cart Barn.	 Restores Victoria Pool to a more original state Area reclaimed as outdoor space Loss of building space for golf concessionaire
Alternative 3 Demolish Golf Cart Barn and reconstruct a new building in keeping with the architecture of the Victoria Pool.	 Additional spaces available for golf course concessionaires New building would be more attractive than existing building Uncertain this is a real need

Preferred Alternative: Alternative 2 - Demolish Golf Cart Barn

This alternative is the most beneficial to the space around the Victoria Pool complex. It reclaims open space and improves the appearance around this historic structure.

Saratoga Spa State Park Office

Background for Analysis

Currently the Saratoga Spa State Park offices are in the Administration building. There is no room at this location for expansion or reconfiguration for efficiency.

Alternatives	Considerations
Alternative 1 Status Quo.	 Access to regional offices and personnel No additional cost The Administration building is poorly located in relation to the many park activities and can be difficult for patrons to locate Not very inviting. No room for expansion
Alternative 2 Relocate the park offices to the Roosevelt II with other new uses.	 Adaptive re-use of the vacant space Room to expand The "park" office would have its own identity This location is large enough to accommodate other new uses as well Would free up office space in the administration building for other uses Cost of renovations and maintenance There may be more appropriate uses for this space The new park office would be near the current office, which is poorly located in relation to the many park activities and difficult for patrons to locate
Alternative 3 Relocate the park office to the Lincoln Bathhouse.	 This is where the visitor center and exhibits are proposed, would make staffing those areas easier Adaptive re-use of the vacant space Would free up office space in the administration building for other uses There may be more appropriate uses for this space Cost of renovations and maintenance Distance from the rest of the park facilities

Preferred Alternative: 2 – Relocate park offices to Roosevelt II with other new uses.

This alternative provides more efficient office space for the park staff.. The intention is to make the park office an appealing and welcoming space, and to include better park and partner information. A new signage plan for the park is under development which will make finding the Roosevelt II building easier. The Roosevelt II is a contributing structure to the National Register listing.

Vacant wings of Lincoln Bathhouse

Background for Analysis

Currently the Regional Park Police offices are on the first floor of the Lincoln Bathhouse. The offices of the New York State Court of Claims are housed in the building as well. There is considerable vacant space in the building which is available for use. The rear of first floor contains spa baths and other hydrotherapy equipment. A preferred alternative listed elsewhere in this Master Plan calls for a museum and visitor center be located on the first floor of this building in the lobby, central corridor and rear of the building.

Alternatives	Considerations
Alternative 1 Status Quo.	 No additional cost The vacant building interiors could further deteriorate Wasting heated space is not sustainable
Alternative 2 Vacant wings of the Lincoln Baths should be renovated to lease-out condition (prospective tenants can build to suit).	 Potential long-term revenue source Little impact on park operations Space would be maintained and kept in good condition Cost to renovate Compatibility to the recreational use and cultural resources of the park

Preferred Alternative: 2 Renovate vacant wings to lease out.

Renovating the vacant wings of the Lincoln Bathhouse to "lease out" condition, as funds are available, will provide both long-term maintenance and a long-term revenue source. Pairing this use with the visitor venter will make these vacant spaces more attractive to potential lessees.

45 and 79 Kaydeross Avenue

Background for Analysis

These structures are both former residential buildings in the southern end of the Hemlock Trail area on Kaydeross Avenue. This area is remote from the main park complex on the west side of Route 9 but is close to important old growth forest on park property. 79 Kaydeross is a wood structure that has had significant problems with mold and wet basement issues. No assessment of the mold problem has been done. Recently the 45 Kaydeross Avenue building was leased to the Waldorf School. Both buildings have been examined by the State Historic Preservation Office and found to be non-eligible for the State and National Historic Registers. The barn at 79 Kaydeross is used to stable Park Police horses.

Alternatives	Considerations
Alternative 1 Status Quo.	 Degradation of buildings will continue if unoccupied Cost to maintain underutilized structures No cost for rehabilitation or demolition Waste of park resources Health and safety issues Target for vandalism (attractive nuisance)
Alternative 2 A. Renovate 45 Kaydeross for lease space. B. Renovate 79 Kaydeross for lease space.	 New rental space for offices or residences Re-use of existing structures is sustainable Cost of rehabilitation may be expensive Extent of mold condition in 79 Kaydeross is unknown Protection of park resources Location of buildings may not be attractive for commercial business as they are not visible from Route 9
Alternative 3A. Renovate 45 Kaydeross to use for lease.B. Renovate 79 Kaydeross to use for park services.	 Increases available space for park needs Remote from rest of park Re-use of existing structures is sustainable Cost of rehabilitation may be expensive Extent of mold condition in 79 Kaydeross is unknown Protection of park resource
Alternative 4 A. Mothball and stabilize 45 Kaydeross B. Mothball and stabilize 79 Kaydeross	 Protects buildings for future use Cost of this process Does not deal with mold issues at 79 Kaydeross Subject to vandalism (attractive nuisance)
Alternative 5 A. Demolish 45 Kaydeross B. Demolish 79 Kaydeross	 Cost of demolition and site work needed after demolition Loss of possibly valuable park resources Reduced maintenance

Alternatives	Considerations
	• Elimination of possible attractive nuisance
	 Avoids renovation of buildings

Preferred Alternative: Alternative 3 - Restore 45 Kaydeross Ave. for lease and 79 Kaydeross Ave. to use for park services

This alternative preserves existing park infrastructure which is costly to replace. The adaptive re-use of these buildings is a sustainable alternative. The leased space can be used in several ways, including education and program space.

LaTour House

Background for Analysis

The LaTour house is a wooden Greek Revival house that is a contributing feature of Saratoga Spa State Park in the national register nomination that placed the park on the National Register of Historic Places. It is currently vacant and presenting an increasingly deteriorating condition due to leaks and lack of maintenance. Several possible uses for the building have been suggested in the past but none have come to fruition. The Field Services Bureau is especially interested in seeing this building restored.

Alternatives	Considerations
Alternative 1 Status Quo.	 Degradation of building will continue Cost to maintain underutilized structure No cost for rehabilitation or demolition Waste of park resources Health and safety issue Target for vandalism (attractive nuisance)
Alternative 2 Renovate for lease or park services such as staff housing or interpretation/education use.	 Building is being considered for resident curator program Preservation of National Register structure New rental space for offices or residences Re-use of existing structure is sustainable Cost of rehabilitation may be expensive Protection of park resources Location of building may not be practical for tenants
Alternative 3 Mothball and stabilize,	Protects building for future use

Alternatives	Considerations
including fixing roof leaks.	 Preservation of National Register structure Cost of this process Eliminates major source of building degradation (water infiltration) Subject to vandalism (attractive nuisance)
Alternative 4 Demolish.	 Cost of demolition and site work afterwards Elimination of maintenance costs Loss of contributing park feature Elimination of attractive nuisance

Preferred Alternative: Alternative 3 - Mothball and stabilize including fixing roof leaks

The LaTour house is a contributing feature of the Saratoga Spa State Park National Register Historic District. The building retains sufficient integrity to justify its continued inclusion in the Historic District (Bowman 2009). It is recommended that the building be preserved until an appropriate use can be found.

Dormitory

Background for Analysis

The Dormitory building is a one-story building formerly used as housing. It has a sound structure and is currently being used for storage space. This building is non-contributing structure to the National Register listing. Other alternative analysis has identified this building as a space for golf cart storage and maintenance.

Alternatives	Considerations
Alternative 1 Status Quo.	 Space is underutilized where space for park uses is at a premium Cost to maintain underutilized structure No cost Health and safety issue Target for vandalism (attractive nuisance)
Alternative 2 Renovate for park services such as maintenance.	 Re-use of existing structure is sustainable Cost of rehabilitation Need for expanded/new maintenance space is critical Location of maintenance services is appropriate

Alternatives	Considerations
	• Existing electric and water hook ups can be used
Alternative 3 Renovate for staff housing.	 Re-use of existing structure is sustainable Cost of rehabilitation Need for low cost staff housing for seasonal workers Existing electric and water hook ups can be used

Preferred Alternative: 2 Renovate the Dormitory for Maintenance Services

This alternative is preferred because of the need for maintenance space and the appropriate location of this building for that purpose. Its proximity to the Gideon Garage and its existing utility hookups contribute to this choice. The building is essentially sound and will need to be evaluated and redesigned for the new purpose.

Roosevelt II Bathhouse

Background for Analysis

This building is currently mostly vacant and is being used for storage for the Automobile Museum. The building has suffered due to deferred maintenance. The Roosevelt II Bathhouse is a contributing feature of the National Register listing. Its placement within the park gives easy access to the rest of the mall area.

Alternatives	Considerations
Alternative 1 Status Quo.	 Space is underutilized where space for park uses is at a premium Cost to maintain underutilized structure Loss of contributing feature Continuing deferred maintenance will further degrade building No cost for adaptation to new use or
Alternative 2 Renovate for park services.	for demolitionRe-use of existing structure is
Administration	sustainable
Interpretation/EducationPublic Rest Rooms	• New public rest room needed in this area of the park
	Cost of rehabilitation
	• Need for expanded/new
	education/interpretation space
	 Location is appropriate
	• Existing electric and water hook ups

Alternatives

Considerations

can be re-used

Preferred Alternative: Alternative 2 – Renovate the Roosevelt II Bathhouse for park services This is the most appropriate alternative for this important contributing feature of the park. The addition of park administrative offices and a new interpretive/education center will greatly enhance park patron experience. Part of the re-designed building will include a comfort station which is needed in this area of the park. The comfort station will remain open until dusk and have a separate entrance from the rest of the building. These renovations can be phased.

Off Leash Area

Background for Analysis

A pilot project for an off leash dog area was started near the parking area on Crescent Street on the east side of Route 9. Signs are posted announcing the rules of the off leash dog area and signs are also posted at the limits of this area informing users where dogs must again be on leash. The project has been successful in that both people and canines have enjoyed the opportunity for off leash activities. It has failed in that the adjacent federally endangered and state threatened butterfly management areas have been adversely impacted by off leash canines even though those areas are clearly marked as on leash areas.

Alternatives	Considerations
Alternative 1 Status Quo.	 Further degradation of endangered butterfly habitat Continued off leash activities in both appropriate and inappropriate locations Does not conform to park law
Alternative 2 Designated new fenced off leash area.	 Provides secure designated space for off leash activities Eliminates off leash canines outside of fenced area Clearly marks spaces appropriate and inappropriate for off leash activities Protection of federally endangered and state threatened butterfly habitat Conforms to park law

Preferred Alternative: Alternative 2 - Designated new fenced off leash area.

This alternative allows both the off leash activities and the protection of the endangered butterfly management area. It requires that dogs must be on leash in all other areas of the park and on the way to and from the fenced area. No dogs will be allowed in the endangered butterfly management area. The off leash area will be in an open field and wooded area to the east of the current Crescent Street parking lot. It will be important to educate the public about the relocation and purpose of this area and to undertake enforcement measures. (See Figure 13)

Spring Houses

Background for Analysis

A goal of the park is to preserve and protect spring houses within the park.

Alternatives	Considerations
Alternative 1 Status Quo. Allow spring houses to remain in their current state.	 No additional cost Spring houses are not being used Loss of resources for public Unappealing appearance
 Alternative 2 Relocate and rehabilitate using volunteer forces, abandoned spring houses including: Relocate the spring house from the Warming Hut area to the Tennis Courts Rehabilitate the existing spring house at #4 hole for use by golf patrons Rebuild spring houses to cover spring fountains (historically appropriate) Renovate the Orenda spring house and the Coesa spring building 	 Sustainable (recycling/reusing spring houses instead of building new ones) Improved appearance Inclusion of volunteers at the park Preserve and protect historic structures for continued public use

Preferred Alternative: Alternative 2 - Relocate and rehabilitate spring houses Relocating, rehabilitating and renovating historic spring houses in the park will improve the

appearance of the park and improve park patron experience in a sustainable manner.

Operations/Maintenance

Lawn Mowing

Background for Analysis

As of the spring of 2008, Saratoga Spa State Park maintained more than 380 acres of lawn. This included approximately 190 acres of golf courses, 113 acres of picnic areas, 45 acres of malls and open play fields, 25 acres of endangered butterfly habitat, and 5 acres on top of a capped landfill. Excluding the endangered butterfly habitat and the capped landfill, these 158 acres of lawn were mowed an average of twice every three weeks for approximately 22 weeks every year. Beginning in 2008, approximately 20.5 acres of lawn were transitioned to a once per year mowing regime. This translated into an approximately 340 gallon fuel usage reduction, an approximately 3.5 week reduction in staff time spent mowing, and an approximately 3.8 ton reduction in CO^2 emissions.

Alternatives	Considerations
Alternative 1 Status Quo. Continue reduced mowing in current acreage and monitor for effects.	 Reduced fuel usage and costs Reduced staff time allocated for mowing Reduced CO² emissions Reduced equipment maintenance requirements Increased wildlife habitat Increased stormwater retention capabilities Increased buffer for sensitive habitats such as wetlands and streams Improved trail connectivity Improved interpretive opportunities and wildlife viewing opportunities = more visitors. Some visitors object to a more natural setting Unmowed areas may limit space for park activities that require lawn area High grass may harbor increased numbers of ticks and other pest species Invasive plant species may develop once lawn mowing activities are reduced
 Alternative 2 Expand the current reduced mowing plan to include additional lawn areas. This alternative would be an extension of the current reduced mowing program in other areas of the park, as deemed appropriate by park staff. As with the current plan, park staff would take into account all historic, scenic, and recreational aspects of park operations. 	 Increase of the positive benefits gained from the reduced mowing program Minimizes the negative impacts. No interference with park operations or visitor enjoyment. Some visitors object to a more natural setting Unmowed areas may limit space for park activities that require lawn area High grass may harbor increased numbers of ticks and other pest species

Alternatives	Considerations
	• Invasive plant species may develop once
	lawn mowing activities are reduced

Preferred Alternative: Alternative 2 - Expand current reduced mowing as appropriate It is recognized that mowing is required to maintain recreation areas as well as the historic elements of the park. This alternative maximizes the benefits gained from the reduced mowing program while at the same time protecting the character of the park.

Geyser Brook Stormwater Management

During rain events some rain is absorbed into the ground while some, called stormwater runoff, flows across the ground and directly into water bodies. As more area is paved or built upon, there is less area available for the absorption of stormwater runoff and thus a greater percentage of the overall rainfall total flows directly into water bodies. The rapid movement of fresh water across the land and into streams and other water bodies, as opposed to infiltrating through the soil, also reduces the amount of water available to refill groundwater supplies. This is an unsustainable practice that can lead to reduced water capacity of local wells and springs.

Background for Analysis

Geyser Brook and its tributaries receive stormwater inputs from many sources as they traverse through Saratoga Spa State Park. Due mostly to aging infrastructure built before modern building codes, many of these sources are currently untreated or uncontrolled. These inputs result in rising temperatures in the brook, the introduction of unsustainable sediment loads, increased peak flow volumes, and the introduction of common chemicals and nutrients that are detrimental to stream wildlife, ecology, chemistry, and hydrology. Increased temperatures have been documented as a limiting factor for the success of brook trout, the native trout species in the area, in Geyser Brook. As a result, the DEC stocks Geyser Brook with brown trout, a species that is more tolerant of higher temperatures.

These impacts travel down the Geyser Brook and into the Kayaderosseras, eventually leading to Saratoga Lake, Fish Creek, and the Hudson River. Some plans to address stormwater issues in the park are in the design phase, but as of this point few resources have been available to reduce or mitigate these impacts.

Alternatives	Considerations
Alternative 1 Status Quo	 Increased peak flows during rain events Increased volume and velocity of water flowing in nearby streams. Contributes to increased erosion Introduction of warmer water increasing temperatures of brook water. Introduction of sediment, chemicals

Alternatives	Considerations
 Alternatives Alternative 2 Reduce the total amount of stormwater runoff by reducing the total amount of impervious surfaces in the park and retrofitting remaining impervious surface areas with collection and/or infiltration. Remove unnecessary impervious surfaces and restore to a natural state with soils and vegetation capable of absorbing or infiltrating stormwater. Remove unused buildings whose roofs shed water and restore the land underneath to a natural state. Remove portions of underutilized parking lots or roadways and restore the land to a natural state. Replace and retrofit remaining parking lots and roadways with new technologies such as pervious pavement, allowing for infiltration of stormwater. Place rain gardens and rain barrels near buildings and parking lots Restore some manicured lawn areas to a natural state to better capture and/or infiltrate stormwater. The result of these actions would be the overall reduction of stormwater runoff. 	 Reduces the overall quantity of stormwater runoff Reduces the need to collect and treat stormwater runoff with engineered designs. Required commitment of physical and financial resources Rehabilitation can take place in phases or as part of already planned facility updates.
 inlets which have direct inputs into park waterbodies Install infiltration basins and wetlands as well as below-ground retention chambers in any area where stormwater is allowed to pass from an impervious surface (i.e. parking lot, building roof, etc.) directly to a waterbody without any treatment. 	 concentrated stormwater impacts Can be used to educate the public about stormwater, its impact, and management. Installation in areas of high ground water difficult. Possible loss of space currently reserved for other park uses
 Alternative 4 Install stormwater controls to manage all point discharges without current stormwater management In some instances, stormwater flows across semi-pervious surfaces, such as lawn or ephemeral stream beds, which do allow for some infiltration, but do not provide adequate treatment. Install stormwater management practices such as infiltration basins and wetlands as well as below-ground retention chambers in any area where they do not already exist and 	 Most comprehensive protection from stormwater impacts that could be provided for the brook. Positive impacts associated with management of stormwater maximized Can be used to educate the public about stormwater, its impact, and management. Many of these areas are in places with high ground water Possible loss of space reserved for other park uses

Alternatives	Considerations
where stormwater is allowed to discharge	
from an impervious surface into a waterbody without any treatment.	
 Installation of such practices should start at 	
sites with direct, untreated discharges and	
then move to other discharge sites as time	
and funds allow.	

Preferred alternative: Combination of Alternatives 2 and 4 – Reduce stormwater generation and install stormwater control measures when necessary

This combination will limit the park's overall stormwater generation impacts while also providing treatment for the limited remaining stormwater that will still enter local waterbodies. These actions provide the greatest protection from stormwater impacts for the Geyser Brook and the downstream watershed while promoting the most sustainable protection of water resources that could be established within the current confines of the existing facilities at the park. With cost being the only real negative factor to managing stormwater runoff, as funds become available or projects are planned, stormwater management will be included.

Maintenance Shop and Warehouse Rehabilitation

Background for Analysis

The maintenance shop and warehouse building are in need of repair. Various additions and rehabilitation work has been done, however, many problems still exist. These include: **Maintenance Shop** - leaking roof, portions not on a foundation, outdated wiring, lack of computer network cables in some of the building, heating upgrades needed for efficiency, floors not adequate, inoperable double hung windows and inefficient windows, repairs needed to garage doors, no fire sprinkler system, space not adequate.

Warehouse Building – Improvements needed to ramps and deck, driveway ramp needed, window replacements needed, drainage problems, rotting doors and windows, roof and floor repairs needed, tunnel improvements needed, bathroom upgrades needed, crumbling interior stairs, no fire sprinkler system, Verizon panels need upgrading, insulation needed to control heat loss, snow diverters needed. This building is the central point for all the utilities coming into the park (water, mineral water, electric).

Alternatives	Considerations
Alternative 1 Status Quo	 No required repairs and upgrades will be done to the building Inadequacies will remain, limiting maintenance efficiency
Alternative 2 Repairs made as money becomes available.Prioritize repair needs	• Repairs to problem areas may become increasingly necessary as the repairs continue to be deferred.

Preferred Alternative: 2 Make repairs as money becomes available.

This alternative focuses on the need to prioritize maintenance needs for the shop and make those repairs that are most important (health and safety) first when funds are available.

Restoration Shop

Background for Analysis

The Auto Museum has express an interest to utilize the restoration shop for additional museum space. The Restoration shop is currently being used by the park's carpenters.

Alternatives	Considerations
Alternative 1 Status Quo	 Carpentry shop would remain where it is No additional museum space created in restoration shop
Alternative 2 Allow the Auto Museum to use the restoration shop and build a new restoration shop at regional maintenance.	 Museum space expanded Conversion to museum space would be responsibility of Auto Museum Construction of new restoration shop would be Park's responsibility
Alternative 3 Allow the Auto Museum to use the restoration shop and relocate the carpentry shop to the Dormitory.	 Museum space expanded Adaptive re-use of an existing building Conversion to museum space would be responsibility of Auto Museum Construction of new restoration shop would be OPRHP's responsibility

Preferred Alternative: 3 Allow Automobile Museum to use restoration shop and relocate carpentry to the Dormitory.

This alternative provides additional space for the Automobile Museum while re-using a vacant space in the park. This offers flexibility to a Park partner and re-use of a space that is currently underutilized.

Expand Golf Maintenance Area

Background for Analysis The golf maintenance area at the Gideon Garage is limited but has room for expansion.

Alternatives	Considerations
Alternative 1 Status Quo	Golf maintenance continues to work in inadequate facilities
Alternative 2 Allow golf maintenance area at the Gideon Garage to expand to the south.	 This expansion has been requested by the golf course concessionaire Allows increased flexibility in golf course maintenance

Preferred Alternative: 2 Allow golf maintenance area to expand to the south This alternative is beneficial to a Park partner and will improve the facilities for maintenance.

Master Plan Alternatives

Two alternatives are considered here. The first is the Status Quo alternative. This alternative consists of current facilities, programs and practices. Under this alternative, the current resource protection, operation, capacity and facility practices will continue. There would be no addition of new recreation resources to meet park patron needs nor will any of the natural resources identified in the park be adequately protected.

The second alternative combines the preferred alternatives from the <u>Recreation</u> <u>Development/Management</u> and <u>Natural Resource Protection/Strategies</u> sections. This alternative is the one that best meets the goals for the park. The following discussion shows the Status Quo alternative and the Preferred Master Plan alternative.

Status Quo

Saratoga Spa State Park is one of the premier parks in the New York State park system. It is of national prominence both as a National Historic Landmark and a destination for tourism. The park also serves the surrounding community with recreation and natural resources that contribute to the local quality of life.

The park is in need of several upgrades to its buildings, grounds and infrastructure, and many of the natural resources enjoyed by the patrons need to be protected in order to remain viable. The status quo will not meet these needs.

Considerations

- Several buildings need to be upgraded and others are awaiting needed repairs.
- New public toilets are needed in the central area of the park
- Existing trails need to be planned and managed
- Maintenance facilities need to be upgraded
- Invasive species need to be managed

- Karner blue butterfly habitat needs to be managed
- Open fields need to be managed
- Forested areas need to be managed
- Vacant buildings need to be renovated for specific uses
- A new visitor center/museum is needed
- Park administrative offices need to be improved/moved/expanded
- Nature/interpretive/education center is needed
- Picnic facilities need to be upgraded and expanded to meet actual patron needs
- Water and electric service need to be modernized
- Impacts to water quality in the Kayaderosseras Creek and Geyser Brook need to be addressed.
- Sustainability issues need to be addressed

OPRHP has a mission statement that is a driving force for the master plan process for state park facilities. The planning process for this master plan generated several goals to meet the agency's mission and the vision for this park. The status quo alternative does not address many of the statewide OPRHP visions and goals, nor does it meet the specific goals for Saratoga Spa State Park.

Preferred Alternative:

The preferred alternative is a Master Plan that responds to the historic, natural and recreational resources of the park. The new plan responds to the needs of park patrons and staff, protection of natural resources, and principles of sustainability.

This alternative is preferred because of the improvements to natural resource protection and recreation resources it contains. This alternative includes many new strategies for protection of natural habitats within the park. New designations of Park Preservation, Bird Conservation and Natural Heritage areas are recommended.

Each preferred element in the Master Plan was analyzed for its suitability in meeting the goals of the agency and of this park. Alternatives were analyzed for effects and impacts to existing resources. The Master Plan is presented in Chapter 6. The following is a summary of the preferred alternatives.

Considerations:

Natural Resource Protections Strategies/Management

- Retain Recreation Park Classification
- Designate Park Preservation, Bird Conservation and Natural Heritage Areas as indicated
- Install erosion control measures at selected locations on Kayaderosseras Creek and Geyser Brook
- Maintain all old agricultural fields through periodic mowing
- Restore all habitat within the bounds of the federally endangered and state threatened Habitat Management Units
- Initiate invasive species management program as indicated.
- Continue and possibly expand reduced mowing

Recreation Resource Development/Management

- Picnic areas will remain concentrated in the southern end of the park along the loop road
- A new playground and improvements to existing playgrounds

- A new programmable space at the old concession stand of the Geyser Comfort Station
- Improvements to the Karista picnic area
- New picnic pavilions and seasonal rental tents
- New rental tent available for large groups (500 people)
- New softball, horseshoe and improved volleyball facilities at picnic pavilions
- Improve utilities to several picnic pavilions
- Rehabilitate asphalt tennis courts
- New lighting and landscape plan for tennis courts
- New nine hole disc golf course in the Peerless Pool complex area
- Improvements to Peerless Pool bath house complex and new program space in old concessions stand
- New fenced off leash dog area
- New Pavilion east of Peerless Pool where entrance loop now exists

Operations

- Remove golf cart barn at Victoria Pool
- Create new maintenance facility and golf cart storage in the Dormitory
- Implement Capital and Operational Recommendations for the Saratoga Performing Arts Center (SPAC)
- Provide park offices, nature/interpretive/education center, and public restrooms in Roosevelt II
- Develop new visitor center and museum on first floor of Lincoln Bathhouse
- Renovate vacant wings of Lincoln Bathhouse to be leased
- Renovate 45 and 79 Kaydeross Avenue buildings for park services
- Preserve LaTour house for future use
- Preserve pavilions around the park

Chapter 6: The Master Plan

Existing Context

The Master Plan proposes actions for the development of the park. These actions are summarized below and in the Master Plan Map.

The Master Plan sets forth the agency's vision for capital improvements and operational enhancements to Saratoga Spa State Park for the next ten to fifteen years. 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, balancing the benefits of creating new public amenities against the need to invest in rehabilitation of existing park infrastructure, much of which is showing the affects of an extended period of deferred maintenance resulting from insufficient financial resources. Moreover, decisions on investments in Saratoga Spa State Park need to be balanced with other pressing needs in the Saratoga-Capital Region and the entire State Parks System. Some actions will be undertaken in the next one to three years; many others will be implemented further in the future as funding becomes available. Some projects are dependent on financial participation from public and private partner organizations.

Classification

Saratoga Spa State Park will continue to be classified as a Recreation Park.

Designations

Park Preservation Area

A Park Preservation Area (PPA) will be designated. The area will include all those lands south of the East West Road including the Driscoll Road Property. It will also include all the lands in the park to the east of Route 9 including the Hemlock Trail and butterfly management areas. The new off-leash area and all parking lots will be excluded as well as the former landfill and other park operations areas. (Figure 14)

Natural Heritage Area

A Natural Heritage Area (NHA) will be designated. The NHA will be those park lands to the east of Route 9 within the Karner blue butterfly management area. This NHA is designated for the protection of the federally endangered and state threatened butterfly populations and their food plants. (Figure 15)

Bird Conservation Area

A Bird Conservation Area (BCA) will be designated. The BCA will have the same boundaries as the PPA. Each BCA has a Management Guidance Summary which identifies the criteria for designation, operation, management, education, outreach and research considerations. The Management Guidance Summary for the Park is in Appendix B. An interpretive kiosk about the BCA will be installed at an appropriate location. (Figure 16)

Natural Resource Protection

Kayaderosseras Creek Management

Native vegetation, bioengineering, and invasive species removals will be used to stabilize stream banks. Meandering of the stream is a natural process that will be allowed to continue. The stabilization will be used to protect car top boat launch sites along the creek with a priority given to the utilization of bioengineering techniques.

Geyser Brook Management

Erosion control measures will be implemented to protect an important piece of infrastructure, the Geyser Loop Road Bridge, from meanders in the brook. Invasive species removals combined with riparian vegetation restoration will be used along the banks of the Geyser Brook within the picnic area, while bioengineering bank stabilization practices along the bend of the horseshoe will be used to protect the Geyser Loop Road Bridge. Native vegetation will provide the basic protection for relatively minor erosion problems, particularly those associated with the invasive plant Japanese knotweed, while bioengineering techniques will be used to protect areas experiencing severe erosion pressures.

Successional Old Field Management

All old fields in the southern portion of the park will be managed to retain their agricultural character. This will be accomplished through mowing once per year, after August 1, which will allow the grassland complex at the park to remain viable to grassland bird species. OPRHP will seek to accomplish this work through an agreement with a local farmer.

Federally Endangered and State Threatened Butterfly Habitat Area

All habitat within the bounds of the butterfly habitat management units outlined in the Draft Management Agreement with NYS Department of Environmental Protection (DEC) will be restored. Permitted uses within the parcel and management units will be reduced. Additionally, opportunities to create and restore habitat patches within the park will be explored. There patches would serve to facilitate movement of butterflies between the large area of habitat within the designated Natural Heritage Area, to other endangered and threatened butterfly populations west of the park. (Figure 20)

Invasive Species Management

An integrated plan for invasive species control will be developed and implemented for long term management. Short term efforts will focus on prevention and eradication of invasives from sensitive habitats, eradication of those species where there is a reasonable chance of success, and prevention of new infestations.

Open Space Protection

OPRHP will not convey to other state agencies, municipalities, or private entities any easements or fee title to land within portions of Saratoga Spa State Park that are designated Park Preservation Areas under this master plan. Similarly, the agency will not enter into leases with public or private entities for lands within these Park Preservation Areas except for concession leases to provide food and beverage services or other customary amenities.

OPRHP will continue to consider acquisition from willing sellers that will protect and buffer the resources at Saratoga Spa State Park. This would include watershed and wetland protection and

water access. These acquisitions are covered within the statewide priority projects identified within the 2009 Open Space Conservation Plan (DEC, 2009a):

STATE PARK & STATE HISTORIC SITE PROTECTION {132} - State Parks and Historic Sites provide valuable natural, cultural and recreation resource that are enjoyed by millions of visitors each year. Protection and enhancement of the existing parks and historic sites is critical to long term stewardship of these resources. It is important to improve access, protect viewsheds, eliminate inholdings and provide buffers to protect the resources as well as to enhance recreational and cultural opportunities.

SARATOGA COUNTY {66} – Including the following: KARNER BLUE BUTTERFLY RECOVERY UNITS, KAYADEROSSERAS & FISH CREEK CORRIDOR, and the MID-COUNTY TRAIL SYSTEM.

Recreation Facility Development/Management

Visitor Center and Mineral Water Museum

The first floor of the Lincoln Bathhouse will be renovated to house a visitor center and a mineral waters museum. The visitor center will be a central location for park patrons to learn about the park through interpretive displays and contact with park staff. Maps and other information about the park will be available. There will also be information about the park partners such as the museums and performance venues.

The mineral waters museum will highlight and display information about the waters, including their importance to the history of the region, origin and health uses. Interpretive panels and artifacts from the park's collection will be utilized in interpretive exhibits. (Figure 17)

Playgrounds

A new shade structure will be constructed next to the Peerless playground, the Geyser picnic area playground will be replaced, and a new playground will be installed in the north end of the Hathorn lawn.

Picnic Areas

The concentration of picnic areas will remain in the southern part of the park bounded by the Geyser Loop Road and the East West Road. There will be other improvements to the picnic areas as listed below:

- Rehabilitate the Geyser picnic area comfort station and convert the old concession stand to program space
- Remove the Karista picnic area comfort station and plan to remove or relocate the Karista pavilion. Construct a new comfort station in the southern section of the Geyser picnic area
- Construct new or relocate existing picnic pavilions to the following areas. Before these are built, use rental tents to accommodate smaller picnic groups
 - One at the Peerless pool complex
 - One near the Coesa, Ferndell and Columbia picnic areas
- Permit the use of large rental tents to accommodate larger groups (up to 500 people)
- Formalize the field sports area at the Orenda picnic area
- Install horseshoe pits at Ferndell, Hathorn, and Peerless picnic areas
- Install new electric service at Peerless picnic pavilion

• Make water available at all picnic pavilions

Additional Issues

- Rehab the volleyball courts, including new nets and sand, at all pavilions
- Rehab the softball field at the Columbia picnic area
- Repave the two southernmost lots east and west of the Geyser Loop Rd. as well as the Columbia and Ferndell parking areas (opportunity for improved stormwater management)
- Rehab the paths throughout the Geyser Creek area
- Rehab sidewalk and exterior concrete at Geyser comfort station
- Rehab the Polaris spring

Tennis

The existing asphalt tennis courts will be rehabilitated to improve play conditions. New lighting will be installed that will be available on a pay per use system until 10:30 PM.

A new landscape plan will be produced that will reflect the historic nature of the area and will improve the appearance of the tennis courts. The plan will be implemented over time, as staff and funding permit. An emphasis on native plants, and plants requiring a minimum of maintenance, will be made. A new path will be constructed from the Administration parking area to the tennis courts.

Disc Golf

A new nine "hole" Disc Golf course will be added to the general area of the Peerless Pool complex. The detailed design will be completed by park staff. (Figure 18)

Championship Golf Course

The park will continue to support Professional Golf Services, Inc.'s capital and operational program including improvements to greens, tees and fairways to increase air circulation and sunlight penetration in order to improve turf conditions. The golf maintenance building will be expanded and the Golf Cart Barn will be taken down. The golf cart storage shed addition to the Victoria Pool Gymnasium wing will be removed. The Gideon Garage building will be expanded to the south to accommodate golf course maintenance and storage needs. Consideration will be given to the adaptive reuse of a portion of the Dormitory for golf cart storage. The park will pursue certification for this golf course through the Audubon Cooperative Sanctuary Program of Audubon International (Audubon International 2009). Efforts will be made to promote the establishment of Karner blue butterfly habitat patches within the golf courses, to promote movement between the metapopulations of the Saratoga West Federal Recovery Unit.

Fishing

Fishing will continue to be allowed in the park in all streams and water bodies. DEC fishing regulations are applicable in these areas.

Hunting

Hunting will continue to be prohibited in the park.

Pools

Peerless Pool Complex

The interior of the bath house complex will be reconfigured utilizing new sustainable practices. The old concessions area at the complex will be retrofitted into a new program space using green technology.

The parking lot entry will change to eliminate the "loop" portion of the road and a new picnic pavilion will be constructed at that location. (Figure 18)

In keeping with the park's sustainability, recreational, maintenance, and safety goals, the following improvements to the Peerless pool complex are recommended as resources become available.

General Rehabilitation and Improvements -

- Rehab building roof
- Paint entry canopy
- Improve parking lot stormwater management
- Rehabilitate masonry
- Improve insulation in heated areas
- Rehabilitate chlorine secondary containment area
- Install floating bulkhead to divide main pool into separate areas
- Relocate and lower lifeguard chairs
- Rehabilitate plaza west of old concession stand for nature programming
- Provide additional seating options besides benches
- Install additional shade structures around pool deck
- Renovate existing concessions area to increase size and food prep capabilities

Utilities

- Install solar hot water system for showers
- Install a grid tied photovoltaic system

Circulation

- Create a corridor to allow patrons to access the lawn without crossing the pool deck
- Improve exterior bike/pedestrian circulation

Recreation

- Formalize lawn space east of parking lot to include a backstop and general sports field
- Install basketball hoops in the northeast corner of parking lot
- Install spray pad adjacent to kiddy pool
- Add volleyball courts inside pool area
- Install disc golf course around perimeter of pool complex
- Create a one mile exercise loop

Programming/Operations

• Offer before and after hours programming, such as water aerobics for seniors, through partnerships with local groups

- Allow interior bathhouse restrooms to be used during special events
- Work with concessionaire to provide party packages, including pool use
- Install brochure rack promoting recreation and cultural activities in the park

Victoria Pool

The Golf Cart Barn will be removed to open up the area and return the pool building to its historic context.

In keeping with the park's sustainability, recreational, maintenance, and safety goals, the following improvements to the Victoria pool complex will be undertaken.

General Rehabilitation and Improvements

- Rehabilitate roof
- Rehab pool administration building basement and establish a catering kitchen
- Remove some of the pool plantings to increase lawn area. Relocate these plant materials to other areas of the park
- Repair glass wall, doors, and winterize the lobby entry area
- Modify plumbing in lion's head fountain to recirculate water
- Add storm windows to existing single pane windows
- Install new boiler for gymnasium
- Install irrigation system for landscape plantings

Utilities

- Install sub-meter natural gas
- Install a wireless hub

Signage/Circulation

- Install lighting and paths from parking areas to areas of activity
- Improve signage, including directional, ADA access, and program

Accessibility

• Make all buildings within the complex ADA accessible

Operations

- Replace pool deck tables and chairs with more lounge chairs
- Formalize the portion of the pool deck used for restaurant concession with a fence and tables for outdoor seating so that the area can also be used by pool patrons who want to picnic

Restaurant Concession

- Expand kitchen to the west (the design for any addition must be done in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties, and will be subject to supplemental review.)
- Install shade tents or awnings on both the pool deck and outside patio seating area

Saratoga Performing Arts Center (SPAC)

The existing capital and operational program for SPAC should be implemented. OPRHP will support SPAC's mission to cultivate, promote, foster, sponsor and develop appreciation, understanding, and love of the performing arts, and promote a sustainable future for the arts center through reduced energy consumption, waste reduction, recycling programs, and natural resource conservation

Trails

The 2009 Saratoga Spa State Park Trails Plan (Appendix A) provides for the development of an organized trails system to accommodate a variety of trail uses and provide interpretive experiences in the park. Trails are located in the main area of the park and in four separate parcels: the Karner blue butterfly habitat, Hemlock Trail, Driscoll Road and Burl Trail areas. Key elements to the plan are listed below.

Trails System within the park:

- Designate seven loop trails in the main area of the park
- Designate uses including walking/hiking, biking, equestrian, cross-country skiing, snowshoeing and interpretation for each trail or area
- Designate the Roosevelt II and Carlsbad parking lots for horse trailer parking
- Extend the paved shared-use path south along the west side of Route 9 from Marrin Avenue to the East West Road
- Develop a stone dust trail paralleling the East West Road from the trail connection along Route 9 to the western intersection with the W trail
- Develop a trail to connect West Fenlon Avenue to the Avenue of the Pines along the west side of the park
- Create an interpretive trail utilizing the pathways in the Mall area to highlight cultural and historical resources

Connections to External Trail Systems:

- Work with City of Saratoga Springs and NYS Department of Transportation to develop a safe Route 50 crossing to create connection with the Railroad Run Trail
- Develop a connection to the proposed Geyser Road Trail
- Develop a connection to the Zim Smith Trail
- Work with the Town of Milton and the City of Saratoga Springs to explore a potential connection to the Woods Hollow Preserve
- Develop a water trail to be part of the proposed Kayaderosseras Creek-Fish Creek Greenway
- Explore connections from the park and trails system to mass transit

Current interpretive programs will continue and be expanded. Coordination with volunteer groups and individuals for the maintenance of the trails system will continue as well.

The designated trail uses are considered appropriate for this park. All trails in the park will be brought up to use standards before designation and signage. Trail design guidelines are provided in the Trails Plan. A long-term maintenance and monitoring plan will be developed to ensure the continued sustainability of the trails system.

Off Leash Dog Area

A new area will be designated for off leash dog walking (Figure 13). This area will be east of the existing Crescent Street. parking and will be fenced. The exact location of the fencing will be

determined by park staff with input from the public. There will be no off leash dog walking allowed outside this fenced area, as per park rules and regulations. There will be no dogs allowed in the endangered butterfly management area.

Cultural Resource Protection

Archaeological Resources

Archeological sites have been found in the park. There are also archeologically sensitive areas that may contain sites that have yet to be discovered. Any actions that may impact known sites or areas of archeological sensitivity will be evaluated for further study in accordance with the procedures of the State Historic Preservation Office. The Archeological Sensitivity Study for the park should be updated, and expanded to include the park lands located east of Route 9 and the lands acquired since 1991.

Historic Resources

All designated buildings within the National Historic Landmark District will be maintained in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties. Any capital construction projects within the District will be designed in accordance with the Standards and reviewed by the State Historic Preservation Office. Specific buildings proposed for rehabilitation as part of the Master Plan include:

Roosevelt II Bathhouse

The Roosevelt II Bathhouse will be rehabilitated for park services. This includes a relocated and expanded park office, a new nature/interpretive center, and public restrooms that will be accessible from a separate outside entrance. If demand for State Seal spring water increases, an additional spring water access pavilion will be added to the south side of this building. The rehabilitation project will be designed in accordance with the Secretary of the Interior's Standards and reviewed by the State Historic Preservation Office. (Figure 19)

Lincoln Bathhouse

The vacant wings of the Lincoln Bathhouse will be renovated to "lease out" condition as funds are available. This will assist with long-term maintenance for these areas and provide a long-term revenue source. A new visitor center and mineral waters museum will be installed on the first floor.

1930's Spa Complex

The agency will continue to maintain and rehabilitate the buildings and landscape elements as necessary, both through direct investment by New York State and working in cooperation with partners and concessionaires.

LaTour House

The LaTour House roof will be replaced in order to retard continued deterioration of the building. The house will be mothballed for preservation and future use.

Operations and Infrastructure

Saratoga Spa State Park Office

The park offices will be moved to newly renovated space in the Roosevelt II Bathhouse. This alternative will provide the park administration with opportunities for more efficient office space and

better service to park patrons. The intention is to make the park office a more appealing and welcoming space, and to include better park and partner information. The vacated space in the Administration Building will be given priority use by the region and park partners, but could potentially be available as rental space

The park will continue to host OPRHP's regional administrative offices for the Saratoga-Capital District Region in the Administration Building.

Environmental Education and Historical Interpretation

Environmental education and historic interpretation within the park will be expanded and enhanced in accordance to the Agency's mission.

- Continue to offer public programs year-round
- Continue to offer school programs that satisfy New York State Learning Standards
- Continue to host large events such as Winterfest, Fish Stocking and Learn to Swim
 - Continue to partner with various organizations including but not limited to:
 - o Saratoga PLAN
 - o Children and Nature Network Saratoga
 - The Nature Conservancy
 - New York State Department of Environmental Conservation (DEC)
 - United States Fish and Wildlife Service (USFWS)
 - Cornell Cooperative Extension
 - Saratoga Mentoring
- Increase the quality and amount of written interpretive material (signs, brochures)
- Develop an education/interpretive center in the Roosevelt II Bathhouse
- Develop outdoor environmental education classrooms
- Hire additional interpretive staff
- Upgrade current interpretive staff title to Environmental Educator II

45 and 79 Kaydeross Avenue

These buildings will be renovated for park services. This will preserve existing park infrastructure which is costly to replace. The adaptive re-use of these buildings is a sustainable alternative.

Dormitory

The Dormitory will be renovated for maintenance services and golf cart storage.

Lincoln Bathhouse

The Lobby and part of the first floor of the Lincoln Bathhouse will serve as the new visitor center and mineral waters museum. Site improvements will be made to the front of the Lincoln in order to improve the aesthetics.

Spring Houses

Spring houses will be built, relocated, or rehabilitated as necessary. This can be done in conjunction with the Friends of Saratoga Spa State Park as labor and materials permit.

Geyser Brook Stormwater Management

Efforts will be made to limit stormwater runoff by reducing the impervious surfaces and providing treatment for stormwater that does enter local water bodies. The reduction will result from removal

of unnecessary structures and impervious paving. Stormwater runoff from remaining impervious surfaces will be treated with infiltration basins, constructed wetlands, below ground retention chambers or other best management practices. Porous pavement will be used wherever possible. As funds become available or projects are planned, stormwater management will be included.

Mowing Reduction Program

The reduced lawn mowing protocol will be continued. The effectiveness of this regime has been determined and more areas will be added as appropriate.

Maintenance Facilities

Repairs to the maintenance shop and warehouse building will be prioritized and done as funds become available. Health and safety concerns will be addressed first. The golf maintenance area will be allowed to expand south of the Gideon Garage.

The restoration shop will be leased by the Automobile Museum. A new building will be constructed adjacent to the existing Regional Maintenance Shop to accommodate the workshop and storage areas currently located in the Restoration Shop. Depending upon schedule and available funding, the Dormitory may need to be used in the interim.

Signage

A new signage study that will lead to a new signage plan for the park has been completed. This study is Appendix D of this document.

Traffic/Parking

A traffic study was done in the summer of 2008 as part of this plan. (Clough Harbour 2009). Recommendations from the traffic study will be adopted where feasible. Actions will include:

- Work with DOT to improve traffic conditions on Route 50 especially during high volume SPAC concerts. Suggestions include Variable Message Sign (VMS) boards during concert season, or, preferably, permanent flashing reduced speed signs that operate during concerts.
- Reinstate the AM/FM broadcast messages to concert goers with information on traffic and parking.

Additionally the problem of speeding on park roads, and its impact on vehicular/bicycle/pedestrian safety, will continue to be a priority for enforcement by the regional park police. Traffic calming measures will be introduced and a separate, off road trail will be constructed along the East West Road.

The Route 50 SPAC East parking lot will be expanded and striped to increase the number of spaces. Some of the small grove of trees will be removed but a line will be left with landscape improvements to buffer the parking lot. Increased use of off site parking and a shuttle service from Moreau State Park will be utilized. There will be no changes to the entries/exits in this parking lot.

Tree Maintenance

Trees that have been deemed a safety hazard to park visitors or staff will be dealt with in accordance to the Agency's *Policy on the Management of Trees and Other Vegetation in State Parks and Historic Sites*.

Utilities

Much of the utility infrastructure within the park will continue to be owned and operated by OPRHP. The agency will continue ongoing programs to replace aging and deteriorated facilities as funding allows. Priority projects include:

- Replace 1960's-era gas mains in the core Spa area of the park
- Replace 1930's-era cast iron water mains in the core Spa area, including replacement of the Mineral Water main from the Lincoln.
- Replace 1960's-era overhead electric lines with buried cables in the picnic areas
- Evaluate sanitary sewer lines and eliminate any groundwater infiltration.

OPRHP will also seek to advance sustainability goals through energy efficiency improvements in buildings, and exploration of the potential for on-site energy generation such as photovoltaic panels or hydroelectric facilities.

Communications infrastructure will continue to be owned and operated by the telephone and cable companies as appropriate. OPRHP will partner with telecommunications companies to improve and upgrade existing communications infrastructure.

Transportation

Much of the transportation infrastructure within the park will continue to be owned and operated by OPRHP. The agency will continue ongoing programs to replace aging and deteriorated facilities as funding allows. Priority projects include:

- Road Repaving
 - o Geyser Loop Rd, North-South Rd, Avenue of the Pines
- Parking Lot Repaving
 - o Columbia, Ferndell, Geyser 2 & 3, Administration, Victoria Pool
 - Incorporate stormwater controls as appropriate
- Bridge Rehabilitation
 - Geyser Creek roadway bridges
 - Geyser Creek pedestrian bridges
 - o Old railroad culverts on Geyser Creek and Coesa Creek
- Improve bicycle and Pedestrian circulation routes as described elsewhere in this Plan

Dams

Rehabilitate Geyser Pond and Coesa Pond dams

Sustainability

In keeping with its strong commitment to sustainability, OPRHP will continue to increase the incorporation of sustainable practices into its daily operations. In addition, OPRHP will implement, and, where appropriate, encourage its partners to implement, the following measures.

Energy Conservation

The agency will explore the harnessing of renewable energy sources, such as small scale wind turbines, solar panels, hydroelectric power, and geothermal heating systems. Heating and cooling

improvements will be added, such as attic fans to decrease the energy use of air conditioners, and centralized air to replace wall units.

Water Conservation and Stormwater Management

When needed, bathrooms and kitchens will be updated with water saving fixtures such as reduced flush toilets.

Stormwater management will be improved with enhanced infiltration systems, rain gardens, wetlands, or other practices as appropriate.

Building and Infrastructure Design and Maintenance

Green building design principles, methods, and materials will be integrated into all new construction and rehabilitation.

Carbon Sequestration/Greenhouse Gases

The reduced mowing program will continue and expand. The decreased fuel consumption will reduce greenhouse gas production and the additional vegetation will increase carbon sequestration. The park will look for additional opportunities to increase vegetated areas, such as an arboretum and native plant garden in front of the Lincoln Bathhouse, and the re-establishment of the traditional Spa Complex landscape plan. New plantings should be designed with native plants and xeriscaping principles.

An emissions audit will be conducted and a reduction goal set.

Vehicle/Fuel Consumption

The park will continue to purchase alternative fuel and fuel efficient vehicles. Shuttles will be used for large events to minimize number of vehicle trips to and from park. Opportunities for expanded non vehicular or public transportation access will be encouraged. Bicycle and pedestrian facilities will be improved.

Recycling/Waste Control

The park will provide recycling bins and encourage partners to improve recycling programs. A composting area will be established in the dry storage area for park and partner kitchen waste.

Implementation

Timeline

The Master Plan sets forth OPRHP's vision for capital improvements and operational enhancements to Saratoga Spa State Park for the next ten to fifteen years. As stated at the beginning of Chapter 6, 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 implementation of the Master Plan for Saratoga Spa 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 Priority Ph	Cable 6 Priority Phases	
-	nentation orities	Description/Development Component
Prio	• • • •	Renovate Lincoln Bathhouse for visitor center and mineral water museum
	•	Implement plan for off leash dog area.
	•	Provide improvements to picnic areas and pavilions including new pavilions, water and electric service, playing fields and activity areas
	•	Implement Phase 1 of park infrastructure maintenance projects
	•	Expand reduced mowing areas
	•	Begin improvement of trails according to trails plan (on going)
	•	Work with Spa partners on sustainability issues (recycling, energy conservation, etc.)
	•	Begin implementation of invasive species plan
	•	Begin management actions at Karner blue butterfly habitat areas
	•	Improve existing playgrounds and install new playgrounds
	•	Implement signage plan
	•	Improve asphalt tennis courts and lighting
	•	Expand/improve interpretive program (on-going)
	•	Install erosion control measures on Kayaderosseras Creek and Geyser Brook
	•	Mothball the LaTour house
Prio	• • • •	Begin renovation of Roosevelt II for park office, education/interpretive center and public restrooms
	•	Improve Peerless Pool Complex
	•	Remove loop at Peerless Pool entrance and install new picnic pavilion
	•	Implement Phase 2 of park infrastructure maintenance projects
	•	Remove Golf Cart Barn and move function to Dormitory building
	•	Expand maintenance building and renovate Dormitory building
	•	Implement improvements to maintenance building and warehouse
	•	Improve parking lots on Route 50

Saratoga Spa State Park Master Plan: The Master Plan

Implementation Priorities	Description/Development Component
Priority 3:	Complete renovation of Roosevelt II and move park office
	Rehabilitate vacant wings of Lincoln Bathhouse for lease
	• Renovate 45 and 79 Kaydeross Avenue buildings for park services
	• Implement Phase 3 of park infrastructure maintenance projects
	Construct nine hole disc golf course
	• Implement plan for park spring houses
	• Build new public spring source behind Roosevelt II if needed

Relationship to Other Programs

Within the boundaries of the park, Saratoga Spa State Park works with several not-for-profit organizations housed in park structures. Not-for-profit partners include SPAC, the National Museum of Dance, the Saratoga Automobile Museum, Home Made Theater, and Lake George Opera. The agency has also entered into agreements with for-profit corporations to operate facilities inside the park including the Gideon Putnam Hotel, the Roosevelt Bathhouse, and the Championship Golf Course. Additional partnerships involve leasing office space to other State agencies including the NYS Court of Claims and the NYS Office of Court Administration.

The Master Plan seeks to strengthen existing partnerships by preserving the traditional uses of the developed area of the park for compatible recreational and cultural activities. These partnerships all contribute to the attraction of Saratoga Spa State Park as the "people's resort," offering hotel accommodations, spa treatments, numerous educational and recreational opportunities along with outstanding arts programming and nationally renowned museums. Yet, this Master Plan emphasizes the stewardship responsibilities shouldered by OPRHP for the remarkable historic and natural resources of the Spa Park.

OPRHP management of these existing partnerships, and the evaluation of opportunities for new partnerships within Spa Park, will be governed by the agency's *Policy on Public/Private Partnerships in New York State Parks and Historic Sites (adopted 3/12/09).* Of particular concern is the carrying capacity of the park's roadways and parking areas to accommodate activities which attract significant crowds. The stresses placed on the historic and natural features of Spa Park, which this plan seeks to preserve and enhance, must be weighed against the benefits offered by any new partnership activity or investment in programming, buildings or infrastructure. Partnership activities should be environmentally and fiscally sustainable, with the impacts on park facilities, landscapes, natural and cultural resources, and operational capacity all factored into the decision to enter new or expanded partnership arrangements.

Another focus of the agency's partnership efforts will be ensuring that all existing and future partners work with the agency to achieve the operational and institutional goals of the park and to protect the park's cultural and natural resources. Examples include adherence to all city and county recycling rules and regulations, seeking Audubon International certification for the golf courses, and working with the golf course management to secure habitat linkages for Karner blue butterflies. Critical to this is recognition that, although these are private organizations, their co-occupancy in the

park holds their operations to a higher standard. The focus will be to work with all partners to achieve mutual goals.

In addition to the partnerships within the park, the Master Plan calls for strengthening the partnerships with organizations operating in the region to advance goals for trail development and water quality and stream preservation. For example, the Friends of the Kayaderosseras are an important partner in the protection and management of the Kayaderosseras Creek. Saratoga P.L.A.N., the Friends of Rail Road Run, the City of Saratoga Springs, Saratoga County, the Town of Malta and the Southwest Neighborhood Association are all organizations that can help improve trail connections to the broader community.

This plan encourages the expansion or addition of Friends Groups to assist the park with the development and management of specific park resources. For example, the success of the proposal for an off leash dog area is contingent upon the establishment of a working group of stakeholders. The Friends of Saratoga Spa State Park will continue to be an essential force in the re-establishment and rehabilitation of pavilions and mineral spring houses, which is called for in this plan. The Master Plan has attempted to maximize the resources of the park through the development of four-season recreational uses that each present their own management challenges. Assistance from Friends Groups will help ensure timely implementation of the ambitious recommendations in this plan.

CHAPTER 7 - Environmental Impacts and Mitigation

Introduction

Consistent with the intent of the State Environmental Quality Review Act (SEQRA), environmental factors were considered in evaluating the plan alternatives and in selecting the preferred alternative, i.e., the Final Master Plan, which is described in Chapter 6. Environmental information useful in understanding the type and extent of potential impacts can be found in Chapter 3 (Environmental Setting) and Chapter 5 (Analysis of Alternatives)...Chapter 7 contains a summary of the potential impacts identified in Chapter 5. The focus of Chapter 7 is a description of the environmental impacts associated with implementation of the Final Master Plan, which is described in Chapter 6.

Impacts of Alternatives

In Chapter 5 (Analysis and Alternatives), alternative management and development directions were developed for the park using information about existing conditions, the analysis of recommended directions for activities and constraints, and considerations identified in the resources analysis. The preferred alternative for the entire park (the Final Master Plan) consists of the best alternative for each identified activity and resource.

Much of the information on the environmental impacts of alternative actions is presented in Chapter 5. The following is a summary of the findings from the impact analysis.

Status Quo Alternative

The Status Quo alternative consists of the current facilities, programs and practices as described in the Chapter 3 (Environmental Setting). Under this alternative, the current resource protection, operation, and facility management practices would continue. The increasing demands on the park would not be met or mitigated, nor would the resources be adequately protected.

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 and development of the park. As more visitors use the park, additional demands will be placed on its natural, cultural and recreational resources. Without the guidance provided by the Master Plan, which directs use and development toward areas with higher capacity for such use (and away from the more sensitive areas of the park), the potential for adverse impacts on environmental resources increases.

Preferred Alternative and the Final Master Plan

The preferred alternative, i.e., the Final Master Plan contained in Chapter 6, is the compilation of the preferred alternatives listed in Chapter 5. This compilation was subject to a final evaluation to assure that there was consistency among the various alternatives. The Final Master Plan provides considerable recreational and resource protection benefits. It identifies potential adverse impacts, both short and long term, as well as 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 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.

Potential Environmental Impacts associated with Implementation of the Master Plan

Traffic and Access

The Master Plan does not significantly change traffic patterns or access to the park. Traffic circulation and access will remain the same. Vehicle speed along the Avenue of the Pines and the East West Road has been a concern. This will be addressed by continued enforcement and additional signage where appropriate

There is adequate parking to accommodate new recreational uses such as expanded picnicking facilities and the improved trail system. The new visitor center and new park office will be located in existing buildings which already have adequate parking associated with them. The SPAC parking lots will be expanded by reconfiguring and formally delineating the existing parking spaces. In other areas, such as the Peerless Pool area, parking will be slightly reduced so that, overall, the number of parking spaces within the Park will remain the same. Overflow parking for large concerts or special events will continue to be managed by using the lawn areas within the park. The natural areas of the Park will not be used for parking.

Implementation of the Trails Plan will result in an organized trails system which will accommodate a variety of uses including walking/hiking, biking, equestrian, and cross-country skiing. It will improve access to the park for walkers and bikers by providing new trails along Route 9 and the East West Road. An improved circulation system, which includes designated loop trails and better signage, will provide a more understandable trail network that will benefit all users.

Recreation/Open Space

The implementation of the Master Plan will result in substantial beneficial recreation and open space impacts. The plan outlines a variety of new and improved recreation facilities and visitor amenities including such items as new and expanded picnic areas and playgrounds. A new spray pad will be added to the Peerless Pool. The Peerless area will be redesigned to include a new picnic pavilion area, a combination ball field/general field area, volleyball courts, a 9-hole disc golf course and a one mile exercise loop around the complex. The plan proposes improved seating and added lawn area at the Victoria Pool. A fenced off leash dog area will provide a safe recreation area for dogs and their owners. The improved trail network will provide a better visitor experience by creating an organized trail system with designated trail uses and improved signage. Visitor access to the park's mineral spring waters will be improved by restoring existing and historic springs. Improved signage and interpretation will provide visitors with a better understanding of the history and content of each spring water. A new visitor venter in the Lincoln Bathhouse, the relocated and expanded park office and a new nature/interpretive center in the Roosevelt II will provide improved visitor services, while also incorporating sustainable design and protecting and reusing existing historic buildings in the park. The use of existing park buildings allows for the expansion of recreation opportunities without the loss of open space required by new construction.

Future land acquisition would provide additional open space for the park, improved trail locations and linkages to other regional trail systems along with the benefits of open space and resource protection.

Land

The Master Plan will result in some physical change to the land, particularly where new recreation facilities and trails will be constructed or segments of trails relocated. Most new recreation facilities,

such as new picnic pavilions and the disc golf course, will be located in lawn areas and require little ground disturbance. New trail sections may require some vegetation removal and leveling. Disturbance will be limited primarily to the required width of the trail corridor. As noted in the Trails Plan, trail builders will follow the policy and guidelines for trail building that have been established by recognized trail organizations and governmental agencies. By following these established guidelines, work will be completed in a manner that maximizes the protection of the resources of the park.

The plan proposes improvements to the existing SPAC parking lots to provide more efficient parking. Some pavement will be removed in the Peerless Pool parking area and replaced with a picnic pavilion and volley ball courts. Little disturbance will be required to improve these areas, only minor filling and/or regrading.

Water Resources

Surface/Subsurface - It is not anticipated that the Master Plan will have any adverse environmental impacts on water bodies and water courses within the park. The protection of the water resources in the park is a major goal of this plan; proposed development has been sited to carry out this goal. The Trails Plan identified several trails with drainage problems, including standing water or seasonal wet areas. Routine water abatement techniques such as water bars or rock rearrangement will remedy many of these problems. This work will be undertaken using the established guidelines found in the Trail Maintenance manuals referenced in the Trails Plan. Areas that require more than routine measures will be identified through the approval process identified in the Plan and remedies will be planned in conjunction with park and regional staff. This includes construction of bridges and/or boardwalks. Some projects, such as bridges or work next to wetlands, may require consultation and permits from the NYS Department of Environmental Conservation (DEC) and/or the US Army Corps of Engineers (COE). The regional staff will review all these types of proposals and consult with these agencies as appropriate. All new trail work will be designed to control stormwater and minimize erosion. All plans will be reviewed to assure that stormwater management and sediment and erosion control measures are incorporated into design and construction. Following construction, the trails will be monitored to ensure that drainage and erosion control measures are working effectively.

Creek bank erosion and expansion of invasive species are the two major concerns along both the Kayaderosseras Creek and Geyser Brook. Along the Kayaderosseras Creek, erosion appears to be occurring at an accelerated rate at the two boat launch sites as well as along the length of creek adjacent to the Burl Trail. Erosion due to a lack of adequate riparian vegetation is accelerating due to the expansion of the invasive plant species, Japanese knotweed. The plan proposes to use native vegetation, bioengineering, and invasive species removals to stabilize stream banks. Meandering of streams is a natural process, so stabilization is focused on protection of boat launch sites and areas near existing trails. Plans will be reviewed by DEC. Invasive species removal will be undertaken using techniques that are appropriate for the species. Park staff will continue to work with the Friends of the Kayaderosseras on invasive species removal and general creek management.

Geyser Brook is impacted by increased temperatures related to the impounding of water behind the Geyser dam and Coesa Pond as well as the lack of vegetation along the banks which can shade and cool the waters. Lack of bank vegetation has also accelerated erosion of the creek banks in the Geyser Picnic area. Untreated stormwater runoff is also affecting the water quality of the stream. The Plan includes a number of measures to improve water quality and stabilize the steam banks.

Consistent with the plan for the Kayaderosseras Creek, Japanese knotweed will be removed from the banks of the Geyser Brook and replaced with native riparian vegetation. This will act to reduce long-

term erosion of the banks of the brook, prevent the spread of Japanese knotweed to more downstream locations, and provide added nutrients and shade for the riparian and aquatic ecosystem. A bioengineering project is also planned to arrest serious erosion taking place at the start of a hairpin turn in the brook just north of the Geyser Loop Road Bridge. Without intervention, this site will continue to be a major source of sedimentation and will eventually threaten the structural integrity of the bridge. This project will greatly reduce the erosion at this location and protect the bridge while providing additional habitat for riparian and aquatic inhabitants of the brook.

In addition to these direct improvements to Geyser Brook, nearby enhancements within the brook's watershed and along its tributaries will provide additional improvement to the overall water quality of the brook. Upgrades in stormwater management in the Ferndell parking lot will reduce the peak volumes experienced by the tributary flowing alongside the Ferndell Trail. Combined with culvert and surface improvements to the Ferndell Trail itself, this will alleviate much of the impacts from heavy flows and sedimentation currently generated from this area. Additionally, as part of the trails plan, several steep, highly erodible trails in the area will be closed. Once restored, this will further reduce the amount of sedimentation impacting the brook's watershed.

Continued protection of the park's historic mineral spring waters is an important goal of this plan. Existing and historic mineral water springs will be restored to assure continued public access and safety.

<u>Wetlands</u> – The park contains several important wetland complexes along the Kayaderosseras and Geyser Brook and in the Hemlock Trail Area which significantly contribute to the overall biodiversity of the park. A small, but rare Perched Swamp-White Oak Swamp wetland community is also found within the Hemlock Trail area. None of the park's wetlands will be changed or affected by implementation of the Master Plan. In addition, these areas will be part of both the proposed Park Preservation Area and the Bird Conservation Area, adding additional protection and recognition. A major threat to all of these wetlands is the expansion of invasive species, particularly purple loosestrife, phragmites australis, and Japanese knotweed. The Master Plan calls for a more structured approach to invasive species management, which will have a beneficial impact on the park's wetlands.

Biological Resources/Ecology

Overall, the Master Plan will have a positive impact on the natural resources within the park. Limited new development is proposed in the park. Direct impacts associated with proposed improvements, such as the new picnic pavilions, playgrounds and disc golf course, will be minimal since the proposed improvements have been sited in areas with previous development, limited environmental sensitivity and which generally possess accessibility to, and use of, existing infrastructure.

The importance of the natural resources within the park is recognized with the proposed designation of portions of the park as Park Preservation Areas, Bird Conservation Areas and as a Natural Heritage Area (NHA). The Park Preservation Areas will include all those lands south of the East West Road including the Driscoll Road Property and the lands to the east of Route 9 including the Hemlock Trail and butterfly management areas. This designation recognizes these areas as containing significant ecological and scenic resources. In general, these areas of the park are almost entirely undeveloped, raising their value as open space resources in the rapidly developing region of Saratoga County. This designation will help protect these resources from future development. Specifically, the butterfly management area is considered important based on the presence of the two protected butterfly species and their habitat. The Hemlock Trail Area contains the largest expanse of native forest in the park. Within this area is a complex of forested wetlands and an area of old

growth hemlock forest and a perched swamp-white oak swamp that is unique not only in the park, but in the state. The areas south of the East West Rd. and at the Driscoll Rd. boat launch site represent a portion of the riparian wetland complex that surrounds the Kayaderosseras Creek. These lands were added to the park for the purpose of protecting the water quality, viewshed, and wildlife habitat of the Kayaderosseras Creek. The designation of these areas as PPAs and BCAs recognizes the importance of these areas in achieving these protection goals. Although some development of these areas is technically feasible, doing so would diminish their ability to perform these primary functions. The designation of these areas in the Master Plan confirms the agency's commitment to retaining their natural character and condition.

<u>Plants</u> - The Master Plan will have beneficial impacts on the vegetation within the park. The designation of portions of the park as Park Preservation Areas will include provisions for resource protection, research and interpretation. Of primary benefit to native plants in the park will be the plan to manage invasive plant species. By managing these non-native, invasive plants, native plants will be given more opportunity to persist in the park. Since these native species have adapted together over many years in this area, the relationships and mutualisms that have evolved will be a benefit to both native plant and animal populations that have been coexisting for many years.

Historic landscapes including the Avenue of the Pines and the formal landscaping around the buildings will be managed under a framework that recognizes their significance as a historical/cultural resource. The plan recognizes that the trees along the Avenue of the Pines are affected by their proximity to the roadway and that they are of limited age class distribution. In addition, in recent years many of the pines have been damaged or felled during severe weather events. Monitoring and replacement of these trees will continue to ensure the continuance of this historic landscape.

Proposed development of new recreational infrastructure, including new picnic areas, playgrounds and a disc golf course, will all be sited in areas of low environmental sensitivity. These facilities are all planned for areas within current lawns, minimizing impacts to native or historic vegetation. Furthermore, where these added facilities are the result of a movement of an existing facility, the former site of that facility is planned for restoration. Any new plantings will be with native, noninvasive plants. This will have a beneficial impact on the overall ecosystem in that area, including plants. The Trails Plan also improves, realigns, and/or removes several trails that currently negatively impact plant life..

<u>Wildlife</u> - Overall, the proposed Master Plan will have a beneficial impact on fish and wildlife resources within the park through the additional protection afforded those species by establishment of Park Preservation Areas, the BCA and the NHA. The habitat and open space protected by these designations is a great benefit to wildlife in rapidly developing Saratoga County. Since the most significant proposed impacts will occur in areas previously developed, which do not provide significant wildlife habitat, short and long term adverse impacts to fish and wildlife resources is not anticipated by adoption of the proposed Master Plan.

<u>Birds</u> – The designation of portions of the park as a Bird Conservation Area (BCA) affords additional protection and recognition to areas deemed to be of significant value to bird populations in the area. This designation recognizes that the park contains many types of habitats important for many types of birds. The areas listed for inclusion in the BCA include areas of Appalachian oak-pine forest intermixed with successional old fields utilized by protected butterflies, northern hardwood forests, old growth hemlock stands, forested hemlock wetlands, open marshes and fallow agricultural fields. Consistent with the Management Guidance Summary (Appendix C), the plan proposed that old fields in the southern portion of the park will be managed to retain their agricultural character and thus will continue to provide habitat for grassland bird species.

Improvements proposed for the Kayaderosseras Creek and the Geyser Brook, including removal of invasives and restoration of stream banks with native riparian vegetation, will also benefit birds.

<u>Rare and Endangered Species</u> – The Park is home to two protected wildlife species, the Karner blue butterfly (state and federally endangered) and the frosted elfin butterfly (state threatened). The Master Plan provides for the protection of these two species through the restoration of their habitat. The long term goal of this restoration is to establish enough habitat and a large enough population of butterflies so that this area will function as a hub for the overall Saratoga West Metapopulation as identified in the Federal Recovery Plan for the Karner blue butterfly. The butterfly population in the park is an integral part of the Federal Plan which also recognizes the importance of the frosted elfin butterfly, a co-inhabitant of this habitat type. The proposed habitat restoration plan is also consistent with the NYS Recovery Plan for the Karner blue butterfly currently being developed by DEC. OPRHP will continue to work closely with DEC to assure that Park operation and management of this area is protective of the butterfly. In addition, the creation of a fenced dog park along with the exclusion of dogs from the endangered butterfly management area will provide additional protection for the butterflies. The dog park will provide a safer location for off leash activities. Restricting dogs from the butterfly management area will eliminate the impacts from dogs walking into and trampling the butterfly's habitat.

Cultural/Archaeological Resources

The Master Plan recognizes and protects the many important historic and cultural resources within the park. The large number of major historic structures in the northern part of the park, including the bathhouses, Administration Building, Hall of Springs and the Gideon Putnam Hotel, have ongoing maintenance and restoration needs. OPRHP will continue its work repairing and restoring these structures. Smaller structures, such as the former trolley station (restoration shop) and the many small springhouses, will be repaired and protected. The cart storage barn, an inappropriate attachment to the north side of the Victoria Pool building, will be removed when cart storage is moved to the new golf cart maintenance facility and storage facility in the renovated Dormitory structure. The La Tour House, a contributing feature to the park's listing on the National Register of Historic Places, will be secured and mothballed until an appropriate use is found. Existing and historic mineral springs will be restored and improved with new signage and interpretation. Historic landscapes in the park, including the Avenue of the Pines and the formal landscaping around the buildings, will be managed under a framework that recognizes their significance as a historical/cultural resource. The agency will continue working with its partners to insure that work they undertake on historic structures is reviewed and approved by OPRHP. Improved signage and interpretive materials will highlight the history of the park and the importance of the mineral waters and the Spa complex.

Several archaeological surveys have identified that the park contains important cultural resources. To assure there are no adverse impacts, any project that could affect the cultural or historic resources of the Park will be reviewed by the State Historic Preservation Office (SHPO) to be in compliance with the State Historic Preservation Act. Any mitigation measures or recommendations for additional archaeological surveys will be implemented.

Scenic Resources

Implementation of the Master Plan will not result in any significant adverse impacts on scenic resources in the park. Scenic resources, both the formal landscapes and the natural settings, will be protected and maintained through the actions recommended in the plan. The Avenue of the Pines, the formal landscapes in the Mall area, the historic structures, and the natural areas in the Hemlock trail area and along the Geyser Brook and the Kayaderosseras Creek are important scenic resources.

The recommendation in the plan for protection of the natural, historic and recreational resources, also results in the protection of the scenic resources.

Public Health and Safety

Public health and safety are an important element in park operations. Facility design and construction will meet applicable health and safety codes, including compliance with the Americans with Disabilities Act. OPRHP's Recreation Services program places strong emphasis on visitor safety. For example, lifeguards at State Park pools must be certified through safety training programs, such as Red Cross Advanced First Aid and CPR. In addition, there is ongoing monitoring of pool quality and drinking water.

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 improvements to the picnic areas and the development of new trail connections. This will be monitored by Park personnel 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 (i.e., fugitive dust, noise from construction machinery, etc.) associated with construction of proposed improvements.

Irreversible and Irretrievable Commitment of Resources

The planning, development and implementation of a Master Plan, including construction of additional picnic facilities and playgrounds, additional infrastructure and a slightly expanded trail system 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 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 recreation resources, historic resources and important open space and natural habitats. There will be positive, on-going, economic impacts to the communities surrounding the park, in the form of increased business investment in the communities. Tourism related expenditures, for activities such as day-use, trail activities and special events, are a major element of the economic vitality of nearby communities. Saratoga Spa State Park, with its significant recreation, historic and natural resources and its location near major interstate, state and county roadways, helps to make this a reality.

Supplemental Environmental Review

Portions of this Master Plan, such as the trail connection along Route 9, 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. For example, bioengineering work along the Geyser Brook may require additional analysis or study such as archaeological surveys. 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 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 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;
- Erosion control proposals for the Kayaderosseras Creek;
- Implementation of new or rerouted trails as identified in the Trails Plan, such as proposed new trails in the Hemlock Trail area, Wetland Interpretive Trail and new trails proposed along Route 9 and the East West Road.

Chapter 8 - Comments and Responses

Introduction

This section contains the responses to the comments received by OPRHP on the Draft Master Plan and Draft Environmental Impact Statement (DEIS) for Saratoga Spa State Park. The Draft Master Plan/DEIS was issued August 26, 2009. A Public Hearing was held September 17, 2009 at the Gideon Putnam Hotel Ballroom in Saratoga Springs, New York. The comment period ended on October 9, 2009.

During the Public Hearing, 19 people spoke out of approximately 150 attendees. Their comments were recorded. During the comment period for the Draft Master Plan/DEIS, the agency received 39 written comment letters and email comments. A list of persons providing comments is included at the end of this chapter.

The types of comments received included document editing suggestions, requests for clarification of information presented in the document, comments related to specific aspects of the plan and comments in support of the plan and specific aspects of the plan. All comments were reviewed, summarized and organized by categories. Responses to these comments are found in this chapter and were considered in revisions made to this Final Master Plan/Final Environmental Impact Statement (FEIS).

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

The agency received comments in support of or in opposition to the plan or parts of the plan. This section of the plan focuses on substantive comments and the agency's response to those comments. Although we do not summarize or respond to comments of support or opposition only, the agency appreciates the time and interest of all those individuals or organizations providing comment on the draft plan and draft environmental impact statement.

Response to Comments

This section is organized by category. Following each category heading, there is a summary of the comments received. Following each summarized comment is the agency's response.

Plan and Process

Comment: ADA

There is not enough mention in the Plan regarding access for persons with disabilities. New projects should be done according to the guidelines of the ADA.

Response:

All new capital construction will be designed in accordance with the Americans with Disabilities Act, as well as the accessibility provisions of the NYS Building Code. Rehabilitation of existing structures will likewise have to meet these provisions.

Comment: "Non-Park" facilities

There should be a statement in the plan that describes the existing "non-park" facilities, the size of the pipes, the width of the easements, the acreage they take up, the authorization used by OPRHP to place these facilities in the park.

Response:

New York Parks, Recreation and Historic Preservation Law § 13.06 - Consents to public utilities; licenses and easements states:

"Notwithstanding any other provision of law, no railroad, bus line, telephone or telegraph company, gas, power or light company, pipe line company or other public utility shall have the right to pass over, through or under any property acquired by the office or other state agency for park, recreational or historic preservation purposes, except by written consent, in the form of a license or easement, granted by the commissioner, or such state agency, and then only under such regulations and restrictions as the commissioner or such state agency shall deem proper. The commissioner or other state agency shall have the right to grant to any person or the federal government a license or an easement for any public purpose or to construct or maintain sewers, water, petroleum products, gas lines and electric transmission facilities within, under or across such property, upon such terms and conditions and under such regulations and restrictions as the commissioner or such state agency shall deem just and proper."

It is difficult to distinguish "non-park" facilities from "park" facilities since the park is a consumer of electricity, water, sewer and telecommunication services."

Mapping and documenting all underground utility infrastructure is outside the scope of this master plan.

Comment: Level of Detail in Environmental Setting

The description of environmental setting in the draft is far too brief and cursory.

Response:

The Environmental Setting provides a concise overview of recreational, cultural and natural resources within the park. Additional information on various elements with the Environmental Setting can be obtained through review of the references cited. For example, additional information on natural resources is contained in the Natural Heritage report on the park. The Environmental Setting also provides satisfactory detail for use within the analysis of alternatives and environmental impacts section of the Draft Plan/DEIS.

Comment: Education and Interpretation of Resources

The springs, natural diversity and the history of the Park deserve a higher level of interpretation and education.

Response:

The agency agrees and believes that the new nature center, visitor center, better signage, and museum will enhance the public's awareness of park history, mineral waters and natural resources. Interpretive signage is part of this plan as well.

Comment: Designations

The provisions in State law that set forth designation and management criteria for Park Preservation Areas (PPA) (Article 20 of Parks Law), Natural Heritage Areas (NHA) and Bird Conservation Areas (BCA) should be presented and discussed in one place in the master plan, comprehensively, and copies of these laws and any related regulations should be included in the appendices.

Response:

The discussion of the laws and criteria for designation of areas in the park is beyond the scope of this plan. The designations are presented concurrently in Chapter 5, pages 58-63. The descriptions are concise, with sufficient discussion to analyze the alternative proposals for each designation. More information about the Natural Heritage Area Program can be found on the NYS DEC website at http://www.dec.ny.gov/animals/36987.html. Information about the Bird Conservation Area Program can be found on the NYS DEC website at http://www.dec.ny.gov/animals/36987.html. Information about the Bird Conservation Area Program can be found on the NYS DEC website at http://www.dec.ny.gov/animals/30935.html. Article 20 of the Parks Law establishing the Park Preserve System and Park Preservation Areas can be viewed online at http://law.justia.com/newyork/codes/parks-recreation-and-historic-preservation/idx_par0tca20.html.

Comment: Land Acquisition

There is no description in the draft of how land acquisition opportunities for the Spa Park will be mapped and prioritized. The master plan should address this topic. For example, the Park should seek to expand, wherever possible from willing sellers, along the Kayaderosseras on both sides of the Creek, and on both sides of Route 9. The State Comprehensive Outdoor Recreation is mentioned in passing in the bibliography for the plan but the State Open Space Plan has not. Yet, any land acquisition projects for the park must be listed in the State Open Space Plan before they can qualify for monies from the Environmental Protection Fund. Both plans and the important role they played in the past acquisition and will play in the future acquisition should be described in the master plan. Both should be listed in the bibliography.

Response:

OPRHP will continue to consider acquisition that will protect and buffer the resources at Saratoga Spa State Park. This would include watershed and wetland protection and water access. These acquisitions are covered within the statewide priority projects identified within the 2009 Open Space Conservation Plan:

STATE PARK & STATE HISTORIC SITE PROTECTION {132} - State Parks and Historic Sites provide valuable natural, cultural and recreation resource that are enjoyed by millions of visitors each year. Protection and enhancement of the existing parks and historic sites is critical to long term stewardship of these resources. It is important to improve access, protect viewsheds, eliminate inholdings and provide buffers to protect the resources as well as to enhance recreational and cultural opportunities.

SARATOGA COUNTY {66} – Including the following: KARNER BLUE BUTTERFLY RECOVERY UNITS, KAYADEROSSERAS & FISH CREEK CORRIDOR, and the MID-COUNTY TRAIL SYSTEM.

The identification of individual projects and priorities are not provided within the plan due to the sensitive nature of the acquisition process. The New York State Open Space Plan is now in the References. Expanded discussion of this plan and the State Comprehensive Outdoor Recreation Plan are beyond the scope of this plan.

Comment: Tree Nursery

The draft does not, but should, review the shared history, and current goals and objectives of the DEC Tree Nursery, and explore creative ways to partner with the Spa Park and its management objectives.

Response:

OPRHP will continue to consult with DEC in the management of the Tree Nursery to the mutual benefit of each agency. This may include providing plants and trees that can be utilized within the Park. In addition, consultation will address the operational aspects of both agencies with respect to their individual missions.

Open Space Protection

Comment: Forest Preserve

Forest Preserve status of Saratoga Spa lands in the Town of Malta should be acknowledged in the plan and that "forever wild" status should exclude open fields in the portion of the park from mowing and management.

Response:

OPRHP has reviewed the legal status of Saratoga Spa State Park and has concluded that it is not subject to the "forever wild" Forest Preserve restrictions of the New York State Constitution. However, the master plan adopts three designations – Park Preservation Areas, Natural Heritage Areas, and Bird Conservation Areas – that will assure that undeveloped portions of the park are managed to preserve their natural, scenic, and open space features. These designations add several layers of protection to conserve critical environmental resources.

The lands of Saratoga Spa State Park located in Malta are proposed to receive the designations of both Park Preservation Area and Bird Conservation Area. These designations recognize this area of the park for its natural character, historic agricultural and meadow habitat, and importance to grassland birds. Management recommendations for this area of the park stress the importance of forested buffering for the Kayaderosseras Creek and of maintaining the historical open field habitat. While most of the 2,500 acre park is either developed or forested, the Malta land provides important diversity of landscape and habitat to the park. Our goal is to preserve this diversity and the habitat it provides for birds and other species.

Comment: Non-park facilities

How will the agency respond to future proposals to add "major non-park facilities" to the park, such as utility easements?

Response:

Consideration of future proposals for infrastructure or other facilities that can be considered "non-park" will be done, as it is in all state parks, on a case by case basis.

The impacts of the existing utilities and the evaluation of future utility proposals will be carefully considered. Utilities can cause ground disturbance that can negatively impact archaeological and natural resources, as well as the visual appeal and recreational uses of the park, especially during short term construction. Utilities must be handled carefully to ensure public safety and the safety of our work force. Utility proposals may also present opportunities to enhance park operations. OPRHP will use all legal mechanisms at its disposal to evaluate future utility proposals to maximize the

protection of historic and natural resources, ensure public safety and the provision of recreational services that is at the core of our mission.

Environmental Impacts

Comment: Erosion

Serious erosion is also occurring along Geyser Brook adjacent to SPAC and the Tufa formation, undermining natural and cultural features of the Park. While other points of erosion and remediation plans are carefully addressed in the draft, this one appears not to be.

Response:

Erosion is occurring in a number of areas throughout the park. While the Plan offered detail about erosion control measures at specific locations along Geyser Brook, this was not intended to preclude erosion control measures from being implemented elsewhere. Indeed, lessons learned from addressing these priority areas will help in future remediation projects.

Comment: Use of native species

There were comments relating to native species and the restoration of native ecosystems using plant materials from local sources.

Response:

Saratoga Spa State Park has a positive working relationship with the Saratoga Tree Nursery and has worked cooperatively with the Nursery on projects, programs and events at the park. The Nursery has provided native tree and shrub species to the park for restoration projects and park programs. This partnership has been a mutual benefit to both the park and the tree nursery. In addition, it is existing practice that for those projects restoring natural areas indigenous species will be used.

Comment: Karner Blue Butterfly

The Karner blue butterfly (Kbb) populations are declining and according to a recent news article in the *Times Union* the cause is unknown. The Plan blames the decline on the presence of dogs in the habitat area, when there are many other possible causes such as auto pollution, pesticide application and run-off, surrounding urbanization, parasites and predatory species. State Parks should do scientific research to determine the reasons for the decline and use scientific evidence before taking any action to restore habitat. The butterfly has recovered in other areas why not in the park?

Response:

The Kbb and its habitat have been the focus of scientific research by many cooperating institutions including the US Fish and Wildlife Service (USFWS), NYS Department of Environmental Conservation (DEC), the Albany Pine Bush Preserve Commission (APBPC), and Wilton Wildlife Preserve and Park as well as numerous university and colleges. OPRHP has worked closely with these organizations and they are providing both guidance and direct assistance in the protection and management of the Kbb populations within the Park. Thus the agency's approach, as detailed in the Plan, is based on the best available science and experience.

The Kbb population has declined in many areas throughout its range in New York State. Many possible factors have been identified to date, many which are out of the agency's control. However, other factors including loss of habitat from woody vegetation growth and direct disturbance are within our control and are the focus of our efforts.

Comment: Other Wildlife Species

Concern was expressed that common wildlife, such as snakes found in the proposed habitat management area, have not been considered in the habitat improvement plan, only the Karner blue butterfly (Kbb).

Response:

In order to restore the Kbb site to a state that more resembles its past condition as good habitat, the successional old field habitat at the site must be replaced. In the short term, while clearing takes place, there will be a loss of habitat for the more common wildlife species found in the area and some mortality of animals may occur. However, as this habitat type and the species present there are relatively common in the area and at the park, it is expected that displaced wildlife will move into these areas of refugia. As the site begins to recover after final grading and seeding, those species will move back into and repopulate the site. In addition, since the plan for Kbb habitat improvement calls for only a relatively small portion of site to be managed at any one time, the loss of vegetation and displacement of wildlife will be small relative to the larger population in the area. Also, work is being timed for after the nesting period, there is likely no negative impact on local bird populations.

Comment: Numbering of habitat areas

Why are some areas in the habitat management area unnumbered in the plan?

Response:

The numbering system for the parcel is based on a 2003 survey and mapping of Kbb habitat areas in the Park by DEC Endangered Species Bureau staff. Areas without habitat were not numbered. This was done as part of the cooperative agreement between DEC and OPRHP in the protection of Kbb habitat.

Invasive Species

Comment: Importance of invasive species control

Control for invasive species is important and should be a program that is intended to integrate into a complete community education campaign. As a community we should be working to eradicate and prevent invasive species from dominating our natural areas, Spa State Park should be a leader in this effort or eradication

Response:

The master plan identifies several strategies for controlling invasive species in the Park and calls for development and implementation of an integrated plan for invasive species control. OPRHP is committed to working with local and regional partners on invasive species issues in Saratoga Spa State Park and all the parks in the Saratoga-Capital District Region.

Recreational Activities

Comment: Heating of Victoria Pool

A suggestion was made to include cooperative arrangements with NYSERDA to obtain energy from solar panels to heat the Victoria pool. It was one of the only heated pools in the country when it opened in the 1930s and undertaking such restoration work presumably would be consistent with historic preservation guidelines.

OPRHP studied this as an option a number of years ago, and concluded that it would not be costeffective.

Comment: Tennis Courts

Requests were made for improving the hard courts and/or adding a few more clay courts so that USTA teams could play there, adding night lighting and landscaping.

Response:

Tennis has been discussed in the plan within the Analysis and Alternatives section on pages 88 - 89 and in the Master Plan section on page 123. The plan calls for rehabilitation of existing courts and addition of landscaping and lighting. The existing clay courts were felt to be consistent with the mission and maintenance requirements of the agency.

Comment: Victoria Pool user conflicts

There were concerns about operations at the Victoria pool and some conflicts with patrons using the pool side bar at Catherine's in the Park.

Response:

These are considered operational issues and will be addressed through consultation with the concessionaire and through a variety of management practices, poolside setup and park personnel.

Comment: Dudley Observatory

A proposal was made to have the Dudley Observatory, which is the oldest observatory in the United States, set up star gazing and have telescopes set up. Further that it is possible to move to Saratoga Spa Park. There is no observatory in Saratoga. There's one in Troy, Albany but not in this area.

Response:

Saratoga Spa State Park staff have been partnering with the Dudley Observatory over the past two years in conjunction with their Rising Star Internship Program by offering astronomy classes on park grounds. These programs are open to the public and are popular. The park would like to continue with this partnership and expand the programming where appropriate.

Comment: Tennis Court surfacing

For sustainability reasons, options other than asphalt should be investigated for the tennis courts.

Response:

The plan recommends rehabilitating the existing asphalt courts, not tearing them out and building new ones (p 123). The agency will remain open to surfacing options in the future where appropriate and where funds are available.

Comment: Community Garden

Add a community gardening program to the Park.

Response:

The plan does not recommend this use since the agency does not envision additional staffing capacity to manage this program. In addition to substantial administration, such a program would

Saratoga Spa State Park Master Plan: Comments and Responses

also demand the development of further physical amenities to support it. This community need could and should be accommodated in closer proximity to neighborhoods where people would have greater ease of access to their plots. The agency also believes that such a program should be run by organizations that have the experience and expertise to do so such as Capital District Community Gardens or other similar groups.

Comment: Expand Naturalist programs

Request to continue and expand the naturalist programs.

Response:

This plan includes a new nature center as well as program facilities at locations in the park. The naturalist program will continue and be expanded as these new facilities are developed.

Comment: Playground improvements

Play ground improvements should include "Natural Play" initiatives.

Response:

The agency agrees. Wherever feasible natural play will be a factor in new playgrounds and playground improvements.

Comment: Peerless Pool Complex

Building and visitor circulation at the Peerless Pool complex is confusing and inefficient – must restructure

Response:

The agency agrees. The plan includes extensive reworking of the Peerless Pool complex. (Chapter 5 pgs 100-102, Chapter 6 pgs 124-125 and Figure 18)

Trails

Comment: Trail and former landfill

Potential exists for a trail across the former landfill, through the swamp wetland, connecting to an observation platform with interpretive signage out into the marsh surrounding Geyser Creek. With improved maps, self-guided trails, information kiosks, as well as personal service interpretation, this area of the Park could become an important natural-educational area within the Saratoga-Capital District Region.

Response:

The upland area adjacent to the old landfill is used by the Park for storage of brush, wood chips, and other yard waste. Heavy equipment operating in this area presents a potential safety conflict with trail users, which is why access across the old landfill is not preferred. However, OPRHP agrees that the wetlands are a significant natural resource with interpretive and educational potential. Other routes of potential access should be explored.

Comment: Safe crossings

There should be a safe crossing from Spa Park to Railroad Run and the Geyser Road Trail across Route 50.

The agency agrees and therefore urged the Capital District Transportation Committee to complete a "Route 50 Southern Gateway Study". Working closely with the City of Saratoga Springs, OPRHP and the NYS Department of Transportation (DOT), this study will lay the foundation for feasible bicycle and pedestrian crossing plans that can be progressed through the DOT process. The development of the Gateway study includes opportunity for public input throughout the planning period from November 2009 to June 2010.

Comment: Zim Smith Trail

Connect park trails to the Zim Smith Trail.

Response:

The trail network illustrated in the Saratoga County Green Infrastructure Plan includes a major north-south spine through the county, the Zim Smith Trail. Saratoga Spa State Park forms a central destination on this trail running from Moreau to Waterford. The preferred alignment for the portion of this trail connecting Spa Park to points south is along the Saratoga County water and sewer right of way. This right of way travels across private property between state park lands forming a gap that has prohibited the connection of the park to the Zim Smith Trail. Acquisition of land from willing sellers to connect this trail segment is a high priority for the park.

Comment: Multiple Use trails and safety

Concern was expressed about safety of patrons using multiple use trails. It was felt that cars should be separated from bicycles and bicycles should be separated from pedestrians.

Response:

The roads in the park are open to vehicular use, including bicycles, as are all local roads in New York State. Separate uses on all of the park trails would necessitate duplication of many of the trails adding to the impacts of developing those trails. Multi-use trails are common throughout the State Park System and are not considered a hazard to the users especially with respect to reduced speed limits in park settings.

Comment: Trail locations and impacts

The opinion was expressed that trails should not bisect open fields or dense woods but rather follow the edge of the wood line and should be developed to remain in place to retard forest encroachment on the open fields.

Response:

Wherever possible, trails are designed to produce the least impact to the natural surroundings while preserving user safety, recreational function and enjoyment.

Comment: Trail Signs

Signs on trails should be informative, kept to a minimum, designed in character with the nature of the park, wording should be firm but polite, reference to regulatory sections is not necessary, physical guides should be consistent with a nature trail, rustic posts and split wood fences, no need for neon red strings and green metal posts or large billboards, signs should say "Please" and "Thank You."

A trail signage manual is currently being developed for the State Park System. This will provide guidance for the design and type of information provided for trail signage within Saratoga Spa State Park as well as in other parks.

Relationship to Other Plans and Partners

Comment: Sewage Treatment

It seems almost absurd for the park's sewage to be pumped to Mechanicville! As part of the sustainability goal the park should investigate opportunities for on site sewage treatment with constructed wetland systems.

Response:

The sewage from Saratoga Spa State Park flows to the County Sewage Treatment Plan in Mechanicville with all of the other sewage from the City of Saratoga Springs and surrounding towns. Prior to connecting to the county sewer system in the 1970's, the park disposed of its sewage onsite through septic tanks, sand filters, and open lagoons. Constructing and operating a new sewage treatment plant in the park to today's standards would be cost-prohibitive.

Comment: Partnerships

The Park should foster partnerships with private entities.

Response:

The agency agrees. While the plan makes note of many productive partnerships in various sections, this section may be used to again express the agency's commitment to fostering the partnerships with other organizations that contribute to the health and vitality of the park:

The Friends of Saratoga Spa State Park is an invaluable source of support. We particularly acknowledge their help with events, with management of the tennis courts and their renovations of spring houses.

The Friends of the Kayaderosseras is a critical partner in the protection and clean-up of the river, and in the recreational management of park holdings along the creek, and in working together to secure additional buffer lands.

The Spa Park Partners Forum – The park established a forum for the exchange of ideas and coordination among all the separate operators in the park in 2008. This plan recognizes and supports all those entities that operate privately in the park including SPAC, the Gideon Putnam Hotel, Professional Golf Services, The Saratoga Auto Museum, the National Museum of Dance, the Lake George Opera, Home Made Theater, Roosevelt Baths and Spa.

The plan also acknowledges the work of other private organizations that assist the park in educational programming, development, and natural resource management including *Parks and Trails New York, Saratoga P.L.A.N., the Friends of Railroad Run, Saratoga Stryders, Children and Nature Saratoga, the Waldorf School of Saratoga Springs, and more.*

Comment: Suburban or Rural classification

Desire expressed that the relationship between park and city should be discussed including disagreement that the characterization of the surrounding land use as rural and suburban and the lack

of discussion on the economic impact of the park on the city or acknowledgement of the services provided to the park from the city.

Response:

Although the park is mostly within the borders of the City of Saratoga Springs, it does not lie in the central district. The park is at the southern boundary of the city and is in a suburban to rural area of the city. The economic impacts are discussed in the plan to the degree needed for analysis of alternatives (Chapter 2 pg 25) and the services provided to the park are discussed in Chapter 3 (pg 42-43).

Comment: Engineering and Design Services

A preference should be made for partnering with qualified local private entities for consulting, design and construction services.

Response:

OPRHP follows a strict legal process in contracting for these services. It is beyond the scope of this document to discuss or provide details on this process.

Designations

Comment: Consultation with DEC

Management of lands with parkland designations such as PPA, IBA, and NHA that overlap with Forest Preserve areas should be discussed with DEC.

Response:

Other state agencies, just like the public, are welcome to review and comment on the draft plan. In addition OPRHP will reach out to DEC for consultation as appropriate.

Comment: Park Preservation Areas

A suggestion was made to create four Park Preservation Areas (PPA) within the Spa Park: 1. Wetlands and uplands south of the East West Road; Park lands off Driscoll Road; 3. Hemlock Trail lands east of Rt. 9; 4. Karner blue butterfly habitats east of Rt. 9.

Response:

These areas are included in the PPA in this plan (Figure 14). The agency feels that separation of these areas into four separate areas is not necessary.

Comment: Park Preservation Area maps

Carefully and colorfully map the Park Preservation Areas for resource professionals and the public alike, and included in Park descriptive brochures.

Response:

The areas have been mapped (Figure 14) as needed for the plan. This information and additional information generated as a part of this master planning process will be used in future informational documents as appropriate.

Access and Entrance

Comment: Paving of road to warming hut

Pave the dirt road leading to the Warming Hut and Warming Hut parking lot. I really like the rustic appeal, but there are weeks during spring melt when it cannot be accessed.

Response:

This roadway will be maintained as a gravel road with seasonal maintenance, grading and filling as necessary to keep it open and to provide patron access to the Warming Hut year-round.

Comment: Waterway link to Kayaderosseras Creek

A suggestion was made for a small non-motorized boat waterway link between the Park (Geyser Brook) and the Kayaderosseras Creek, ultimately connecting to Saratoga Lake, and perhaps the State Boat launch serving that lake. Was a water trail covered in the plan?

Response:

The use of the Geyser Brook as a water trail connection to the Kayaderosseras Creek was considered during the formation of the Plan and it was determined that numerous obstacles exist to the development of such a trail. First, the main flow of Geyser Brook almost immediately divides into two separate stream channels once it passes south of the East-West Road. One of the channels leaves the park property. Beyond that point, each channel divides multiple times as they traverse the flat bottomlands of the wetland complex, reducing the flow to the point where they are no longer navigable without many portages. Additionally, beavers have built several dams across the channels, creating even more obstacles. It was determined that creation of such a trail is not feasible and would require significant manipulation of and impacts to a sensitive habitat.

Operations

Comment: Tobacco free zone

Consider making Saratoga Spa State Park a tobacco free zone.

Response:

Through the Spa Park Partners Forum, the park has been working with the private businesses that operate in the park to raise awareness of the need to limit patrons' exposure to tobacco. For instance, in 2009, SPAC began designating non-smoking areas of the lawn during classical programming. We look forward to continued progress with our partners to curtail the use of tobacco in the park.

Regarding the use of tobacco in the areas of the park that are managed with OPRHP staff, it is agreed that more could be done to limit tobacco exposure to patrons. It is proposed to designate all playgrounds and pool areas non-smoking. These are the areas of the park where people are most concentrated together, and where young children and others at risk are most likely to be exposed to smoke. Therefore, management plans will be developed to establish and enforce a no-smoking policy for these areas.

Comment: Nature interpretation

Staffing, contractual services and volunteers to provide nature and waters interpretation as important public services and programs deserve more attention in the draft plan.

Staffing levels and assignments are not in the scope of this master plan but will be reviewed as funds are available.

Comment: Paving alternatives

Concern was expressed that the periodic re-paving of roadways and parking lots is too expensive and is environmentally unsound. Suggestions were made that these lots be re-paved with permeable blocks and consider alternative stormwater treatment such as wetlands.

Response:

As funding allows, alternatives to paving materials and project design to mitigate runoff impacts will be considered. In the park there is already a parking lot being resurfaced with porous pavement.

Comment: After Performance Impacts

Live Nation should pay for clean up detail outside the performance area also. Residents avoid the park after big rock concerts because it is unpleasant to have to wade among garbage and drunken participants sleeping it off.

Response:

The Park works closely with Live Nation and the SPAC to host the popular summer rock concert series at the amphitheater, and to manage the resulting impacts in a way that provides the least disruption to other recreational users of the park. In the past, Live Nation has assisted with park cleanup after major shows, upon request. Appropriately managing the impacts of the concerts on the park, its patrons, and regular constituents will continue to be a high priority.

Historic Resources

Comment: Mineral Baths

Desire that the future of the Mineral Baths should be discussed in the plan. The draft master plan discusses some of the history of the mineral baths, and includes a proposal for a museum about the mineral waters, but mentions no future plans for rehabilitating and marketing the baths. The master plan should put forth, prominently, a coherent plan for the future of the baths and the spa functions of the park.

Response:

The Plan provides for the adaptive reuse of the Roosevelt II and Lincoln Bathhouses should an appropriate entity wish to partner with the State. Currently the Roosevelt I Bathhouse is under a contract to perform Spa Services. This serves as an example of the agency's desire to continue to include services related to the Mineral Bath history of the park. In the future the number of baths being provided will be directly related to the level of demand. A comprehensive rehabilitation and marketing plan for the baths is beyond the scope of this Plan.

Comment: Adaptive reuse of vacant buildings

All vacant buildings should be considered for potential adaptive re-use. Are private lease holders an option? Office space or Condos?

The plan includes considerations for adaptive re-use of all buildings. Leases to private entities are considered in several places in the plan. (pgs 41-42, 52, 94, 106-108, 120, 128-129.) Proposals for adaptive reuse, however, must be consistent with the mission of the agency and the goals and policies of this master plan/EIS.

Off Leash Area

Comment: Enforcement to protect butterfly area

Significant enforcement and education measures will be required to ensure that all off-leash activities are restricted to the proposed fenced area for dogs which is very close to the butterfly habitat management area.

Response:

The agency agrees, and every effort will be made to smoothly transition to the new off-leash area and to enforce the leash laws of the park outside of the off-leash area. Dogs will not be permitted in the Kbb management areas. The proximity to the butterfly habitat management area is of prime concern to park, state and federal agency staff.

Comment: Parking lot expansion

Expand the parking lot by the dog park.

Response:

This area will be monitored as are all parking areas in the park. If the need is observed and demonstrated the parking lot may be expanded when funds become available.

Comment: Size of off-leash area

Concern that the new off-leash area is too small. Desire to preserve open area and trails that exist now. An unfavorable view of the fence was expressed as well as concern for issues such as sun and shade areas, entrances, carry-in-carry-out, enforcement, height of the grass in the new area.

Response:

The area of the current off-leash area is approximately 2.9 acres. The new, fenced off-leash area is approximately 2.7 acres which is still larger than two football fields. Enforcement of the leash law outside the off-leash area will be increased. The fence is necessary to delineate the off-leash area and to protect the federally endangered butterfly management areas. It also acts as a protection from dogs accidentally running into the street. The exact location of the fence will be determined when the off-leash area is established. The location gives the opportunity for both open and shaded areas. The tall grass in the new area will be mowed and mowing in the current off-leash area will be discontinued except for a strip along the route 9 side of the field. Dogs will still be allowed on leash in all other areas of the park except the butterfly management areas where they will not be permitted either on or off leash. The new area is intended to be a carry in-carry out area for all litter, including dog waste.

Comment: Protection of Karner Blue Butterfly

The endangered butterflies have nowhere else to go. Their habitat is limited, and this is their home, where they live -- the dogs can go elsewhere, but the butterflies really can't. Having a large fenced in area for the dogs to run is much more beneficial for the park/butterflies and the dogs. Less people and their pets will be running through the woods.

The agency agrees and have designed the new off-leash area to accomplish this.

Comment: Off -leash area amenities

Having a paved path in the fenced in dog area will allow for people to walk and exercise safely with their dog. Some type of covered seating areas, benches should be provided. A source of water for dogs and humans should be provided as well as an agility set up.

Response:

Detailed design of the off-leash area will occur after the adoption of this plan and will be dependent upon the positive involvement of the community, municipal partners, and the constituents that frequent this area of the park.

Comment: Paved path in off-leash area

Suggestion to pave the path through the butterfly area for people and dogs.

Response:

This plan calls for the butterfly habitat management area to exclude dogs therefore a paved path is not needed.

Comment: Assistance from others in off-leash area

Suggestion to have off-leash area users help cover expenses and maintenance. There is an entire group that is willing to help with anything that needs to be done so that this can be a better park for everyone. An offer of a fence and installation was made.

Response:

The park and the agency look forward to working with other agencies, municipalities and volunteers to help the new off-leash area be developed.

Comment: Concern over aesthetics

Concern that a city known for Health, Horses and History will now be known for a dog park with beautiful state land fenced in so that people of Saratoga can watch their dogs litter the land. Please don't allow this park to become a fact. We have a beautiful park area filled with many great attractions for everyone to see.

Response:

The off-leash area has been deemed to be a legitimate activity in the park. The placement of the new area is appropriate and not the main emphasis of the park. Other new facilities such as the new visitor center and museum in the Lincoln Bathhouse are far more prominent and representative of the park.

Comment: City role

Concern that the city will have to assume the cost of cleanup and removal of litter and for the snow removal of the "Dog Park" parking lot?

Any future agreements with other entities concerning the management of the off-leash area are yet to be discussed and developed and are beyond the scope of this plan.

Comment: Appropriateness of Off-Leash area on state land

We do not want the dog park on our state land. Someone must own some property that could be used by the dogs and their owners who could monitor the cleanup and maintenance.

Response:

The agency agrees that State Parkland should not be the only solution for off-leash areas. The agency has initiated discussions with the city regarding additional off-leash areas within the City. Most dog parks are local municipal amenities and a more comprehensive approach would be a more sustainable and reasonable manner to address the need for off-leash areas.

Comment: Size of off-leash area

Why must the dog park area be shrunk to provide Karner blue butterfly (Kbb) habitat when habitat already exists elsewhere in Saratoga County.

Response:

The Kbb is a federally endangered species and in the 2003 federal Recovery Plan identifies the State Park site, the Wilton Wildlife Preserve, and the Airport as the hubs of the Saratoga West Metapopulation and critical to the recovery of the butterfly. Each population is needed for the recovery of the butterfly with the ultimate goal of removing it from the endangered species list. Federal and state law also require that we protect this habitat area and, more importantly, it is part of State Park's mission to be responsible stewards of our valuable natural resources.

Comment: Lack of sightings of Kbb

Opinion expressed that most people have never seen the Karner blue butterflies in the butterfly area.

Response:

Kbb's are very small and by definition rare and few in number. Also the butterfly has a relatively short life cycle, making the chance of a random sighting unlikely.

Traffic

Comment: CDTC RFP

CDTC just issued an RFP for a study of Rt. 50, with the consultant study to be especially dealing with establishing safe bicycling and pedestrian travel in this corridor. Desire that the findings of the Saratoga Plan contribute to the Rt. 50 analysis, and the transportation corridor study results eventually becoming fully linked to the Park plan's implementation, if adopted.

Response:

OPRHP is a primary partner in the Route 50 Corridor Study. Parks-related issues will certainly be addressed.

Comments Received During the Consideration Period for the Final Plan/FEIS

December 16, 2009 to January 11, 2010

Comment: Open Space Protection – Non-park facilities

A comment was received during the Consideration Period for the Final Plan/FEIS that the response given to the comment regarding future proposals to add "major" non-park facilities within the park did not address the matter sufficiently. A request was made to reassess the answer.

Response:

OPRHP will not convey to other state agencies, municipalities, or private entities any easements or fee title to land within portions of Saratoga Spa State Park that are designated Park Preservation Areas under this master plan. Similarly, the agency will not enter into leases with public or private entities for lands within these Park Preservation Areas except for concession leases to provide food and beverage services or other customary amenities.

Name	Title	Organization
Rebecca Manwaring	Director	Project ACTION Tobacco-Free Coalition of Hamilton, Fulton and Montgomery Counties, St. Mary's Hospital
Emily Goring	Resident	
Jennifer Flickinger	Resident	
Dale Ordes	Resident	
Debbie Keefe	Resident	
Nancy and Roger Tyler	Resident	
Mark Lawton	Resident	
David Gibson	Conservation Chair	Audubon Society of the Capital Region
	Executive Director	Protect the Adirondacks
Elizabeth Bruyere	Resident	
Tim Sweeney		Parks & Trails New York
Linda Fusina	Resident	
Laura Clark	Resident	
Cay Hanley	Resident	
Patrick Gill	Resident	
Virginia Dunigan	Resident	
Jaqueline Bave	Conservation Chair	Glens Falls-Saratoga Chapter – Adirondack Mountain Club
JoAnne and Keith Stanton	Residents	
Janine Stuchin	Project Manager	Southern Adirondack Tobacco-Free Coalition
Annette Travis	Resident	
Courtney A. Smith	Resident	
M. Howie	Resident	
Victoria Morse	Resident	
Ruth Breunig	Member	Tobacco-Free Coalition
Chris Kulls	Resident	
Ivan Vamos	Resident	
Joshua C. Zalen	Resident	

Persons / Organizations Who Provided Comments

Bridget Rocco	Coordinator	Tobacco-Free Healthy Schools Policy Program Catholic Charities Fulton & Montgomery Counties
Steve Torman	Resident	
Amanda Hooker	Resident	
Judy Rightmyer	Resident	
Charles C. Morrison	Resident	
Molly Gagne	Resident	
Bill Sprengnether	Resident and	
	PR and Outreach Chair	Sustainable Saratoga
David Aimone	Resident	
Ian Klepetar	Resident	
Nancy Zucchino	Resident	
Ken Ivins	Commissioner of Finance	City of Saratoga Springs
Joan Waoner	Resident	
Teena Willard	Resident	
Jesse Cook	Resident	
Shelley Waters	Resident	
Rod Vallone	Resident	
Allison Beals	Government Relations	Adirondack Mountain Club
Michael James	Resident	
Jennifer Green	Resident	
Pete Murray	Resident	
Unknown Audience		
Unknown Audience		
Unknown Audience		

Saratoga Spa State Park Master Plan: Comments and Responses

References and Appendices

References

- CNA 2008. Certificate of Analysis of State Seal Spring, Saratoga Spa State Park, Saratoga Springs, NY. Final Report dated 10/15/08.
- Collamer 1991. Stage 1A Literature Review and Stage 1B Archaeological Investigations for the Saratoga Spa State Park. East Nassau, NY. 1991.
- DEC 2002. New York State Department of Environmental Conservation. *Ecological Communities of New York State, second edition,* A revised and expanded edition of Carol Reschke's *Ecological Communities of New York State,* New York Natural Heritage Program, NYS DEC.
- DEC 2009. New York State Department of Environmental Conservation. *Ambient Air Quality Monitoring*. http://www.dec.ny.gov/chemical/8406.html. April 2009.
- DEC 2009(a). New York State Department of Environmental Conservation and Office of Parks, Recreation and Historic Preservation. 2009 New York State Open Space Conservation Plan and Final Generic Environmental Impact Statement. Albany, NY. 2009.
- NYSERDA 2008. New York State Energy Research and Development Authority. *Energy Efficiency Feasibility Study: Saratoga State Park*. Prepared by L&S Energy Services Inc., Clifton Park, NY. 2008.
- NYSM 2008. New York State Museum. NYS Surficial Geology Listed Alphabetically. http://www.nysm.nysed.gov/data.surficial_alpha.html. May 2008.
- OPRHP 1983. New York State Office of Parks, Recreation and Historic Preservation. Saratoga Spa State Park Management Analysis Plan to the Year 2000. Draft, Not Published. Albany, 1983
- <u>OPRHP 1999. Draft Environmental Impact Statement, Proposed High Rock Golf Course at Saratoga</u> <u>Spa State Park, NYS OPRHP, LA Group, High Rock Partnership.</u>
- OPRHP 2005. New York State Office of Parks, Recreation and Historic Preservation. *Saratoga Performing Arts Center (SPAC) Facility Rehabilitation Plan.* Prepared by C&S Engineers, Syracuse, NY for OPRHP. 2005.
- OPRHP 2009. New York State Office of Parks, Recreation and Historic Preservation. *Statewide Comprehensive Outdoor Recreation Plan 2009-2013* NYS OPRHP. Albany, NY.
- SLPID 2002. Saratoga Lake Protection and Improvement District. A Watershed Management Plan for Saratoga Lake.. Prepared by LA Group, Saratoga Springs, NY. 2002.
- USFWS 2003. Department of the Interior U.S. Fish and Wildlife Service Great Lakes Big Rivers Region. *Karner Blue Butterfly Recovery Plan(Lycaeides melissa samuelis)*. Fort Snelling, Minnesota. September 2003.

Appendices

Appendix A Saratoga Spa State Park Final Trails Plan Appendix B Permeable Paving Protocols Appendix C Management Guide Summary for Saratoga Spa State Park Bird Conservation Area Appendix D Saratoga Spa State Park Signage Plan