Green River Reservoir State Park

Final Draft

Long-Range Management Plan

2005

Section I
Introduction

A. Mission Statements Guiding the Development of this Plan

1. Vermont Agency of Natural Resources

The mission of the Agency of Natural Resources (ANR) is "to protect, sustain, and enhance Vermont's natural resources, for the benefit of this and future generations" (Agency Strategic Plan, 2001-2005).

Four agency goals address the following:

- To promote the sustainable use of Vermont's natural resources;
- To protect and improve the health of Vermont's people and ecosystems;
- To promote sustainable outdoor recreation; and
- To operate efficiently and effectively to fulfill our mission.

Agency Departments

Vermont Department of Environmental Conservation
Mission Statement - 2001-2005
The mission of the Vermont Department of Environmental Conservation (DEC) is to preserve, enhance, restore, and conserve Vermont's natural resources, and protect human health, for the benefit of this and future generations.

Vermont Department of Fish and Wildlife
Mission Statement - 2001-2005
The mission of the Vermont Fish and Wildlife Department (DFW) is the conservation of all species of fish, wildlife, and plants and their habitats for the people of Vermont. To accomplish this mission, the integrity, diversity, and vitality of their natural systems must be protected.

Vermont Department of Forests, Parks and Recreation
Mission Statement - 2001-2005
The mission of the Department of Forests, Parks, and Recreation (DFPR) is to practice and encourage high quality stewardship of Vermont's environment by monitoring and maintaining the health, integrity, and diversity of important species, natural communities, and ecological processes; managing forests for sustainable use; providing and promoting opportunities for compatible outdoor recreation; and furnishing related information, education, and services.

B. Overview of Lands Management by the Vermont Agency of Natural Resources

1. Purposes of Land Ownership

On behalf of the State of Vermont, the Agency of Natural Resources manages state-owned land for a variety of purposes, ranging from the protection of important natural resources to public uses of the land in appropriate places.

Natural resources include, but are not limited to, the following: biodiversity, wildlife habitat, natural communities, water bodies, wetlands, undeveloped land, scenery, and aesthetic values.

Public uses include, but are not limited to, the following: recreation, access to state lands or waters, environment-related businesses, flood control, education, research, and sustainable use of renewable resources such as hunting, fishing, trapping, and forest management.

2. Outcome of Long-Range Management Plans

The Vermont Agency of Natural Resources manages state lands in a sustainable manner by considering all aspects of the ecosystem and all uses of the natural resources (Agency Strategic Plan, 2001-2005).

The Agency has a mandate to serve as the principal land steward for properties owned or managed by its three departments – Environmental Conservation; Fish and Wildlife; and Forests, Parks and Recreation.

The development of long-range management plans (LRMP) for Agency lands represents a key step in providing responsible stewardship of these valued public assets. Each LRMP identifies areas where different uses are to be allowed and describes how these uses will be managed to ensure protection of natural resources. The following over-

arching management standards further both Agency and Department missions and are applied to the development of long-range management plans for all ANR lands:

Biological Diversity: Agency lands are managed to both maintain and enhance the variety and abundance of plants, animals and other life forms at scales ranging from local to regional.

Ecosystem Health: Agency lands are managed to ensure ecosystem functions, health, and sustainability. Threats and stresses are monitored, evaluated, and reported regularly.

Legal Constraints: Agency lands are managed in accordance with the purposes for which they were acquired. Many Agency lands were purchased with federal funds that require management to be directed for specific purposes. These requirements and other legal restrictions, such as conservation easements, are supported in all planning and management activities.

Natural Resource Science: The foundation for management decisions on Agency land consists of comprehensive ecological assessments as developed and documented in long-range management plans.

Wildlife Management: Wildlife management activities are directed at protecting and enhancing wildlife habitat for species needing to be conserved as well as those of public interest and utilization.

Recreational Uses and Needs: Agency lands are managed to create, maintain, and enhance sustainable recreational uses. Permitted or allowed activities are dependent upon site capabilities and public need. Wildlife management areas continue to give priority to wildlife dependent activities.

Sustainable Forestry: Agency lands are managed to ensure forest health and sustainability. Vegetation management and utilization strategies based on natural communities and appropriate silvicultural guidelines ensure that trees, forests, and forest ecosystems remain healthy.

Public Involvement: State lands are a public resource. The public is involved in all aspects of decision-making on state lands, including acquisition, policy development, management planning, and the implementation of policies, plans, and regulations. In developing long-range plans, the Agency considers interests outlined in local, regional, and state plans, including town plans, regional plans, watershed plans, and species recovery and management plans, and works to resolve conflicts between plans as may be appropriate or necessary.

Historical/Cultural and Scenic Values: Agency lands are managed to be sensitive to historical, cultural, and scenic values. Due to protection under state

and federal regulations, sites of archaeological significance are equal in status to legal constraints applicable to the lands.

Best Management Practices: Lands under Agency management serve as exemplary stewardship models for the public and private sectors in Vermont. Whenever possible, best management practices that are utilized are visible and easy to understand.

Regional Availability of Resources and Activities: Because every parcel of Agency land cannot accommodate all the uses that the public might want, the Agency works to ensure that the following uses are made available on a regional basis: sustainable forest harvest; sustainable recreational activities; wildlife-oriented activities; protection of biodiversity and natural communities; and activities that reflect historical and cultural values.

3. Amendments to the Long-Range Management Plan

The long-range management plan provides guidance for the long-term management and development of a state land unit. However, the future can not be fully determined at the time of plan development. The Department undertakes an amendment process to the current long-range management plan when significant changes to the plan are proposed, such as:

1) designation of non-developed camping sites (via statute regarding camping on state lands);
2) major change in use or species management direction;
3) new recreation corridors not identified in current plan;
4) major land acquisitions added to existing parcel;
5) major capital expenditures for new projects;
6) facility closures;
7) transfers in fee ownership;
8) leasing of new acreage (e.g., ski resort); and
9) renaming natural features (prior to recommendation to Department of Libraries) or lands.

When the amendment process is triggered, the Department enters into a public involvement process. The type of process is determined at the time and is dependent upon the extent of the type of amendment. If applicable, the easement holders are notified to discuss the proposed amendment.

There may be times when the Department would seek public input and comments regarding changes to a plan that are less significant than those triggering the amendment process. This is left to the discretion of the District Stewardship Team.

C. Green River Reservoir State Park Long-Range Management Plan Structure

This long-range management plan provides guidance for long-term management and development of Green River Reservoir State Park. The plan summarizes the available information about the park, documenting the planning process and the relevant data used in making land use decisions, and specific management and development proposals. As conditions change, the plan may be reviewed and updated as necessary to responsibly guide Departmental actions at the park. The plan, however, is not meant to provide detailed plans for site development, resource management, or park operation and maintenance. Camping, day use, and parking capacities indicated by the plan are approximate only, and may be slightly more or less when specific site plans are prepared for funding and implementation.

The plan represents the comments and recommendations made by the public, through the thoughtful and serious review by the District Stewardship Committee (DSC) and Agency of Natural Resources technical staff. Discussions about land not owned by the Department of Forests, Parks and Recreation have been included. These lands represent potential areas for necessary park management needs, protection of resources, and acquisition opportunities, based on available data. However, the discussions are intended for planning purposes only, and do not represent a commitment for management or acquisition.

This long-range management plan follows the agency's planning format. It is divided into several sections.

Section I is the ***Introduction***, which includes the Agency and Department missions, an overview of lands management, and the structure of the long-range management plan.

Section II is the ***Parcel Description and Background.*** Found in this section is a summary of the general description of the park along with locator and base maps, the history of acquisition and special constraints of the property, a summary of the land use history, and how this plan relates to regional and town plans.

Section III is a ***Public Input Summary*** to this plan and management of the property.

Section IV covers ***Management Strategies and Actions.*** This section of the plan provides the park character statement and operating philosophy (vision) as well as goals, objectives and actions to set the stage for park management, operations, and development. It also identifies management areas, where different uses are allowed, and describes how these uses will be implemented and managed.

Section V is a compilation of an ***Implementation Schedule*** for management actions identified in the previous section.

Section VI is the ***Monitoring and Evaluation*** portion of the plan describes how the natural resources, park operations and visitation, and management will be monitored and evaluated, and it will provide a way of tracking accomplishments.

The final section is the ***Appendices,*** which is a compilation of all the technical information used to arrive at the management goals, objectives, strategies and actions found in the public long-range management plan. Found in the appendices are all the resource analyses (natural, recreational, visual, and cultural), a glossary of terms, pertinent policies, legal constraints and additional maps as well as a responsiveness summary to public comments. The Appendices are not included in the final public long-range management plan, but can be obtained by contacting the Barre District Office. In addition there are a number of other documents that have been cited in the LRMP and are included in the files located in the Barre District Office.

Section II
Parcel Description and Background

A. General Description

Green River Reservoir State Park, located in the Towns of Hyde Park and Eden, contains approximately 5110 acres of land surrounding the Green River Reservoir (See State Locator Map). This property includes many unique features, and offers a diversity of land types with outstanding ecological, recreational, and wildlife values. The property is located in the Northern Green Mountains biophysical region (See Biophysical Regions Map).

The most outstanding feature of this property is the Green River Reservoir, a 653-acre Reservoir built in 1946/47 for the purposes of supplying hydropower to the Town and Village of Morrisville and for flood control (See Base Map). The surrounding 19 miles of shoreline are virtually undeveloped with the exception of approximately 2000 feet (approx. 0.4 mile) of private land abutting the Reservoir near the southern end. Green River Reservoir is one of the largest undeveloped water bodies in Vermont and the largest dedicated to non-motorized recreation. The scenic Reservoir has long been a favorite destination for canoeists and campers. In winter, its network of snowmobile and cross-country ski trails attract numerous outdoor enthusiasts. There are also extensive wetlands scattered throughout the property, a number of undeveloped ponds, and the adjoining woodlands are the primary component of the largest deer wintering area in Lamoille County. The Common loon has been nesting successfully for a number of years, and there is a Great Blue Heron rookery located in the northern end of the Reservoir.

Prior to state ownership, the Reservoir was open to public recreational use under the ownership of the Morrisville Water and Light Department (MWL). At one point in time, it was a “hidden jewel” visited by very few people (mostly local residents). As word got out, recreational use increased to the point where some of the wilderness or primitive characteristics that visitors once enjoyed were becoming diminished.

The State Park is surrounded on all sides by private property whose owners utilize their land as both year-round residences and seasonal camps. Adjacent to the Park in the northeast section, are Atlas Timber Lands owned and managed by Vermont Field Office of The Nature Conservancy. MWL still owns land in the southern part of the property adjacent to the park and surrounding Zack Wood Pond and Mud Pond. Access to the Park is from VT Route 15 in the south going north on Garfield Road to Green River Dam Road for approximately 2 miles to the main entrance.

[insert State Locator Map]

[insert Biophysical Region Map]

[insert bio region map back]

[insert Base Map]

base map back

B. Acquisition History

Green River Reservoir State Park was established as a state park on March 30, 1999. This property, and adjacent adjoining lands, have long been recognized by the State of Vermont which, at various times over the last couple of decades of the 20th Century, has attempted to acquire this property and surrounding lands for public purposes.

On behalf of the State of Vermont, the Vermont Field Office of The Nature Conservancy (TNC) actively started negotiating to acquire this property beginning in 1988. These efforts ultimately resulted in approximately 5110 acres of land being acquired by TNC, and then immediately transferred to the State of Vermont, on March 30, 1999 for $2.5 million from the Morrisville Water and Light Department (MWL). Financing for the project came from the federal Forest Legacy Program ($1.385 million) and the Vermont Housing and Conservation Trust Fund ($750,000 Grant #99-027). TNC borrowed the balance of $365,000 needed to meet the purchase price from internal sources with the expectation that it would be reimbursed for its expenses associated with the project. Until being reimbursed, TNC held an undivided 20% interest in the property. The State of Vermont closed on the purchase of TNC's retained interest on March 29, 2000.

The March 30, 1999 purchase price for the Green River Reservoir property was $2.5 million and was met as follows:

Forest Legacy Funds (FY '98 grant):	$1,005,000	
Forest Legacy Funds (FY '99 grant):	380,000	
Vermont Housing and Conservation Trust Fund:	750,000	(State Match)
The Nature Conservancy:	365,000	*
Total	$2,500,000	

*Note: The $365,000 funding shortfall for this purchase was met by The Nature Conservancy with the understanding that the State would apply for FY '00 Legacy funding to reimburse TNC for eligible project costs. TNC retained an undivided 20% interest in the entire property. The State was awarded an additional $391,509 in Forest Legacy funding in FY '00 as a continuation to the previous two Legacy grants. These funds were used by the State to acquire TNC's interest it retained in the property and to reimburse TNC for eligible Forest Legacy costs it incurred on this project. The State of Vermont closed on this final purchase on March 29, 2000.

After the closing on the property, an Interim Management Plan was developed and approved prior to the first park operating season in 1999. On July 22, 1999, Governor Howard Dean officially dedicated Green River Reservoir State Park as Vermont's newest state park.

C. Special Constraints – Legal and Policy

1. Conservation Easement - Summary

As part of the land acquisition process, a Conservation Easement on Green River Reservoir State Park was signed and is co-held by the Vermont Housing and Conservation Board (VHCB) and the Vermont Chapter of The Nature Conservancy (TNC) (see Appendix A: Special Constraints for the entire Conservation Easement). This Easement conveys the development rights of the property to VHCB and TNC except for those needed to carry out the permitted uses of the property. It also restricts certain uses of the property and requires that a long-range management plan be developed in consultation with VHCB and TNC, accordingly (Town of Hyde Park, Book 91, Page 446-458, received March 30, 2000). The most important items that directly pertain to the management plan are:

Purposes of the Grant:

1. To provide for dispersed public outdoor recreation use that is low-impact (and except as may be provided for within the Grant, non-commercial and non-motorized), and for primitive camping resources, as well as the quiet enjoyment of the Protected Property, provided such uses are compatible with the purposes of the Grant.
2. To conserve and protect important wildlife habitat and natural communities on the Protected Property and the ecological processes that sustain these areas.
3. To conserve productive forestry resources on the Protected Property and provide for the sustainable management of timber resources in a manner that is compatible with the purposes of this Grant.
4. To conserve and protect the Protected Property's undeveloped character and scenic and open space resources for present and future generations.

Restricted Uses of Protected Property

1. Shall be used for educational, scientific, public outdoor recreation, natural area, and open space purposes only. No residential, commercial, industrial or mining activities shall be permitted on the Protected Property and no building or structure associated with such activities shall be constructed, created, erected or moved onto the Protected Property, except as specifically permitted by the Management Plan or by deed.

2. No driveways, roads or utility lines shall be constructed, developed or maintained into, on, over, under or across Protected Property.

3. There shall be no signs, billboards or outdoor advertising of any kind erected or displayed; provided, however, that the Grantor may erect and maintain reasonable signs indicating the name of the Protected Property, boundary markers, directional signs, signs informing the public about reasonable use or restricting access on the

Protected Property, memorial plaques, historical markers and interpretative/educational markers.

4. There shall be no manipulation or alteration of natural watercourses, lakeshores, wetlands, water levels and/or flow of other waterbodies except as may be provided in the Management Plan or deed. Does not apply to activities associated with the operation of the hydroelectric facility.

5. Except along designated travel corridors and public access point(s), there shall be no operation of motorized vehicles on the Protected Property except for uses specifically reserved, such as park operations and maintenance, wildlife and forest management, trail grooming and/or maintenance, and for emergency purposes. However, snowmobiling may be permitted at the discretion of Grantor (FPR).

6. The forest management plan will provide for the protection of recreation use areas and any natural communities, important wildlife habitat areas or other ecologically or environmentally sensitive or important areas. Logging activities in such areas shall be restricted, limited, or conducted in such a way so that recreation and natural resource values are not unduly compromised, and at a minimum will include 50-foot riparian buffers on each side of a stream, 100-foot buffers around ponds and wetlands, and a 500-foot buffer around Green River Reservoir where no harvesting or other forest management activities are conducted except for stream crossings and use of existing logging roads. In addition, no forest management activities will be permitted on islands in Green River Reservoir (See Conservation Easement Buffers Map).

7. There shall be no disturbance of the surface, including but not limited to filling, excavation, removal of topsoil, sand, gravel, rocks or minerals, or change of the topography of the land in any manner, except as may be reasonably necessary to carry out the uses permitted on the Protected Property under the terms of this Grant and provided for in the Management Plan. This includes the right to clear, construct, repair, improve, maintain and replace trails, roads, parking areas, structures or facilities, together with necessary access drives and utilities, on the Protected Property, provided trails, roads, parking areas, structures or facilities are consistent with this Grant and permitted by the Management Plan (Town of Hyde Park, Book 91, Page 446-458, received March 30, 2000).

2. Deed Restrictions

There are 14 deed restrictions that include: rights of ways to use logging roads; oil, gas and mineral rights; annual rental payments; and use of a spring for drinking water (See Special Constraints Map and Appendix A for complete description in Conservation Easement). A summary of the major restrictions include:

1. UVM has reserved mineral rights in the Town of Eden on Lot 1 Range 3, Lots 2 and 3 Range 4, Lot 4 Range 6 and Lot 1 Range 7.

2. There are five Lease Lots on the Property:
   In Eden: Lot 1 Range 5 to the Social Worship of God
   In Hyde Park: Lot 38 to the English School, Lot 39 to the Social Worship of God, Lot 52 to the Grammar School and Lot 53 to the Gospel Minister.

3. There is one spring right on the Property located on the east side off the Patnoe Farm Drive known as the "Halquist Spring." The spring may remain as long as no major repairs become necessary, in which case it must be removed. Liability insurance in the amount of $500,000 (with the State listed as additionally insured) must be maintained on the spring by the Lessee.

4. The most recent deed restriction was issued to H.A. Manosh, Inc. (1999 Cross Easement) moments prior to the State of Vermont closing on the property. This easement is for use of logging road to access three landlocked parcels off of Green River Dam Road for the purposes of removing forest products from his property and to gain access to a personal, noncommercial hunting camp that he can erect on his property. The easement is 40 feet in width from the centerline of the existing logging road.

   Manosh has also conveyed through the Cross Easement, an easement to the "Village" for the purposes of enabling the Village to maintain, inspect, repair and otherwise attend to its dam facility, and to remove forest products in conjunction with that purpose. Also an easement has been deeded to the State of Vermont (as Village successor) for access for administrative and management purposes.

3. Morrisville Water and Light Department

Morrisville Water and Light Department retained ownership of land lying below 1220 feet above mean sea level, and all those lands under the waters of Green River Reservoir. They also retained the Federal Energy Regulatory Commission license (FERC Project #2629) and Vermont Department of Environmental Conservation Water Quality Certificate (issued March 29, 1981; amended May 25, 1981) to operate the dam as a power generation facility. During May - October, MWL operation of hydroelectric dam facility will be with a maximum drawdown of 1 foot from the full pool elevation of 1220'

[Insert Easement Buffers Map]

back of easement map

[Insert Special Constraints Map]

back of special constraints map

msl using only one turbine except during periods of excessive precipitation when the second turbine will be used to prevent spillage. During the critical winter period (December – February), the normal winter drawdown below full pool will be six (6) feet while no maximum drawdown will exceed ten (10) feet. MWL owns approximately 53 acres around the dam and along Green River Dam Road (Town Highway #16), including 50 feet on each side of the power lines running along Green River Dam Road.

MWL also retained rights as follows:

- A right of way over and the right to use, by persons, machinery, equipment, and vehicles, all existing roads, trails and easements, wherever presently located, for the purpose of access to the lands retained, to the Green River Reservoir and to the dam (FERC Project # 2629).

- All rights to raise or lower the level of the water in connection with the operation, repair and maintenance of the dam, the hydroelectric facility, and all other components as specified under its FERC License (Project # 2629) and Vermont Water Quality Certificate (1981).

- All rights of flood and flow determined to be necessary or desirable, the right to "cycle" water and to regulate the level of water in the Reservoir and for the dam and Project # 2629.

4. DFPR Legal Road Access to Property

Other than the main access to the park from Green River Dam Road, there is limited legal access to the remainder of the property. The only other legal accesses are from the Upper Diggins Road on the west side of the property in the Town of Hyde Park where the Class III road turns to a Class IV road and terminates near Schofield Pond and on the east side of the property from the Garfield Road, then along Bornemann Road to the right of way access (see Special Constraints Map). A summary of the access limitations includes:

- No deeded access or rights of way across the private road, or through the gate, owned by Lawrence LaClair in order to gain access to east side of property.

- No deeded access or rights of way across private road from Diggins Road to gain access to west side of property. Private road owned by George Fearing and J. Raymond Chauvin. Diggins Road north to property is a Class IV Town Highway.

- No deeded access or rights of way across private road near South Pond to gain access to northwestern part of property.

- No deeded access or rights of way across Lepine property on the west side of the Reservoir. MWL had an informal agreement with the Lepine's – upkeep of road across Lepine property for permission to access lands north of their property.

- Deeded rights of way to State of Vermont across Bornemann, Misner, Atlas and Demerritt properties to access the northeast corner of the property.

5. Vermont Water Resources Board, Vermont Use of Public Waters (UPW) Rules

The UPW governs the aquatic resources management of public waters of Vermont under 10 V.S.A. Section 1424. It provides guidance for the review of petitions seeking the adoption of rules regulating the use of particular public waters filed pursuant to 10 V.S.A. Section 1424. It also establishes a number of general management rules to protect normal uses on all lakes, ponds and reservoirs for which specific rules have not been adopted. The provisions that directly affect Green River Reservoir include:

1. 2.11 – Those water bodies which currently provide wilderness-like recreational experiences shall be managed to protect and enhance the continued availability of such experiences.

2. The use of internal combustion motors (3.5), use of personal watercraft (3.3), and use of aircraft (3.4) are prohibited on Green River Reservoir unless law enforcement, emergencies or the performance of official duties by a governmental agency require otherwise (3.1(c)). [This would include Morrisville Water and Light.]

3. 3.6 – Between May 1 and July 31 all persons and vessels are prohibited from public waters within 300 feet of any loon nesting site that the Secretary of the Agency of Natural Resources or his/her authorized representative has identified by signs and buoys or other clear on-site markings.

C. Summary of the History and Development of the Area

1. The Garfield Area and the Green River Reservoir

Green River Reservoir State Park and the area around it have a strong history in lumbering and farming (for more details see Appendix F: Historic Resources Assessment). Garfield, the hamlet at the intersection of the Garfield Road and Green River Dam Road, was at one point in time a thriving community. Previously named the Green River Hamlet, it was renamed to Garfield after James Abram Garfield, President of the United States, when a post office was to be established in 1881. Since there was already a Green River in the southern Vermont with an established post office, the name Green River had to be changed.

Agriculture

Very little tillable land was available in the Green River watershed including the Upper and Lower Diggings section of Green River. Grassland agriculture was practiced in a few areas where meadows had evolved. Most of the agriculture in the area was small, subsistence farming, or those associated with logging and lumber companies, such as near the Schofield Mill.

From the 1870 and 1880 agricultural censuses of Hyde Park, there were five farms located in the upper Green River watershed. Four of the five have been located in the field, and include the Joseph Cleaveland, Jonas Sulham, Pluma Prior, and Hiram Haskin farms. The fifth, the Curtis Putnam farm merits consideration because it documents the production of a tenant farm owned by R.S. Page, a prominent Hyde Park businessman, with a wide range of interests including lumber, cattle and real estate. Putnam is recorded as living on a farm leased by R.S. Page, which was probably in the immediate vicinity of Schofield mill on Schofield Pond. Conversely, the Haskins farmstead represents the agricultural component of a saw mill complex located about a mile above the outlet of Great Pond on the Green River.

The Cleaveland, Sulham, and Prior farms are identified as small holdings, cultivating a limited mix of crops and exhibiting yields of potatoes that suggest orientation to the market and/or logging and lumbering industry. These extra potatoes were either consumed as table stock in the logging camps and company kitchens, or they were acquired by one of the several starch factories in the area, one of which was located in Garfield.

Industrial Development and Mills

In the late 1800's and early 1900's, Garfield was a bustling community with two general stores, a post office, a blacksmith shop, a schoolhouse, sawmills, and about a dozen

houses all centrally located around a covered bridge. The schoolhouse doubled as a community center where many country dances, church suppers, and other community events were held as well as school classes.

According to Native American legends, there was a pot-hole in a rock just south of Garfield, on what is now called Garfield Road, where Native Americans use to grind corn. It was also thought to be a relic of the glacial period, but its origin or use will never really be known as the road commissioner blasted the rock in the 1990's in order to widen the road.

There were five sawmills in operation in the area (the first three on state park property) when it was called Green River: 1) Schofield Mill, later known as the Morrill and Gates Mill, operating at the outlet of Schofield Pond or Big Pond (also previously named George Pond and Pettingill Pond) in the Upper Diggins (remains exist); 2) H.S. Haskins Mill, which was located near Sodom Meadow in the northern reaches of the Park property (now submerged under the Reservoir); 3) Sherman Farnham Mill, located in the area called the Lower Diggins, along with a group of houses and a covered bridge (now submerged under the Reservoir); 4) Taylor Mill, located on Taylor Pond; and 5) the Mill at Garfield, owned by Charlie Swift, formerly the Wilkins Mill and later owned by C.L. Gates, A.A. Pike, and A.G. Small whom consolidated the mill under the name of Morrisville Lumber and Power Company. This was the largest mill in the area that reportedly employed 100 men.

In the Upper Diggins area near Schofield Pond, there was the Schofield Mill (earliest 1859), the boss's house, a boarding house (used as a fishing and hunting camp as late as 1930's), and a number of farm buildings. Along the road were many houses and a school making this area quite populous for the time.

In the upper reaches of the Park property, near where Adams Brook was located is Sodom meadow (along the town line). This was a hay field of considerable size and a barn stood there as well.

The Gates-Pike-Small Mill, whom formed themselves into the Morrisville Lumber and Power Company indicates that there was some thought that sooner or later power would be developed on the Green River when the days of lumbering were passed. Between 1906 and 1912, plans were discussed to connect Stowe to Newport via an electric railroad with the electricity to be supplied by an electric plant on the Green River at or above Garfield. This never happened.

Electric power generation from the area was on the minds of many people and discussed at various venues. After the burning of the mill at Garfield and with the lumbering era over, A.G. Small offered all their land and the power rights in the Diggins to the Village of Morrisville for $5,000. The offer was refused because the Village believed they had all the power they needed, so A.G. Small, et. al. sold it to Warren Curtis, Jr. and H.L. Curtis in 1915 for a sum of $19,000. In the same year, the Curtis brothers purchased the Sherman Farnham Mill and 175 acres, which included the deep gorge below the mill

where there was an ideal dam site. The Curtis's also bought the right to divert all water from the stream and to erect and maintain penstocks over land along the Green River from Garfield to the Lamoille River. In 1928, the Curtis brothers sold all their rights and land to the People's Electric Vermont Corporation in Montpelier, which later became the Green Mountain Power Corporation (GMP), as it now exists. In 1929, the Green Mountain Power Corporation built a line from Hardwick to Green River with the expectation of reinsulating the line for 33,000 volts when the Green River was developed. The project was abandoned for lack of coordination in the use of power in this project with the power developed on the Winooski River.

Around 1936, the Village of Morrisville realized that they indeed needed more power for the Village and began negotiating with Green Mountain Power Corporation to purchase the rights and land they were once offered for $5,000. GMP and the Village settled on a price of $125,000 in 1942 following an offer of $90,000 by the Village. Following several surveys, the dam site was cleared. On May 1, 1945, the Village finally took an option on the holdings for $177,000 ($125,000 plus taxes and fixed costs for 5 years while deciding on the property for a total of $137,000; plus additional rights for $40,000).

In addition to the land purchased from GMP, the Village also purchased 2400 acres of land in Eden and Hyde Park at a cost of $12,000 (C.T. Morrill Estate and mill in the Upper Diggins for flowage along Adams Brook). A contract was signed in 1945 between the Morrisville Water and Light Department and the Public Light Company of St. Albans to share the expense of development over a 36-year period beginning in 1950. MWL also purchased two other tracts of land for protection of water and flowage rights: 1) in 1950, 300 acres in Hyde Park and Wolcott that included Zach Woods Pond, Perch Pond, Mud Pond and Little Mud Pond; and 2) Little Clear Pond in 1958.

In 1946, the Village began construction of the dam, which included: 1) clearing 600 acres that would be the main flowage area; 2) constructing a dike 248' long, 150' thick at its base, and 20' wide at its top to an elevation of 1230' above sea level to stop flow at a low spot during high water; and 3) constructing the dam and related facilities. The dam was built with 10,300 yards of concrete to make it 320' long, 110' high, 40' thick at the base and 7' thick at the top. The project was completed in October 1947.

2. Property History

The lands of Green River Reservoir State Park were most recently owned until March 30, 1999 by the Morrisville Water and Light Department for the main purposes of operating a municipal hydroelectric generating facility and flood control. The 653-acre Reservoir with several islands and a beautiful undeveloped shoreline was created with the construction of the dam in 1946/47. During the period of time when MWL owned these lands, they managed the outlying forests for sustained revenue from timber and kept the property open to the public for dispersed recreational activities, including hunting, fishing, non-motorized boating, hiking, snowmobiling, camping, and snowshoeing.

Timber management records were kept over the years, and most of these have been transferred to DFPR for historical records.

MWL has retained ownership of the dam and surrounding 53 acres of land to continue with power generation and flood control. In addition, MWL retained lands surrounding Zack Woods Pond and near the earthen dam in the southeastern section of the Reservoir.

Over the years, this parcel gained the reputation throughout the region as one of the few places in central Vermont where a quality wilderness experience for boating and camping could be found. Faced with ever-increasing costs and recreation management problems due to its ownership of the land, MWL, with approval of Morristown voters, entered into an agreement in December 1998 to sell 5,110 acres of its land surrounding Green River Reservoir to the Vermont Department of Forests, Parks and Recreation.

More detailed history can be found in Appendix F: Cultural Assessment and/or in the Barre District files. This history section used excerpts from:

> "A Brief History of the Green River Project and the Area Covered By It," May 31, 1951, Willard K. Sanders, Morrisville Water and Light Department Superintendent form 1940 – 1973.
>
> "Garfield Area and the Green River Reservoir: Past, Present and What Can We Expect in the Future," April 24, 2000, Jo-Anne Ring, student report for Natural History of Vermont course, Community College of Vermont.
>
> "The Cultural Landscape of the Green River Reservoir State Park, Hyde Park and Eden, Lamoille County, Vermont: Historic Resource Summary, Historic Context Development and Prioritization of Known and Expected Historic Resources." April 13, 2004, Stephen R. Scharoun, M.A. and Ellen R. Cowie, Ph.D., Archaeology Research Center, Department of Social Sciences and Business, University of Maine at Farmington, Farmington, Maine 04938.

E. Relationship to Town, Regional and Other Planning Efforts

The Green River Reservoir State Park LRMP fits well within other planning efforts in the region and at the local level. The park property is managed to maintain natural communities and water quality; provide high quality and critical wildlife habitat; provide sustained timber resources; and opportunities for a variety of recreational experiences and activities.

1. Regional Plans

Green River Reservoir State Park is located in Lamoille County, which includes the Towns of Stowe, Morristown, Elmore, Wolcott, Hyde Park, Cambridge, Johnson, Waterville, Belvidere, and Eden. The park property straddles the Towns of Hyde Park and Eden. Each planning region has a planning commission and is required to prepare a regional plan every five years by soliciting input from member communities, regional organizations, and the general public. The regional plans reflect growth trends and address issues of concern at the local and regional level; support the individual goals and issues of each of their member towns as expressed in town plans; and provide a collective voice for the region in state and/or federal regulatory proceedings and in state agency planning efforts.

The Lamoille County Regional Plan (2002 – 2007), adopted in 2001, is a policy document that addresses issues of common concern among the municipalities of the region. The following issues and policies are relevant to Green River Reservoir State Park LRMP:

> 5.1.1.2 Silvicultural Resources, Policy. The State and other public entities that own or are acquiring lands should manage and maintain such lands as working lands, unless there are areas within lands that are too sensitive to be worked (i.e., rare, threatened or endangered species).
>
> 5.1.1.3 All Working Land Resources, Policy: All public lands should be made accessible to the general public.
>
> 5.1.1.3 All Working Land Resources, Policy: Critical wildlife habitats and corridors and forestlands should be protected; especially threatened, rare and endangered species.
>
> 5.1.1.3 All Working Land Resources, Policy: Landowners should be encouraged to manage their lands for wildlife, such as deeryards, riparian areas, etc.

5.1.2 Water Resources, Policy: Land uses that contribute to nonpoint sources of pollution should be adequately buffered from surface waters and managed.

5.1.2 Water Resources, Policy: LCPC supports and encourages the monitoring of water quality….

5.1.2 Water Resources, Policy: Restoration and protection of riparian buffers of at least 50 feet are strongly encouraged along all surface waters.

5.1.2 Water Resources, Policy: The preservation of the quality of the region's lakes and rivers as a resource for human recreation and wildlife is encouraged.

5.7 Recreation & Tourism, 6: Public recreational areas should be multi-purpose where possible.

5.7 Recreation & Tourism, 7: Handicap accessibility is encouraged for recreational activities.

5.7 Recreation & Tourism, 13: Recreational activities should not cause harmful or long lasting impacts on the natural environment.

5.7 Recreation & Tourism, 14: Any change in public or private recreational use proposed on state or municipal lands should be publicly noticed and local comments received.

2. Watershed Context

The Vermont Department of Environmental Conservation's (VTDEC's) Watershed Planning process is underway in the Lamoille River Watershed. Green River Reservoir State Park is located in this watershed. Watershed planning is expected to occur in all of the state's 17 watersheds on a five-year rotational basis. VTDEC is working collaboratively with other state, federal, non-profit and volunteer organizations, and local residents for input, funding, technical assistance, and public education for various water quality improvement projects for lakes, ponds, streams, and wetlands identified through the watershed planning process. As required by the Vermont Water Quality Standards, changes in the current classification system of the management of all surface waters will take place.

The purpose of the watershed plans is to examine overall water quality of each watershed by identifying issues related to water quality and water-related resources, and to provide management goals, strategies and actions for improving these as well as conserving high quality water resources. It is VTDEC's intent to implement these activities in collaboration with interested organizations and individuals and within other agencies and departments.

The Lamoille River Watershed Plan (2003) is in draft format at the writing of the Green River Reservoir State Park LRMP. Green River Reservoir is the third largest water body behind Caspian Lake and Arrowhead Mountain Lake in the Lamoille watershed. Management issues and strategies identified in the draft Lamoille plan that affect Green River Reservoir State Park include: erosion and sediment control; stormwater runoff and discharges; wetland protection; conservation and protection of undeveloped shorelines and exceptional waters; protection from invasive exotic species, especially Eurasian watermilfoil; lead contamination and subsequent mortality of loons from lead poisoning; mercury contamination; and dam operation and water level management. Any land management activities and/or park and road will be conducted in cooperation with the recommendations of the Lamoille River Watershed Plan and with basin planning efforts for the Mississquoi basin when it occurs.

3. Local Planning

Town of Hyde Park

Town Plan: The Town of Hyde Park, *Municipal Development Plan* (readopted October 30, 2000) includes goals and policies related to Green River Reservoir as follows:

Land Use Goals and Policies:
Goal: To promote orderly growth while maintaining the rural character and vitality of our neighborhoods and the quality of our natural resource base.
Goal: To support development that is sensitive to the inherent limitations of the land and community services.

Policy: Recognize the importance of the Lamoille River and Green River Reservoir, and maintain their scenic and recreational value.

Natural Resources Goals and Policies:
Goal: To promote public awareness and appreciation of the Town's natural resources and to balance the conservation and protection of these natural resources with ecologically sound development practices and economic needs.
Goal: Encourage the ongoing involvement of residents in determining the appropriate balance between resource protection and development.

Policy: Land use and development activities should minimize and, where possible, eliminate negative impacts on water resources, such as increased storm runoff, erosion, sedimentation, habitat loss and contamination.
Policy: Work to retain and acquire by purchase, if necessary, access to public waters.
Policy: Mitigate adverse impacts of development on undeveloped areas of special natural resource value.

Productive Resources Goals and Policies

Goal: To support and encourage the continued wise use of land and conservation of productive soils for agriculture, forestry, resource extraction and recreation.
Goal: Support long term multi-use land management strategies.

Policy: Minimize the localized impacts of productive resource development.
Policy: Encourage an economic base that will sustain the agricultural and forest resource segment of the economy.

Scenic and Historic Resources

Goal: Manage growth and development in a way which protects and promotes the town's historic, scenic, and cultural assets without unduly infringing upon the rights of landowners.

Policy: Recognize the importance of the Lamoille River and Green River Reservoir and their continuing scenic and recreational values.
Policy: Support activities which help to maintain and enhance the working landscape and natural beauty of the area.

Zoning: In the Town of Hyde Park, Green River Reservoir State Park lands are located in three zoning districts: Conservation District 27, Shoreland District, and Flood Hazard District. The Town's Zoning Ordinances (passed June 2, 2004; enacted June 23, 2004) govern the types of use and development that can occur within each of the zoning districts by permit. The DFPR will apply for local zoning permit(s) for all state park activities and development that requires such under the town zoning ordinance.

"The Shoreline District includes those portions of the town within 500 feet of the mean water level of the Green River Reservoir [1220 ' above mean seas level (msl)], Zack Woods Pond (1179 msl), Mud Pond, Clear Pond, and Schofield Pond…. Development in this District should be limited and controlled to lessen the impacts on municipal and educational services, and to preserve the pristine-like setting of these water bodies (Green River Reservoir) and the unique recreational opportunities they afford. There should be no development within 100 feet of the mean water mark of these water bodies. In addition, existing trees and ground cover should be maintained to the extent necessary to retain the natural character of the shoreline and to prevent soil erosion. Within this District, commercial and industrial development should be prohibited. In all respects, development in this District shall comply with the provisions of the Conservation District 27" (Municipal Development Plan, 2001, page 20).

The Flood Hazard District has special zoning standards to regulate development in these areas. Parts of Green River Reservoir State Park are within the Flood Hazard District.

Town of Eden

Town Plan: The Town of Eden, *Town Plan 2002* (adopted September 24, 2002) includes goals and policies related to Green River Reservoir as follows:

Historic, Scenic, and Archeological Resources Goals and Policies:
Goal: To conserve scenic resources without undue burden on property owners
Goal: To preserve Eden's fragile archeological record.

Policy: Telecommunications towers and other large obvious structures should be carefully sited to minimize impacts on scenic resources.
Policy: Development around the natural scenic resources identified must be sited and constructed in such a manner as to retain the natural scenic beauty of the areas. Removal of the natural vegetation on the site should be minimized and structures should be screened or hidden from view as best possible.
Policy: Development should avoid ridgelines, especially those visible from roadways. Any ridgeline development should be set back from the edge of the hill and a forested buffer remain to protect the view from the valley.
Policy: Projects occurring in the archeologically sensitive area should consider the potential impact of their project on archeological sites during the early stages of development.

Public and Private Utilities, Facilities, & Services
Goal: To maintain and enhance recreational facilities and opportunities.

Policy: Before any purchase of land to be held by the public, the entity must report the anticipated loss of value from the Grand List to the Selectboard.

Land Resources
Overall Goal: To protect and enhance Eden's land resources, including productive farm and forestland and available earth resources, in order to maintain and adequate land base to sustain farming and forestry operations and to secure needed supplies of sand and gravel for the benefit of existing and future generations.

Fragile/Natural Areas & Wildlife Resources
Goal: To ensure fragile and natural areas are protected and preserved.
Goal: To maintain the native diversity of wildlife throughout Eden through the protection of critical habitats.

Policy: Development within or proximate to designated natural areas will take place in a way to preserve their value for education, science, research, aesthetics, and recreation.
Policy: Deer wintering areas and bear habitat must be protected from development and other uses that threaten the ability of the habitat to support the species….

Policy: Rare, threatened and endangered plants and animals and their habitats will be protected and preserved through appropriate conservation techniques. Where appropriate, a buffer strip should be designated and maintained to ensure protection.

Water Resources
Goal: To ensure Eden's rivers and streams contain clean water, a healthy riparian habitat and stable stream banks.
Goal: To maintain overall health of our lakes and ponds for recreation and environmental purposes.
Goal: To preserve and protect wetlands from pollution, filling, and any other uses or activities that will result in their degradation or a reduction in its capacity to provide wildlife habitat, flood control and water storage.
Goal: to maintain and, where degraded, improve the water quality across the town.

Policy: All bridges and culverts should be built to standards recommended by the better back roads program to ensure minimal impacts on rivers and streams.
Policy: A naturally vegetated buffer around the lakeshores would protect the water quality form contaminants as well as protecting the scenic values of the areas.
Policy: A management plan for large lakes and ponds should be developed to determine boating, swimming, fishing and other recreational activities to ensure ecological and recreational goals are met for the areas.
Policy: All wetlands are required to have a 50-foot buffer. No filling or draining of wetlands is permitted.
Policy: All construction where soil is to be disturbed should provide adequate erosion control so that no soil moves off site or into surface waters or wetlands.
Policy: Agriculture and forestry must abide by AAP and AMPs. Where an activity may have a negative impact on water quality, BMPs are recommended.

Zoning: The Town of Eden does not have a Zoning Ordinance.

Section III
Public Input Summary

Public involvement, or citizen participation, is a broad term for a variety of methods through which the citizens of Vermont have input into public land management decisions. The Department of Forests, Parks and Recreation is committed to seeking that input. Expressions of citizen interest come in many forms. These include letters, personal comments, telephone calls, emails, and more formal methods, such as public meetings and surveys.

The planning process included a comprehensive evaluation of the park's resources, property restrictions, and the roles the property and cooperating agencies play in providing recreational opportunities and in preserving significant natural and cultural values at the park. In addition, public participation played an integral part in developing this plan.

After the draft Long-Range Management Plan was ready for public review, a number of public meetings were held for public comment of the final draft plan. Appropriate changes were made to the plan prior to the final approval of the plan.

A. Public Meetings

Prior to park acquisition, staff from the Department of Forests, Parks and Recreation and The Nature Conservancy held several meetings and correspondence with the Town of Hyde Park Select Board in order to gauge support for the project and to identify any issues that the town officials may have had regarding the acquisition. The town select board conditionally supported the acquisition and establishment of a state park within their town boundaries.

Also prior to the acquisition of the park, a number of public informational meeting were held to gauge public interest for acquisition and park management. These meetings were held on September 22, 1998 at the Charlamount Restaurant, Morrisville, and February 10, 1999 at the Lamoille County Educational Center, Hyde Park, Vermont. The purposes for the meeting were three-fold: 1) to inform the public about the acquisition, what it meant and what was going to happen; 2) to answer questions regarding the acquisition and management of the park as best as possible; and 3) to solicit input on preliminary ideas for managing the park, including selecting a name of the park.

On March 30, 1999, Morrisville Water and Light deeded Green River Reservoir lands to the Department of Forests, Parks and Recreation (80% ownership) and The Nature Conservancy (20% ownership). On July 22, 1999, Governor Howard Dean dedicated and celebrated the establishment of Vermont's newest state park as he unveiled the park sign during a ceremony that was attended by approximately 80 people.

After acquisition of the property, a draft Interim Management Plan was developed and reviewed at another public meeting held on April 27, 1999. There was overwhelming support for the plan, and the DFPR proceeded with opening the park for the 1999 operating season.

B. Public Planning Advisory Group (PPAG)

An advisory committee, the Green River Reservoir State Park Public Planning Advisory Group (PPAG), was organized to assist with discussing the issues of management, and with making recommendations on how the park should be managed and developed. The PPAG consisted of 27 members, which met monthly from the end of October 1999 until October 2001, for a total of **sixteen** meetings [October 18, 1999; November 15, 1999; January 10, 2000; February 7, 2000; February 28, 2000; April 24, 2000; July 17, 2000; September 25, 2000; October 23, 2000; November 27, 2000; December 18, 2000; January 22, 2001; February 26, 2001; March 26, 2001; April 23, 2001; and October 22, 2001]. These meetings were open public meetings, and at times other citizens participated in the meetings. The PPAG provided guidance for writing this plan, and reviewed it on September 2, 2004. Additional changes were made to the draft plan prior to it being released to the general public in January 2005.

C. Recreational User Surveys and Car Counts

The main purposes for the Recreational User Survey were to: 1) determine who the park users were, what activities they were participating in, and 2) their views and opinions on how the park should be managed and developed. The survey was implemented by park staff between 8:00 a.m. to 5:00 p.m. from June 30 to September 6, 1999 during randomly selected dates and times. A 17-question survey was distributed to 325 users at the Reservoir with 156 surveys returned via the mail for a response rate of 48 percent. In addition to the survey, a vehicle count was also conducted at the same time recording the number of cars per day and the state of licensure.

The results of the survey and car counts were used as another means of public information and input to be used the planning process and development of the long-range management plan. The results are further discussed and summarized in Appendix C:

Recreation Resources Assessment, and the complete report of the survey can be found in the files at the Barre District Office.

D. District Stewardship Committee

After the second year of operations and management, a presentation of the recommendations and current operations was made to all interested Agency technical staff in order to gauge progress in the plan development (October 27, 2000). The majority of the PPAG discussions the first year centered on park operations and management (how many campsites, their location, design of park entrance and facilities, etc.). This meeting was held prior to discussions on land management.

During the entire planning process, the District Stewardship Committee (DSC) was loosely organized to address management issues, needs and considerations, monitor the Public Planning Advisory Group progress, and make recommendations for management given the two purposes for the establishment of the park: protection of the resources and recreational use of the property. The DSC became more involved as the planning moved away from park operations and toward land management. The DSC weighed and balanced the various issues and needs, and provided guidance for the development of the plan. The DSC began meeting in earnest on December 13, 2000 in order to develop Agency positions for the land management aspect of the plan.

The DSC reviewed the final draft plan in conjunction with the review by the Public Planning Advisory Group. The ANR Lands Stewardship Board also reviewed the draft plan and made recommendations for changes prior to the release to the general public. After the general public review period, the DSC analyzed all comments and developed a final long-range management plan that was forwarded to the ANR Lands Stewardship Board for final approval and sign-off.

E. Plan Approval and Adoption

The final draft of the **Green River Reservoir State Park Long-Range Management Plan** was developed with public input and comment, and was presented to the Green River Reservoir State Park Public Planning Advisory Group for review and comment prior to releasing the LRMP to the public-at-large. The public-at-large was invited to attend a presentation and listening session held at the Morristown Elementary School, Morrisville, VT on March ___, 2005. During this session, resource findings were explained and public comments on the draft plan were heard and recorded.

The meeting was advertised in local papers and at the Town Offices of Hyde Park, Morristown, Elmore, and Eden and the Village of Morrisville. In addition, a meeting notice was mailed to approximately 100 individuals and organizations notifying them of the public meeting. The draft plan was also placed on the Department's website: http://www.state.vt.us/anr/fpr/lands/currentplans.htm

Written comments were received up to 30 days after the public forum date. Responses to public comments and questions are explained in the Responses to Public Comments Summary that is on the website, mailed out upon request, and as part of the final plan (Appendix G).

After public review and comment, the Agency of Natural Resources entered into an approval process, which included analysis of all comments and appropriate incorporation into the final plan, a presentation to and final approval by the Agency State Lands Board, and final approval with the signature of the Secretary of the Agency of Natural Resources and the Commissioner of Forests, Parks and Recreation.

F. Future Public Input

All of this public input has been considered in the writing of the **Green River Reservoir State Park Long-Range Management Plan** and will continue to be considered as management of the Park moves forward. There will be future opportunities for the public to stay involved. Public comments will be needed for any amendments to the LRMP (see Section I for more discussion on amendments). The LRMP, as approved, will stay into affect until such time any significantly new or different management strategies are proposed by the public and/or DFPR.

In addition, each year the District Stewardship Team (Barre District) completes an Annual Stewardship Plan for all state-owned properties where management activities are planned in the next fiscal year (July 1 – June 30). This plan is available for review by July 1 of each year. Typically, the select board for the town(s) where the state parcel is located will be notified of any management activities for that specific parcel. Future opportunities for public input will be announced on the Department's website and through local media.

Public requests for additional facilities, uses, and/or changes in management of the park and its surrounding lands will be considered on a case-by-case basis by the District Stewardship Team. If these requests meet the management strategies and ANR policies outlined in the LRMP, they may be approved and incorporated into the Annual Stewardship Plan for the park. If these requests are significantly different than the approved management strategies and ANR policies outlined in the LRMP, public comment will be necessary prior to implementation.

Section IV
Management Strategies and Actions

A. Park Vision Statement and Operating Philosophy

1. Vision

The Green River Reservoir and surrounding park lands will remain in its wild and undeveloped condition, with low-impact, compatible recreational and forest uses. Management will include those activities necessary to maintain the property's wilderness-like character, protect the environment and critical resources, demonstrate sustainable forest and recreation management, control excessive use by visitors, and ensure high-quality outdoor experiences for those at the Reservoir or surrounding park lands.

2. Operating Philosophy

Green River Reservoir State Park will be managed as a state park with minimal facility development. The amount and types of recreational uses and facilities will be balanced with the need to protect the wilderness-like character and the unique natural resources. The park will also be managed in a way that it will be a good neighbor and a community asset.

3. Primary Recreational Uses

- Primitive/Remote Camping
- Limited Day Use Water-Based Activities – Paddling, Swimming and Picnicking
- Fishing, Hunting and Trapping
- Non-Motorized Water-Based Recreation; Electric Motors are Allowed
- Trail Activities on Designated Trails – Mt. Biking, Horseback Riding, Snowmobiling, Cross-Country Skiing, and Snowshoeing
- Nature Study and Wildlife Observation

4. Secondary Recreational Uses

- Ice Fishing
- Winter Camping

5. Supporting Facilities and Uses

- Parking
- Access Roads
- Entrance Control and Contact Station
- Restroom Facilities
- Park Ranger House
- Maintenance Buildings
- Signs - Directional and Informational
- Trails
- Water
- Utilities
- ADA Accessibility

6. Restricted and Prohibited Uses

- No residential, commercial, industrial, or mining activities and associated buildings and/or structures, including telecommunications, broadcasting or transmission facility.
- No rights-of-way, easements, driveways, roads, utility lines, other easements or use restrictions unless related to purposes of park and management plan.
- No signs, billboards or outdoor advertising, except for park-related signs and boundary markers.
- No placement, collection or storage of trash, human waste, or any other unsightly or offensive material, except for park management purposes.
- No disturbance of the surface, including but not limited to filling, excavation, removal of topsoil, sand, gravel, rocks or minerals, or change of the topography of land, except to reasonably carryout park management purposes.
- No surface mining of subsurface oil, gas or other minerals.
- No manipulation or alteration of natural watercourses, lakeshores, wetlands, water levels and/or flow of other waterbodies, except for hydropower generation.
- No all-terrain vehicles (ATVs) use, except for emergency or management purposes.
- No public operation of motorized vehicles on roads and trails on park land.
- No planting or broadcasting of any genetically modified or replicated organisms, or any exotic species.
- No silvicultural use of herbicides for the general manipulation of forest regeneration or native tree species management.

B. Overall Management Goals and Objectives of Green River Reservoir State Park

Within the broad bounds of the overall vision and operating philosophy stated on previous pages, the following overall goals and objectives provide more specific direction for the management of Green River Reservoir State Park.

1. To provide opportunities and manage for the continuation of high quality, "wilderness-like" recreational experiences and activities.
    a. Maintain and enhance opportunities for a wide range of compatible dispersed recreational opportunities.
    b. Develop minimal facilities to support management and operating philosophy of the park.
    c. Provide and manage for remote canoe/kayaking camping experiences along the shoreline of the Reservoir. Provide and manage for backcountry primitive camping experiences away from the Reservoir.
    d. Continue to limit the number of people that visit the Reservoir at any one time to the design capacity of the park facilities.
    e. Work with the Towns of Hyde Park and Eden, and private landowners and others to protect the Reservoir's viewshed from visually intrusive development.
    f. Adequately maintain park facilities and roads.
    g. Work with interested organizations and individuals to maintain trail systems and provide new trail opportunities where appropriate.
    h. Continue to allow other traditional recreational use of the property, including, but not limited to, hunting, fishing, trapping, snowmobiling, and cross-country skiing.

2. To protect biological diversity.
    a. Maintain or enhance the health, integrity, and native biological diversity of the park lands. In particular, monitor rare, threatened, and endangered species of wildlife and plants, and rare and/or high quality natural communities. Maintain natural ecological processes.
    b. Continue to gather information using the coarse and fine filter approaches to maintain or enhance natural communities and/or populations of species of interest.
    c. Support research and monitoring efforts where and when appropriate.

3. To manage the forest resources to contribute to the local and regional economies.
    a. Manage for a sustainable flow of high quality forest products.
    b. Maintain and enhance opportunities for a wide range of compatible dispersed recreational opportunities.
    c. Utilize appropriate silvicultural techniques to minimize impacts on the viewshed from the Reservoir.
    d. Apply best management practices to protect water quality.

4. To maintain or enhance critical wildlife habitats and aquatic ecosystems.
    a. Manage to provide high quality habitat all target wildlife species with a particular emphasis on target wildlife species.
    b. Protect the wetlands and shore lands of the Green River Reservoir and smaller ponds in the park.
    c. Minimize shoreline erosion near campsites.
    d. Rehabilitate and revegetate islands and areas where there is shoreline erosion or other areas impacted by excessive recreational use using native species.

5. To protect the cultural and historic resources on the property.
    a. Minimize management activities in culturally sensitive areas to protect the resources.
    b. Develop interpretative materials on the cultural and historic resources found in the park.

6. To provide educational and research opportunities on the natural, recreational and cultural resources of the park.
    a. Develop partnerships with organizations, universities, and colleges to conduct research studies to collect information on natural communities, species of concern, recreational use patterns, etc.
    b. Allow appropriate organizations, universities, and colleges to conduct educational field trips related to the natural and cultural aspects of the park.

C. Land Management Categories (Classification)

Four levels of management have been identified for the lands administered by the Vermont Agency of Natural Resources (ANR). These categories indicate where different levels of use or types of management will be emphasized on the land. In this section of the plan, the recommended levels of use will be shown for all the land area in this parcel. This section also describes generally how the land will be managed so that the activities occurring on the land are compatible with the category assigned. The four categories are: (1) Highly Sensitive Management Area, (2) Special Management Area, (3) General Management Area, and (4) Intensive Management Area. Within each of the management categories, there are a number of sub-categories. Not all of the sub-categories are found at each state land unit.

As part of the planning process, the lands, resources, and facilities held by the ANR are evaluated and assigned to the appropriate land management category. Assignment of land management areas for Green River Reservoir State Park is based on a thorough understanding of the resources identified and the application of the over-arching lands management standards presented in the introduction section of the plan. The resources include natural communities, plants, and wildlife, as well as recreation, historic, timber, and water resources. The definitions for each category are found on the following pages. In each area category, certain activities or uses are emphasized. Other activities may be allowed within these areas if compatible with the emphasized activity (See Land Management Map). There are certain management strategies and activities that transcend the land classifications, or can be found in a number of land classifications. These may include trail and road systems, operation and management rules and regulations for use, etc., which are addressed in separate sections. The land management categories found at Green River Reservoir State Park include:

1.0 Highly Sensitive Management Areas

1.1 Rare or Exemplary Natural Community
- 1.1A – Wiley Brook Wetland Complex
- 1.1 B – Eastern Wetland Complex
- 1.1C – Schofield Pond Wetland Complex

2.0 Special Management Areas

2.1 Biological, Cultural, and Geological Resources
- 2.1A – Sodom Meadows Wetland Complex
- 2.1B – Green River Wetlands

2.2 Critical Plant and Wildlife Habitat – Deer Wintering Area

2.5 Special Protection Area – 500’ Buffer Around Green River Reservoir and Green River Reservoir

3.0 General Management Areas

4.0 Intensive Management Areas

1.0 Highly Sensitive Management Areas

Definition - *An area with uncommon or outstanding biological, ecological, geological, scenic, cultural, or historic significance where protection of those resources is the primary consideration for management. Human activities and uses should not compromise the exceptional features identified.*

1.1 Rare or Exemplary Natural Community

1.1 A – Wiley Brook Wetland Complex

This interior wetland complex, located in the north central portion of the park around Wiley Brook, is designated as a highly sensitive management area at Green River Reservoir State Park. The wetland complex consists of Spruce-Fir-Tamarack Swamp, Alder Swamp, Sedge Meadow, Red Maple-Black Ash Swamp, and Shallow Emergent Marsh, and encompasses 115 acres or 2% of the park.

All activities within this land use category must achieve the highest level of protection for these important natural communities. With the exception of paddling up the Wiley Brook, human activities will be minimized within this area to protect these exceptional natural communities, the Great Blue Heron rookery, and a nesting tripod platform for ospreys.

The Spruce-Fir Tamarack Swamp found in this complex is one of the larger occurrences in the park (16 total occurrences). Because of its inaccessible location it has not been as heavily disturbed by logging as the other occurrences in the park. This is an uncommon natural community type in Vermont.

The Alder Swamp found in this complex is the largest example of the five occurrences found in the park. It is of excellent quality (A-ranked) while the others are of only moderate (C-ranked) quality. This natural community type is common in Vermont, but this occurrence is of such high quality in comparison with other occurrences.

The Sedge Meadow located in the northern sections of this complex is one of five occurrences found at the park. This particular sedge meadow is in better condition than the other sedge meadows found scattered in the park. It is also a common natural community type found in Vermont, and provides habitat for a wide variety of wildlife.

The Red Maple-Black Ash Swamp natural community is found in ten other locations in the park. This occurrence is relatively small and of lower quality. The red-maple-black ash swamp is common in Vermont.

The Shallow Emergent Marsh found in the interior wetland complex is common in the park and throughout Vermont. Shallow emergent marshes are habitat for a wide variety of wildlife species. They are productive and diverse systems that provide food, hunting grounds, cover, nesting habitat, and many other wildlife needs. Management strategies

[Insert Land Management Map]

back of land mgt map

for this natural community should be sensitive to the habitat needs for wildlife. All eleven occurrences found at the park have C and D quality rankings.

Great Blue Herons nest in colonies called rookeries. The nest is a platform of twigs and sticks that is built in trees, on cliffs, or on the ground. There is a Great Blue Heron rookery found in the Wiley Brook Wetland Complex. It is located in the lower reaches of the Wiley Brook and the associated wetlands north of the bridge. Great Blue Herons have used this general area periodically over time. The extent and frequency is unknown at this time.

The five distinct natural community types in this wetland complex function as a unit, and the wetland will be managed as a single entity.

Management Objectives

1. Protect examples of exemplary natural communities.
2. Protect shore land areas along the Green River Reservoir, the wetlands, and Wiley Brook to maintain their natural condition.
3. Continue to provide dispersed recreational opportunities where appropriate and compatible with other goals.
4. Provide high quality habitat for target wildlife species.
5. Provide opportunities for education, research, and monitoring activities.

Implementation Actions

(Planned activities; this may not be an all-inclusive list; other unforeseen actions may be necessary to carry out the goals and objectives of this plan.)

1. Maintain a vegetated 100-foot buffer area around the wetland complex when conducting management activities in other land use categories.

2. Monitor and attempt to control the spread of invasive exotic plants within the wetland complex.

3. Monitor human use of the area. Place a sign at the bridge that seasonally prohibits users from entering the area during nesting season, and to educate users of the sensitivity of the area around the Great Blue Heron Rookery and wetland complex.

4. Work with interested organizations, colleges and universities, and individuals interested in conducting research, education, and monitoring activities.

1.1 B – Eastern Wetland Complex

This wetland complex is located near the northeast corner of the park and is designated as a highly sensitive management area at Green River Reservoir State Park. The eastern wetland complex includes a Spruce-Fir-Tamarack Swamp, Red Spruce-Hardwood Swamp, Black Spruce Swamp, Dwarf Shrub Bog, Alder Swamp, Sedge Meadow and Beaver Wetlands, and associated upland Rich Northern Hardwood Forest. The complex encompasses 78 acres or 1.5% of the park.

All activities within this land use category must achieve the highest level of protection for these important natural communities. Human activities will be minimized within this area to protect these exceptional natural communities.

The Spruce-Fir Tamarack Swamp found in this complex is one of the larger occurrences in the park (16 total occurrences). Red Spruce-Hardwood Swamp, a variant of this community type, is also found in this wetland complex. This is an uncommon natural community type in Vermont.

The Black Spruce Swamp located in this complex is the only occurrence found at the park and is a rare natural community type in Vermont. It is 11 acres in size and of high quality (A/B rank). The swamp is perched at the high point of a valley between two unnamed peaks on the east side of the park and there is extensive beaver activity in the vicinity. A small area of the swamp has been logged, and is now in dense thicket of tamarack saplings. Given the rarity of this community type, beavers should be prevented from flooding it.

The Dwarf Shrub Bog located in this complex is the only occurrence found at the park, and is found within the Black Spruce Swamp described above. It is less than ½ acre in size and is a rare natural community in Vermont. Dwarf Shrub Bogs are sensitive to disturbances to their water regime, so forest management activities in close proximity should be minimal. Beavers also pose a threat to the community. This bog has a C/D quality rank.

The Alder Swamp found in this complex is a small example of the five occurrences found in the park. It is of lower quality (C-ranked). This natural community type is common in Vermont.

The Sedge Meadow found in this complex is a small occurrence and is one of the five occurrences found at the park. It is a common natural community type found in Vermont.

A series of Beaver Wetlands are found as part of this larger wetland complex, mainly on the northern and southern sections on the outlet drainages for this area. The Dwarf Shrub Bog and the Black Spruce Swamp are susceptible to water level regime changes. The dam building activities of beavers can change the water regime quickly and could threaten these two rare natural community types.

The Rich Northern Forest found in this complex is one of six occurrences found in the park. It is one of the better examples and has not been logged due to the steep ledgy terrain. Some of the larger hardwoods at the park are found in this location. All occurrences are small in size relative to others in the state, and have a C-quality ranking.

These natural communities share many features, and will be managed as a single unit.

Management Objectives

1. Protect examples of exemplary natural communities.
2. Protect the wetlands complex to maintain their natural condition.
3. Limit recreational opportunities in this area to protect exemplary natural communities.
4. Provide opportunities for education, research, and monitoring activities.

Implementation Actions

(Planned activities; this may not be an all-inclusive list; other unforeseen actions may be necessary to carry out the goals and objectives of this plan.)

1. Maintain a vegetated 100-foot buffer area around the wetland complex when conducting management activities in this and other land use categories.

2. Monitor and attempt to control the spread of invasive exotic plants within the wetland complex.

3. Monitor beaver activity in the vicinity of the Black Spruce Swamp and dwarf shrub bog for its affects on these natural communities.

4. Monitor dispersed recreational activities for impacts on the natural communities in this category.

5. Work with interested organizations, colleges and universities, and individuals interested in conducting research, education, and monitoring activities.

1.1 C – Schofield Pond Wetland Complex

This wetland complex and associated uplands is located around Schofield Pond in the west central portion of the park is designated as a highly sensitive management area at Green River Reservoir State Park. The Schofield Pond complex consists of Intermediate Fen, Alder Swamp, Spruce-Fir-Tamarack Swamp, Seep, and Shallow Emergent Marsh Natural Communities as well as Lowland Spruce-Fir Forest, Hemlock-Northern Hardwood Forest and the remains of the Schofield Mill and Boarding Houses Historic Sites. The area encompasses 134 acres or 3% of the park.

All activities within this land use category must achieve the highest level of protection for these important natural communities. Human activities will be minimal within this area to protect these exceptional natural communities and the historic and cultural sites found in the area.

One example of an Intermediate Fen was located in the park at the Schofield Pond complex. Fens are rare in Vermont, and are very sensitive to changes in hydrology. The Intermediate Fen is currently mapped at just three acres in size, but its true extent may be much larger. Although it is somewhat atypical, this is a high quality (A-ranked) example of the community and could be disturbed by forest management activities in the immediate vicinity.

The Alder Swamp found in the Schofield Pond complex is one of the five occurrences found in the park. It is of lower quality (C-ranked). This natural community type is common in Vermont.

Seeps are a common community type in Vermont and are relatively quite small in size. Thirteen seeps were found in the park, but the one found in the Schofield Pond complex was large in comparison at +3 acres in size. It was located in the Hemlock-Northern Hardwood Forest. Seeps are important breeding habitat for many species of salamanders, frogs, and toads. Some of Vermont's rarer invertebrates are dependent upon seeps for all stages of their life. Seeps are some of the first places with new vegetation in the spring, and as such, provide food to bears, deer, and other wildlife during a time when food is scarce. The seep in this location is B-ranked for quality.

The Shallow Emergent Marsh found in the Schofield wetland complex is common in the park and throughout Vermont. It is prominent in this complex, almost surrounding Schofield Pond. Shallow emergent marshes are habitat for a wide variety of wildlife species. They are productive and diverse systems that provide food, hunting grounds,

cover, nesting habitat, and many other wildlife needs. Management strategies for this natural community should be sensitive to the habitat needs for wildlife. All eleven occurrences found at the park have C and D quality rankings.

The Lowland Spruce-Fir Forest natural community type is one of the wide-ranging communities of Green River Reservoir State Park. There are two phases found at the park, one that rings the many wetlands and lakeshore areas (like at Schofield Pond), and another that occurs on relatively flat areas of somewhat poorly drained soils. The lowland spruce-fir forest serves as habitat for many species of animals.

The Hemlock-Northern Hardwood Forest found near the Schofield Pond complex is located along a ravine around the outlet stream from Schofield Pond. It is of lower quality (D-ranked).

Near the outlet of Schofield Pond (previously named Big Pond, George Pond, and Pettingill Pond) there is still evidence of the Schofield saw mill. Early maps document a saw mill at this location at least as early as 1859. The local history describes the Schofield mill as part of a complex which included 2000 acres of timberland, farming operations which produced hay, grain and produce, a boarding house and barns. A log dam raised the pond ten feet. The mill was destroyed around 1909, but was rebuilt and powered by steam. Schofield sold his lumber to the Hyde Park Lumber Company and averaged one million board feet annually. The boarding house was used for a fishing and hunting camp as late as the 1930s. These are sensitive, regionally important historic sites and will be protected as part of the Schofield Pond complex.

Schofield Pond Area

Management Objectives

1. Protect examples of exemplary natural communities.
2. Protect shore land areas along Schofield Pond, the wetlands, and Schofield Brook to maintain their natural condition.
3. Protect important cultural and historic sites.
4. Continue to provide dispersed recreational opportunities where appropriate and compatible with other goals.
5. Provide opportunities for education, research, and monitoring activities.

Implementation Actions

(Planned activities; this may not be an all-inclusive list; other unforeseen actions may be necessary to carry out the goals and objectives of this plan.)

1. Maintain a vegetated 100-foot buffer area around Schofield Pond and the wetland complex when conducting management activities in other land use categories.

2. Monitor and attempt to control the spread of invasive exotic plants within the wetland complex.

3. Limit or monitor forest management activities in this category.

4. Monitor the impacts of human use of the trails, roads, Schofield Pond, and the general area.

5. Stabilize the remaining historic and cultural structures and cellar holes, removing vegetative growth that threatens the stability of the sites, and by releasing and pruning apple trees associated with the sites.

6. Further study to assess the significance of the historic and cultural resources present in the Schofield mill area. Further document and map these sensitive resources. Consider for nomination to the National Register of Historic Places.

7. Develop public education and interpretation materials and signs on the agricultural and logging and lumbering heritage and known historic and cultural features of Green River Reservoir State Park.

8. Work with the Town of Hyde Park to “throw up” the portion of the Town Class IV Road on state property in order to protect this sensitive area from degradation by vehicular traffic.

9. Work with interested organizations, colleges and universities, and individuals interested in conducting research, education, and monitoring activities.

2.0 Special Management Areas

Definition - *An area with unique or special resources where protection and/or enhancement of those resources is an important consideration for management.. These areas do not require the same level of protection given to highly sensitive management areas and, may be intensively managed for specific purposes. There may be some evidence of timber harvesting, wildlife management, roads, and recreational activities; however, those* ***activities should be compatible with and not compromise*** *the unique or special resources identified.*

The single highest percentage of the acreage at Green River Reservoir State Park falls into this category, and will have special management considerations. Areas with special management considerations follow below. The four Special Management Areas total 2,499 acres, or 49% of the property within Green River Reservoir State Park. Portions of these areas may be commercially and non-commercially harvested on occasion to meet wildlife management and public safety objectives.

2.1 Biological, Cultural, and Geological Resources

2.1A – Sodom Meadows Wetland Complex

This wetland complex is located in the northern part of the park and is comprised of a large sedge meadow and other wetlands that cover approximately 92 acres or 2% of the park. The sedge meadow, commonly called Sodom Meadows, is an important but not exemplary example of a Sedge Meadow community within Vermont. Historically, Sodom Meadows was used as a hay field during the late 1800's.

There are other wetlands in this complex, including Alder Swamp and Sweetgale Shoreline Swamp. There are also Seeps in this complex. The VAST Trail #100F bisects the northern part of the complex with a bridge over the open water in the middle of the complex.

Management Objectives

1. Protect examples of exemplary natural communities.
2. Protect the wetlands and riparian areas to maintain their natural condition.
3. Protect important cultural and historic sites.
4. Continue to provide dispersed recreational opportunities where appropriate and compatible with other goals.
5. Provide opportunities for education, research, and monitoring activities.

Implementation Actions

(Planned activities; this may not be an all-inclusive list; other unforeseen actions may be necessary to carry out the goals and objectives of this plan.)

1. Maintain a vegetated 100-foot buffer area around the wetland complex when conducting management activities.

2. Monitor and attempt to control the spread of invasive exotic plants within the wetland complex.

3. Determine if there is another suitable location in order to reroute the VAST trail around the wetland complex. If not, minimize the impacts of the trail and road through the wetland.

4. Develop public education and interpretation materials and signs on the agricultural and logging and lumbering heritage and known historic and cultural features of Green River Reservoir State Park.

5. Work with interested organizations, colleges and universities, and individuals interested in conducting research, education, and monitoring activities.

2.1B – Green River Wetlands

The Green River Wetlands is comprised of a large Sedge Meadow natural community, a very small Alder Swamp, and other wetlands that occur on approximately 54 acres or 1% of the park. A portion of Green River Dam Road runs adjacent to the southern section of this wetland complex, mainly along the Sedge Meadow. This Sedge Meadows is found along the flats where the slow moving Green River occurs. A wide variety of wildlife species use Sedge Meadows. Found in this specific Sedge Meadow is a very rare plant, the cloud sedge (*Carex haydeni)* [see Ecological Assessment for more information].

Management Objectives

1. Protect examples of exemplary natural communities and species.
2. Protect the wetlands and riparian areas to maintain their natural condition.
3. Protect important cultural and historic sites.
4. Continue to provide dispersed recreational opportunities where appropriate and compatible with other goals.
5. Provide opportunities for education, research, and monitoring activities.

Implementation Actions

(Planned activities; this may not be an all-inclusive list; other unforeseen actions may be necessary to carry out the goals and objectives of this plan.)

1. Maintain a vegetated 100-foot buffer area around the wetland complex when conducting management activities.

2. Monitor population trends of the rare cloud sedge.

3. Monitor the impacts of the adjacent Green River Dam Road and the Manosh easement on the wetlands.

4. Monitor and attempt to control the spread of invasive exotic plants within the wetland complex.

5. Work with interested organizations, colleges and universities, and individuals interested in conducting research, education, and monitoring activities.

2.2 Critical Plant and Wildlife Habitat – Deer Wintering Area

Much of the northern part of the Green River Reservoir State Park is mapped deer wintering habitat, and accounts for 1,698 acres or 33% of the Park land. This deer wintering area is the largest in Lamoille County. The wintering area occurs in the lowland spruce-fir and red spruce-hardwood natural communities.

Past logging practices have systematically removed the softwood component from many of the mixed wood stands or significantly lowered the percentage of softwood species in those stands. Comparing FOREX (Forest Examination) inventories from 1970 and 2001 illustrates this:

East side of Reservoir		1970	2001
1.	Spruce/Fir/Hemlock	50%	37%
2.	Spruce/Fir	55%	3%
3.	Spruce/Fir	75%	22%
West side of Reservoir			
1.	Spruce/Fir/Hemlock	86%	40%
2	Spruce /Fir	77%	40%

Not only is species composition a problem within the wintering area, but stocking levels for all the softwood and mixed wood stands have been reduced to levels far below the density required for adequate canopy cover in a wintering area. As a result, the wintering area has little value for white-tailed deer and currently shows little evidence of use.

Along with the problems of stocking levels and species composition in these stands, past logging was by diameter limit cutting. This has resulted in most of the stands consisting of trees in the poletimber or small sawtimber size class, with very few larger diameter trees. This also reduces the ability of the stands to intercept snow and thereby reduce snow depth on the ground.

There are three options for management of the wintering area: Option 1- simply do nothing, letting nature course. This action will only lengthen the time before a functioning wintering area will exist. Option 2- work with the existing overstory and manage the remaining acceptable growing stock. Option 3- clearcut the remaining stand and start over. Clearcutting will establish new regeneration for the next stand.

The DFPR will use a combination of Options 2 and 3 to re-establish the wintering area. This will consist of removing the overstory trees where softwood regeneration is already established and giving the younger trees room to grow. The remaining areas will be managed to continue some cover and in attempt to establish more softwood regeneration.

Recreation in the Deer Wintering Area will be primarily for dispersed recreational activities, such as trail uses, hunting, trapping, fishing, and primitive camping. Primitive camping means camping in a forest with no developed facilities and leaving the area with little or no evidence of human visitation. Primitive camping areas are usually difficult to access, and have no facilities or a designated water supply. Primitive camping must be at least 100 feet from any stream or body of water, 200 feet from any trail or property line, and 1000 feet from any traveled road.

Currently there are portions of VAST Trails #100, #100C and #100F and the Catamount Trail that are found within the deer wintering area. White-tailed deer minimally use the deer wintering area at present for the reasons mentioned above. Use of the area by deer will be monitored over time, especially after habitat improvement projects begin. If conflicts with winter trail use begin to occur, portions of the VAST and Catamount Trails may need to be rerouted or closed. For the time being, the Catamount and VAST Trails that are in the interior of the deer wintering area will continue to be allowed in their current locations. These trails are also state forest roads and will be maintained for summer trail access for walking/hiking, mountain biking, and horseback riding where appropriate.

Management Objectives

1. Restore quality, maintain, enhance, and/or provide for high quality habitat for target and general wildlife species.
2. Maintain a 50-foot buffer on each side of the mapped streams and a 100-foot buffer around wetlands found within this land management category.
3. Provide appropriate opportunities for dispersed recreational activities that will not conflict with wildlife needs and habitat: hiking/walking, mountain biking,

horseback riding, snowmobiling, cross-country skiing, hunting, fishing, trapping, and primitive camping.
4. Maintain clean, high quality water resources and aquatic habitats. Restore quality of water resources where necessary.
5. Maintain and enhance natural communities.
6. Protect important cultural and historic resources of the property and promote visitor knowledge of the history of the property.
7. Provide opportunities for education, research, and monitoring activities.

Implementation Actions

(Planned activities; this may not be an all-inclusive list; other unforeseen actions may be necessary to carry out the goals and objectives of this plan.)

1. Work with the Vermont Institute of Natural Science (VINS), the Friends of Green River Reservoir, and Johnson State College to establish a Forest Bird Research Monitoring Site at the park in order to conduct long-term research and monitoring of migratory forest bird species. Green River Reservoir has been identified as one of the richest areas in the state for the habitat (hemlock – spruce) that VINS is looking for. A License Agreement would be developed with VINS and the researchers to establish the research protocols.

2. Vegetative management, over the next 20 to 50 years, will focus on restoring the red spruce and balsam fir to the mixed softwood-hardwood stands. This will be accomplished by, first removing the overstory hardwood trees in groups or patches from areas of existing regeneration. Other areas may be treated with shelterwood cuts to establish regeneration. Connecting areas will be left alone to provide travel cover within the wintering area. When stocking levels, species composition, and a good distribution of sizes classes exist, the wintering area will be managed following guidelines developed jointly by the Departments of Fish and Wildlife and Forests, Parks & Recreation.

3. Monitor white-tailed deer use in the wintering area to determine if conflicts with winter trail users are occurring. Relocate portions of the VAST and Catamount trails if and when conflicts arise with white-tailed deer wintering in the area.

4. Separate and relocate the Catamount Trail off of the VAST trail if an appropriate location can be found.

5. Develop public education and interpretation materials and signs on the agricultural and logging and lumbering heritage and known historic and cultural features of Green River Reservoir State Park.

2.5 Special Protection Area – 500' Buffer Around Green River Reservoir and Green River Reservoir

The Special Protection Area at Green River Reservoir State Park includes the Green River Reservoir and 500 feet from the shoreline of the entire Reservoir extending north into the Boomhour Brook area. The land area accounts for 655 acres or 13% of the Park, and includes many small ponds and wetlands, two sensitive natural communities (red spruce-northern hardwood forest and hemlock-northern hardwood forest), some historic or cultural sites, one osprey platform, loon nesting sites, all of the remote campsites, day use sites, many trails and roads, and some of the gravel pits.

Wilderness-Like Character

Preserving the wilderness-like character of the Green River Reservoir is vitally important for Vermont and out-of-state visitors alike. Vermont has made a commitment to protect this area with the purchase of much of the land surrounding the Reservoir. The conversion of this area to a state park has already helped to return the shore lands to a more natural state. In addition, recreation management in this zone is to provide wilderness-like overnight and day use recreational opportunities and experiences without creating user conflicts, visitor congestion or overcrowding, and/or detracting from the park's natural values, qualities, and resources.

Part of protecting the wilderness-like character of the Reservoir and park is the need to protect the Reservoir's viewshed, meaning the land that is within view of the Reservoir. There are local views of the surrounding hills (Umbrella Hill, Davis Hill, McKinstry Hill, and Bean Mountain) and some distant views of Elmore Mountain (to the south) and Belvidere Mountain (to the north). Under the Conservation Easement co-held by The Nature Conservancy and the Vermont Housing and Conservation Board, no harvesting or other forest management activities are to occur within this 500-foot buffer or on the islands, except for using the road system and crossing streams. Outside of this buffer, forest management techniques will be used that do not impact the viewshed from the Reservoir.

The shoreline surrounding the Reservoir is mostly undeveloped except for approximately 2000 feet of shoreline in the southeastern area of the Reservoir that is privately held. There are also a number of parcels of private land within the Reservoir's viewshed that could be developed in ways detrimental to the goal of preserving its wilderness-like character. It is, therefore, very important to the park's future that voluntary guidance be provided on how new development can occur without harming either the park's important values or having a detrimental impact on privately-owned lands within the viewshed.

The Water Resource

The Reservoir itself is 653 acres in size with a maximum depth of 93 feet and an average depth of 35 feet. There are two primary tributaries that enter the Reservoir – Boomhouer Branch or Brook, and Wiley Brook – as well as many small, unnamed tributaries. The Reservoir has a configuration that is unusual for Vermont with approximately 19 miles of

undeveloped shoreline with secluded coves and numerous islands (14 islands). The islands vary in size to from a few square feet to the Big Island that is about 34 acres in size**.**

Water clarity, average total phosphorus, and average chlorophyll *a* measurements are about average for Vermont and characterize Green River Reservoir as a mesotrophic waterbody (Vermont Department of Environmental Conservation, 2004). The alkalinity of Green River Reservoir is low making it vulnerable to acidification from acid rain. Hence, all aquatic biota in the Reservoir are considered threatened by acidification.

The Reservoir can support a variety of fishes (see Fisheries Management discussion in the Ecological Assessment Appendix) and other organisms typical of both cold and warm water lakes. Coves support emergent aquatic vegetation, and several sheltered, mud-bottom areas feature vegetation more commonly found in eutrophic lakes communities around the perimeter of the Reservoir. These are probably affected by cold air drainage towards the Reservoir and abundant moisture. This is evidenced by the dense understory layer of balsam fir (*Abies balsamea*), eastern hemlock (*Tsuga canadensis*), and red spruce (*Picea rubens*) in many areas with hardwood canopies. The Reservoir also provides a variety of habitats for birds, including Canada warbler (*Wilsonia canadensis*), northern parula (*Parula americana*), and the state-endangered common loon (*Gavia immer*), all of which breed here.

Shoreline erosion occurs primarily from foot traffic as people access the campsites from the water and pull their canoes out of the water. The major exception was the observed undercutting, usually caused by wave action and/or variable water levels, at Blueberry Island and a few other locations along the shoreline.

Designated Remote Camping Sites

The Department has three designations for camping: **developed** (as found at most state parks); **remote** (as found along the shorelines of Green River Reservoir, Woods Island and Knight Island); and **primitive** (as are designated areas in many state parks and forests). Remote camping areas are located throughout a large forest complex, island or shoreline. They differ from "primitive camping" areas because the location is specific and may include pit toilets, fireplaces, lean-tos, and/or tables. Fees are also usually associated with remote camping areas, and they can be reserved. Primitive camping areas follow the "leave no trace" principles. Usually, large land areas are designated for primitive camping, but there are no designated sites or any facilities provided.

Currently, the Park is permitted for up to 40 designated campsites around the shoreline of Green River Reservoir (Town of Hyde Park Conditional Use Permits #99-30, 1999; amended by #2002-16). There are 36 sites that have been designated, with 30 active campsites in use during the park operating season. Each year, there will be a number of sites closed to use in order to rehabilitate the sites from overuse. The majority of the campsites are only accessible from the water, but there are a few that can be accessed by hiking into the site. If new sites are selected to replace some of the older sites, the campsite location criteria will be used to minimize the impacts on the viewshed, the shoreline, and the resources.

Facilities at the remote camping sites will be limited to:

- Identifiable or designated tent site(s) locations/pad
- Fire ring; stone preferable.
- Toilet facilities – Pit toilets at a minimum with other technologies (composting) if needed.
- Site numbers on posts – unobtrusive but still recognizable from the water and made of native materials.
- Boat landing providing shoreline protection.

There will be no picnic tables or other structures developed at the sites, such as lean-tos.

If use increases in the future, additional privies and further site hardening may be necessary to protect the vegetation and other resources at the site.

Remote Campsite #25 Prior to Site Hardening with Tent Pad

Designated Day Use Sites

Currently there are only 2 designated day use sites on the Reservoir where these facilities may be provided:

- Fire ring; stone preferable.
- Post marking location, if needed.
- Pit toilet, if possible.

There will be no picnic tables provided at the day use sites. Users of the Reservoir may use any portion of the shoreline for day use, except if they want to build a fire. Fires are only allowed at designed day use sites in the provided fire ring. Unoccupied campsites could also be used for day use, especially if the designated day use sites are all occupied.

Day Use Site

Off-Season Use

Typically individual use of Vermont State Parks' facilities during the "off-season" (non-park operating season of mid-May to mid-Oct) is allowable with permission of the parks regional manager (under the *"Rules and Regulations, Visitor Conduct & Fees and Charges for State Park Services and Commercial Activities on Department Lands"*). As there are no developed facilities at Green River Reservoir State Park, individuals may use the Reservoir for day use and camping without first obtaining permission. Any type of group, however, is required to request and obtain a Special Use Permit or License from the parks regional manager prior to use.

Winter use of the Reservoir is becoming more and more popular over time with people winter camping, cross-country skiing, snowshoeing, dog sledding, snowmobiling, and ice fishing. Snowmobiling on the Reservoir is extremely dangerous once Morrisville Water and Light starts their winter draw down of the Reservoir causing sometimes huge air gaps between the upper most layer of ice and the "new" surface of the Reservoir. There are also a number of people that ice fish on the Reservoir gaining access through the boat access or across the earthen dike. Sometimes shanties (both temporary and permanent) show up on the ice being dragged there by snowmobiles.

Trails and Roads

There are a number of roads and trails that are found within this land management category. These roads are part of the larger system found throughout the park and will be maintained for access for management activities.

The trails in and around the campsites should be maintained and monitored so that "social" trails are kept to a minimum in order to protect the vegetation and shore land areas.

Emergency Access
Because of the potential for emergencies while camping and boating at Green River Reservoir State Park, the existing boat access area will provide the primary access point for emergency vehicles and boats. Other emergency access points include the state park roads in the east (off of Collins Pond Road) and in the west (Upper Diggins Road). Keys to the various gates to allow emergency vehicle access will be supplied to the appropriate emergency service provider(s). Emergency procedures are part of the Park Operations Manual.

Gravel Pits
There are six known existing gravel pits within this buffer area/land use classification zone. Some gravel pits have been depleted from previous management activities while others still could provide gravel for ongoing road maintenance and trail development within the park only.

Management Objectives

1. Protect examples of unique or special natural communities.

2. Protect rare, threatened, and endangered species.

3. Appropriately manage critical plant and wildlife habitat to promote high quality habitat.

4. Monitor for and try to prevent invasive exotic species, including Eurasian milfoil, Japanese knotweed, and purple loosestrife.

5. Plan, develop, maintain, rehabilitate, reserve, close, or otherwise regulate the remote campsites along the shoreline of Green River Reservoir to ensure the protection of the resources and the wilderness-like recreational experience.

6. Stabilize shoreline erosion at campsites and other areas where erosion is prevalent. Rehabilitate and revegetate islands and other areas to minimize shoreline erosion.

7. Manage and monitor use of area to maintain the high quality “wilderness-like” recreational experience.

8. Encourage the development of visual and land management guidance to protect the viewshed of the Green River Reservoir State Park.

9. Provide dispersed recreational opportunities where appropriate and compatible with other goals. Develop ADA accessible facilities where appropriate.

10. Provide for healthy and safe environs for visitors.

11. Protect important cultural and historic resources of the property and promote visitor knowledge of the history of the property.

12. Provide opportunities for education, research, and monitoring activities.

Implementation Actions

(Planned activities; this may not be an all-inclusive list; other unforeseen actions may be necessary to carry out the goals and objectives of this plan.)

General

1. Work in conjunction with the Towns of Hyde Park and Eden, and other interested organizations to encourage adjacent private landowners to develop their property in a manner that minimizes visual and other impacts on the unique wilderness-like experience and natural viewshed from the Reservoir.

2. Fishing, hunting and trapping will be allowed on the park property. During the park operating season, certain areas will be off-limits to hunters. Most of the hunting is for small game, birds, and white-tailed deer. Currently, there is minimal waterfowl hunting or moose hunting. In the future, moose hunting may become more popular at the park. Beaver and otter each have a large population. Trapping of beaver may need to be encouraged at some point.

3. The Department of Fish and Wildlife should conduct periodic, voluntary creel surveys at the Reservoir to obtain more current baseline information on the fishery. This will enable better management of the fishery and better preparation for the renewal of the FERC hydropower license (so that there is a better understanding of the fishery and changes over time). The Reservoir has a productive small mouth bass fishery, which has become a very popular.

4. The gravel from the existing gravel pits will only be used to maintain the roadway and trail systems in the Park. It will not be hauled off site. If there are major upgrades to facilities, such as the second parking lot, gravel will most likely be hauled in from external sources.

Remote Camping

1. Any new campsites or relocated campsites will be allowed only if they meet the following campsite location criteria: Flat, level space for up to 2 – 3 tents; campsite located 25’- 50’ from shoreline; undisturbed shoreline except for trail to campsite; campsite screened from water; campsite screened so hard to see or hear any other campsites from the campsite; adequate soils and slope for pit toilets (at

least 150' from shoreline); pit toilet(s) located within 300' of campsite; no island sites, except for on the Big Island; and suitable landing location for boat.

Remote Campsite

2. Campsite development will not occur in some areas of the Reservoir – the south cove (southerly most cove immediately to the east of the access area) and the northern part of Boomhour Brook are two areas identified for no campsite development.

3. Identify and designate each remote campsite. Camping will only be permitted on designated sites. Develop two ADA compliant campsites.

4. There are a total of 40 permitted campsites, but there will be no more than 30 active campsites at one time or less in order to protect the "wilderness-like" character of the Park. The remaining 10 sites will be kept in reserve to allow these sites to periodically be "rested," or rehabilitated to ensure a quality experience and to prevent resource damage. Of the 10 "inactive" sites, up to 2 may be used as overflow campsites.

5. Existing campsites may be closed where continued use will cause significant degradation of the shoreline, vegetation, soil or water quality, or substantial conflict with other users.

Campsite Closed for Rehabilitation

Day Use Site on Point Under Rehabilitation

6. The number of campsites on the Big Island will be limited and some may be eliminated over time.

7. Not more than two of the active sites shall be designated for group camping with the maximum number of campers not to exceed 12 people per group, or the maximum number of people determined by the capacity of the site. These sites should be away from the water to limit sound from traveling across the water.

8. Each campsite capacity will be determined by the characteristics of each individual site, and not by a "blanket" number (i.e., 8 people maximum per site).

9. Amenities at each campsite will be limited to the least amount necessary to protect the site: a stone fire ring, a site number on a post that is unobtrusive but still recognizable from the water and made of native materials, identifiable or

designated tent locations/area, and accessible pit or composting toilets. Amenities that will not be provided include picnic tables and lean-tos.

10. Install an adequate number of privies to service all campsites with signs directing users to privy location.

Two Types of Privies Currently Used at Individual Sites (L) and Group Site(R)

11. Discourage spread/creep of each remote camp site by attempting to designate camping and use locations on the site.

12. Provide information about low-impact camping techniques, to include proper disposal of human waste and requesting that campers avoid cutting vegetation.

13. Close campsites near loon nesting sites until the chicks are old enough to be off the nests.

14. Provide information about loons and their sensitivity to human disturbance.

15. Fees, rules and regulations for camping and visitor use will be annually reviewed and established through the *"Rules and Regulations, Visitor Conduct & Fees and Charges for State Park Services and Commercial Activities on Department Lands"* through the Administrative Rules process, and other ANR policies. The fee structure will encourage the minimum number of vehicles per campsite.

16. Immediately surrounding each designated campsite, trees will be annually evaluated and cut if they are deemed to become hazardous to visitors at the site.

17. Off-season camping will be allowed under "leave no trace" guidelines and only on designated campsites. Groups will still need to request and obtain a Special Use Permit or License (which is consistent with all other state lands). Fees will not be collected in the off-season from individual users.

Groups

1. Group use will not be encouraged as a primary use of the Reservoir. A "group" is defined as eight or more people with a maximum allowed size of 12 people or 6 vessels.

2. On a daily basis, not more than two overnight camping groups shall be allowed at Green River Reservoir State Park.

3. On a daily basis, not more than two day use groups shall be allowed at Green River Reservoir State Park.

4. All groups wishing to use the park and/or Reservoir during the "off-season" must first request and obtain a Special Use Permit or License from the Barre District Office.

5. Fees, rules and regulations for group use will be annually reviewed and established through the *"Rules and Regulations, Visitor Conduct & Fees and Charges for State Park Services and Commercial Activities on Department Lands"* through the Administrative Rules process, and other ANR policies.

Day Use

1. There will be designated day use sites; however, day users are not limited to only using these designated sites. Fires are only allowed at designated sites in the fire rings provided at each site.

2. Fees, rules and regulations for day use will be annually reviewed and established through the *"Rules and Regulations, Visitor Conduct & Fees and Charges for State Park Services and Commercial Activities on Department Lands"* through the Administrative Rules process, and other ANR policies.

Trails and Roads

1. Maintain existing interior road system as a management and emergency vehicle access. Provide keys to appropriate emergency response organizations.

2. Trail systems may be developed in this land management classification, and will be constructed and maintained to minimize conflicts between users, allow reasonably safe travel, and minimize soil erosion and damage to water resources and wildlife habitats.

3. Place gates and/or boulders where appropriate to discourage illegal vehicle and ATV use.

4. Use minimal amount of gravel from existing pits as necessary to maintain the logging roads on the Park property.

Monitoring Use During the Season

1. Install a day user and campsite register to monitor use, collect fees, and to receive comments from the users if park staff is not present.

2. Monitor area for impact due to human use and waste. When impacts and/or use warrants additional site hardening, considerations will be made for the least intrusive type of site hardening, and may include tent pads or additional pit privies. Monitor and inspect campsites for to evaluate impacts from fires, tree cutting, and other camping related use impacts.

3. Periodically check signs and physical condition of all park facilities and roads.

4. Record and review user information and register comments.

5. Monitor inappropriate use, or illegal uses of property. If warranted, enter into enforcement contracts with the State Police and /or local Sheriff Department.

Off-Season Use

1. Warning signs will be placed at the access area on the potential hazardous situation in the winter with the ice shelves from Reservoir drawdowns.

2. Snowmobiling will be prohibited on the Reservoir due to safety hazards associated with the winter water draw down by revising and updating the ANR Policy on Snowmobiling on State Owned Lands (5/5/92).

3. Ice fishing will continue to be allowed as generally ice fishermen do not use the ice if it is unsafe (or they can't get to the water to fish due to draw downs resulting in two ice shelves).

3.0 General Management Areas

Definition - *An area where the dominant uses are timber harvesting, wildlife habitat management concentrated trail networks, dispersed recreation, or other general land uses. In these areas, a primary management consideration is minimizing conflict between the activities, as well as with lands categorized as more sensitive where they are adjacent to a general management area. In addition, more sensitive resources that occur within these areas may require special attention.*

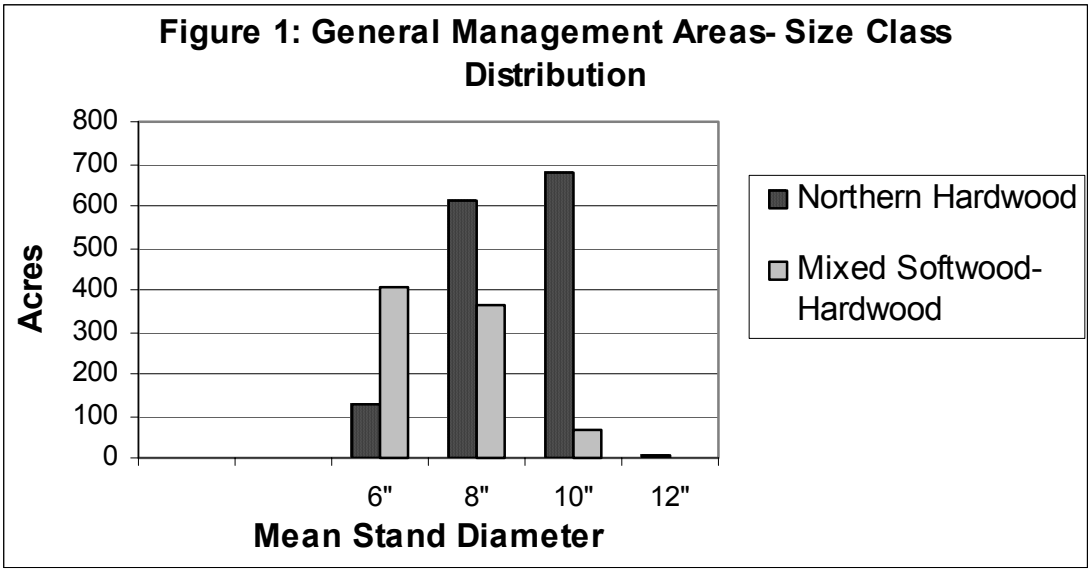
At Green River Reservoir State Park, the General Management Areas represent 2,266 acres or 44% of the property. The General Management Areas include the remaining portions of the property that do not generally have highly sensitive natural communities and/or resources that need protection and special management (except for possible vernal pools, rare, threatened and endangered species, historic resources, etc. that may be found within the area), areas that have deed and/or easement restrictions, or the intensive management area.

The forest cover types in the General Management Area consist of northern hardwood stands (62%), mixed red spruce-hardwood stands (37%) and small stands of hemlock.

Past harvesting practices consisted of high-grading in the hardwood stands. High-grading is a practice where only the larger trees of sawlog value are harvested, leaving behind mostly low value and cull trees. This practice has created stands that are adequately stocked and have a reasonable distribution of diameter classes; unfortunately the stems left are of low quality.

The mixed spruce-hardwood stands were treated by diameter limit cutting of the softwood species. This is the practice of removing all trees over a specified diameter, usually the cut off being for sawlogs. What has resulted, are significantly understocked stands of primarily poletimber-sized trees, and having poor species composition. Past harvesting systematically removed the softwood, leaving very poor quality red maple and yellow birch. Figure 1 illustrates the current diameter class distribution by number of acres for both the northern hardwood and mixed spruce-hardwood stands.

There are three management options to consider: 1) Option 1 is to simply do nothing, letting nature take its course and accepting whatever happens; 2) Option 2 is to work with the existing overstory and manage the remaining acceptable growing stock; and 3) Option 3 is to clearcut and start over with the forest. Clearcutting would establish new regeneration for the next stand.



The DFPR will implement Option 2 when working in the hardwood stands and a combination of Options 2 and 3 in the spruce-hardwood stands. For the hardwood stands, treatments will consist of removing mostly cull trees along with the poorest quality sawlogs and creating small openings for regenerating the hardwood species. Within the mixed spruce-hardwoods stands, harvesting will focus on removing the hardwood overstory from existing spruce regeneration in an effort to improve species composition. It will take many years of diligent management to return these stands to their once productive capacities. Option 1, doing nothing to the stand, is not acceptable. This would only prolong the situation and leave the restoration work for future land managers.

Recreation in the General Management Area will be primarily for dispersed recreational activities, such as trail uses, hunting, trapping, fishing, and primitive camping. Primitive camping means camping in a forest with no developed facilities and leaving the area with little or no evidence of human visitation. Primitive camping areas are usually difficult to access, and have no facilities or a designated water supply. Primitive camping must be at least 100 feet from any stream or body of water, 200 feet from any trail or property line, and 1000 feet from any traveled road.

Management Objectives

1. Provide a sustainable flow of high quality forest products.
2. Provide high quality habitat for target and general wildlife species.
3. Maintain a 50-foot buffer on each side of the mapped streams and a 100-foot buffer around wetlands.
4. Provide opportunities for a wide variety of dispersed recreational opportunities and activities: hiking/walking, mountain biking, horseback riding, snowmobiling, cross-country skiing, hunting, fishing, trapping, and primitive camping.

5. Maintain clean, high quality water resources and aquatic habitats. Restore quality of water resources where necessary.
6. Promote healthy natural communities.
7. Protect important cultural and historic resources of the property and promote visitor knowledge of the history of the property.
8. Provide opportunities for education, research, and monitoring activities.

Implementation Actions

(Planned activities; this may not be an all-inclusive list; other unforeseen actions may be necessary to carry out the goals and objectives of this plan.)

1. Vegetative management, over the next 20 to 50 years will focus on rehabilitating the current stands. Management in the hardwood stands will be designed to work with what is on the site by removing the poorest quality trees and attempting to provide desired regeneration. For the hardwood stands the goal is to manage them under an uneven-aged system. It will be many years before that stage is reached. Treatments will occur every 15 to 20 years.

   Management of the red spruce-hardwood stands will focus on improving the softwood stocking by releasing small groups and patches of existing softwood regeneration and creating conditions for the establishment of red spruce and balsam fir. Over time this cover type will be managed as evenaged stands. Treatments will occur every 10 to 15 years. They will be regenerated using a shelterwood system or patch cuts.

2. Maintain and upgrade the existing truck road system for use in harvesting timber and as recreational trails.

3. Relocate a portion of the Catamount Trail off the existing VAST Trail, if an appropriate location can be determined.

4.0 Intensive Management Area

Definition - *An area that is easily accessible and characterized by a high level of human activity and high intensity development on or adjacent to state land Aesthetics and safety are the primary management considerations in these areas. However, more sensitive resources that occur withing these areas may require special attention.*

There is one area designated as an Intensive Management Area at Green River Reservoir State Park, which represents 18 acres, or 0.5% of the park. This area is the main entrance to the park and currently provides such facilities as parking areas, temporary contact station and storage shed, boat access and launch area, temporary port-a-lets, and bulletin board and sign in registers.

Additional permanent park facilities will be necessary to adequately operate and manage the Park from this main access area. These facilities include: ADA boat access trail; a contact station with power and telephone; composting toilet facility; year round park ranger or staff housing with adequate water and sewerage systems; storage and equipment facilities; and any other necessary facilities.

Management Objectives

1. Protect the natural, cultural, and historic resources of the area.
2. Continue to provide dispersed, "wilderness-like" recreational opportunities.
3. Improve and develop necessary facilities to meet the needs of adequately operating a state park. All facility development will be minimal and visually unobtrusive as possible. Develop appropriate ADA accessible facilities.
4. Provide for healthy and safe recreational facilities and environs for visitors.
5. Manage and monitor use of area to maintain the high quality "wilderness-like" recreational experience.
6. Provide public information about the park and "leave no trace" principles.
7. Promote visitor knowledge of the natural and cultural history of the property.

Implementation Actions

General

1. DFPR will periodically conduct recreational user surveys at the Reservoir to determine how the users feel about management changes, use, crowding, etc.

Park Entrance/Access Road

1. Maintain the park entrance or access road at the existing alignment and width (unless traffic circulation patterns change) to allow for unheeded traffic circulation within the access area.

2. The park entrance road will be gated to control and limit vehicle access during non-operational periods of the year.

Green River Reservoir State Park Entrance

Parking

1. Develop sufficient parking capacity that meets the maximum allowed use at the Park, which will still provide a primitive or wilderness-like recreational experience, but not be overbuilt. There will be three separate parking areas with a total of no more than 75 parking spaces:
    a. A small parking area near the boat drop-off area with at least two parking spaces for use by persons with disabilities and a total parking capacity of no more than 15 vehicles.
    b. Mid-way on west side of access road, a 30 car (more or less) parking area.
    c. At the "old log landing," a 30 car (more or less) parking area.

2. The parking areas will be ditched and have appropriate drainage to protect against stormwater runoff reaching the Reservoir, or other environmentally sensitive areas.

3. Designate and sign the appropriate number of ADA compliant parking spaces.

Lower Parking Area Near Boat Launch Looking West

Boat Access

1. Continue to provide only one boat access to the Reservoir, located at the southern end of the Reservoir in its present location. Continue to provide only walk-in boat launching by gating the trail to the water.

2. Minimize stormwater runoff and limit erosion at the existing boat access by improving the drainage from the parking area and trail to the Reservoir and stabilizing the shoreline near the edge of the water.

3. Erect a bulletin board near the access area to provide users with updated information about using the area, loon nesting areas, a map showing active campsites and day use areas, emergency protocol, leave no trace principles, etc.

4. Provide ADA compliant boat access to the water from the ADA compliant parking space(s).

Walk-In Access to Green River Reservoir

Bulletin Board Area at Boat Access

Boat Access Area Prior to Shoreline Stabilization Project – July 2000

Boat Launch Area After Shoreline Stabilization Project – June 2003

Facility Development

1. All facility development will be minimal and in keeping with the Park's character. All new facility development must meet ADA compliance requirements.

2. Construct composting toilets at the access area to meet public needs and current regulatory codes.

3. Construct a park ranger residence and contact station to provide supporting administrative facilities for park operations. Electric and telephone service is needed to adequately operate the park and for emergency communications.

4. Signs will be kept to the minimum required for safety, information and direction. They will be designed to have minimum visual impact.

Public Information

1. An interpretative brochure highlighting the history and cultural and historic resources of the park may be developed. An interpretative trail could be developed, or these sites could be located/identified along the trail system.

2. Oral history interviews will be conducted with the old timers to document their knowledge of the area before they pass on. Morrisville Water and Light and others have old pictures, written text, and memories that should be gathered and archived with the Hyde Park, Eden, and Morrisville Historical Societies.

D. Management Actions by Resource Category

1. Park Operations and Management

Park administration and operations refers to the policies, rules and regulations, procedures, programs, and services required to operate a specific state park on a day-to-day basis.

Each Vermont state park is governed by state statutes, ANR and DFPR policies and procedures, and the "*Rules and Regulations, Visitor Conduct & Fees and Charges for State Park Services and Commercial Activities on Department Lands."* Each state park also has a "Park Ranger Manual" and specific park "Operations Manual," which provides park staff with daily guidance and information necessary to operate the park.

The Park Ranger Manual includes specific information about the organization's expectations for operating a park, such as the rules and regulations (mentioned above), accounting and reservation practices, personnel policies and expectations, and facility maintenance requirements. The Park Operations Manual provides more specific information about operating a specific park, such as Green River Reservoir State Park, and includes topics on staffing, maintenance schedules, facility development and maintenance schedules, enforcement procedures, and emergency services. This Operations Manual is reviewed and updated annually by park staff.

There have been certain overall operating principles and strategies that have been established for Green River Reservoir that are different from the approaches the organization takes for the other 55 state parks in the system.

Implementation Actions

Marketing and Promotion

1. Green River Reservoir State Park will <u>not</u> be actively promoted or marketed.

   Public informational materials and products that indicate locations and general information that are acceptable include: the Green River Reservoir State Park brochure; the Vermont State Parks brochure, the state highway map; the Fish Vermont map; and other similar maps.

   Promotional materials and products that have been determined to not be acceptable at this time include: the Vermont Campground Guide and other similar products. Press releases about the park should be kept to a minimum.

When the appropriate time arrives, Green River Reservoir State Park will be added to the Vermont State Parks website in order to provide appropriate information about what type of park Green River Reservoir is, how to make a camping reservation, and other information that is necessary.

2. Roads, Trails and Trail Use

Portions of both the Vermont Association of Snow Travelers (VAST) and the Catamount Trail Association (CTA) winter trail systems are currently located in the park. VAST Trail Route #100, #100C, and the Catamount Trail coincide on the same trail corridor on the eastern side of the property using existing logging roads as the corridor. Toward the middle of the property and the northern end of the Reservoir, the VAST Trail Route #100 diverges north through the middle of the property to again connect with VAST Trail Route #100F. Along the eastern edge of the property in the north, the VAST Trail Route #100 continues off of the property towards Albany and Craftsbury, Vermont. Near the north central part of the property VAST Trail Route #100F continues northwest towards South Pond and Eden (see Winter Recreation Map).

The many skid and logging roads throughout the park have also been used minimally for other trail activities, including hiking/walking, mountain bicycling, horseback riding, and snowmobiling. Use of motor vehicles and ATVs by the public on park roads and trails are not permitted; however, illegal ATV use continues to be a problem on park land.

During 1999 and 2000 summer seasons, all skid and logging roads were inventoried, mapped, and assessed for potential trail development and/or designation. This information will be used to develop a designated trail system within the park.

There is no legal access to the east side of the park property from Collins Pond Road, to the north through South Pond Road, or to the west towards the dam off of Upper Diggins Road. This severely limits most trail opportunities, however, the current private landowners have allowed trail users to gain access to the park property across their private roads mainly for snowmobiling and cross-country skiing in the winter and informal trail use in the summer. Until such time that legal access is obtained, trail and recreational access and use via these three private roads will not be encouraged. Through the efforts of VAST and the CTA permission has been granted from the private landowner to use the private road off of Collins Pond Road for winter trail activities. The DFPR will partner with VAST and the CTA to continue these two trail corridors on park property as much as feasible.

[insert Winter Recreation Map]

back of winter map

Implementation Actions

General

1. A trail system for hiking, mountain biking, and cross-country skiing will be developed in the southern section of the park property with trailheads located on the Green River Dam Road (on park property) and on the Garfield Road (on Morrisville Water and Light property dependent upon approval). The trail system would continue to the west side of the property from the south on the Manosh Cross Easement and linking to existing logging roads. On the west side, trailheads will be located on the Upper Diggins Road (on park property) and near the gate (on park property) on the private road that goes towards the dam. These two trailheads on the west side will also serve as parking areas for summer and fall use. There will be no winter/spring parking areas on the west side of the park as the road to these is a Class IV Town Road.

2. The gravel from the existing gravel pits will only be used to maintain the roadway and trail systems in the Park. It will not be hauled off site. If there are major upgrades to facilities, such as the second parking lot, gravel will most likely be hauled in from external sources.

Snowmobiling

1. Snowmobiling is only allowed on the designated VAST winter trail system.

2. Snowmobiling on the ice of the Reservoir will be prohibited as there are many times when the ice is unsafe due to water draw downs. The ANR Policy on Snowmobiling on State Owned Lands (May 15, 1992) will be amended to include Green River Reservoir as public water body where snowmobiling will be prohibited.

3. If winter recreational use conflicts with the management of the deer wintering area, the existing VAST and Catamount Trails may need to be relocated or closed.

4. The existing VAST Trail Route #100C and #100F will continue in their present location, but will be relocated when the trail crosses important wetlands and natural communities.

Cross-Country Skiing

1. The existing Catamount Trail, which follows the VAST Trail Route #100 and #100C, will be relocated to a separate trail corridor if an appropriate location can be determined and developed.

2. A cross-country ski trail may be developed circumnavigating the Reservoir if an appropriate location can be determined. The portion of this trail east of the Reservoir could be co-located with the Catamount Trail.

Other Trail Uses

1. The logging roads will continue to be open to the following informal trail uses: hiking, walking, mountain biking, horseback riding, cross-country skiing, and snowmobiling (only on designated VAST trails).

3. Primitive Camping

Primitive camping (not to be confused with remote camping along the shoreline of the Reservoir) is a specific activity that is allowed on state lands only within designated areas and by certain guidelines as defined in the policies of the Department of Forests, Parks and Recreation. The Conservation Easement for Green River Reservoir State Park allows the public the right of access to the entire property and for primitive camping to occur.

Primitive camping is allowed throughout the Park, except for within the 500-foot buffer of the Reservoir (Special Management Area) and the Schofield Pond Wetlands Complex (Highly Sensitive Management Area). Access to primitive camping is only allowed via land (on foot, no vehicles are allowed on Park roads and trails), and not by water from the Reservoir. Vehicles may be used on town roads that abut park land for access to primitive camping.

Primitive camping must be at least 100 feet from any stream or body of water, 200 feet from any trail or property line, and 1000 feet from any traveled road. There are no facilities and no designated water supplies for primitive camping, and it is allowed year-round. There are other general DFPR guidelines for primitive camping that follow “no trace” camping.

Implementation Actions

1. Monitor primitive camping impacts on the resources.

4. Water Resources

The management of Green River Reservoir State Park by the Department of Forests, Parks, and Recreation will, at a minimum, maintain the quality of all surface waters associated with the land. It is understood that agricultural and silvicultural activities that follow Accepted Agricultural Practices and Acceptable Management Practices are presumed to conform to the rebuttable presumption of compliance with Vermont's Water Quality Standards.

Managers of ANR land holdings will cooperate with the ANR's Department of Environmental Conservation, Water Quality Division with their watershed planning initiatives for the Lamoille River and others as they are undertaken.

The Vermont Department of Environmental Conservation's Watershed Planning process is underway in the Lamoille River watershed. The watershed basin planning effort includes the determination of the water management type of all waters located with the basin(s). Through this process, the assignment water classification and water management type for all waters will take into consideration the existing water quality, the desired water quality, and whether or not the desired quality is attainable.

Since the 1960s, Vermont has had a classification system for waters that establishes management goals. Setting water quality management goals is the responsibility of the Vermont Water Resources Board. These goals describe the values and uses of surface waters that are to be protected or restored through appropriate management practices. The Agency of Natural Resources works to implement activities that restore, maintain or protect the management goals. The current classification system includes two classes: A and B. Class A waters are divided into two subclasses: A(1) and A(2).

Presently, in all basins, waters above 2,500 feet in elevation are classified as A(1) by Vermont statute and are managed to maintain their natural condition. Waters used as public water supplies are classified as A(2). All remaining waters are Class B waters. As part of the Water Quality Standards revisions in 2000, the system was changed to divide Class B waters into three management types: B1 (best), B2 (better), and B3 (good). This change was made to furnish a greater level of protection to existing higher quality waters and to recognize attainable uses that could be supported by improvements to existing water quality.

The revised Water Quality Standards require that all basin plans place Class B waters into one of the three water management types where the typing has not already been done. All Class B waters must still support the designated uses described in the Vermont Water Quality Standards for Class B waters, which include, among other uses, suitability for aquatic life, boating, fishing, swimming, and drinking with treatment.

The initial proposal in the Lamoille River watershed plan sets management goals for waters within the Green River watershed. The B1 proposal is based upon the pristine

condition of certain reaches of waters. Assessments of these waters conducted by staff from the Agency of Natural Resources indicate that the areas are mostly forested and sparsely populated and/or provides significant wetlands and wildlife habitat, fisheries spawning areas, and pristine water quality. The B1 designation, or almost natural conditions, has been proposed for many of the headwater tributaries to the Green River Reservoir (excluding the Reservoir itself) and ponds and wetlands adjacent to the Reservoir, including Schofield Pond, Mud Pond, Perch Pond, Wiley Brook, Zach Woods Pond, and several unnamed streams, ponds and wetlands.

The initial proposal also recommends a B3 designation for waters on the Green River Reservoir for the waters affected by the dam. The B3 proposal within this reach includes the entire impounded and bypass areas of the dam. The B3 designation allows for continued water level fluctuation to augment flow for the Morrisville Hydroelectric Project.

Final water management types for the Reservoir will be determined through a public rulemaking process by the Vermont Water Resources Board.

Section V
Management Activities for the Next 20 Years

The long-range management plan, outlines in a general way how Green River Reservoir State Park will be managed for the foreseeable future. Management activities to be undertaken in a particular year are detailed in the Annual Stewardship Plan prepared by the District Stewardship Team. These are available for public review for each fiscal year beginning in June for the following July through June.

This section of the plan offers more specific details about the priorities for management activities and practices that will be implemented at the Park. Some management activities are ongoing stewardship activities (i.e., picking up litter, mowing lawns), which do not need to be identified and are assumed to occur as baseline responsibilities for owning the land. Other management activities are maintenance related, such as replacing a roof, brushing trails, re-graveling roads, thinning for wildlife habitat, or brush hogging a field. Exactly when these types of projects are implemented often depends upon the availability of funding and staff resources, which varies from year to year. Many of these items are routine and will usually not be included in the Annual Stewardship Plan.

Another management activity included here is the cutting schedule for timber harvests for the next 20 years. This activity is more predictable than other activities. However, due to a variety of circumstances described in the timber sale section, harvest operations may need to be shifted a few years one way or the other. Due to the long-term durability of forests, this will have little effect on the final outcome.

Other management activities may include new facility development or upgrades to existing facilities, land additions to the park, and new demands from users, which are unknown at this point in time. The implementation of these activities is often dependent on available funding, and implementation may be delayed even when urgent. As these projects or activities arise, each project will undergo resource analysis and public review.

A. Park Operations and Management

Management responsibilities for recreation at Green River Reservoir State Park are shared between the Parks and Forestry Divisions. The Parks Division typically manages the "park," its campgrounds, picnic areas, day use areas, buildings, and other intensively used sites. The Forestry Division typically manages the more dispersed recreational

opportunities, such as hiking, snowmobiling, cross-country skiing, mountain biking, and primitive camping. The two divisions will be working cooperatively on projects at Green River Reservoir State Park.

Park administration and operations refers to the policies, rules and regulations, procedures, programs, and services required to operate a specific state park on a day-to-day basis. Each Vermont state park is governed by state statutes, ANR and DFPR policies and procedures, and the "Rules and Regulations, Visitor Conduct & Fees and Charges for State Park Services and Commercial Activities on Department Lands." Each state park also has a "Park Ranger Manual" and specific park "Operations Manual," which provides park staff with daily guidance and information necessary to operate the park.

The Park Ranger Manual includes specific information about the organization's expectations for operating a park, such as the rules and regulations (mentioned above), accounting and reservation practices, personnel policies and expectations, and facility maintenance requirements. The Park Operations Manual provides more specific information about operating a specific park, such as Green River Reservoir State Park, and includes topics on staffing, maintenance schedules, facility development and maintenance schedules, enforcement procedures, and emergency services. This Operations Manual is reviewed and updated annually by park staff.

There have been certain overall operating principles and strategies that have been established for Green River Reservoir that are different from the approaches the organization takes for the other 55 state parks in the system. They have been reflected throughout this long-range management plan.

1. Marketing and Promotion

As the primary management philosophy of Green River Reservoir State Park is to protect the wilderness-like experience that is atypical of most of Vermont's state parks, Green River Reservoir will be managed in a way to control the amount and type of use the Park receives. Part of this philosophy will be to not actively promote or market Green River Reservoir State Park.

Appropriate public informational materials and products that identify the location and general information about the Park are acceptable. Examples include the Green River Reservoir State Park brochure; the Vermont State Parks brochure, the state highway map; the Fish Vermont map; and other similar maps. Promotional materials and products that promote more than provide general information that have been determined to not be acceptable at this time include the Vermont Campground Guide and other similar products. Press releases and news articles about the Park will be kept to a minimum, and the message within the articles will be crafted in a manner to be sensitive to the management philosophy of Green River Reservoir State Park. When the appropriate time

arrives, Green River Reservoir State Park will be added to the Vermont State Parks website in order to provide appropriate information about what type of park Green River Reservoir is, how to make a camping reservation, and other information that is necessary.

2. Constructing New Recreational Facilities and Trails

Capital improvement funds are usually obtained through the legislative process in the capital budget, which is passed annually. Vermont State Parks typically receives little capital monies; when such monies are appropriated it is usually directed to failing systems or to meet federal accessibility, health and safety codes. Capital monies for new facilities are difficult to obtain through this process. In 2001, the Legislature created the Land and Facilities Trust Fund to provide sustainable funding for stewardship activities on state lands, which could include the development of new park facilities. This Fund will become available when the there is a sustainable principle in the Fund. The Agency is proposing use of some of the Fund in fiscal year '06. The Friends of Green River Reservoir may provide an avenue, or partnership, in order to leverage private donations and/or foundation dollars to assist in developing the park to fully make it operational. Most of the trail work will be funded through the Vermont Recreation Trails Fund, a fund set up using gas tax receipts from non-highway sales of gasoline.

Recreational Priorities for Implementation

Priorities for implementation do not have any timeframes associated with them as some require substantial sums of capital monies in order to implement. Instead, a general priority rating has been given to guide the Department.

High Priorities (not in order of priority)

- ADA compliance
- Contact Station and adequate communication systems
- Boat access area toilet facility
- Signage and public information (e.g., maps)
- Designate and establish campsites
- Pit toilet construction
- Develop parking areas and trail system
- Remove hazardous trees near campsites
- Monitor safety hazards
- Monitor for invasive species
- Establish bird monitoring site
- Gain legal vehicle road access on east and west sides of property
- Relocate the Catamount Trail, as appropriate

Medium Priorities (not in order of priority)

- Park Ranger House
- Interpretative signage
- Eliminate or diminish safety hazards
- Shoreline erosion stabilization and improvements

New Projects

All new projects, whether proposed by the Department or by an outside organization, must go through an extensive review process. The following are some of the questions and issues that must be addressed before a new project can be approved:

1. Does the parcel deed allow the activity?
2. Is the activity consistent with the parcel's management?
3. Is the activity consistent with agency and department policies?
4. Is it compatible with the land use classification? Recreation Opportunity Spectrum (ROS) classification?
5. Are there significant resource issues? wildlife habitat; rare, threatened and endangered species; wetlands; cultural/historic, etc.
6. Are there other user group conflicts?
7. Is an Act 250 permit required? local permits required?
8. Is a storm water permit required? wetland permits?
9. Who will be responsible for construction, maintenance, signing, parking, enforcement, etc.?

A new project can take a significant commitment of time and energy from conception to construction. Because of the district's small staff and many other responsibilities, the Department of Forests, Parks and Recreation will seldom propose a new recreational facility or trail unless it is to meet recreational needs and demands, resolve an environmental issue, improve operations and management of an area, or to limit user conflicts. Therefore, it will take a very committed organization or individual to get a new facility or trail effort off the drawing board and onto the ground and take on responsibility for maintenance.

New and unknown recreational uses and activities are always surfacing. Again they will have to go through a similar review process before use can occur.

B. Roads and Access

One of the main barriers to management at Green River Reservoir State Park is legal vehicle access to the lands around the Reservoir. Other than the main access to the park from the Green River Dam Road, there is limited legal vehicle road access to the

remainder of the property. The Morrisville Water and Light Department developed a number of verbal agreements with adjacent landowners to get access to the land surrounding the Reservoir. There is legal road access from the Upper Diggins Road on the west side of the property and a deeded right-of-way from Bornemann Road on the east side.

The Department will pursue contacts with the adjacent landowners to obtain legal rights-of-way along the existing roads that access the land surrounding the Reservoir.

There are no plans for constructing new truck roads on Green River Reservoir State Park. However, this may need to be revised depending on the ability to gain legal access to the property. Maintaining the existing truck roads is an on-going process. The culvert headers are cleared of leaves and other debris annually. Periodically the ditches are cleaned and re-established using an excavator. Culverts are repaired or replaced and the road surface is graded and graveled as needed. Any bridges will be maintained, repaired and replaced as needed. In the maintenance of the existing truck roads it may be beneficial to replace some culverts with bridges. The roadsides are mowed to keep woody vegetation from growing up and closing in the roads.

There are numerous skid roads on the property that will be used periodically for timber harvesting operations. When they are not in use they will be closed down by waterbarring, removal of temporary water crossings, and blocking access.

C. Timber Sale Schedule

The timber management goals for Green River Reservoir State Park include: manage on a sustainable basis; improve tree quality, vigor and species composition; improve wildlife habitat where opportunities present; maintain high standards for water quality; practice demonstration quality silviculture; maintain high aesthetic values associated with the Green River Reservoir viewshed; work with the natural community classifications to assure appropriate species composition on each site; and accommodate recreational uses where possible.

For timber management purposes, the park is divided into smaller units called compartments, usually determined by natural features. On Green River Reservoir, the Eden-Hyde Park town line is also a compartment boundary. There are seven compartments on Green River Reservoir State Park (see Timber Sales Map).

A detailed sale prescription will be prepared for each project at the time it appears in the Annual Stewardship Plan. The property will be re-inventoried on a 10- to 20-year schedule. This timber sale schedule covers all treatments in the General Management Area (3.0) and the Special Management Area (2.2). There will be 100-foot buffer around all wetlands and a 50-foot buffer along major streams. No harvesting will be allowed

within these buffers. Management of vernal pools, riparian areas, den and snag trees, bear corridors, mast stands, and historic and cultural resources are implemented in each sale based on Agency of Natural Resource and Division for Historic Preservation guidelines. In addition, harvesting will be conducted in a way to minimize its impacts on the Green River Reservoir viewshed.

This Timber Sale Schedule is subject to change, depending on the results of more current inventories, improved silvicultural or habitat guidelines, insect and disease outbreaks, floods, wind and ice storms, exceptionally wet or snowy years, access problems, district workloads, markets, and the identification of new sensitive sites. Recognized U.S. Forest Service silvicultural guides will be used when developing stand prescriptions for timber harvests. Because forest management is a long-term proposition, shifting harvesting operations a couple years one way or the other has little effect on the final outcome. Unevenaged silvicultural practices will be the primary goal for managing the northern hardwood forest. Evenaged silvicultural practices will be used to manage the softwood and mixedwood stands and maintain areas of early successional species.

The following schedule of timber sales on Green River Reservoir State Park has been developed for the time period, Fiscal Year 2006 through 2026 (see Timber Sales Map).

Fiscal Year	Compartment	Sale #	Treatment
2007	5	1	Group Selection-Deer Wintering Area
2007	2	2	Group/Patch Cuts-release softwood regeneration
2010	5 & 6	3	Group Selection-Deer Wintering Area
2011	3	4	Selection/Group Selection
2014	4	5	Selection/Group Selection
2014	6	6	Selection
2017	6 & 7	7	Selection/Deer Wintering Area
2018	1	8	Selection/Group Selection
2020	7	9	Selection/Group Selection
2021	3 & 4	10	Group Selection-Deer Wintering Area

The next round of scheduled harvests will be developed after conducting an inventory of the property so that there is current stand data to base the decisions on.

In addition to the above projected timber harvesting operations, stands adjacent to public accessible roads may be subject to improvement thinning through the Department's Roadside Fuelwood Program at any time during the span of the management plan. Harvesting operations may also be done as part of training workshops, demonstration projects, salvage of storm or insect and disease damaged trees, removal of hazard trees in Intensive Management Areas, and research studies.

[insert Timber Sales Map]

back of timber map

D. Wildlife Habitat

The most current Department of Fish and Wildlife guidelines will be used to address management of riparian habitat, bear travel corridors, beech stands used as fall feeding areas, and other wildlife habitats. Den and snag trees will be maintained to provide habitat for cavity nesting birds and mammals.

Green River Reservoir provides unique habitat for a number of large bird species. It has a nesting pair of common loons, nest platforms have been installed for ospreys, and a known Great Blue Heron rookery exists on the parcel. The habitats for these birds will be protected by utilizing best management practices and following all state and federal guidelines.

Timber harvesting will be conducted in the wintering area to release or regenerate the softwood species. The main goal is to manage to promote the health of and increase the stocking of softwood trees, which enhances their ability to function as winter cover and provide hardwood browse in close proximity to the winter cover. This reduces the energy that deer will need to use in the search for food. These treatments may be accomplished as part of larger commercial timber sales included in the Timber Sale section.

Fiscal Year	Compartment	Sale #	Treatment
2007	5	1	Deer Wintering Area
2010	5 & 6	3	Deer Wintering Area
2016	6 & 7	7	Deer Wintering Area
2021	3 & 4	10	Deer Wintering Area

E. Water Resources

In order to achieve the goals of 10 V.S.A. §1250 (Water Pollution Control) and 33 U.S.C. § et seq. (Clean Water Act), management practices on Agency of Natural Resources lands will, to the extent feasible, restore and maintain the quality of the state's waters and aquatic habitats. All management activities will conform with Vermont Water Quality Standards and Vermont Wetland Rules. The Department will cooperate with the Department of Environmental Conservation, Water Quality Division on their watershed planning initiatives for the Lamoille River, and will manage waters according to their classification and typing.

F. Historic Resources and Archeological Sensitivity

A preliminary archaeological analysis was completed for Green River Reservoir State Park by the Consulting Archaeology Program at the University of Vermont (March 2004). The GIS predictability model developed for the Vermont Division for Historic Preservation was used to determine archaeological sensitivity levels at the park. Within the park boundaries, the areas that could be archeologically sensitive include broad, level terraces along the margins of the Green River Reservoir, the Green River, Wiley Brook, Boomhour Brook, Rush Pond and Schofield Pond. Other potentially sensitive areas include natural springs, or possible rock outcrops of fine-grained stone, which may have been quarried in the past for the raw materials to make stone tools. The geologic formation of the area is Stowe formation, which includes beds of greenstone and quartz. No quartizite or chert beds are located in the immediate area of the state park, which are the most common types of fine grained stones utilized by prehistoric Native Americans in Vermont. As a result of these factors, the site types expected in the Green River Reservoir State Park may include small residential camps, bedrock quarries and quarry workshops, kill sites, and find spots (isolated tools and debitage).

Land management practices on Agency of Natural Resources lands will protect and maintain cultural and historic resources. Known cultural sites will be documented for future reference, as will new sites as they are found. As resources become available our knowledge of pre-European settlement will be improved. Management activities that include ground (or soil) disturbance are subject to review under Section 106 (Historic Preservation Law). The Department currently contracts with archeologists and historic preservation professionals to evaluate a particular activity for archeological sensitivity and makes recommendations if further archeological analysis is necessary.

Section VI
Monitoring and Evaluation

Each year the Long-Range Management Plan for the Green River Reservoir State Park is in effect, monitoring will be conducted by the Agency of Natural Resources to ensure that state-owned resources are protected from natural disturbances, encroachments, or unforeseen problems that may occur within the camping area and the forest.

Additionally, management activities carried out to conform to scheduled actions and planned outcomes will be evaluated to determine how closely the results matched those projected within the plan. The Agency of Natural Resources may make recommendations for changes in planned activities to reflect changed conditions or unanticipated results. Any major revisions to the plan would be proposed as amendments and be subject to public review and approved by the State's Agency of Natural Resources Stewardship Team.

A. Recreational Use

Park staff will monitor camping and day use on a daily basis during the park operating season (mid-May to mid-October). Annually, there will be a review of general use patterns that could include revenues generated and expenses incurred for the year, occupancy of the remote campsites, day use, group use, and human impacts on the campsites and resources. Adjustments will be made to management strategies keeping the overriding philosophy of providing a wilderness-like experience at the Park as the driving force behind any management and use changes. Also, each year the fees, rules and regulations governing use of Green River Reservoir State Park will be reviewed and adjusted accordingly through the administrative rule process for the "Rules and Regulations, Visitor Conduct & Fees and Charges for State Park Services and Commercial Activities on Department Lands."

B. Forest Health

Department personnel will monitor the health of the forest stands within the Green River Reservoir State Park through a system of aerial observation and ground checking. Significant changes in forest stand conditions will be recorded and investigated by the Forest Resource Protection Specialist. The specialist will provide specific information on

identified problems sufficient to make informed management decisions and will assist the state lands staff in formulating appropriate management strategies. Strategies for managing forest stands damaged by insect and disease will be ecologically acceptable and will be based upon appropriate silvicultural practices.

Each year near the more developed areas that the public uses (i.e., parking area, remote campsites, landing/launching area) there will be an evaluation on the condition of the trees as to whether or not any of the nearby trees present a hazard to the public (i.e., topple over in a storm on a tent site). Hazardous trees will be marked and cut according to protocols developed by the Forest Resource Protection Section and Vermont State Parks.

C. Vegetation Management

The Stewardship Specialist and the District State Lands Stewardship Team will periodically review timber harvests and wildlife management practices completed within Green River Reservoir State Park to determine how well the state is doing in achieving its planned objectives. If the monitoring results indicate that there is a significant difference between the outcomes predicted by the plan and the actual conditions, the Agency may recommend changes to the plan.

D. Natural Communities and Rare Species

Presence and condition of exemplary, unique, and special natural communities and rare, threatened and endangered species of plants and animals at Green River Reservoir State Park will be periodically evaluated by the Stewardship Specialist and the District State Lands Stewardship Team to determine conservation status (threats from recreational or other land uses) and successional trends. Management strategies may be developed to ensure that those communities and species continue to be afforded the highest level of protection and stability.

E. Invasive Exotic Species

Department personnel will monitor the property within the Green River Reservoir State Park for presence of invasive exotic species. If any invasive species are found, appropriate management strategies will be undertaken to remove and/or control these species.

F. Historic and Cultural Resources

Department personnel will monitor the historic and cultural resources within the Green River Reservoir State Park for degradation. Appropriate management strategies will be undertaken to protect these resources.