NEW YORK STATE

STRATEGIC PLAN FOR STATE FOREST MANAGEMENT

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Strategic Plan

and

DRAFT Generic Environmental Impact Statement

for

State Forest Management

2011

Statewide Plan

Prepared by
The New York State Department of
Environmental Conservation

FGEIS Accepted: December 29, 2010

Adopted: July 15, 2011 by Commissioner Martens

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JOE MARTENS
COMMISSIONER

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY, NEW YORK 12233-1010

M E M O R A N D U M

TO: The Record

SUBJECT: New York State Strategic Plan for State Forest Management

DATE: JUL 15 2011

The New York State Strategic Plan for State Forest Management/Generic Environmental Impact Statement ("the Plan") has been developed and completed through an extensive public process. A prior version of this Plan was adopted in December 2010 without the requisite SEQRA Findings. Consequently, I have made SEQRA Findings and clarified language in the Plan relating the SEQRA language in Chapter 5 to ensure that it conforms with the Department's stated position that no exploration or extraction of the Marcellus Shale formation using HVHF will be considered for permitting on State Forests lands until current efforts to assess and analyze its environmental impacts have been completed through the Division of Mineral's SGEIS, and any other environmental impact assessments specific to State Forest lands the DEC deems necessary (see replacement pages 243 and 244 of the Plan). In keeping with the attached SEQRA Findings, I find that the Plan is consistent with Department policy and the ECL, and hereby adopt this revised Plan.

Joseph J. Martens
Commissioner

Attachment: SEQRA Findings

DEC's Mission

"The quality of our environment is fundamental to our concern for the quality of life. It is hereby declared to be the policy of the State of New York to conserve, improve and protect its natural resources and environment, and to prevent, abate and control water, land and air pollution, in order to enhance the health, safety and welfare of the people of the state, and their overall economic and social well-being." - Environmental Conservation Law 1-0101(1)

DEC's Organizational Structure

This plan has principally been developed by foresters and other staff within DEC's Division of Lands and Forests, Bureau of State Land Management, which is responsible for the care of State Forests. DEC has 17 divisions and offices and is further organized into bureaus to fulfill the functions and regulations established by Title 6 of New York Codes, Rules and Regulations (6NYCRR). DEC is headed by Commissioner Joe Martens, who is assisted by executive managers. A detailed organization chart can be viewed on DEC's website at: www.dec.ny.gov/about/255.html

ACKNOWLEDGEMENTS

We gratefully acknowledge the efforts of all who contributed to this plan. Because the plan represents a new, more ecological approach to making management decisions in New York, its development could not have occurred without many diverse contributions. The development of ecological management principles required clarification through lively discussions, debates, critiques and the patient support of too many people to name here. We, the principal editors, thank all who participated in this process.

Principal Editors

David M. Forness, Bureau Chief, retired, Bureau of State Land Management
Robert Messenger, Bureau Chief, Bureau of State Land Management
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Dylan Walrath, Environmental Program Specialist, Division of Lands and Forests

Technical Advisors and Authors

Technical Advisors that have considerable experience and expertise in the many aspects of the history and ecology of New York, as well as its laws, policies and regulations affecting State Forest management, contributed significantly to development of specific subject areas. Without their guidance and the sections they authored, this plan would not be as comprehensive as it is today. (Division of Lands and Forests staff unless noted otherwise)

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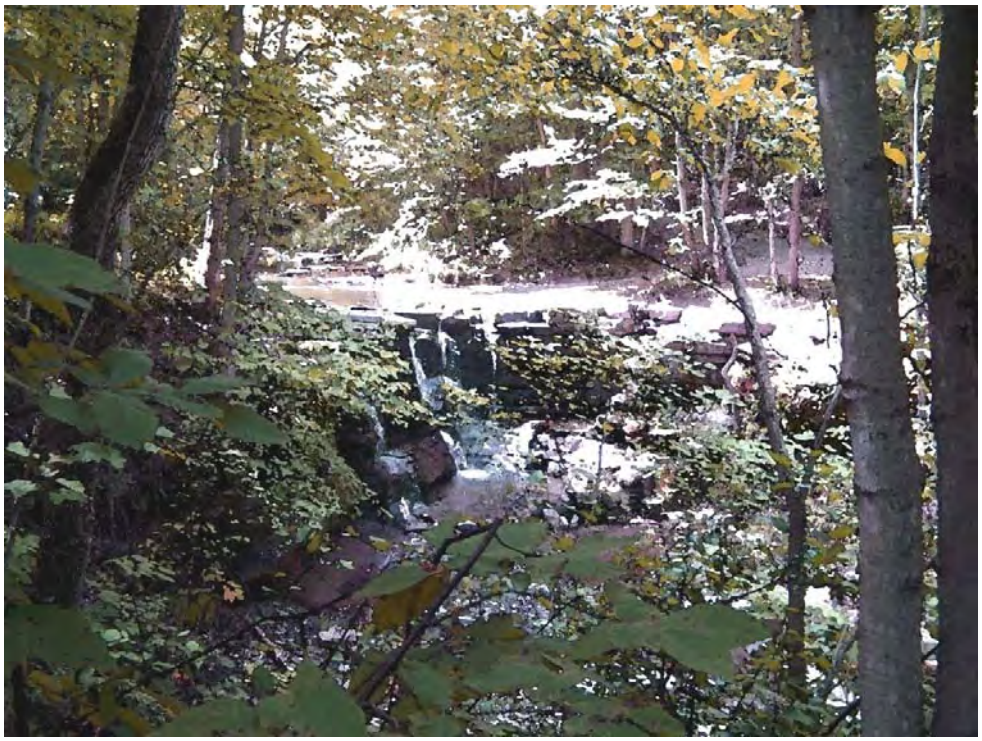
VISION STATEMENT

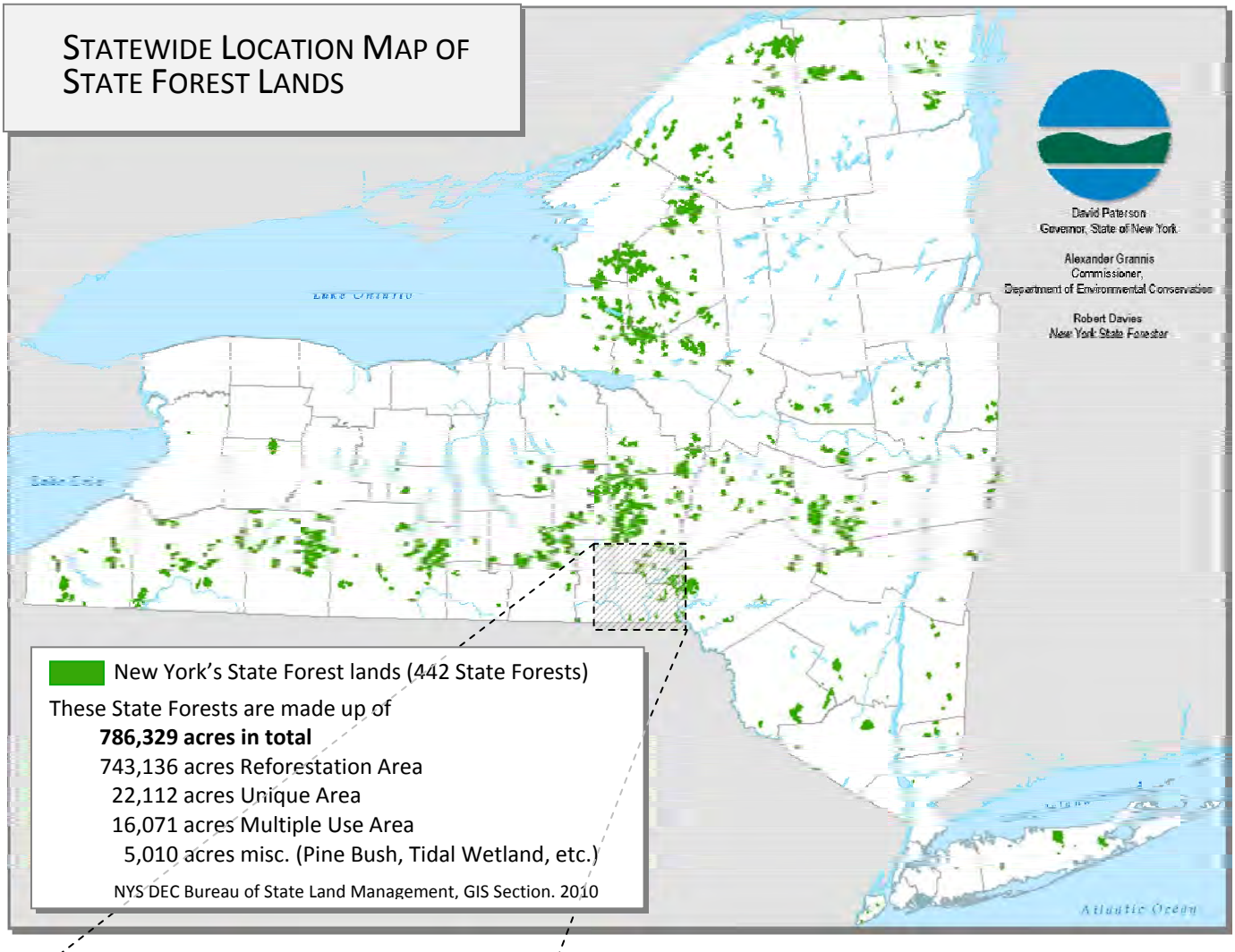


Waterfall on Sugar Hill State Forest in Schuyler County

State Forests will be managed in a sustainable manner by promoting ecosystem health, enhancing landscape biodiversity, protecting soil productivity and water quality. In addition, State Forests will continue to provide the many recreational, social and economic benefits valued so highly by the people of New York State. DEC will continue the legacy which started 80 years ago, leaving these lands to the next generation in better condition than they are today.

This plan sets the stage for DEC to reach these ambitious goals by applying the latest research and science, with guidance from the public, whose land we have been entrusted to manage.

Statewide Location Map of State Forest Lands



New York's State Forest lands (442 State Forests)

These State Forests are made up of

786,329 acres in total

743,136 acres Reforestation Area

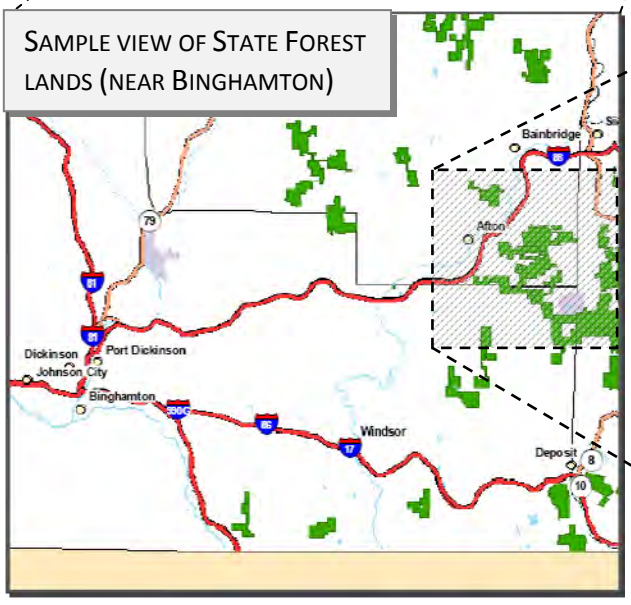
22,112 acres Unique Area

16,071 acres Multiple Use Area

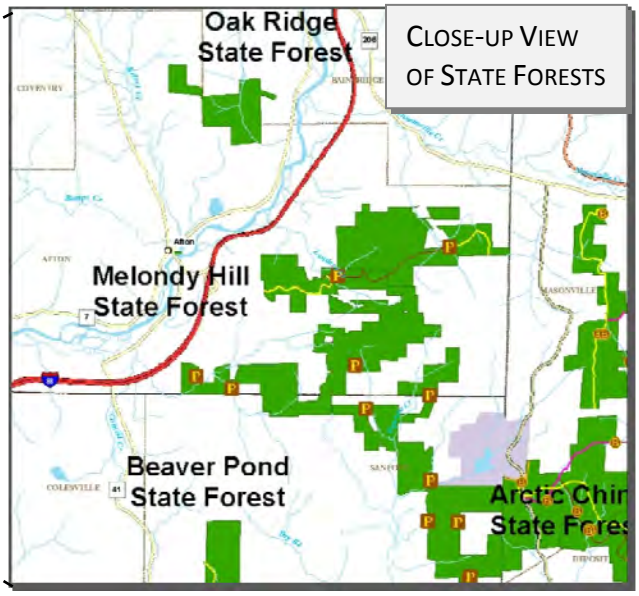
5,010 acres misc. (Pine Bush, Tidal Wetland, etc.)

NYS DEC Bureau of State Land Management, GIS Section. 2010

Sample view of State Forest lands (near Binghamton)



Close-up View of State Forests



Create custom maps with the DEC State Lands Interactive Mapper at www.dec.ny.gov/outdoor/45478.html

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ROBERT K. DAVIES

State Forester, Robert K. Davies

New York began purchasing land for creation of State Forests 80 years ago in response to serious environmental challenges. At that time, 75% of forest land in the state had been cleared for agricultural use. Moreover, a significant portion of the tilled land suffered from poor farming practices, which depleted the soil of essential nutrients and organic content and contributed to soil erosion and stream sedimentation. As a result, many of the early farms failed and in some cases were abandoned. This dire situation sparked one of the largest conservation efforts of the time.

With the passage of the Hewitt Law in 1929, the first State Reforestation Area (State Forest) was purchased in Cortland County. It was too early to refer to this property by the common name it holds today, Hewitt State Forest, as 78% of its acreage consisted of abandoned agricultural fields rather than forest land. The remaining acreage suffered from unsustainable logging practices. The Conservation Department, with assistance from the Civilian Conservation Corps, planted more than one million tree seedlings on the Reforestation Area to reclaim the lands and reestablish forests.

The same restoration process was repeated on Reforestation Areas across the state over the following decade, focusing on the most abused properties in the state. By law, these lands had to be more than 50% open and in need of planting and worth no more than $4.00 per acre. Within the first ten years of the program, more than 485,000 acres had been purchased and 340,000 of those acres had been planted with seedlings from state nurseries, such as the one operated to this day in Saratoga Springs.

Today, thanks to the vision of State Senator Charles Hewitt and the efforts of several generations of DEC foresters, New York State's 786,329 acres of State Forests are now some of the most productive, healthy and valued forests in the state.

Yet our work is still incomplete. The plantations established in the 1930s and 40s are reaching biological maturity and, now that their soils have had time to recover, DEC foresters are working to establish more natural, mixed-hardwood forests in their place where appropriate. As all of our State Forests continue to grow and mature, so does our knowledge and expertise in managing them for public benefit in the most ecologically sound manner possible.

A NOTE FROM OUR STATE FORESTER

Environmental challenges of today, although different, are just as acute as they were 80 years ago. Today, our forests face major threats from invasive species, habitat fragmentation, more frequent severe weather events, and climate change. New programs within DEC now focus on early detection and eradication of introduced species like Asian long-horned beetle, emerald ash borer and oak wilt disease, which are poised to invade our forests. Management strategies strive to make our forests more healthy and diverse in order to enhance their resistance to these threats.

Society still requires and values the traditional benefits these lands can provide, including recreation, watershed protection and forest products. However, we must also manage these lands to enhance their carbon sequestration potential and landscape biodiversity, and increase their resilience to human impacts.

This management plan will guide the future management of our State Forests, blending the proven management techniques applied in the past with the most up-to-date research and strategies available. Fortunately, the science behind our management has matured along with our forests. Multiple-use strategies, which we use to balance the wide diversity of demands placed on forests, are now enhanced by the concepts of ecosystem management and landscape ecology. Paper maps and tally books are being supplemented by Geographic Information System (GIS) mapping, computer databases, and Geographic Positioning System (GPS) enabled field data recorders. Though technological advances such as these enable foresters to work more accurately and efficiently, remaining unchanged is DEC's commitment to leave this precious resource to the next generation in better condition than it was when we started.

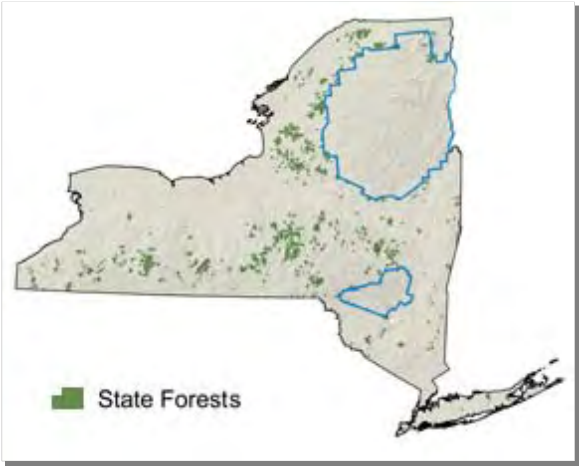
Robert K. Davies
New York State Forester
Director, Division of Lands and Forests
New York State Department of Environmental Conservation

CHAPTER 1
NEW YORK STATE FORESTS

STATE FOREST OVERVIEW

WHAT IS A STATE FOREST?

State Forests are located throughout New York State and include Reforestation Areas, Multiple-Use Areas, Unique Areas and State Nature and Historical Preserves. Wildlife Management Areas, Forest Preserve, Conservation Easements and State Parks are ***not*** State Forests. These state-owned lands are managed by other programs, divisions and agencies, under different legal guidance and strictures, and are not addressed in this management plan.



State Forests play a unique role in New York's landscape because they: are managed under public ownership by professional foresters; allow for the sustainable use of natural resources; are open to **recreational use**; provide watershed protection; and cover large land areas throughout the state. From the beginning, State Forests were set aside to offset widespread trends of agricultural abandonment and deforestation and restore the land's ability to support vegetation.

The Forest Stewardship Council (FSC) and the Sustainable Forestry Initiative (SFI) have certified New York's State Forests as being sustainably managed. The methods used in the management of these lands are designed to respond to today's complex issues and ecological threats, such as shifting land use trends, invasive species and climate change.

State Forests provide a positive impact on **water quality** and **ecosystem health**, a proving ground for innovative forestry, an example of good stewardship to private landowners, and a balance to the kind of management driven by short-term goals that sometimes occurs on private lands. Long-term sustainability of the forested landscape requires the sort of steady ownership and consistent management that exists on State Forests.

Sustainably managed State Forests provide forest products along with water quality, habitat, recreation and ecologically healthy forest lands

Timber Management

On most of these lands, timber management is used as a tool to enhance biodiversity, create habitat features that might be lacking in the landscape, and provide a renewable supply of sustainably-harvested forest products. Timber management is adapted and modified to ensure that as many goals as possible are realized.

STATE FOREST OVERVIEW

The **high-quality timber** harvested from State Forests is used by New York businesses and is often sent around the world to international markets. Some examples include: furniture-quality hardwoods, softwoods for log cabins, fiber for paper making, firewood, animal bedding, and biofuels, like wood pellets, and chips burned as fuel for electricity production, or ethanol derived from wood waste. Lower grade timber helps to sustain New York-based and regional businesses that depend on fiber for paper making, fuelwood, and other wood fiber-based products.

A timber harvest on State Forest lands

Harvesting wood products and incorporating them into durable goods such as homes and furniture aids in carbon sequestration as well, reducing the amount of carbon released from decaying wood. In addition, timber harvests provide additional space and resources for the remaining or new trees to use in sequestering additional carbon. Besides being a renewable resource, wood is a much more environmentally friendly building material than most of the potential substitutes such as plastic, steel, aluminum or concrete. Less carbon is emitted, fewer waste products are created and less water is used in the manufacturing process of wood.

Wildlife Habitat

The management of state forests provides a wide variety of habitat conditions that are not often found on private lands. On a landscape scale, state forests offer large, relatively undisturbed areas that are required by many wildlife species for habitat. Open grassy areas may be maintained to provide habitat for grassland bird species. Large areas of early successional forest, containing seedling/sapling size trees, can be found in other areas. These areas can be important habitat for many birds ranging from grouse and woodcock to warblers and sparrows. At the other end of the spectrum of forest conditions, large areas of mature hardwoods and conifers having minimum disturbance offer habitat for birds such as pileated woodpeckers, goshawks, barred owls and red shouldered hawks. Harvesting operations can be tailored to provide benefits to wildlife. Even-aged management systems create early successional habitat, while uneven-aged management systems provide large, unbroken expanses of forest. Such habitat is becoming scarce as private lands are subdivided and habitats are fragmented.

Rock City State Forest in Cattaraugus County

Open Space

Open space for public use and enjoyment is increasingly valued as opportunities for use of private lands decline due to posting, subdivision and development. The current trend of subdivision and development in rural areas is causing long term changes in the landscape. State forests preserve open space and the character of undeveloped areas.

Hiking the Long Path in the Catskill region: Multiple-use trails on State Forests provide part of the ground covered by this long-distance trail that stretches from the George Washington Bridge, to John Boyd Thatcher State Park, outside Albany.

Outdoor Recreation

State Forest lands are also highly valued for recreation. More than 2,446 miles of trails and forest roads are available for camping, hiking, mountain biking, snowmobiling, horse riding, snowshoeing and cross country skiing. State Forests may contain features of special interest such as geological formations, waterfalls, cultural resources and unique natural communities which require careful protection and responsible use. These properties are also enjoyed by hunters and trappers, anglers, wildlife/nature observers, picnickers and boaters, as well as by orienteering and geocaching enthusiasts. Best of all, there is no entrance or user fee charged on State Forests making them available to people of all socioeconomic levels and one of the best recreational values in New York State.

ADDITIONAL INFORMATION

Rules for Using State Forests – Anyone enjoying State Forests must observe the rules which protect both them and the forest environment, and are based on 6 NYCRR Parts 190-199. www.dec.ny.gov/lands/44115.html

Directory of State Forests – A clickable list of DEC (and OPRHP) administered public lands, including maps, information on individual State Forests and contact information can be viewed at www.dec.ny.gov/outdoor/347.html

State Lands Interactive Mapper (SLIM) – An interactive online mapper can be used to create custom maps of recreational trails on DEC lands throughout the state to help people plan outdoor activities. A link to the SLIM is located at DEC's Mapping Gateway: www.dec.ny.gov/pubs/212.html

Google Earth Virtual Globe Data - Some of DEC's map data, including accessible recreation destinations, boat launches, lands coverage, roads and trails can be viewed in Google Maps or Google Earth. A link to Google Earth is also located at DEC's Mapping Gateway.

STATE FOREST OVERVIEW

STATE FOREST FACILITIES, INFRASTRUCTURE AND FEATURES

State Forest Fact Sheet				
State Forest Land Area	Reforestation Areas	743,136 acres	**786,329 acres**	2.5% of New York's total land area. Four times the size of New York City's five boroughs.
	Unique Areas	22,112 acres		
	Multiple Use Areas	16,071 acres		
	Miscellaneous: Natural Resource Management Areas, Pine Bush, Tidal Wetlands, etc.	5,010 acres		
Boundary Lines	Boundary lines run adjacent to private land and often through deep woods. They are maintained, using yellow paint, signs and blazes at least once every seven years to make state land readily identifiable to recreationists and passersby, while reducing unintentional trespass on both State Forests and private land.		**6,520 miles**	Equivalent to a line from New York to the southern tip of South America
Public Forest Access Roads	Public forest access roads (PFARs), including more than 10,000 culverts and bridges, are maintained so the public can safely enter State Forest lands with minimal environmental impact.		**563 miles**	Equivalent to all the city streets in both Albany and Binghamton
Trail-Based Recreation on **Multiple Use Trails** (includes PFARs; does not include municipal roads)	Hiking Trails	1,211 miles	**2,446 miles ***	* When multiple recreational uses overlap on a trail, overlapping sections are counted for each use and added to total trail miles.
	Mountain Biking Trails	803 miles		
	Cross Country Skiing Trails	881 miles		
	Equestrian Trails	762 miles		
	Snowmobile Trails	801 miles		
Recreation Facilities	**Trailheads / Parking Lots**		**705**	State Forest facilities are usually of a more primitive and undeveloped nature, in comparison with most parks and campgrounds.
	Designated Campsites (Backcountry camping is also available across a majority of State Forest lands.)		**156**	
	Boat Launches		**18**	
	Fishing Piers		**6**	
	Accessible Recreation Destinations – areas with facilities that are designed to provide access to nature for people with disabilities		**27**	

State Forest Fact Sheet				
MAPPWD Permit Routes	**Motorized Access Program for People With Disabilities (MAPPWD)** – designated routes that provide a means for permit holders to access recreational programs like hunting and fishing via motor vehicle.		**255 routes** -within- **111 State Forests** (incl. UA, MUA, etc.)	54 of 82 of UMP Units have at least one MAPPWD Route
Mineral Resources	Active well pads		**132**	
	Inactive well pads		**76**	
	Surface Mines (sand, gravel, etc.)		**21**	
Historic & Cultural Resources	Un-inventoried resources, including archaeological sites, fire towers, water holes, stone walls and foundations		**Approx. 2,500**	
Water Resources	Streams by class	Class AA or A	**145 miles**	
		Class B	**50 miles**	
		Class C	**1,449 miles**	
		Class D	**134 miles**	
	Ponds, lakes, wetlands (incomplete inventory)		5,164 features **33,456 acres**	
Sustainable Forest Resources	**Sustainable Harvest Threshold Level** (Growth/year adjusted for mortality)		**116,649 Mbf/year** (Thousand board feet/year)	** 2% of the total value of forest products harvested from public and private lands in New York State each year
	Annual harvesting (average annual rate over a ten year period)	Total	**43,783 Mbf/year**	
		Expressed as a percent of the sustainable harvest threshold level	**37.5%**	
	Economic Contribution (average annual sales 1999-2008)		$5,317,564 **	

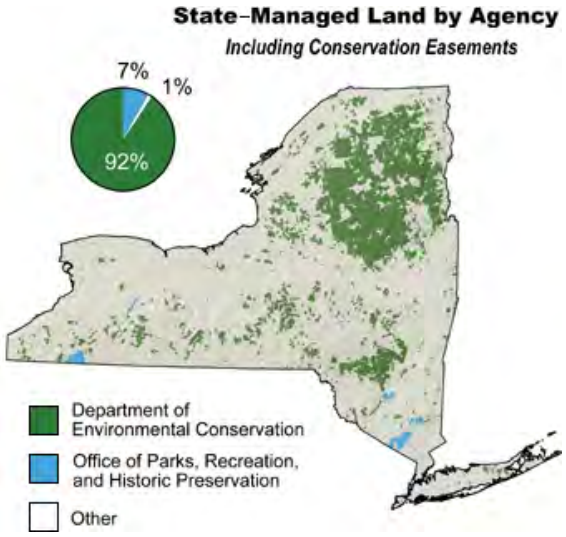
Recreational Use and Demand

As privately owned lands continue to be subdivided and are increasingly closed to general public use, State Forests have become more popular. As explained in greater detail in the Recreation section of this plan, the diversity of recreational uses has grown along with the number of people recreating in State Forests. Over the last few decades, the traditional users of these lands, such as hunters and hikers, have been joined by mountain bikers and people using GPS units for geocaching. Recreational use of State Forests does not wane in tough economic

STATE FOREST OVERVIEW

times, but actually increases, in part because there are no entrance or user fees charged to enjoy these properties.

Commercial activities such as timber harvesting and mineral extraction on State Forests also impact the infrastructure system, due primarily to the use of heavy trucks to move logs and machinery. The effects on roads can be mitigated by requiring contractors to improve and rehabilitate roads so that they can support this use without negative environmental impacts.



Funding and Staffing

DEC's Division of Lands and Forests maintains and manages a combined 4.6 million acres of State Forests, Forest Preserve and Conservation Easements, including the infrastructure associated with these lands. This is an area larger than the entire state of Connecticut and comprising 92% of all publicly owned land in New York State. In 2009, funding for the management of these lands dropped more than 60% from five million to less than two million dollars annually. This is roughly 44 cents per acre to cover maintenance of the more than 1,500 miles of Public Forest Access Roads, 4,000 miles of trails, hundreds of bridges, dams, parking lots, kiosks, outhouses, lean-tos, thousands of culverts and signs, and more than 17,000 miles of boundary lines.

DEC is addressing the shortfall on a case by case basis, closing roads, bridges and trails, and breaching dams when public safety is at risk or the land could suffer excessive damage because facilities cannot be adequately maintained.

Bridges such as the above on Cole Hill State Forest in Albany County require maintenance in order to provide access for hikers, cross country skiers and other recreational users

Staffing has declined recently as well. In 2009, State Forests were managed with a field staff of 35 permanent full time foresters and forestry technicians and 14 seasonal employees. With the current hiring freeze, permanent staff declined by three full time foresters or about 8%. A slightly larger drop is expected in 2010, again due to retirements and the hiring freeze. This presents serious challenges. For instance, there has been no land manager on Long Island for more than two years to manage about 16,000 acres in Nassau and Suffolk counties. These are heavily used recreational areas and include sensitive sites, endangered species, and extensive pine barrens. In DEC Region 9, full-time permanent staff assigned to State Forests was reduced

more than 35% due to retirements in 2009. Under the current hiring freeze, these positions will not be filled. The statewide trend towards lower staffing numbers is expected to continue.

Foresters inspect a timber sale on State Forest land

Lower staffing has a direct effect on New York State's budget because staff losses include personnel who manage timber sales, which provide significant revenues to the state, while enhancing wildlife habitat, improving forest health, and support New York's economy. As identified by a NYS Comptroller's Office 2006 audit of the Bureau of State Land Management, "a forester harvesting timber on a full-time basis generated $4.30 in timber sale revenue for every $1.00 in salary and fringe benefit costs. Thus, even on a half-time basis, the forester generated $2.15 in timber sale revenue for every $1.00 in salary and fringe benefit costs." That same audit recommended that the state hire an additional 17 foresters. However, as of the date when this plan was published, this recommendation has not resulted in an increase in staff.

A 2006 NYS Comptroller's Office audit report estimated that, over the three-year period studied, an increase of 17 foresters would have created a net revenue increase of $3.7 million per year.

Resource Protection by Regulations

State Forests may contain features of unique interest. Unique geological formations, deep woods, waterfalls and cultural resources such as old homesteads, cemeteries and historical sites can draw inquisitive visitors. State Forests can also harbor rare and endangered plant communities and ecosystems. These special habitats add emphasis to the stewardship responsibilities of State Forest management. Regulations protect these valuable resources by prohibiting individuals from taking any tree, flower, shrub, fern, fungi or other plant-like organisms, moss or other plant, rock, soil, fossil or mineral or object of archaeological or paleontological interest found or growing on State land, with the exception that recreationists may collect fungi, fruit or berries for their personal consumption.

DEC may post signs denoting seasonal restrictions, site-specific safety precautions, or other unique rules and regulations to protect special features and resources.

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STATE FOREST LAND CLASSIFICATIONS

State Forest land classifications are defined in several pieces of land acquisition legislation. The classifications place different priorities on land uses. For example, classification as a Unique Area places higher priority on the preservation of scenic and natural character compared to other land uses.

The people of the State of New York, in approving a new constitution for the state in 1938, approved a new constitutional provision at Article XIV, Section 3, paragraph 1, which recognizes the importance of state land acquisition to protect and enhance the state's forests and wildlife:

> ". . . Forest and wild life conservation are hereby declared to be policies of the state. For the purpose of carrying out such policies the legislature may appropriate moneys for the acquisition by the state of land, outside of the Adirondack and Catskill parks . . . for the practice of forest or wild life conservation."

Numerous pieces of legislation have implemented this constitutional provision. As discussed below, legislation has been enacted which has resulted in the creation of Reforestation Areas, Multiple Use Areas, Unique Areas, and other land classifications.

Reforestation Areas

The authorizing legislation for the acquisition of Reforestation Areas (ECL 9-0501 (1)) provides that:

> "In order to provide for the acquisition of lands outside of the Adirondack park and the Catskill park . . . which are adapted for reforestation and the establishment and maintenance thereon of forests for watershed protection, the production of timber and other forest products, and for recreation and kindred purposes, the Department may acquire in the name of the state, by gift, purchase or appropriation, reforestation areas which shall consist respectively of not less than five hundred acres of contiguous lands, which shall be forever devoted to the planting, growth and harvesting of such trees as shall be reforested."

Multiple Use Areas

Multiple use areas are parcels of land acquired by the state primarily for outdoor recreation, including public camping, fishing, hunting, boating, winter sports, and, wherever possible, to also serve multiple purposes involving the conservation and development of natural resources, including the preservation of scenic areas, watershed protection, forestry and reforestation. The first legislative authorization for Multiple Use Area, found at Parks, Recreation and Historic Preservation Law, 15.01 (1) (b):] provides:

> ". . . moneys received by the State from the sale of bonds sold pursuant to the park and recreation land acquisition bond act of 1960 and 1962 shall be expended . . . (b) for the acquisition of real property for other than state park or municipal park purposes, to provide additional opportunities for outdoor recreation, including public camping, fishing, hunting, boating, winter sports, and, wherever possible, to also serve multiple purposes involving the conservation and development of natural resources, including the preservation of scenic areas, watershed protection, forestry and reforestation . . ."

A more recent bond act authorizing the acquisition of lands for multiple use purposes is the Environmental Protection Act of 1990. Specifically, ECL 54-0303 authorizes the acquisition of open space land conservation projects listed in the state Open Space Land Acquisition Plan prepared pursuant to ECL Article 49, Title 2. More recently, the 1996 Clean Water/Clean Air Bond Act, at ECL 56-0307, authorized the acquisition of open space land conservation projects which enhance water quality protection and public access to water bodies.

Unique Areas

A Unique Area Preservation Project is defined in ECL 51-0703(4) as "a state project to acquire lands of special natural beauty, wilderness character, geological, ecological or historical significance for the State Nature and Historical Preserve, and similar lands within a forest preserve county outside the Adirondack and Catskill Parks." See also ECL 52-0101(h). Unique Areas are formed by land acquisition or re-designation of existing state land at the discretion of DEC. State Nature and Historical Preserves are also commonly referred to as Unique Areas and are managed by DEC in much the same way.

State Nature and Historical Preserves

State Nature and Historical Preserves are parcels of land acquired by the state to protect biological diversity and provide a field laboratory for observation of plants and animals and education about their relationships in natural communities. These areas may also provide protection for places of historical interest and be used for recreation by the public. The state Nature and Historical Preserve is authorized by Article XIV, Section 4 of the New York State Constitution, providing in part that

> "(t)he legislature shall . . . provide for the acquisition of lands and waters . . . outside the forest preserve counties, and the dedication of properties so acquired or now owned which, because of their natural beauty, wilderness character, or geological, ecological or historical significance, shall be preserved and administered for the use and enjoyment of the people."

This constitutional provision is implemented by ECL Article 45. ECL 45-0117 (3) provides that:

> "(l)ands dedicated to the preserve are declared to be put to their highest, best and most important use and are to be held for one or more of the following purposes:

a. as natural communities for maintaining plants, animals and natural communities;

b. As reservoirs of natural materials and ecological processes that contribute to the state's biological diversity;

c. As field laboratories for scientific research and education in natural sciences, including the fields of biology, conservation, ecology, natural history and paleontology; and

d. As places of natural and historical interest and beauty which provide the public with passive recreational opportunities including, where appropriate, fishing, hunting and trapping, or commercial fishing opportunities that are compatible with protecting the ecological significance, historic features and natural character of the area.

e. As old growth forest to be protected with minimal management or disturbance that only considers passive recreational opportunities with no construction of public amenities."

With the exception of lands acquired for old growth protection, the remaining lands under ECL Article 45, may be actively managed including the use of prescribed burns to perpetuate fire-dependent natural communities, and harvesting trees, provided these activities do not diminish the unique character of the property which prompted its inclusion in the state Nature and Historical Preserve Trust. In these cases, harvesting may be used as a tool to further biodiversity, forest health, resiliency to insects and disease, or public safety.

Miscellaneous

Some state lands have other classifications, such as "pine bush," "sand plains," or "nature preserve." The management of these areas is based on the legislation which authorized their acquisition and the management goals established by DEC for the land. Some state lands, especially in Long Island (DEC Region 1), are referred to as Natural Resource Management Areas and are composed of parcels under a variety of the statutory classifications listed above.

There is also a small amount of State Forest land within the Adirondack Park boundary that is considered by the Adirondack Park Agency to be Wild Forest lands under the Adirondack Park State Land Master Plan. To the extent that it does not impair the "wild forest character" of these lands, timber harvesting is allowed.

STATE FOREST HISTORY

From the time of European settlement in North American until the middle of the 19th century, forests had been viewed primarily by the settlers as an obstacle to civilization; they were something to be cleared out of the way for agriculture, or to be unsustainably cut and exploited for profit. By the 1880s, less than 25% of New York State remained forested.

At the turn of the 20th century, New York State's remaining forests were spread thin and losing stock. The New York Forest, Fish and Game Conservation Commission warned that the state would run out of timber within 50 years. The commission had reason to be alarmed. Timber companies were cutting the remaining trees at an alarming rate, leaving bare hillsides to be stripped of soil by erosion.

Forests in all the northeastern states were disappearing fast, but New York was the first to reverse this seemingly inexorable process by beginning to plant seedlings to replace trees that had been cut. The commission believed in using the latest science: sustainable forestry, the concept of managing forests for long-term productivity rather than short term profitability. Gifford Pinchot, who later founded the U.S. Forest Service, introduced this new forest management concept to the United States in the early part of the 20th century. He had studied forestry in Europe where timber was grown as a renewable resource on carefully managed plantation forests. In 1901, the commission planted the first tree plantation on state land in the Catskills to replace trees that had been logged.

The commission founded New York State's tree nursery system in 1902, the first state tree nurseries in the nation. In their early years, the nurseries supplied seedlings for planting on state land in the Catskills and Adirondacks. Hundreds of millions of seedlings of Norway spruce, white pine, red pine and Scotch pine were planted on State Forests as windbreaks and forest plantations.

In 1911, the Conservation Department, predecessor of today's Department of Environmental Conservation, was created by legislation to consolidate the functions of the Forest, Fish and Game Commission, the Forest Preserve Board, the Water Supply Commission and the Water Power Commission. By combining these commissions into a single department, the state greatly enhanced its ability to protect the environment and respond to new environmental challenges, such as the rapid abandonment of farmland that began in the 1920s. Many of the farms in New York were on marginal land, and as better land became available out west, agriculture began to decline in New York. When the Great Depression hit, many farmers could no longer make a living on their worn out, unproductive land.

The 1929 State Reforestation Act, and the 1931 Hewitt Amendment, authorized the Conservation Department to acquire land outside the Forest Preserve to be used for reforestation. These State Reforestation Areas, consisting of not less than 500 acres of contiguous land, were to be "forever devoted to reforestation and the establishment and maintenance thereon of forests for watershed protection, the production of timber and for

STATE FOREST HISTORY

recreation and kindred purposes" (Article 9, Title 5, Environmental Conservation Law). The State Reforestation Areas were the beginning of today's State Forest system. Many of the early reforestation areas were established on some of the least productive land in the state.

A majority were abandoned farm lands with depleted soils and significant erosion issues. The Conservation Department began a massive tree planting program to restore these lands for watershed protection, flood prevention and future timber production. Today, these areas are covered with healthy forests.

NYS Governor Franklin D. Roosevelt on Reforestation Tour at Pleasant Brook and Cherry Valley, Otsego County

State funding for tree planting fell victim to the Depression, but the federal Civilian Conservation Corps (CCC), founded by President Franklin D. Roosevelt in 1933, rescued the tree planting program in New York. Millions of tree seedlings were planted on the barren soil of the new state reforestation areas, work that provided employment for thousands of young men. FDR was especially interested in reforestation work, having begun planting his own estate with seedlings from the state Tree Nursery in 1912. During the war years of 1941-1945, very little was accomplished on the reforestation areas. Plans for further planting, construction, facility maintenance and similar tasks had to be curtailed. After World War II, there was a resurgence of tree planting as more farmland fell vacant. Through postwar funding, conservation projects once again received needed attention.

The Park and Recreation Land Acquisition Act of 1960, as well as the Environmental Quality Bond Acts of 1972 and 1986, provided funds for the acquisition of additional State Forest lands, including inholdings and parcels adjacent to existing State Forests. All of these lands were acquired for the conservation and development of natural resources, including the preservation of scenic areas, watershed protection, forestry and recreation.

Site planted in 1930 near Brasher, NY on pure sand with little fertility

Past land use practices have left a legacy of impacts on the land and soils, which have influenced later forest development. Much of NY forest today is post-agricultural

forest that has grown on abandoned farmland. During the maximum expansion of agriculture, even very poor land was used for farming. When these marginal farms were abandoned, they were sometimes in such poor condition that almost nothing could grow on the ruined soil. After the state acquired these lands, the first step in restoration was to stabilize the eroding soil by planting trees. Early photos of some State Reforestation Areas show expanses of raw blowing sand studded with tiny conifer seedlings. These seedlings were the beginning of the conifer plantations that were to be widely planted on reforestation areas.

Early plantations; brush was scattered among seedlings to hold drifting sand for the first few years after planting

Although these orderly plantations of Red Pine, Norway Spruce or Scotch Pine may look artificial to us today, they represent an era when establishment of conifer plantations was the best and most appropriate management practice. Conifer seedlings were able to grow on the damaged soil of abandoned farms, thriving in conditions too poor to support hardwood forest regeneration. The conifer plantations were literally the fastest way to get forest on the land. They stabilized erosion, improved watershed protection and slowly restored the depleted organic nutrients in the soil with their fallen needles and branches.

Today. the restoration effort continues. The plantations of Red Pine and Scotch Pine are now reaching the end of their natural or biological life. While these were the correct species to use on the former depleted soils, over the years the soils have been replenished and can now support a more natural forest. The old plantations are now being removed in managed stages, to allow natural regeneration of native hardwood and softwood species.

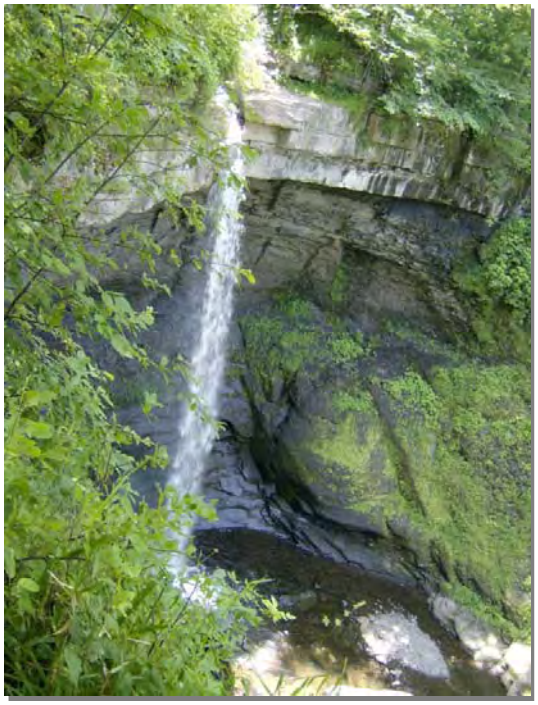
Forest management today is a complex process that involves ecosystem management, habitat enhancement, biodiversity management, landscape ecology, carbon sequestration, ecosystem services, and traditional uses.

GEOLOGIC HISTORY

The topography of New York has been shaped by a complex and turbulent geologic history, including multiple tectonic plate collisions, uplift and erosion of several mountain ranges,

STATE FOREST HISTORY

volcanic activity, earthquakes, igneous intrusions, regional metamorphism, advancing and retreating sea levels, deposition and erosion of huge deltas, and even a huge meteor strike 350 million years ago. Against this changing backdrop, plants and animals evolved, first in the ocean and later on land. New York has one of the world's best fossil records of the Devonian Period (408 to 360 million years ago), with remarkably well preserved marine sequences, and also non-marine fossils that show the transition to land. Most of the bedrock in New York is more than 250 million years old, younger rocks having been almost completely removed by erosion.



Carpenter Falls at Carpenter Falls Unique Area in Cayuga County

New York's present landscape is dominated by the impacts of the last ice age. Only a small area of the southwestern part of the state escaped glaciation (the southwest corner of the High Allegany Plateau Ecoregion). Glaciers shaped the high peaks in the Catskills and Adirondacks, changed hydrology, formed huge lakes, and covered much of the state with a layer of glacial till. Where huge glacial lakes once held melt-water, there are now thick sand and clay deposits such as those in the Hudson Valley and parts of Central New York. Remnants of ice age features, such as sand dunes, river sand and gravel deposits, and muck-filled bogs can be found in many parts of the state. But the most ubiquitous material is glacial till, the rough mixture of rocks, sand and clay scraped up and bulldozed by the glacier's ice. This layer of raw debris was left behind as the ice retreated, sometimes in oriented hills called drumlins, more often as an uneven layer over the underlying bedrock. Glaciers erased the existing forests and landforms of New York so thoroughly that there is almost no trace of the pre-glacial ecology.

Glaciation resets the ecosystem clock. Everything has to start over again, beginning with pioneer plant species that colonize the raw rock and sterile mineral debris. New soils began to develop as organic matter accumulated with subsequent plant successions. Tree species, led by spruce about 11,000 years ago, migrated back north from their glacial refuges. As species migrated, they formed many forest types, some of which are no longer found today. Trees migrated as individual species, and moved at different rates depending on successfully they dispersed their seeds. Some of the early trees arriving soon after white spruce included black spruce, elm and black ash. One of the last major species to arrive was chestnut, reaching New York about 2,000 years ago.

State Forests are often on some of the poorest farmland in the state, land that has been little softened by soil since the retreat of the glaciers. For example, some of the sandy soils in northern NY had only a thin organic layer which was quickly destroyed by farming. The result was sand drifts, which can be seen in early photographs of State Forest lands acquired in the

1930s. Hills with very thin rocky soils, sometimes only a few inches above bedrock, also proved to be difficult sites for farming. Today, these sites are forested and slowly regaining organic matter lost to erosion.

Bedrock geology forms the framework for the landscape, influencing the drainage patterns, the elevation, shape and orientation of much of the topography, and also the local climate. For example, some of the topography of New York shows a strong northeast-southwest orientation that is derived from underlying bedrock structures. Bedrock also influences soil and water chemistry. Most of the bedrock in New York, including shale, sandstone and most metamorphic rock, produces acidic soils. Where the bedrock is limestone or marble, soils are high in calcium. The difference between forest types growing on acid and calcareous soils can be dramatic. Where sandstone bedrock is next to limestone bedrock, the change in vegetation is often abrupt. Pitch pines, chestnut oaks, blueberries and other acid-loving plants will not grow on limestone. Other species are more tolerant, notably red cedar which grows well on rocky sites of any type. For red cedar, lack of shade from competition is a more important factor than soil chemistry.

Location and topography is critical for a tree because, unlike an animal, it cannot physically move to another site. Many elements of a site affect a tree, including aspect, elevation, moisture availability, soil thickness and rooting depth, wind exposure, frost effects and soil chemistry. Different species have different site requirements, and the health and vigor of a tree ultimately depends on where it grows. Encouraging the growth of tree species on sites with optimal conditions is one of the important benefits of forest management. For example, sugar maple growing on a south-facing dry slope is likely to be stressed by drought and heat, and more susceptible to insects and disease. However, many oak species would thrive on such a site, since they prefer warm well drained conditions.

Foresters must rely on their knowledge of the site requirements for each tree species and forest community, so their management efforts emulate natural systems as closely as possible, and result in resilient and healthy forests. In the example above, a harvest on a south-facing dry slope would focus on removing species which would be stressed, such as sugar maples, and perpetuating species which do best under those conditions, such as oaks. This purposefully parallels the natural successional changes nature would follow and contributes to the overall ecological health of the area.

MANAGEMENT PLANNING OVERVIEW

STATEWIDE PLAN

This statewide plan has been developed to lead future management of DEC administered State Forests. It establishes statewide management guidelines for DEC staff through a process of public involvement and review. The plan provides a foundation for the development of Unit Management Plans (UMPs), which set forth the specific actions to be undertaken by DEC on individual State Forests. As individual UMPs are developed, this plan will serve as a guide and will be included by reference. This plan will be revised at least once every ten years.

Development of the plan occurred through a **public process** with many steps:

Step 1 - A Draft Strategic Plan for State Forest Management was written with input from a wide variety of resource experts including biologists, ecologists, foresters, geologists, botanists, and accessibility specialists. The draft plan development relied heavily on existing policies, guidance and related public input.

Step 2 - The Draft Strategic Plan for State Forest Management was reviewed by the Department's regional, legal and executive staff with revisions adopted as needed.

Step 3 - The Draft Strategic Plan for State Forest Management was presented to the public for comment. A press release was distributed to news outlets across the State. An e-mail announcing the release of the draft plan was sent to a number of recreational and constituent group leaders. The draft plan was posted on DEC's Public website. Copies of the plan were made available in all DEC field offices, in a number of libraries, and in CD or hard copy form through the mail. Release of the plan and notice of public hearings were posted on the Environmental Notice Bulletin (ENB), a DEC online publication. A press release announcing public hearings and comment opportunities was distributed statewide to all major news outlets. A direct mailing was made to organized user groups. **Public hearings** were held at numerous locations across the State to solicit oral comments. **Written comments** were accepted by mail or by e-mail to.

Step 4 - Comments were reviewed and a **responsiveness document** was prepared incorporated into the final plan.

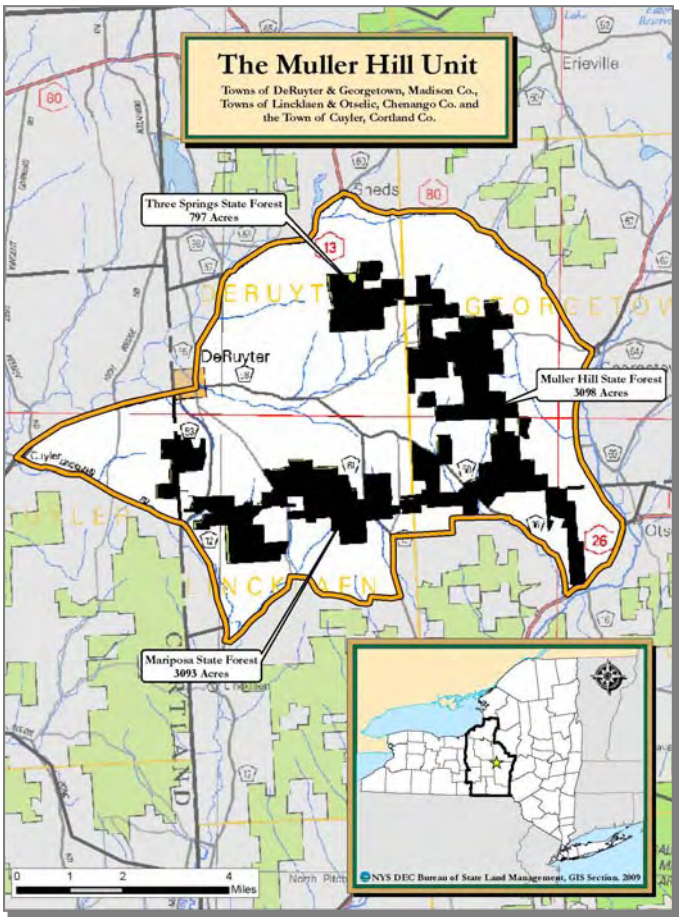
Step 6 - This final Strategic Plan for State Forest Management was written, with appropriate changes, based on public comments. This plan went through internal review by DEC executive staff for final approval by the Commissioner. The SEQR process was noticed in the ENB along with adoption of the management plan. SEQR findings will be filed 10 days after adoption of the plan.

MANAGEMENT PLANNING OVERVIEW

UNIT MANAGEMENT PLANNING

UMPs will establish specific management activities and serve as a vehicle for the implementation of this plan by addressing statewide objectives on the local unit. A **unit**, for the purposes of unit management planning, consists of the state-owned land managed by DEC within a given geographic area. Rather than, develop a UMP for each individual State Forest, DEC staff assemble units, often consisting of multiple State Forests and other DEC administered lands, such as Wildlife Management Areas, that are adjacent and similar to one another.

A UMP contains an assessment of the natural and physical resources on the unit and considers the landscape conditions in the surrounding geographic area. Each UMP supports the ecoregional objectives in this plan. The UMP guides the Department's activities on the unit for a ten-year period, although a number of goals and objectives in the plan focus on a much longer time period. Each plan addresses specific objectives and actions for public use and ecosystem management.



In the development of this plan, the state was divided into 80 UMPs. Based on this reorganization, UMPs have been scheduled to be completed and updated on a 10-year cycle. A statewide map of units and schedule of UMP completion have been developed. A statewide UMP template will be completed to enable timely and more standardized development of UMPs. Reorganization of unit management planning across the state has resulted in a significant reduction in the total number of units and is intended to increase the amount of staff time available for other management activities.

ADDITIONAL RESOURCES

Statewide Map of Units and **UMP Completion Schedule** – A statewide schedule, organized by year of first draft completion, and map delineating the new UMP boundaries can be found at http://www.dec.ny.gov/docs/lands_forests_pdf/sfumpschedule.pdf

PUBLIC PARTICIPATION

One of the most valuable and influential aspects of UMP development is public participation. Many diverse public stakeholders help vet potential issues during the planning process. Additionally, public participation gives stakeholders an opportunity to influence the decision making process and know their interests are part of the final plan.

UMP public meetings provide an opportunity for input from concerned citizens, neighbors and user groups

There are a series of steps involved in developing a UMP:

1. Conduct a resource inventory of the State Forests of the unit
2. Solicit written and verbal input from the public
3. Develop a draft UMP
4. Internal review and approval of draft UMP
5. Release draft UMP and conduct public meetings to gather comments on the draft plan
6. Address issues and develop a final UMP
7. DEC Commissioner approves final UMP and implementation begins.

Public Input

Initially, public input is gathered to help begin the process of developing a UMP. People are encouraged to help identify issues that need to be addressed in the plan. Mass mailings, press releases and public meetings may be conducted to obtain input from adjoining landowners, recreation clubs, natural resource organizations and the general public. Initial public input is received in the form of verbal comments, e-mails and letters.

Unit Management Plan Development

Information gathered from the public is incorporated into the draft UMP. After public input is received, Department staff also performs additional fieldwork and conducts in-depth research on topics related to the UMP. All of this information is necessary to provide a sound foundation for decision making. The draft UMP includes a brief local history as it relates to future management, information on the unit, and treatment and project schedules with budgets for the State Forests of the unit.

Draft Unit Management Plan

Once the draft UMP is formally released, timelines and deadlines become less flexible. This is due to the noticing and comment requirements related to the New York State Environmental Quality Review Act (SEQRA) and also due to the need to issue a final UMP and begin implementation. Meetings are held to gather public input on the draft UMP. If individuals are not able to attend a public meeting, comments may also be made in writing, by telephone, fax,

or e-mail up to 30 days after the public meeting. Regardless of the format of public input, all forms of communication with DEC carry equal weight.

Address Issues and Develop Final Unit Management Plan
All comments received are considered, and revisions to the UMP are made as appropriate. A Final UMP is the result, which is reviewed for SEQRA compliance and forwarded to the DEC Commissioner for review and approval.

MANAGEMENT TEAM AND RESPONSIBILITIES

State Forest UMPs are written by DEC's Division of Lands and Forests with input from the Division of Fish, Wildlife, and Marine Resources, the Division of Operations, the Division of Mineral Resources, the Division of Forest Protection and Fire Management, the Division of Public Affairs and Education, and the Office of Invasive Species Coordination. A description of each division's responsibilities is listed below. Additional information can be found on DEC's website at www.dec.ny.gov.

Division of Lands and Forests
Foresters, Forest Technicians and Surveyors in the Division of Lands and Forests are responsible for the stewardship, management, protection, and recreational use of State Forest lands, the care of the people who use these lands and the acquisition of additional lands to conserve unique and significant resources. DEC also provides forestry leadership by providing technical assistance to private forest landowners and the forest products industry.

Division of Fish, Wildlife, and Marine Resources
Biologists, Ecologists and Zoologists in the Division of Fish, Wildlife, and Marine Resources serve the public by using their collective skills to describe, understand, manage, and perpetuate a healthy and diverse assemblage of fish and wildlife populations, and ecosystems.

Within the division, the NY Natural Heritage Program combines thorough field inventories, scientific analyses, expert interpretation, and comprehensive databases to deliver quality information on New York's flora and fauna. The Natural Heritage Program studies the most imperiled species, ecosystems, and high-quality natural areas, enabling management decisions that have significant and lasting effects on the preservation of New York's biodiversity.

Division of Operations
Engineers and field staff in the Division of Operations provide technical services, facilities management, and maintenance of physical assets to insure effective and efficient operation of DEC and safe public use of Department lands and facilities.

Division of Mineral Resources
The Division of Mineral Resources is responsible for ensuring the environmentally sound, economic development of New York's non-renewable energy and mineral resources for the benefit of current and future generations.

Division of Forest Protection and Fire Management

Forest Rangers in the Division of Forest Protection and Fire Management are responsible for the preservation and protection of the state's forest resources, and the safety and well-being of the public using these resources.

Division of Public Affairs and Education

Staff in the Division of Public Affairs and Education communicate with the public; promote citizen participation; train teachers and inform students; operate four environmental education centers and four summer environmental camps for youngsters; publish print materials; produce broadcast and audio-visual communications; develop and manage DEC's web site.

Office of Invasive Species Coordination

The Office of Invasive Species Coordination is responsible for preventing or minimizing the harm caused by invasive species to New York’s environment by collaborating and coordinating efforts with all stakeholders across the state.

SUSTAINABILITY AND FOREST CERTIFICATION

SUSTAINABLE FOREST MANAGEMENT

Sustainable forest management is the practice of meeting the forest resource needs and values of the present without compromising the similar capability of future generations (Helms 1998). On State Forests, this means maintaining their health, productivity, diversity, and overall integrity in the long run in the context of human activity and use. It is a process of informed decision-making that takes into account resource needs, public use objectives, site capabilities, existing regulations, economics and the best information available at any given time (Wisconsin Dept. of Natural Resources 2003).

Those concerned about forest management have long recognized the challenge of balancing social, economic and environmental objectives. They also recognize the complex relationship between forest management practices and the long-term sustainability of the forests.

It is DEC's goal to sustainably manage New York's State Forests and to maintain certification of that management under the most current and applicable standards set forth by the Sustainable Forestry Initiative and Forest Stewardship Council.

Using an integrated approach to the management of diverse resources, preparing comprehensive plans, recommending best practices, and proposing guidelines are not new concepts. However, the following concepts may be considered by some in the field of forest management as new:

- Consolidating integrated management decisions to support the sustainability of many different resources within forest communities
- Recognizing that management decisions should be designed to accommodate a wide range of resource needs, public-use objectives, and site conditions
- Taking a broad-based, collaborative approach that results in user-friendly planning decisions applicable to the entire State Forest system.

FOREST CERTIFICATION

Forest certification by a recognized authority is a way of publicly ensuring that State Forests are sustainably managed. In 2000, the Bureau of State Land Management received Forest Stewardship Council (FSC) certification under an independent audit conducted by the Rainforest Alliance's SmartWood program. This certification included 720,000 acres of State Forests in DEC's regions 3 through 9 that are managed for multiple uses, like water quality protection, recreation, wildlife habitat protection, logging and mining. To get these forests certified, DEC had to meet more than 75 rigorous criteria established by FSC. Meeting these criteria established a benchmark for forests managed for long-term ecological, social and economic health.

SUSTAINABILITY and FOREST CERTIFICATION

The certification audit contract with the SmartWood Program expired in2005. Recognizing the value of dual certification, the Bureau of State Land Management sought bids from independent auditing firms to compare the management of the State Forest system against the two most internationally accepted forest certification standards; those of the FSC and the Sustainable Forestry Initiative ® (SFI).

Signing on with auditing firms NSF-International and Scientific Certification Systems (SCS), more than 762,000 acres of state forests managed by DEC in its regions 3 through 9 were again audited; this time for dual certification against FSC and SFI program standards. The audit lasted from May until July of 2007 and dual certification was awarded in January 2008.

ADDITIONAL RESOURCES

The **SCS audit report** (audit vs. FSC standards) and **NSF audit report** (audit vs. SFI standards), are located at www.dec.ny.gov/lands/42947.html

#SCS-FM/COC-00104N

©1996 Forest Stewardship Council FSC certification means that NYSDEC State Forests are managed according to strict environmental, social and economic standards.

#NSF-SFIS-6I741

NYSDEC use of the Sustainable Forestry Initiative® logo indicates that State Forests have been certified by a qualified independent auditor to be in conformance with the SFI standard.

FOREST SUSTAINABILITY AS MEASURED BY THE MONTREAL PROCESS

The Montreal Process is an internationally driven initiative to measure and promote sustainable management of the world's forests. The process was initiated by a United Nations committee at a 1992 meeting in Montreal, Canada. Over the next few years a working group, including representatives from the United States and nine other countries, developed a framework of seven *criteria* and 67 *indicators* for data collection and evaluation and, to the extent possible, standardized reporting of forest management at an international level. As of the date of this plan, 12 countries have signed on to abide by the Montreal Process: Argentina, Australia, Canada, Chile, China, Japan, Mexico, New Zealand, the Russian Federation, South Korea, the United States, and Uruguay.

ADDITIONAL RESOURCES

For more information on the Montreal Process including a full listing of the criteria and 67 indicators, their website can be found at www.rinya.maff.go.jp/mpci/

The seven criteria of the Montreal Process are:

- Conservation of biological diversity
- Maintenance of productive forest ecosystems

- Maintenance of forest ecosystem health and vitality
- Conservation and maintenance of soil and water resources
- Maintenance of forest contribution to global carbon cycles
- Maintenance and enhancement of long-term multiple socio-economic benefits to meet the needs of societies
- A legal, institutional and economic framework for forest conservation and sustainable management

While this management plan does not directly follow the Montreal Process criteria and indicators, their essence has been adopted in the DEC's management strategies. The following "crosswalk" indicates areas of this plan as they relate to the criteria.

Crosswalk between the Montreal Process and State Forest Management	
Montreal Process Criteria	**State Forest Strategies**
Biological Diversity	Landscape Assessment, Protected Species
Forest Ecosystems	Ecosystem Management Strategy
Ecosystem Health and Vitality	Deer Management, Plantation Management, Forest & Tree Retention, Invasive Species Control, Insect & Disease Control
Soil and Water Resources	Soil Protection and Ecology, Water Ecology, Best Management Practices, Stream Management Zone Rules
Global Carbon Cycles	Carbon Sequestration, Fire Management, Protecting Forest Health, Forest Products
Needs of Society	Supporting Local Communities, Universal Access, Meeting Recreational Needs, Preserving Historical & Cultural Resources
Sustainable Management	Managing on a Sustainable Basis, Green Certification of State Forests

STATEWIDE MANAGEMENT GOALS

The following broad goals shall be used as the basis for State Forest management decisions, in conjunction with the appropriate statutory, regulatory and policy guidance. Objectives in this plan are written primarily with the intent of serving one or more of these goals.

GOAL 1 – PROVIDE HEALTHY AND BIOLOGICALLY DIVERSE ECOSYSTEMS

Ecosystem health is measured in numerous ways. One is by the degree to which natural processes are able to take place. Another is by the amount of naturally occurring species that are present, and the absence of non-native species. No single measure can reveal the overall health of an ecosystem, but each is an important part of the larger picture. DEC will manage State Forests so they are judged to be in a high degree of health as measured by multiple criteria, including the biodiversity that they support, how connected they are to other forests, and their ecological function.

GOAL 2 – MAINTAIN HUMAN-MADE STATE FOREST ASSETS

Human-made assets on State Forests include structures, boundary lines, trails, roads and any other infrastructure or objects that exist because they were put there by people. Many of these items need no more than a periodic check to make sure they are still in working order. Others need regular maintenance to counteract the wear of regular use. It is DEC's intent to ensure that all human-made items on State Forests are adequately maintained to safely perform their intended function.

GOAL 3 – PROVIDE RECREATIONAL OPPORTUNITIES FOR PEOPLE OF ALL AGES AND ABILITIES

State Forests are suitable for a wide variety of outdoor recreational pursuits; some are compatible with one another, while others are best kept apart. Equally varied are the people who undertake these activities, as well as their abilities, and their desire to challenge themselves. While not all people will be able to have the experience they desire on every State Forest, DEC will endeavor to provide recreational opportunities to all who wish to experience the outdoors in a relatively undeveloped setting. This is consistent with DEC's goal of helping citizens maintain a connection with nature.

GOAL 4 – PROVIDE ECONOMIC BENEFITS TO THE PEOPLE OF THE STATE

ECL §1-0101(1) provides in relevant part that "It is hereby declared to be the policy of the State of New York to conserve, improve and protect its natural resources and environment and to prevent, abate and control water, land and air pollution, in order to enhance the health, safety and welfare of the people of the state and their overall **economic** and social well being"

(emphasis added). In considering all proposed actions, DEC will attempt to balance environmental protection with economic benefit.

GOAL 5 – PROVIDE A LEGAL FRAMEWORK FOR FOREST CONSERVATION AND SUSTAINABLE MANAGEMENT OF STATE FORESTS

Staff must have clear and sound guidance to direct their decisions and actions. Likewise, the public must have clear information regarding what they are and are not allowed to do on State Forests. Both functions are provided for by well-written laws, regulations and policies. DEC will work to improve existing legal guidance where it has proved to be inadequate, and create new guidance as needed.

"SM" OBJECTIVES AND ACTIONS

Statewide Management (SM) Objective I – This Strategic Plan for State Forest Management will be implemented through the future development of individual UMPs.

SM Action 1 – Develop a template for future UMPs which incorporates state wide recommendations, by December 2010.

SM Action 2 – Apply SEQR analysis thresholds during UMP development to ensure that proposed actions comply with this GEIS.

SM Action 3 – Engage the people of the state in formal public input into actions on specific State Forests via UMP development.

SM Objective II – DEC will maintain green certification of State Forests.

SM Action 4 – State Forest Management will be annually audited by independent auditors against the standards of the Forest Stewardship Council and Sustainable Forestry Initiative to assess sustainable management. Annual reports will be posted on the DEC public website to provide transparency and document improvements.

SM Action 5 (also AFM 4, SW 2, AR 4) – Provide continuing education opportunities for DEC staff as follows:
2010-11 – identification & management of at-risk species and communities, using PROs
2011-12 – landscape ecology and SPSFM implementation
2012-13 – enhancement of forest matrix blocks and connectivity
2013-14 – climate change adaptation
2014-15 – soil & water protection BMPs
2015-20 – TBA

SM Objective III – Appropriate levels of funding will be secured for the management, protection and maintenance of State Forests.

SM Action 6 – Annually, prepare realistic budget requests for adequate funding to ensure sustainable management and meet the multiple use goals of this plan.

STATE ENVIRONMENTAL QUALITY REVIEW (SEQR)

The SEQR Act requires local and state government agencies to consider environmental factors early in the planning stages of actions they directly undertake, fund or approve. The basic purpose of SEQR is to inform agency decision-making so that proposed actions are modified or conditioned to avoid and mitigate damage to the environment, enhance human and community resources, and enrich understanding of ecological systems. The proposed action to be analyzed in this section is the development and implementation of this Strategic Plan for State Forest Management (SPSFM).

GENERIC ENVIRONMENTAL IMPACT STATEMENT

Because this is a broad-based plan, DEC chose to prepare a generic environmental impact statement (GEIS) to analyze potential environmental impacts that may arise from its implementation. GEISs are commonly used for comprehensive plans that cover a broad geographic area involving common resources such as New York State Forests. Typically, GEISs are conceptual in nature, and establish performance standards or best management practices (BMPs), other plan conditions and impact thresholds.

The GEIS in this plan establishes BMPs for each category of forest management actions included within. These BMPs are designed to ensure that future management actions and UMPs avoid or mitigate detrimental environmental impacts to forests to the maximum extent practical.

Furthermore, this plan establishes the environmental impact thresholds that would trigger future SEQR reviews of management activities requiring a more in-depth or site-specific assessment of potential environmental impacts (see below). However, future management actions that conform with this plan, and do not trigger any thresholds established in it, would not require any additional SEQR review.

Finally, certain categories of management activity may result in adverse environmental impacts; for example herbicide application. In such cases, an analysis of less damaging alternatives is presented within their respective sections. A brief statement regarding the option of not acting on this plan is given at the end of this chapter.

Description of the Proposed Action

Development and implementation of the SPSFM: The SPSFM has been developed to consolidate and standardize the administration of all State Forests by incorporating principles of ecosystem management and landscape ecology. The analyses included in this plan are also based on the experience of more than 25 years of unit management planning across the State. Over that time, public input, fieldwork, inventories and in-depth research on key topics have provided a sound foundation for decision making. The knowledge gained, if acted upon through this statewide plan, can inform future State Forest management decisions. Issues that have

been addressed and will continue to be weighed and balanced as future decisions are made include:

- continued conversion of most plantations to a more natural forest condition
- increased recreational demands and impacts
- decreasing staffing and funding
- demand for domestic energy resources such as natural gas
- protecting species of greatest conservation need
- demand for highly valued forest products
- control of invasive pests
- addressing climate change and carbon sequestration

Environmental Setting

The environmental setting of the State Forest system and surrounding landscapes are discussed in chapters 1 and 2. Chapter 1 includes a map of State Forests throughout New York, a discussion of State Forest units, and a list of infrastructure and resources, along with a general history. Chapter 2 highlights the landscape surrounding State Forests, based on TNC ecoregions and presents a general analysis of the State Forest system by land cover and habitat type.

SEQR Analysis of Specific Management Activities: Environmental Impacts, Mitigation Measures and Alternatives

Each proposed management activity is evaluated for its potential environmental impacts in chapters 4-7. Specific objectives and management actions are listed along with their short-term and long-term impacts, cumulative impacts, mitigation measure and alternatives, and where applicable, thresholds for requiring additional SEQR are established.

The following list identifies issue areas which may be of particular concern to the general public and other interested parties, or which potentially could cause significant environmental impacts:

Off Highway and All Terrain Vehicle Use: *page 213*

Plantation Management: *page 263*

Active Forest Management (including, in limited cases, clearcutting and use of pesticides for control of interfering vegetation and invasive species): *page 81*

Oil and Gas Leasing and Development: *page 227*

Increased Recreational Demand and Use of State Forests: *page 187*

No-Action Alternative

Choosing not to act on the SPSFM will impair the management of State Forests. Without the SPSFM, statewide goals and strategies will not be established to meet the critical forest issues mentioned previously. Additionally, land managers will not have the necessary guidance to make decisions at the forest unit level that take into consideration statewide concerns.