

SAFEGUARDING OUR STATE'S NATURAL & CULTURAL HERITAGE



SUPPORTING OUR WORKING FARMS & FORESTS



STEWARDING OUR UNIQUE, NATURAL & WILDLIFE HABITATS



PRESERVING OUR SCENIC, HISTORIC & CULTURAL HERITAGE



SAFEGUARDING OUR STATE'S NATURAL & CULTURAL HERITAGE

New York's exceptional natural resources include the coasts of Long Island, the Hudson River, the Adirondack and Catskill Forest Preserve, the Finger Lakes and Great Lakes, the Tug Hill Plateau, the Allegheny River Basin, and the Niagara River Escarpment. Our natural assets encompass the watersheds that provide abundant and clean water supplies, the wetlands that support a rich biodiversity of terrestrial and aquatic species, provide habitat and limit flooding, and the natural heritage and beauty that brings tourism and enhances our quality of life. Our State has a long history of protecting these valuable natural asset, while at the same time utilizing them for the benefit of New Yorkers. Our quality of life stems in part from the quality of our water, which is maintained by healthy coasts, watersheds, wetlands, marine ecosystems and infrastructure, including flood control and wastewater treatment infrastructure.

Supporting Our Working Farms & Forests

WORKING LANDSCAPES

New York's Working Landscapes are important cultural resources. Their preservation is not only economically beneficial, it is also culturally important since it preserves a certain atmosphere that has largely disappeared as a result of the urbanization of our society.

People who use farmlands, forests and shorelines for commercial purposes are not only stewards of the land but also business people who must support families, employees and stockholders. As farmlands and forestlands have always provided multiple resource values to their owners and to all State citizens, productive forest land and prime

agricultural soils are valuable and vulnerable resources for all of us.



Our Working Farms

Article XIV, Section 4 of the N.Y.S. Constitution provides in part that "[t]he policy of the State shall be to:

"...conserve, protect and encourage the development and improvement of its agricultural land for production of food and other agricultural products. It is also the declared policy of the State to conserve and protect agricultural lands as valued natural and ecological resources which provide needed open spaces for clean air, watersheds, as well as for aesthetic purposes."

The cornerstone of the Agriculture Districts Law is the provision to create the creation of "agriculture districts," our State's "locally initiated mechanism" for protecting and enhancing agricultural lands.

Our Working Forests



*Former Champion Paper Company Timberlands
The Conservation Fund
www.conservationfund.org/new_york/adirondack*

Supporting New York's forest-based economic development activities offers additional opportunities for promoting sustainable forest management and long-term retention of forested open space, particularly in large tracts that have significant ecological benefits. Additionally, working forests have long been used for hunting, trapping, fishing and other forms of recreation while protecting water and air quality. Markets for wood products provide direct economic returns and incentives to landowners and encourage the practice of sustainable forestry. Viable and diverse markets for a broad range of forest products allows managers and landowners to do a better job of silviculture – managing the establishment, composition, growth and regeneration of forest stands – by providing returns from a variety of timber products, not just the biggest and best trees of a few species.

Supporting and building our local industrial capacity adds value to our forests and management by bringing diverse markets closer to the raw material producers. A "critical mass" of sustainably managed forest land, available for wood products harvesting, is vital to supporting a diverse forest-based industry. Conversely, a viable, diverse forest-based economy is essential to the retention and sustainable management of private forested open space.

CONSERVATION EASEMENTS

Private forestry is essential to the future of our State. It is a practice that remains one of our State's long running, traditional, natural resource based industries, and is now beginning to play an increasingly important ecosystem role in the face of global climate change. In the past few years, our State has acquired more than 600,000 acres of new working forest easements mostly located in the Adirondack Park. With the trend in the last 20 years of major forest product industries selling off large tracts of their land-holdings to private timber investment companies, sustaining this industry and the substantial values provided by our State's forests have become a primary focus of our State's open space conservation efforts at this critical juncture in New York's history. Three elements that have become important to every working forest easement are:

- Sustainable forestry, which can be achieved through a requirement for forest certification through one of several approved certification programs;
- Public recreation rights including hiking, camping, hunting, canoeing and snowmobiling, in balance with private recreation activities where they exist prior to the easement; and
- Extinguishment of residential or *non-forestry* commercial development rights to ensure the lands will be protected in perpetuity from residential and commercial development.

The objective of the working conservation easement program is to allow the purchase of easements over productive forest land so that landowners are paid to limit their right to develop their land, while retaining it as private property dedicated to resource use. To be most effective, expenditures for protection of these landscapes should take place on blocks of land so that the resource uses, such as forestry and recreation can continue over the long run without interference from other land uses.

Protecting working forests and other important habitats through conservation easements can also be a viable solution to the problems of rising property taxes, suburban and recreational development, high inheritance taxes, short-sighted forest management and a lack of management information. In addition to

providing an immediate cash flow to the landowner, easements can also relieve some of the property tax burden if subsequent assessments reflect a reduced property value.

Easements are not, however, a "free-ticket" to open space conservation. Using conservation easements to protect working forests requires the administrative oversight to enforce and manage these often-complex agreements. Recent DEC experiences in the Adirondacks with large scale working forest easements have shown that major time and staff investment is necessary to verify that the easement agreements are being followed by the parties and that unauthorized public use or private actions are not taking place. Publicly-held conservation easements require a corresponding investment of resources for staffing and non-personal resources for administration and management to protect all parties' rights and interests.

**MANAGEMENT SERVICES
FOR PRIVATE LANDOWNERS**

The demand for goods and services from private land requires long-term appropriate use and scientific, sustainable management. Resource professionals have a key role in providing technical advice and assistance to landowners in the stewardship of their lands. Landowners and managers must be informed decision makers to be able to meet their objectives and insure the sustainability and quality of their valuable lands.

When open space retention and sustainable resource management can be a profitable proposition, then landowners will more readily support this land use, and resist invitations to convert their open space to other uses. Private landowners who are motivated, assisted and supported to actively manage their lands can significantly improve or enhance the personal and public benefits those lands provide. Financial incentives have proven to be an effective means of encouraging and supporting sustainable land management practices and retention of forested open space.



ACTIONS

- Provide support for programs that protect farmland from conversion and support a robust agricultural economy.***
 - *Continue to streamline administration of the farmland protection program to reduce turnaround time and complete projects sooner.*
 - *Continue to provide technical assistance to Farmland Protection program participants and help build capacity of its municipal and nonprofit partners.*
 - *Support the work of municipalities to develop or update local Agricultural and Farmland Protections Plans through the County Farmland Protection Planning Grants.*
 - *Support farmland preservation programs in your county by attending county and town planning meetings.*

- Working Forests***
 - *Support tax incentives and regulatory relief for forest-based industries.*
 - *Support technology transfer, technical assistance and financial support for new forest product development, industry modernization and the adoption of new higher-yield, environmentally-friendly manufacturing technologies.*
 - *Improve skill-building initiatives within forest-based industries to improve competitiveness, safety and economic viability.*
 - *Continue to support state, local government and non-profit acquisition of or easements on priority forest lands (listed in Chapter V) identified by the Regional Open Space Advisory Committees.*
 - *Develop an income tax credit program that incorporates broader ecosystem goals and more landowners, encouraging sustainable*

management of private forest lands and related resources that provide environmental benefits to the public.

*Stewarding Our Unique,
Natural & Wildlife Habitats*



ECOSYSTEM-BASED MANAGEMENT

Protection of our State's open space is essential for the perpetuation of our State's varied ecosystems. New York is unique and remarkable in the diversity of its habitats and the diversity of living things which depend upon those habitats. Fish, wildlife, marine resources, and plants are important parts of the web of living things on the planet. Undeveloped open spaces deliver ecosystem services that our society depends on by protecting forests, soils and wetlands, which in return provides the benefits of clean air, clean water, flood control, erosion control, carbon sequestration, natural cooling, drought mitigation, aquifer recharge and a steady source of fresh oxygen from plant photosynthesis. Providing stewardship and "ecosystem services," which help to sustain our State's natural resources and their many contributions to our well-being, is an important, if often overlooked, function of open space, whether in public or private ownership.

**SPECIES & HABITATS OF
GREATEST CONSERVATION NEED**

In New York, our varied geology creates habitats which support a rich species diversity that is part of our natural heritage. Unfortunately, in many parts of the State, the loss and fragmentation of habitat has been a cause of decline of many native plants and animals, and protection of habitat through open space planning is a key strategy in securing the future of this biological diversity. For the first time, the 2009 Open Space Plan's regional project listing identifies projects that will help sustain species of greatest conservation need (SGCN), identified through state conservation planning processes.

The importance of habitat connectivity is critical and needs the cooperation of state agencies, conservation groups, biologists, and local experts to identify and protect lands critical to habitat connections, providing corridors through valleys between key areas, such as the Adirondacks, Vermont's Green Mountains, the Tug Hill Plateau, Ontario to the Catskills, and lands along water courses. Such areas of continuous protected forest will be critical as global warming forces some species to move northward or upward to adapt, especially the vulnerable boreal and cold-water species.



Wild Pink

New York Natural Heritage Program

New York Rare Plant Status Lists

www.dec.ny.gov/docs/wildlife_pdf/nynhprpsl.pdf

New York Rare Animal Status List

www.dec.ny.gov/docs/wildlife_pdf/2007_animal_list.pdf

**TOP THREAT TO BIODIVERSITY:
INVASIVE SPECIES**

Early in the 20th Century, chestnut blight arrived in North America and has since wiped out the American chestnut, one of the most valuable trees in our forest. Zebra mussels arrived here from their native Caspian Sea in the late 20th Century and have altered ecosystems, clogged pipes, and ruined bathing beaches in some of our largest waters. Near the start of the present century, West Nile Virus came here from Africa and has harmed both birds and humans. Asian Longhorn Beetle arrived within the lumber used for packing crates and has forced us to cut down thousands of prized shade trees in our cities and suburbs with the hope that it can be stopped from spreading into our forests.

Invasive species are primarily non-native species that can cause harm to the environment or to human health. Only habitat loss is a greater threat than invasive species to biodiversity. Invasive species come from all around the world and the rate of invasion is increasing along with increasing international trade that has accompanied globalization.

Invasive species have caused many problems in the past, are causing problems now, and pose threats to our future. A wide variety of species are problems for many sectors of our world. Our ecosystems, including both all natural systems and managed forests, are becoming increasingly damaged. Our food supply, including not only agriculture but also harvested wildlife, fish and shellfish is in serious danger. Our built and cultural environments, including landscaping, infrastructure, industry, gardens, and pets are also becoming affected. Invasive species also have implications for recreation and for human health, as seen with the recent spread of Lyme disease-carrying ticks.

MARCELLUS SHALE

The Marcellus Shale is a black shale formation extending from Ohio and West Virginia from Pennsylvania and into southern New York. Geologists have long known about the natural gas resources of this formation. With new developments in horizontal drilling and hydraulic fracturing, interest in gas exploration of Marcellus Shale has increased significantly.

In 1992, DEC released a Generic Environmental Impact Statement (GEIS), applicable to oil and gas drilling operations which specifically addressed the impacts from hydraulic fracturing. However, at that time, a typical hydraulic fracturing job used less than 100,000 gallons of water per well. Now, exploration of Marcellus' long lengths of horizontal wells, hydraulic fracturing may use up to five million gallons per well. DEC has thus initiated a formal public review process to supplement the 1992 GEIS, in order to ensure that any issues unique to Marcellus and other horizontal shale formation drilling are adequately addressed.

As our State is rich in mineral and natural gas resources, it is critical that local municipalities take into account existing and potential areas identified when planning for both open space and development. With proper planning, natural resource exploration and mining activity impacts can be mitigated. A comprehensive local open space plan should consider potential sources of economic industry, and examine surrounding land use conditions, as local governments have the authority to determine where certain industrial activity is allowed within the municipality. Proper long-range planning and zoning techniques can help ensure that adequate economic development will be reserved and that the public will be protected from the undesirable impacts of such development.

ACTIONS

- *Support implementation of the recommendations of the April 2009 EBM report, "Our Waters, Our Communities, Our Future: Taking Bold Action Now to Achieve Long-term Sustainability of New York's Ocean and Great Lakes."*
 - *Design & promote training workshops for state and local government officials and employees, nonprofit staff and the general public on ecosystem-based management (EBM), as well as, provide specific information on the benefits of EBM including economic, environmental, cultural and societal benefits.*

- *Continue and expand regional EBM programs such as the Hudson River Estuary, Long Island Sound and Lake Champlain programs; using the Hudson River Estuary Program as a model to develop similar programs in other regions of the State, especially the Great Lakes basins, Long Island South Shore, Mohawk Valley and Upper Hudson Valley.*
- **Support achievement of the goals of the Hudson River Estuary Action Agenda 2005–2009 and its update to be released in 2010.**
- **Provide Connectivity**
 - *Work to identify and protect lands critical to wildlife habitat connections throughout the state including the Southern Lake Champlain Valley, the Black River Valley, northwest from Adirondack Park to Ontario's Algonquin Park, Mohawk Valley and along water courses. Areas of continuous protected forest will be especially critical as climate change forces some species to move northward or upward to follow their climate "envelopes" and puts boreal and cold-water species at risk.*
- **Fight Invasive Species**
 - *Develop invasive species emergency response plans and regulations.*
- **Steward New York's Natural Resources**
 - *Maintain certification of State forests through the Forest Stewardship Council and Sustainable Forestry Initiative.*
 - *Redesign the State Forest Unit Management Planning process to streamline the process and incorporate landscape ecology and ecosystem management strategies.*
 - *Continue the preparation of master plans to guide the management and development of State Parks and incorporate ecosystem-based management.*
 - *Improve Land Management Capability to provide sufficient dedicated positions in State and local government agencies for the management of their public open spaces;*
- *and to provide initial EPF stewardship funding at the time of acquisition for immediate parcel needs such as boundary marking, debris removal, and proper public access.*
- *Educate landowners on the benefits of green infrastructure and low-impact development and encourage implementation of these technologies.*
- *Promote private forest owner participation in New York's Forest Stewardship Program.*
- *Continue to support state, local and non-profit acquisition or easements on priority habitats for Species of Greatest Conservation Need; and sites that contain Significant Natural Communities identified by the NY Natural Heritage Program; and Significant Coastal Fish and Wildlife Habitats identified by the NYS Department of State's coastal program.*
- **Integrate aquatic conservation objectives into NYS road planning & maintenance work within the Adirondack Park.**
 - *Work in partnership with the Adirondack Nature Conservancy & NYS DOT to develop GIS tools that delineate the most important aquatic and adjacent upland habitats for Species of Greatest Conservation Need as well as the most critical barriers for restoration.*
- **Continue to assess forest stewardship outcomes on private lands by maintaining the Stewardship Analysis Project and its attendant geo-database in order to focus limited program resources on those lands exhibiting the highest potential for stewardship outcomes.**
- **Habitat Protection**
 - *Advocate for a plan that restores natural conditions and habitats to Lake Ontario, while attenuating possible flood impacts.*
 - *Prepare recovery plans for endangered species; evaluate feasibility of restoring extirpated species.*

- *Prioritize inventory on our State's rare plants, animals, and significant natural communities identified as species of greatest conservation need. Maintain and update a comprehensive database on the locations and status of our State's most imperiled animals and plants, and significant natural communities.*
- *Produce on-line Conservation Guides (www.guides.nynhp.org) that provide biological and conservation information on NY's rare species and communities.*
- *Gather existing data on baseline condition of habitats and species, population trends, and projections of impacts from climate change in order to draft adaptation strategies, monitor impacts, and mitigate expected impacts.*

□ **Local Government**

- *Support local governments to enact laws or ordinances that directs where mining occurs or prohibits mining through zoning by enacting zoning ordinances or laws which determine permissible uses in zoning districts, under the Mined Land Reclamation Act.*

Preserving Our Scenic, Historic & Cultural Heritage



Hudson River

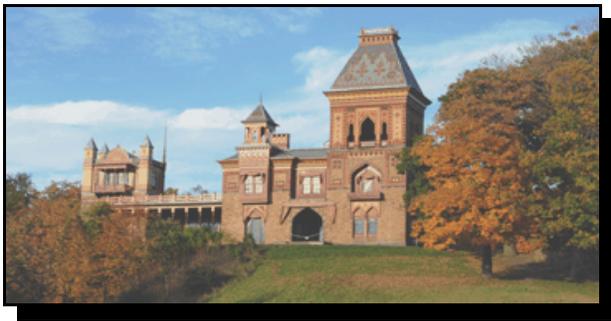
The archaeological, historic and cultural resources of our State provide our State citizens, and our country, with tangible reminders of the importance of our region's rich and varied heritage. Whether they are rural communities, urban streetscapes, historic working landscapes, or archaeological sites, the presence and knowledge of such resources provide a community and its citizens with continuity and context for their daily lives, and contribute to the overall quality and enjoyment of life. They also can give our communities unique characteristics and a special sense of place, fostering our pride in the places where we live.



Palace Theater, Albany

HISTORIC PRESERVATION

The preservation of New York's historic places contributes to the cultural values of New York and its citizens. The ability to understand our past, through experiencing it at a historic site, provides all New Yorkers with an appreciation of their diverse cultural heritage, and an ability to deal with the present day and the future. Ever since the Legislature designated Washington's Headquarters at Newburgh as an historic site in 1850, the State has recognized the importance of preserving historic resources. Thirty-five historic places are operated as State Historic Sites by OPRHP.



Olana State Historic Site, Hudson, NY

PRESERVING OUR STATE'S INDUSTRIAL WATERFRONT HISTORY



Oyster Bay

www.nylcvf.org

The re-zoning of industrial sites along waterfronts gives us an opportunity to memorialize the industrial age in many of New York's cities. A model for this is the implementation and development of the High Line Park, which makes use of elevated and abandoned rail lines to create a striking public amenity on Manhattan's West Side. By marrying

existing historic buildings and structures with open space and recreational uses, our waterfront and maritime history could be approached in the same creative manner.

For example, the former Brooklyn Navy Yard, located in Kings County, was once known as America's premier shipbuilding facility. It was purchased by the City of New York in 1967. Today, the Navy Yard operates as a thriving industrial park with over 40 buildings, 230 tenants and 5,000 employees. As it undertakes the Yard's greatest expansion since WWII, the Brooklyn New York Development Corporation (BNYDC) is pursuing its mission to create and retain industrial jobs in New York City with a strong commitment to environmental sustainability and the celebration of the Navy Yard's rich history – www.brooklynnavyyard.org.

PRESERVING OUR STATE'S ARCHAEOLOGICAL SITES

As our archaeological data base is finite in nature, many areas of our State contain no prehistoric sites remaining to tell future generations the story of important segments of our State's past. Listing in either the National or State Register provides only limited protection. Additional protection is needed through management agreements, conservation easements, deed covenants, permit conditions or acquisition to assure long-term protection. In addition, looting of important or artifact rich sites, particularly human burials, in public and private ownership has become a serious problem. Existing legislation protecting such resources is outdated and weak compared to federal law and the laws of neighboring states.

Archaeologic sites require protection because of their religious, cultural, educational or historic values. They must be protected from disturbance when changes are made in the use of the land, and guarded against pilferage and unauthorized collecting. Information on these sites is in the care of the State Museum, DEC and OPRHP. OPRHP coordinates statewide historic preservation efforts, administers State owned historic sites and facilities. The New York State Museum maintains an inventory of archaeological sites.

The protection, preservation, appropriate use and management of the rich archaeological, historic and cultural resources on the land and under the waters of New York State are integral parts of our responsibility to safeguard our State's unique historic and cultural heritage.

ACTIONS

□ ***Preserve our Historic, Archaeological & Cultural Heritage***

- *Encourage the training of park, historic site and land managers in best management practices for protection of natural and cultural resources as well as for operation and maintenance of facilities to ensure public health and safety.*
- *Engage park managers in developing a sustainability plan identifying long-range goals and best management practices for park and historic site operation, maintenance and management, and provide benchmarks for measuring success.*
- *Support the Natural Heritage Trust and Legislative Assistance Programs that seek to expand the provisions of recreation services and resource protection.*
- *Encourage the listing of buildings sites and districts both urban and rural on the State and National Register of Historic Places.*
- *Encourage the establishment and effective operation of municipal landmark and architectural review commissions.*

