

SHAWANGUNK MOUNTAINS REGIONAL OPEN SPACE PLAN



Shawangunk Mountains Regional Partnership, December 2008

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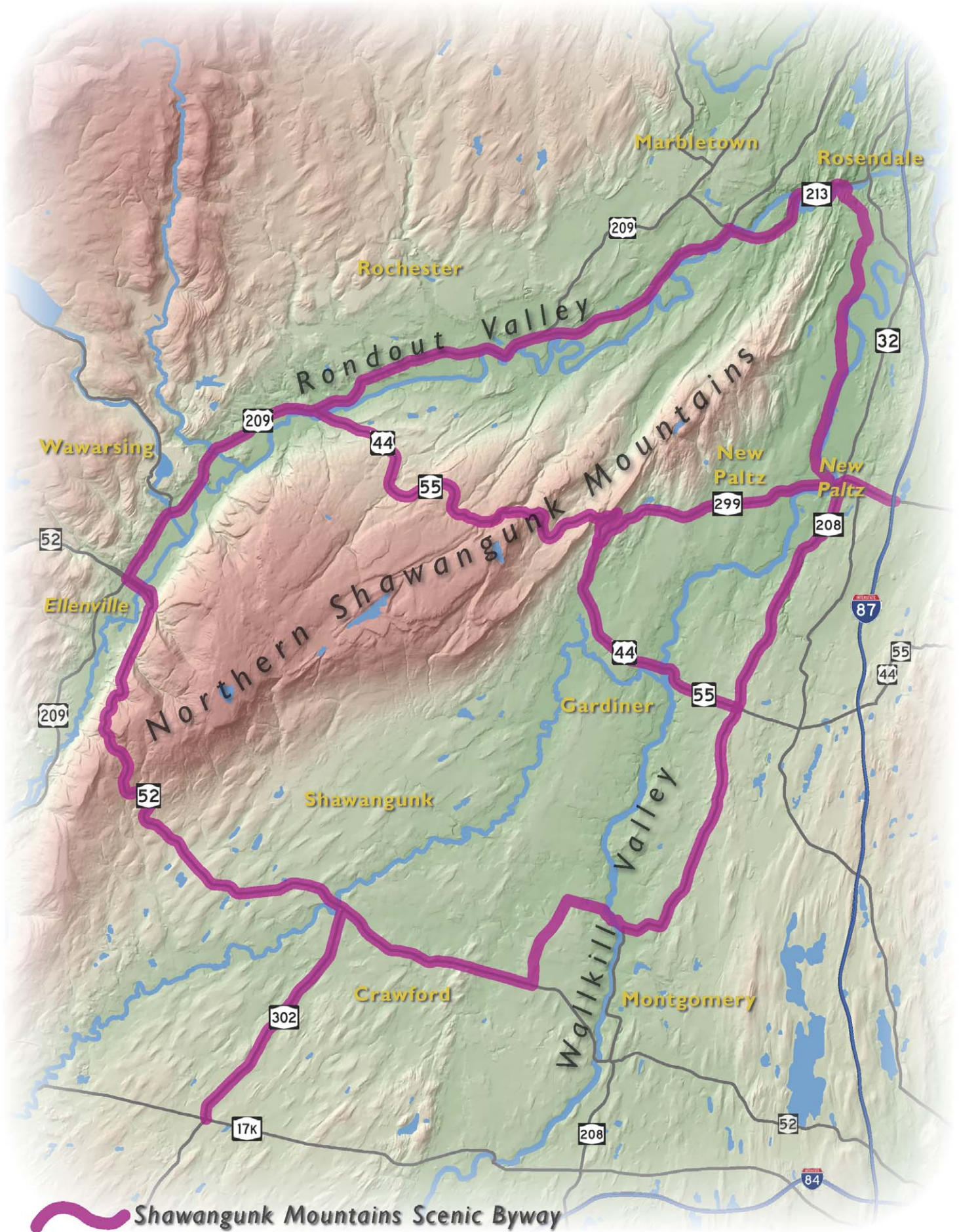
December, 2008



Presented by the

**Shawangunk Mountains Regional Partnership
of the towns and villages along the Shawangunk
Mountains Scenic Byway**

The Shawangunk Mountains Region



The Shawangunk Mountains Regional Partnership

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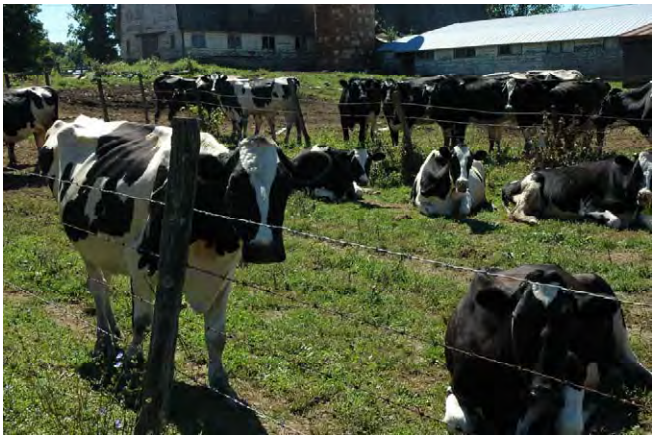
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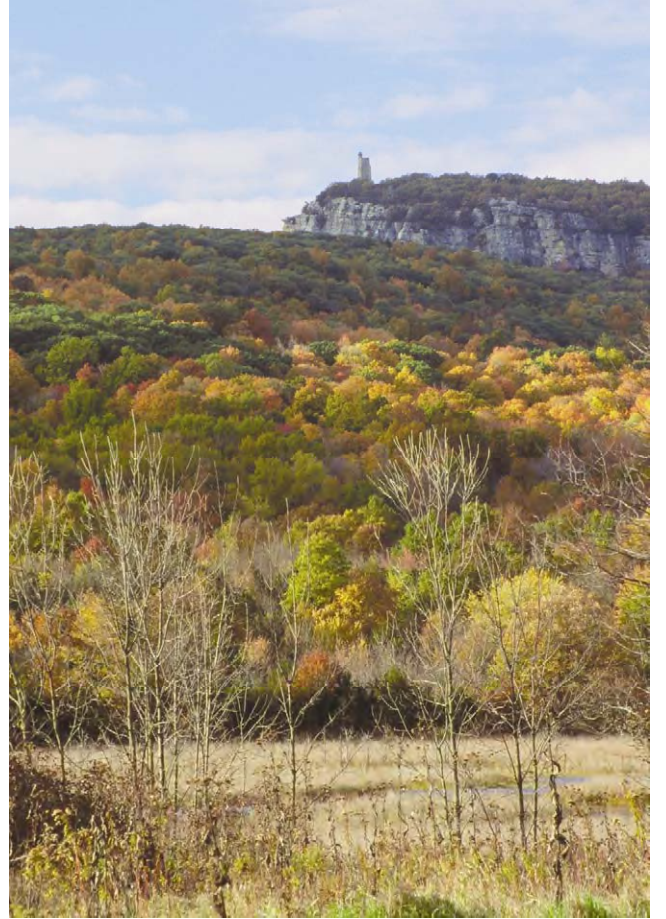


Table of Contents

	<u>Page</u>
Executive Summary	vii
Introduction	1
Our Region	3
Status of Our Region	7
Our Resources	9
The Natural Communities of the Shawangunk Mountains	11
Connections between the Mountains and other Natural Areas	15
The Waterways	19
The Farms, Orchards and Vineyards	21
The Scenic Views	25
Our Forests	29
Our Strategies for Preserving Our Resources	33
Partnering with our Land Trusts	35
Conservation Financing	41
Resource Friendly Growth	47
<i>Considering our Resources in Site Planning</i>	48
<i>Mapping “the Natural Landscape”</i>	52
Conservation Advocacy	57
Tracking our Progress	58
In Conclusion	61

Maps

Natural Communities of the Shawangunk Mountains	10
Connections Between the Shawangunk Mts. and Other Natural Areas	16
Prime Soils and Active Agricultural Parcels	20
Scenic Views	24
Forests	28





Executive Summary

Located less than 90 miles north of New York City, the Shawangunk Mountains Region is ideally situated for the growth of its tourism industry, providing economic opportunities for its hamlets and villages. And yet this growth can be sustained only if the character and special resources that attract visitors here are preserved.

The Shawangunk Mountains Region of the Hudson River Valley encompasses the northern Shawangunk Mountains and the Rondout and Wallkill valleys.

More specifically, the region is the area inside the loop of the Shawangunk Mountains Scenic Byway and $\frac{1}{4}$ -mile outside of the roadway. It's an area of 134,000 acres, and includes land in the Ulster County towns of Gardiner, Marbletown, New Paltz, Rochester, Rosendale, Shawangunk, Wawarsing and the villages of Ellenville and New Paltz, and the Orange County towns of Crawford and Montgomery.

These towns and villages have worked together since early 2000 to form the Byway, designated a State Scenic Byway in 2006. Through an intermunicipal agreement, they have formed the Shawangunk Mountains Regional Partnership to help implement the Scenic Byway Corridor Management Plan.

This Regional Open Space Plan is the initial project of the Partnership and grew out of the conviction that our economic growth through tourism, and the quality of life of our residents, rely greatly on the continued preservation of our shared resources.

The entire region is wonderfully rich in scenic, natural, recreational and historic resources, and many are recognized to be significant from a state, national and even global perspective.

The centerpiece of the region is the 60,000 acres of the northern Shawangunk Mountains, with the Mohonk Preserve, Minnewaska State Park Preserve, the Mohonk Mountain House, Sam's Point Preserve and numerous other landholdings.

Our valleys provide the ideal landscape accompaniment, with about 320 working farms, orchards and vineyards covering 28,000 or so acres, providing a strong economic base as well as adding greatly to the attractiveness of our region for tourists.

Also within our valleys are the waterways, wetlands, forests, grasslands, and other natural communities that support our rich biodiversity and maintain clean air and water.

With about 25% of the region protected, the question we strive to answer here is how can these towns and villages work individually and together in this partnership to preserve the open space resources that give our region its special character and appeal.



Executive Summary

Our strategies for preserving our regional open space resources are discussed further in our plan. They are organized in the following categories:

Partner with Our Land Trusts: Become active partners with our land trusts, helping them to build their capacity and be more effective in their work of conserving our regional resources.

Conservation Financing: Leverage existing funds available for conservation to their best potential and secure State permitting legislation for a Real Estate Transfer Fee for the municipalities in the Shawangunk Mountains Region.

Resource-Friendly Growth: Work with our municipalities to consider our regional resources in planning and development decisions, helping to bring the regional dimension of our resource to the attention of our local boards and promoting intermunicipal cooperation where it is beneficial.

Conservation Advocacy: Advocate for changes in state and federal policy that would help our region improve its ability to conserve land and resources while supporting resource-friendly growth.

Tracking our Progress: Track local and regional efforts to monitor progress, celebrate success, and identify obstacles for the future.

Our Partnership has already developed a relationship with the land trusts and sponsored the land trust conference this fall. And we have secured funding for a project to provide our planning boards with tools to help preserve scenic views.

Our continued progress, of course, depends mostly on the people in each town and village in our region who step forward and volunteer their time and energy to implement the many activities suggested in the plan.





From Sky Top tower, visitors have a bird's eye view of our valleys. The views extend beyond our region to six states.



Views of the mountains in Kerhonkson across the Rondout Valley.

The Shawangunk Mountains region was recognized as a regional entity when New York State officially designated the Shawangunk Mountains Scenic Byway in the fall of 2006. The idea behind the byway is to “link together the communities of the northern Shawangunk Mountains and, in doing so, to give birth to a new region of New York State...the Shawangunk Mountains Region.”

The designation of the scenic byway was based on the state-wide significance of the scenic, natural, recreational and historical resources of our region. The Corridor Management Plan (CMP) was created to guide the management of the byway.

The management entity for the scenic byway is the Shawangunk Mountains Regional Partnership. The executive committee of the Partnership consists of the chief elected officers or appointed representative of each of the municipalities in our region.

Once the byway was designated, the Partnership decided to implement one of the major recommendations of the CMP: the development of an open space plan with a regional perspective.

Funding was applied for and awarded by federal and state sources, and the boards in each of the towns and villages voted to contribute funds to this undertaking.

The idea behind this plan is to augment the various comprehensive and open space plans of the individual towns and villages by adding a regional dimension, to provide resources that may not be available on a local level and to engage in projects that may be carried out more efficiently on a regional level.

Ulster and Orange counties have developed open space plans. Our plan shares many of the goals of these county plans, but focuses on the special resources of our region and on strategies for preservation that may be particularly appropriate for our partnership of local towns and villages.

The process for developing our plan began in early 2007. Several of our communities were in the process of revising or had completed revising comprehensive plans and zoning, as well as local open space plans, which considered conservation of resources.

Our consultants, Behan Planning Associates, read through these plans, several of which they had prepared, and we met with our executive committee members to gain first-hand knowledge of their thoughts and needs. We also met with many different individuals and organizations involved in conservation in our region, such as the preserves and land trusts.

We then met with many different people, including state and federal agency directors; state legislators; members of local municipal boards, planning boards and environmental commissions; farmers and other landowners.

This information provided the basis for a regional perspective of the major open space resources of the Shawangunk Mountains Region, and of special value is the development of the first interpretive mapping of these resources.

From there we go to the various strategies recommended for our Partnership and our towns/villages to help preserve those resources that give our region its special character.



A section of the Rondout Valley on the west side of the Shawangunk Mountains, with the Rondout Creek running through the center of the image and Route 209 on the right.

It's a bit amazing, isn't it, that one of the most unique and beautiful areas in all of the eastern United States is located less than 90 miles north of New York City?

Here is a region of mountains, forests, farms, small hamlets and rolling, still-unspoiled countryside, alive with nature, less than a two-hour drive from the busy, bustling, big City.

No wonder tourists come here. And will continue to come here so long as this place doesn't become like just any other place.

Right now, the entire region of 134,000 acres is wonderfully rich in scenic, natural, recreational and historic resources. And many of our resources are recognized to be important from a state, national and even global perspective.

The northern Shawangunk Mountains are the centerpiece of our region, with the Mohonk Preserve, Minnewaska State Park Preserve, the Mohonk Mountain House, Sam's Point Preserve and numerous other land holdings. Two of our preserves, at Sam's Point and the Mohonk Preserve, are registered as National Natural Landmarks.

The "New York State Open Space Conservation Plan" cites the Shawangunks as "one of the highest priority areas for biodiversity conservation in the northeastern United States" and refers to the exemplary natural communities here, several of which are globally rare, such as the dwarf pitch pine barrens.

From our study of the region, with the help of the Hudson River Estuary Program of the New York State Department of Environmental Conservation (NYSDEC) and the Shawangunk Ridge Biodiversity

Partnership, we are beginning to appreciate that there are many important natural areas that connect to the northern Shawangunk Mountains, like the forests of the Catskills, the waterways and wetland systems of the Swarte Kill and the Wawarsing wetlands.

And so we can think of the Shawangunks as part of an even larger system of interconnected natural areas, all of which serve as the foundation of our natural landscape.

The Shawangunks are also the centerpiece of the state-designated Shawangunk Mountains Scenic Byway, and are seen from nearly everywhere along the 88-mile route, looking across a mostly rural countryside of farm fields, waterways and forests. From many vantage points, the hard white Shawangunk conglomerate rock of the ridge is exposed and visible, presenting scenic landscapes that rival any other in all of New York State.

From the scenic pulloffs along our mountain roads we can see across the Rondout Valley to our neighboring Catskills, or across the Wallkill Valley to the Hudson Highlands.

Considering all of the above, we're able to appreciate how important the mountains are to the nature we can all enjoy every day, and also to the tourism that is vital to our economy, and the opportunity for the growth of that economy in the future.



A part of the Wallkill Valley primarily in New Paltz, showing the Wallkill River through the center of the image and the Shawangunk Mountains in the background. Route 208 runs across the bottom of the image.



Jersey cows at Domino Farm won a first place award in New York State, both for their protein and milk production.



Winter views at Taliaferro Farms in New Paltz, an organic farm offering Community Supported Agriculture.

Much of our region's character is shaped by the agriculture and rural countryside we are fortunate to still have here in the Rondout and Wallkill valleys.

For this, we owe much to the dedication, ingenuity and management skills of our farmers, and the prime and statewide important soils that have been built up in our valleys over millions of years.

Our 320 farms work about 28,000 acres, which is a bit more than 1/5th of the region. The economic importance of these farms ranks #1 in the region, considering not only the value of what is produced but also the contribution the tourism generated by these farms adds to the growth of many other businesses in the region.

Most of the remaining undeveloped land in the valleys was once in agricultural production and is no longer.

Some of this land has been developed and some of this land has grown back to forest or is in an earlier stage of post-agricultural succession, perhaps waiting to be developed.

What will happen to this land? And how will that affect our region? Well, those are the big questions for us.

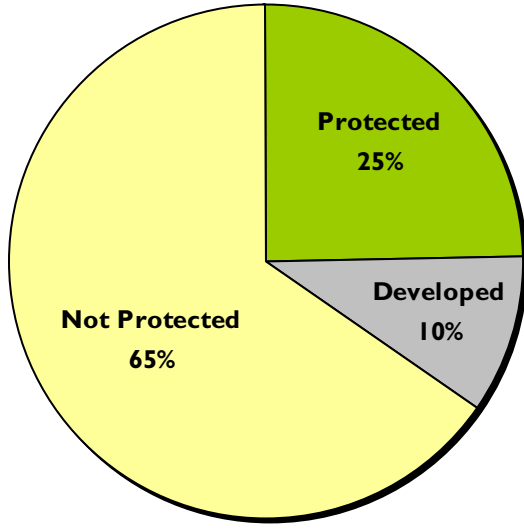
Preserved Lands and Parks



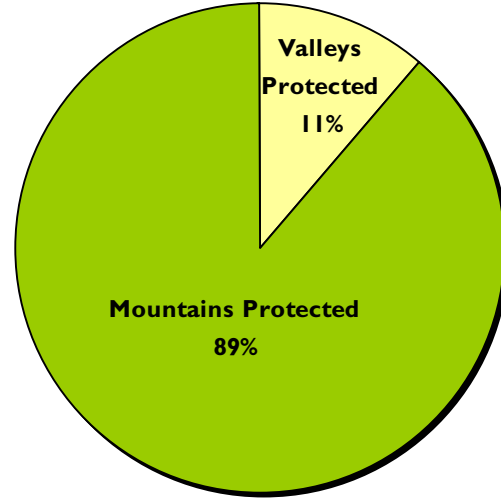
Map Prepared for the Shawangunk Mountains Regional Open Space Plan
 Sponsored by the Shawangunk Mountains Regional Partnership
 Map prepared by Behan Planning Associates, LLC

Data Sources:
 Ulster County Information Services, Orange County Planning Dept., The Nature Conservancy, NYSGIS Clearinghouse, CUGIR, Local reports

Status of Our Region



Status of Lands in the Shawangunk Mountains Region



Distribution of Protected Lands in the Shawangunk Mountains Region

We're fortunate to have about 1/4 of the land in our region, about 33,500 of our 134,000 acres, in a protected status.

Of this protected land, nearly 90% is in the mountains, within the break-in-slope. If this had been planned, it couldn't have been planned better since this is where many of our valued natural assets are, and it is what draws tourists to our region. And so, of course, preserving land in the mountains is still a high priority for us.

But if our goal is to encourage the distribution of tourism throughout the region, and not to have tourists drawn just to and from the mountains, then it follows that we need to assure that the countryside in the valleys provides the quality of experience that will invite tourists to explore beyond the ridge.

The byway maps out a network of scenic roads for tourists to follow, linking our towns and villages, providing an opportunity for economic growth. But, with less than 4,000 acres protected in these valleys, this suggests that much more attention must be paid to preserving our farmland and rolling fields of post-agricultural land, our rivers, streams, wetlands, and our forests.

The benefits of doing so align with many of our other local and regional goals, such as providing local food and clean water for our region's inhabitants, our people and our wildlife.



Our Resources

The Shawangunk Mountains

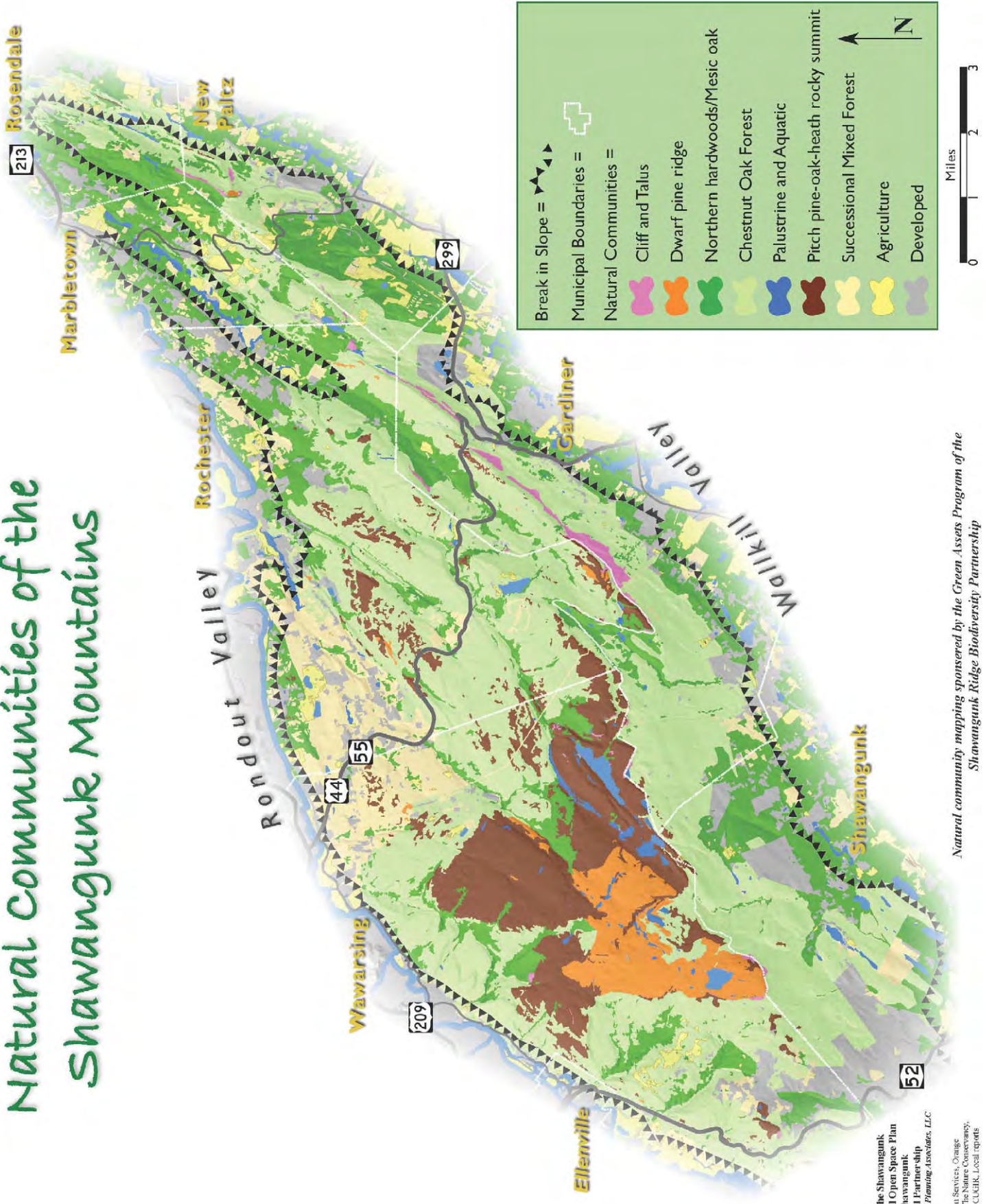
The Waterways

The Farms, Orchards and Vineyards

The Scenic Views

The Forests

Natural Communities of the Shawangunk Mountains



Map Prepared for the Shawangunk Mountains Regional Open Space Plan
 Sponsored by the Shawangunk Mountains Regional Partnership
 Map prepared by *Biom Planning Associates, LLC*
 Data Sources:
 Ulster County Information Services, Orange County Planning Dept., The Nature Conservancy, NYSGIS Clearinghouse, CUGIR, Local reports

Natural community mapping sponsored by the Green Assets Program of the Shawangunk Ridge Biodiversity Partnership

The Natural Communities of the Shawangunk Mountains

For our planning purposes, we are defining the Shawangunk Mountains as the area within what is called the break-in-slope. That's where we see a significant and continuing change in elevation, and we have shown this line on our maps.

Going by this definition, in our region, the northern Shawangunks cover an area of some 60,000 acres and stretch from the Rondout Creek at Route 213 in Rosendale to below Sam's Point in Wawarsing just beyond Route 52. The mountains lie in a south-westerly direction, about 18 miles across. Further south, the mountains become the Kittatinny Mountains in New Jersey and the Blue Mountains in Pennsylvania.

The Shawangunk Mountains combine a wide range of topography, substrate, and habitat types. Many species that occur in the mountains are at the northern or southern limits of their ranges, or are specially adapted to the harsh conditions on the ridge. As a result, the mountains have a high diversity of regionally rare species and support many significant natural communities.

A "natural community" is an assemblage of interacting plants and animals, their physical environment, and the natural processes that affect them. They are often described by their dominant plants. While there are many natural communities in our region, there are several that are very rare, such as our dwarf pitch pine barrens, which are one of only two such assemblages in the world. This natural community is dominated by pitch pine trees which require natural fire regimes in order to regenerate.

The core natural community of the Shawangunk Mountains is the chestnut oak forest, interspersed with hemlock/northern hardwoods in the cool ravines and globally rare dwarf pitch pine barrens at higher elevations. This interior forest also includes a variety of wetlands, small lakes, streams, bogs, and swamps, as well as a myriad of vernal pools, which, with their surrounding habitat, support a variety of woodland species.

The diversity of relatively unbroken deciduous and coniferous forests and wetlands of the mountains support a wide variety of nesting birds, and more than 200 species are found here. The Shawangunk Mountains support an exceptional example of a high-elevation forest bird community. They also support significant breeding, wintering, or migrating populations of species at risk. For this reason, and based on continental and global criterion, the northern Shawangunk Mountains are designated as an "Important Bird Area" by Audubon.

The Shawangunk Mountains also allow for the movement of wide ranging mammals such as black bear, fisher, and bobcat that have very large territories, and reptiles and amphibians like the spotted turtle, spotted salamander, and eastern hognose snake that require a complex of different habitat types to meet their needs. Turtles inhabiting the mountains and surrounding valleys include wood turtle in streams and forested riparian areas, and spotted turtle in wetlands and ponds.



Flying over the Shawangunks in the western part of Gardiner, we see the escarpment and Lake Minnewaska. This picture shows portions of Minnewaska State Park and the Mohonk Preserve.

The Natural Communities of the Shawangunk Mountains

The rich biodiversity and clean water found in the Shawangunk Mountains and surrounding area have survived because the forests, streams, wetlands, and meadows are still relatively unbroken, or unfragmented by roads, subdivisions, power lines, or other built infrastructure that can diminish how natural areas function. The resources of the Shawangunk Mountains are so unique and fragile that they deserve special preservation efforts.

To date, we have preserved a significant area of the Shawangunk Mountains through the far-reaching efforts of many partners, such as the Mohonk Preserve, New York State, local municipalities, the Open Space Institute, and the Nature Conservancy.

We also have the Shawangunk Ridge Biodiversity Partnership, a consortium of non-profit and public agencies dedicated to protecting and restoring the sensitive wildlife habitat and other natural resources of the Shawangunk Mountains. Partners use field research and a science-based approach to manage more than 30,000 protected acres of the Shawangunks, and work with local communities to preserve nearby open space resources.

Major land holdings on the Shawangunk Mountains include the Mohonk Preserve (6,700 acres), Minnewaska State Park (14,000 acres) and Sam's Point Preserve (more than 5,000 acres).

Even with this accomplishment, there are many more exceptional resources in need of preservation on the Shawangunk Mountains. According to the *New York State Open Space Conservation Plan*, approximately 14,000 additional acres of the Northern Shawangunks are identified as high-priority for conservation. We support the state open space plan's goals for the "protection and enhancement of existing parks and historic sites," and "improving access, eliminating in-holdings, and providing buffer areas."



The Nature Conservancy recognizes the Shawangunk Mountains as one of "Earth's Last Great Places" because they support many rare and exceptional biodiversity resources.



Joppenburg Mountain is part of the Rosendale Limestone Cave Complex which provides habitat for several native bat species.



The Great Pacama Vly is a large, intact wetland system that provides habitat for many rare plants and animals, some of which are found nowhere else in New York.

Connections between the Shawangunk Mountains and Other Natural Areas

The Shawangunk Mountains are a significant natural resource, rich in biodiversity. The natural life of the Shawangunk Mountains cannot survive as an island, however, and depends on connections to the surrounding valleys, river systems, and the Catskill Mountains.

There are many natural connections that link the Shawangunk Mountains to other areas rich in biodiversity, such as the Catskill Mountains and Warwarsing wetlands to the northwest, and the Esopus/Lloyd wetlands and ridges to the east. The region also has distinctive natural areas such as the Shawangunk Grasslands and Rosendale limestone caves.

Thus, we can think of the Shawangunk Mountains as part of a larger system of natural areas that serve as the foundation of our natural landscape, providing large areas for wildlife to roam or for plants to disperse.

Preserving this system of interconnected natural areas helps to sustain natural processes such as forest fires and flooding. It also helps to maintain thriving, diverse ecosystems that serve as the “green infrastructure” for our human communities. Protection of these lands is the most cost effective, proven way to supply clean water, soils and air as well as flood and climate control. If protected, these areas will enable us, and the wildlife of our area, to adapt and respond to changing environmental conditions in the future.

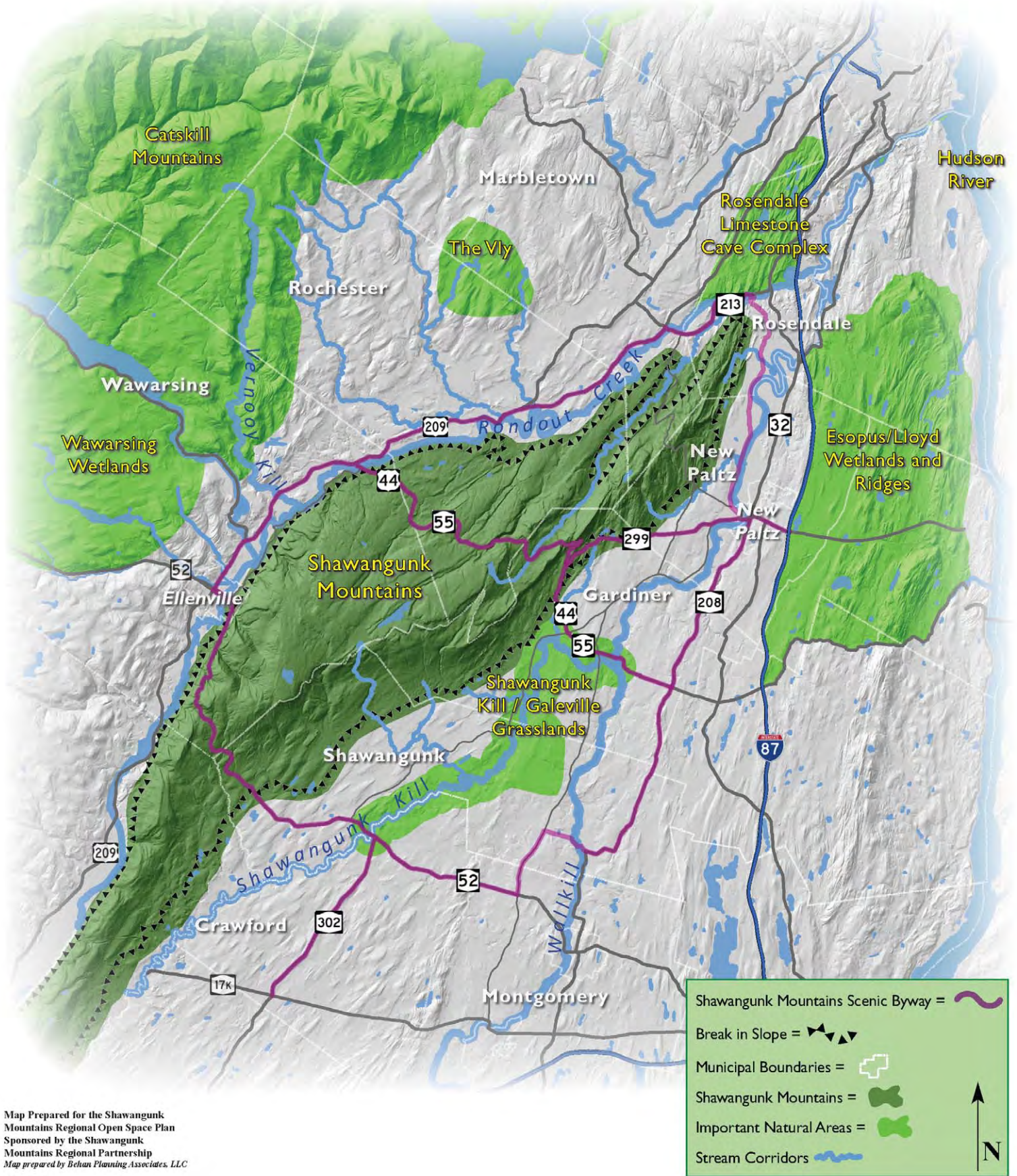
While it may not be feasible to preserve all of the land between large natural areas, we can develop broad corridors of natural resources that provide connections for wildlife and help maintain healthy ecosystems.

Our waterways serve as one way to connect natural areas to the Shawangunk Mountains. Our waterways themselves are valuable habitat for wildlife, but when the areas around them are maintained, they can also serve as important corridors. These “riparian areas” are ecosystems adjacent to or near flowing water, such as rivers, lakes, shorelines, and some wetlands, and provide important transitional zones between aquatic and upland systems.



Our waterways serve as connections between natural areas.

Connections Between the Shawangunk Mountains and Other Important Natural Areas



Map Prepared for the Shawangunk Mountains Regional Open Space Plan
Sponsored by the Shawangunk Mountains Regional Partnership
Map prepared by Behan Planning Associates, LLC

Data Sources:
Ulster County Information Services, Orange County Planning Dept., The Nature Conservancy, NYSGIS Clearinghouse, NYSDEC, CUGIR, Local reports

Important Natural Area designations by the NYSDEC Hudson River Estuary Program



Connections between the Shawangunk Mountains and Other Natural Areas

The map on the facing page illustrates important natural areas that are connected to the Shawangunk Mountains. Our waterways are depicted on the map to show how we can maintain broad corridors along our waterways to help preserve these natural connections. The summaries below describe the significance of each natural area.

The Catskill Mountains: The Catskill Mountains contain a large area of forest that is not broken up, or fragmented, by roads and dense housing. They also contain first growth forest, alpine communities, gorges, pristine headwater streams and reservoirs. They are rich in biodiversity. Connections between the Catskills and Shawangunks give large mammals “room to roam.”

The Vly: The Great Pacama Vly is a 315-acre wetland that harbors rare species and communities found nowhere else in the state. It is the only site in the Catskills where black spruce is known to be found, and also has large, high-quality red maple-tamarack peat swamp and hemlock-hardwood swamp.

Rosendale Limestone Cave Complex: This area is part of the Karst Aquifer region and encompasses a series of extensive abandoned limestone mines that serve as critical habitat for several native bat species. The caves in this area are among the top 15 sites *in the world* for hibernating populations of both Indiana and small-footed bats.

Esopus/Lloyd Wetlands and Ridges: This area contains wetland and upland habitat that is important to amphibian species, breeding and migrating waterfowl, and river otter. Upland communities include ridges, ledges and a mature hemlock-northern hardwood forest. The complex also includes one of the largest dwarf shrub bog occurrences in the Hudson Valley.

Shawangunk Kill / Grasslands: The relatively low nutrient levels, cool water and lack of dams allow the lower Shawangunk Kill to support a regionally rare biological community. Immediately adjacent to the Shawangunk Kill, the Shawangunk Grasslands are important breeding and overwintering habitat for a number of grassland bird species, several of which are rare or declining.

Wawarsing Wetlands: This complex of large wetlands is well maintained by a large area of surrounding upland forest. The forested wetlands along Brandy Brook contain trees that are 480 years old, as well as unique and rare communities and species. A wetland along Beer Kill Creek can be canoed and offers a diversity of aquatic habitats. The overall wetland and forest complex serve as an important connection between the Shawangunk Mountains and Catskill Mountains.

Please note that all of these natural areas are identified as priorities in the *New York State Open Space Conservation Plan*, and further summarized in the *Hudson River Estuary Wildlife and Habitat Conservation Framework*.



The Wallkill River drains into the Rondout Creek near Sturgeon Pond in Rosendale. The Rondout Creek continues north and eventually drains into the Hudson River near Kingston.



Native vegetation along the Rondout Creek in Marletown helps to maintain the quality of the water by filtering or regulating pollutants from agricultural and residential uses.

The Waterways

Two major river systems traverse the valleys surrounding the Shawangunk Mountains: the Wallkill and the Rondout Creek. Other significant streams such as the VerNooy Kill and the Shawangunk Kill drain into these rivers, as well as hundreds of smaller tributaries and drainage channels. Countless lakes, streams, ponds and wetlands are also part of this system of surface waters.

The map on page 16 illustrates how our waterways serve as connections between important natural areas. For example, the VerNooy Kill and surrounding forests link the Catskill Mountains to the Shawangunk Mountains and provide a way for wildlife to travel between the two mountain ranges.

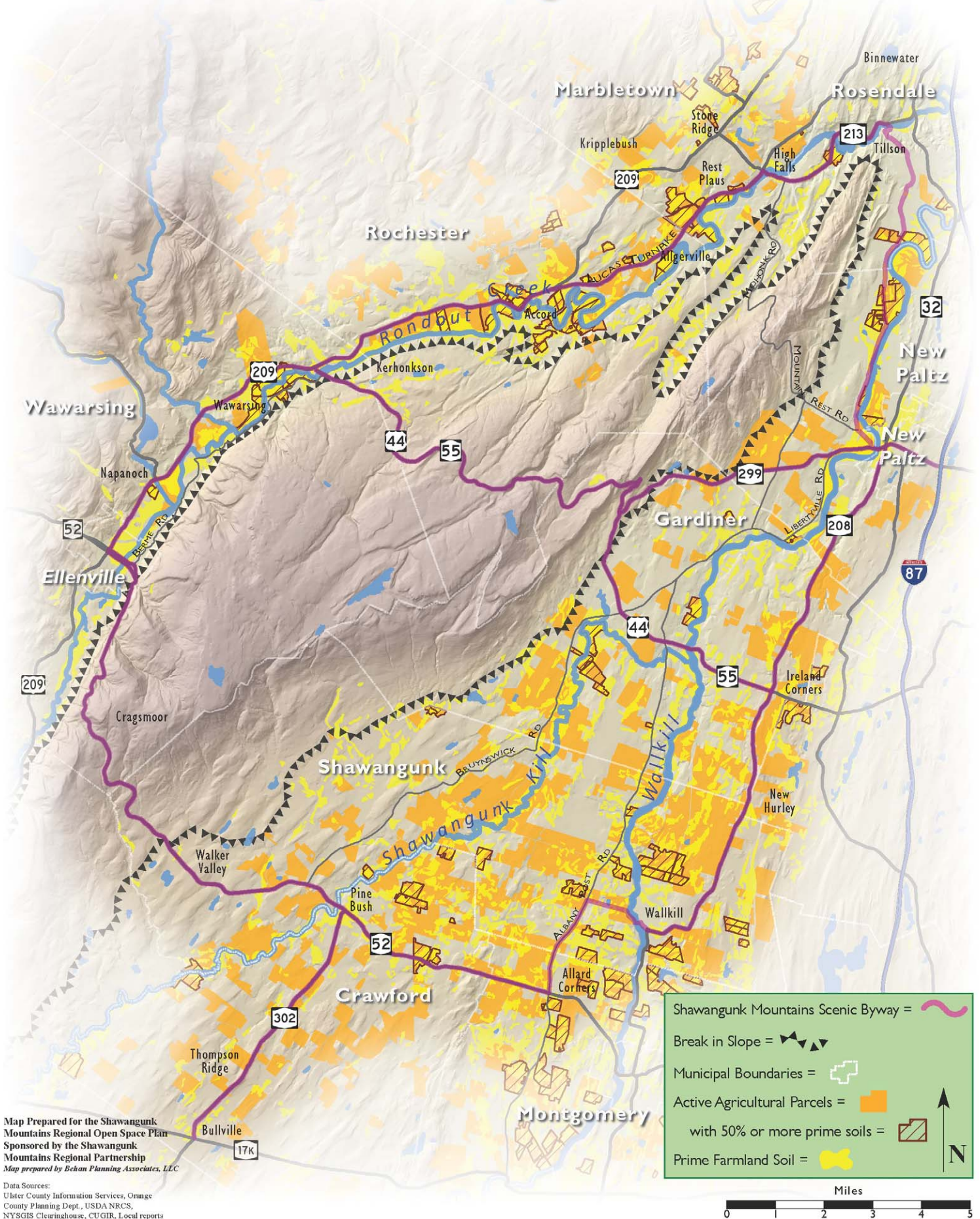
Our waterways are surrounded by vegetation - trees, shrubs, grasses and other plants – and often flow through forests and wetlands. It is important to maintain these natural, streamside communities that provide a healthy environment for wildlife and people. Habitats and vegetation along our waterways provide shelter, food and shade for many aquatic animals. They help to stabilize stream banks and prevent erosion of stream channels. They also hold and store flood waters, which helps to decrease property damage, and contribute to water quality and quantity, which is important for people living in the Region

Maintaining broad corridors between natural areas along our waterways is important for preserving the rich biodiversity of our region, and ultimately the health of its residents.



A segment of the Shawangunk Kill in our region has been designated as a Recreational River under the *New York State Wild, Scenic, and Recreational Rivers Act of 1982*. This area of the Shawangunk Kill is exceptionally rich in biodiversity.

Prime Soils & Active Agricultural Parcels



The Farms, Orchards and Vineyards

Our farms are some of the most significant in all of New York State. We have organic beef, orchard fruits, dairy products, vegetables, honey, and corn – just to name a few of the many products sold by the 320 farms in the Shawangunk Mountain region. Our farms produce many foods that are available locally.

Working farms cover about 28,000 acres - a little more than 20% of the Shawangunk Mountains region. Although we have about 17,700 acres of prime soils, only about 50% of our prime soils are in production. About 10% of our prime soils have been developed, and another 40% are forested. Therefore, we have a finite amount of prime soils left for crop production.

Many people want to live in a place like ours, where they are surrounded by farms and views of the Shawangunk Mountains, and yet still close to major population centers such as Albany and New York City. As a result, many new homes have been built in our region.

Our region has already seen a tremendous loss of farmland. Between 1940 and 2003, Ulster County lost approximately 200,000 acres of farm land and gained 90,000 people. In the same time period, Orange County lost close to 200,000 acres and gained close to 200,000 - that's once acre of farmland lost for every person added. These figures come from the National Agricultural Statistics Service (NASS) of the (USDA).

Agricultural Statistics for the Shawangunk Mountains Region

Active farms: 320 farms covering 28,000 acres

Prime soil: 17,700 acres

Acres of prime soil in production: 7,900 acres

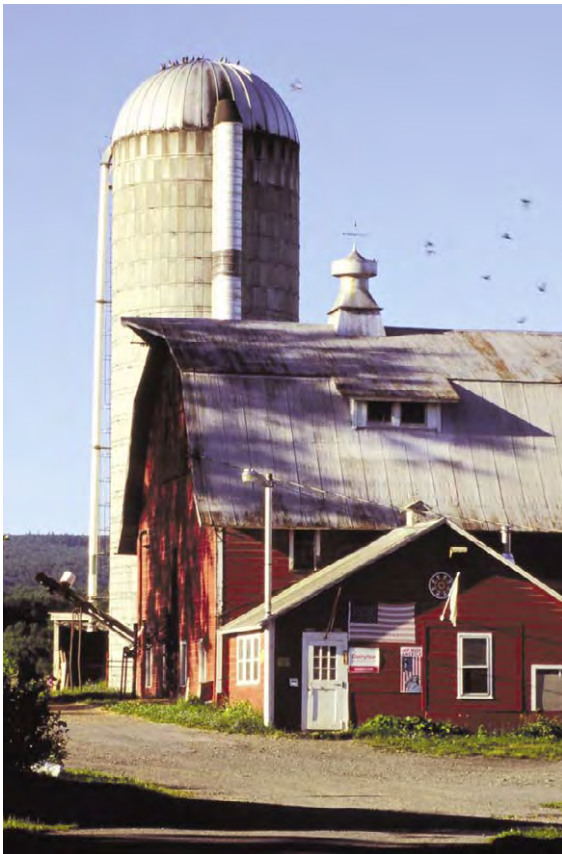
Our farmers are challenged with high land values, an economy that favors large-scale farming, and the continued loss of agriculture as a way of life. There are many positive trends towards consumer interest in local food and organic farming, but major changes are still needed in order for our farmers to make a reliable living off of the land.

Our farms also benefit our communities and our environments. Many of our scenic views, natural connections, forests and other resources, are located on our farms. The value of these benefits to our communities should be recognized.

There are many organizations already involved in farmland protection efforts in our region. The Partnership can continue to support their work and add a regional dimension by helping to serve as a liaison between the many efforts. It is important that all of our strategies – from the individual farm to the town, county, region and state – are harmonious and complimentary. Having this cohesive strategy enhances our funding and marketing prospects.



The Huguenot Street Farm in New Paltz grows many different crops for local consumption.



A dairy barn and silo in the Rondout Valley.



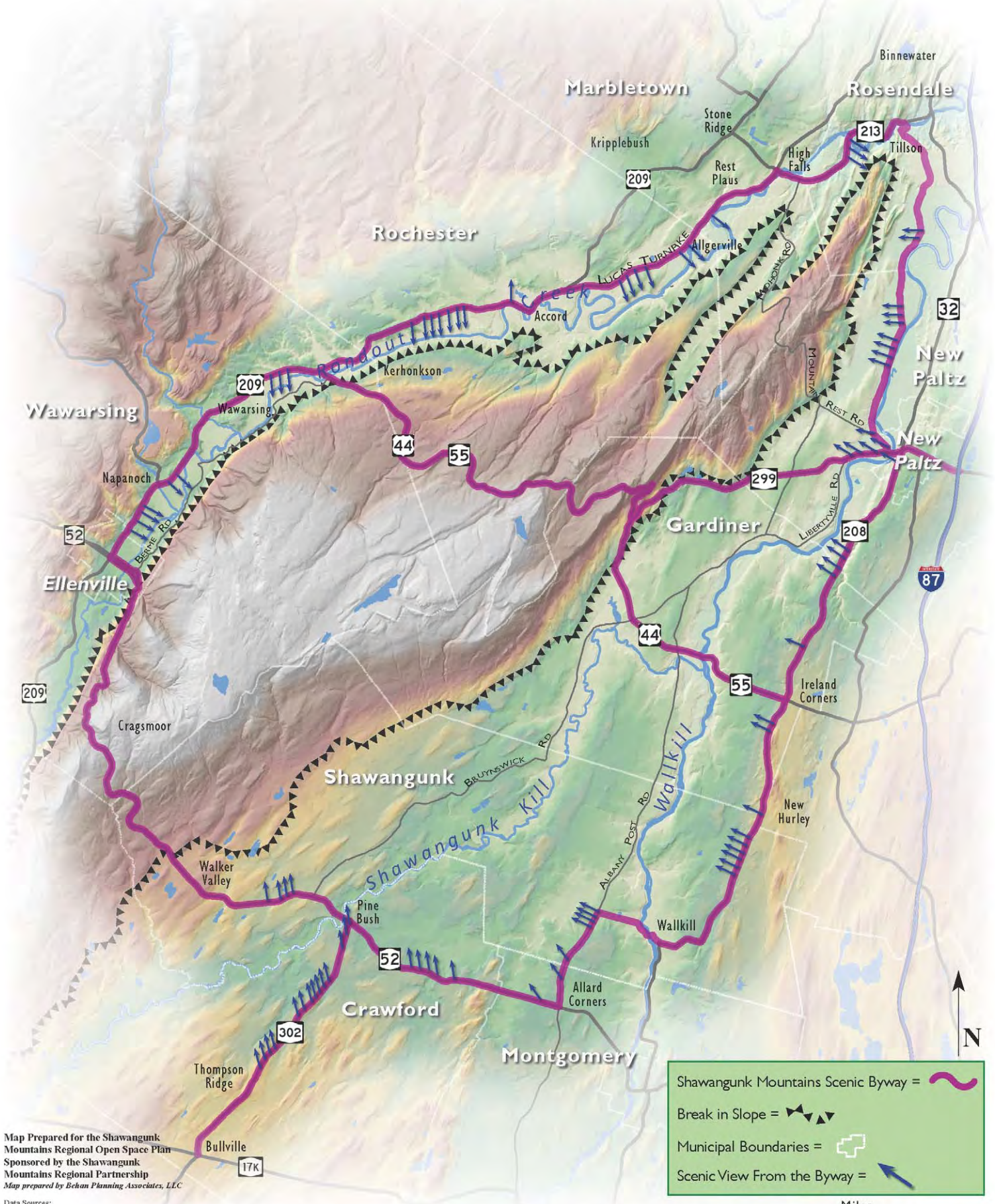
Apple orchards in bloom at Dressel Farm in the Wallkill Valley.

Strategies for Preserving our Working Farms

1. The Partnership should serve as a liaison between local, regional and state farmland protection efforts. This includes participating in our county and local farmland protection plans and implementation strategies so that we can provide a regional dimension. We should also maintain our efforts to support regional farmland protection projects and grant applications, and encourage the development of town farmland protection plans.
2. Continue to advance the idea of a byway farm partnership. The *Shawangunk Mountains Scenic Byway Corridor Management Plan (CMP)* recommends the formation of a byway farm partnership to work with farmers in ways that can be helpful, such as through expanded promotional materials or programs (P-46 to P-47). One opportunity that might be explored is the creation of a Shawangunk Mountains brand for farm products.
3. Support our land trusts' farmland protection efforts. Our land trusts, especially the Open Space Institute and the Wallkill Valley Land Trust, are active in the preservation of farmlands. The Partnership can continue to work with our land trusts to serve as a regional catalyst for preservation projects and add regional thinking and support for purchase of development rights (PDR) applications.
4. Advocate the development of additional (or augmented) funding sources to support farmland protection at the local, county and state levels.
 - Support efforts to increase state funding for farmland protection, working with the American Farmland Trust and other lobbying organizations.
 - Orange County and Ulster County have approved farmland protection plans, which make the counties and the municipalities within them eligible for state PDR funds. The Partnership should share information with our counties to facilitate updates to their plans, and encourage their legislatures to fund plan implementation. This is also recommended in the CMP (P-46).
 - Our municipalities should continue to explore the development of local funding for PDR. The Farmland Protection Program administered by the NYS Department of Agriculture and Markets provides grants for PDR. The state has such a high demand for this program that many good projects go unfunded every year. Providing a local match makes grant applications more competitive because they are leveraged. In addition, many of our farms will not meet the state's criteria for PDR funding and will need local funding to be completed. Local PDR funds are also recommended in the CMP (P-46).

Local open space funds in the Towns of Gardiner, New Paltz, Marbletown, and Montgomery have been established for this purpose.

Scenic Views



Map Prepared for the Shawangunk Mountains Regional Open Space Plan
 Sponsored by the Shawangunk Mountains Regional Partnership
 Map prepared by Behan Planning Associates, LLC

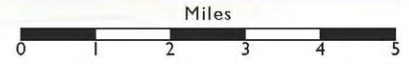
Data Sources:
 Ulster County Information Services, Orange County Planning Dept., NYSGIS Clearinghouse, CUOIR, Local reports

Shawangunk Mountains Scenic Byway =

Break in Slope =

Municipal Boundaries =

Scenic View From the Byway =



The Scenic Views

Perhaps the most obvious quality of our region is its wonderfully-rich scenic resources. Our farms, cliffs, forests, grasslands and rural buildings all contribute to the feeling of visual delight we all experience while traveling throughout the region.

Our views are both to and from the mountains. Many of our scenic views originate in the river valleys across farms, grasslands and other open lands. In spring when our apple orchards are in bloom, the bright pink flowers are contrasted with the greens and greys of the mountains. High atop the cliffs of the Shawangunks, we also get a spectacular bird's eye view of our valleys – meandering rivers and farmlands interspersed with our hamlets and villages. It is quite a sight.

Our business areas are also part of our scenic landscapes, and the character, aesthetic appeal and visual enjoyment people experience in these areas affects what people do ... whether they become customers or just travelers.

We have many iconic views in our region, such as the view of the Shawangunk Mountains along Route 299 exiting the Village of New Paltz. Or the view of the mountains across the fields of Arrowhead Farm in the Town of Rochester.

But what makes our region so special is not a single view; it is the cumulative effect of all the scenic landscapes throughout our nine towns and two villages. If this effect is chipped away at ... a bit lost here a bit lost there ... after a while the region will have lost this special character.





Views of the mountains from Thompson Ridge along Route 302, a designated scenic road.



Views of the Mountains near Dressel's Farm Market along Route 208 in the Walkkill Valley.

Strategies for Preserving Our Scenic Views

1. Because the Byway is a state-designated scenic road, the impacts of a project that would be located along the byway should be considered during SEQR review. The Visual EAF addendum should be used to evaluate the impacts and determine mitigation measures.
2. The Partnership will launch a program in 2009 to provide tools which our municipalities may use to help preserve scenic views. This project is being funded by the Federal Highway Administration's National Scenic Byways grant program and the NYS Department of Economic Development.

The program will provide tools to assess scenic views in open space and to help minimize the impact of potential development through considerations in regard to siting, use of materials, design of roads, landscaping and other site-review issues.

Our business areas are very much a part of our scenery and so the program will also provide guidance on design considerations for business areas with particular attention to new technology available for improved landscaping of these areas.

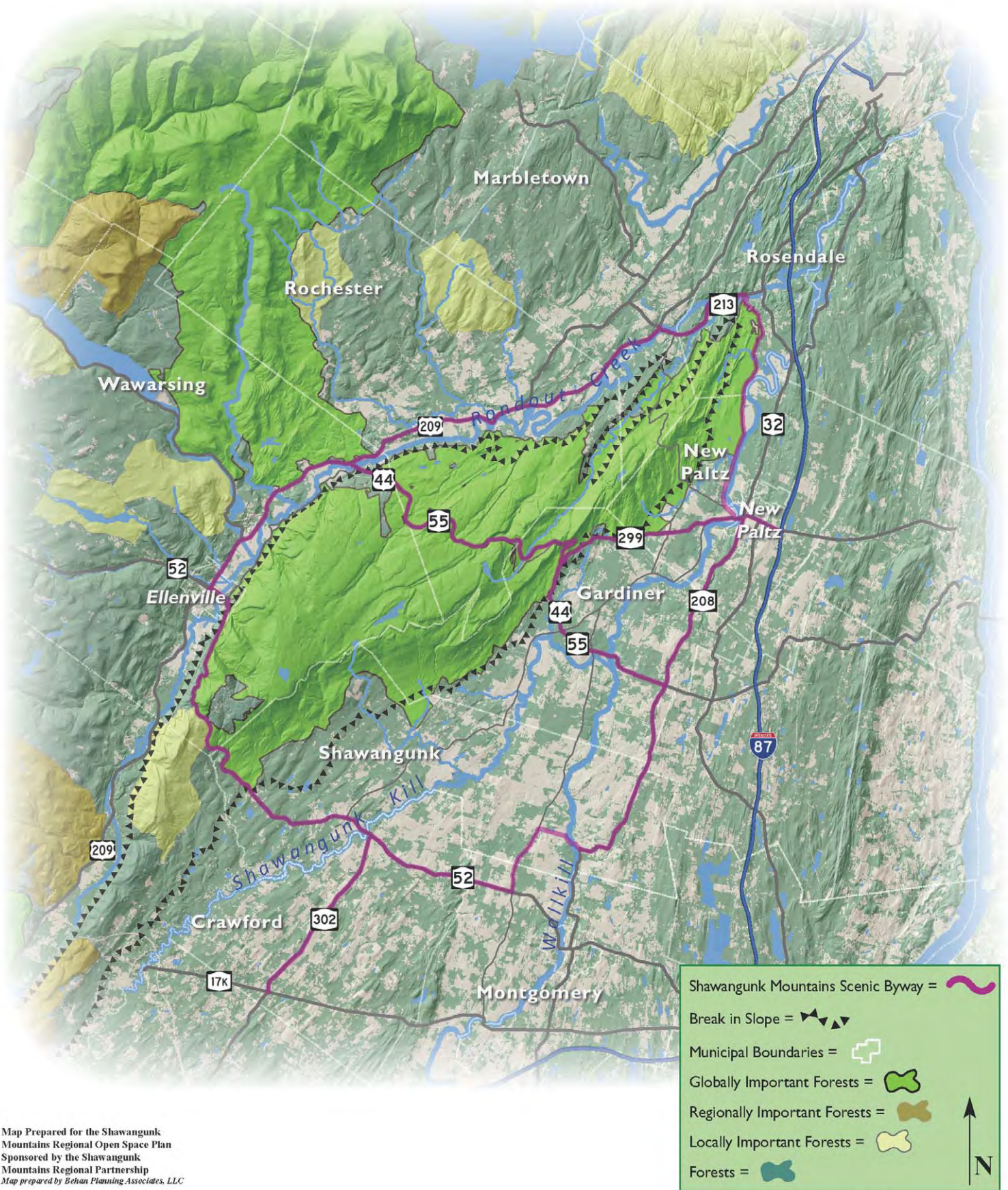
3. Support the development of a scenic road program. Our towns may decide to designate local scenic roads as part of a regional road system. In so doing, individual towns would recognize the scenic value of these roads, and intermunicipal nature of the views along the roads. These roads would not become part of the state-designated byway – they would simply become locally-designated roads that are important in our region. Our towns could decide how to address the scenic roads in local planning.

One option is that the planning boards could consider these roads in the site review process or local SEQR review. They could, if they choose to do so, pass local laws to preserve the scenic quality of the roads. For example, the Town of Crawford has passed local law to require a wide setback along Route 302 to maintain scenic views. In some cases, cooperation with counties would be required regarding the roads.

Roads to consider for local designation:

- Huguenot Street in New Paltz
- Binnewater Rd. in Rosendale
- Main Street in Stone Ridge (Marbletown)
- Kripplebush Rd. in Marbletown
- Rest Plaus Rd. in Marbletown
- Main Street in Accord (Rochester)
- Albany Post/Butterville Road in New Paltz and Albany Post Road in Gardiner
- Rt 7/Bruynswick Rd. in Gardiner/Shawangunk to Rt. 52
- Hoagerburg Rd. in Shawangunk
- Ulster County Rt. 9 to the Shawangunk Mountains Scenic Byway at Rt. 9/Rt. 18
- Plank Rd. in Shawangunk
- Cragsmoor Rd. in Wawarsing
- Berme Rd. in Wawarsing/Rochester
- Rt. 48/Rt. 17 in Crawford
- New scenic roads in subdivisions

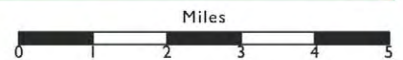
Forests



Map Prepared for the Shawangunk Mountains Regional Open Space Plan
 Sponsored by the Shawangunk Mountains Regional Partnership
 Map prepared by Behan Planning Associates, LLC

Data Sources:
 Ulster County Information Services, Orange County Planning Dept., The Nature Conservancy, NYSGIS Clearinghouse, CUGIR, Local reports

Forest designations by the Shawangunk Ridge Biodiversity Partnership



Our Forests

Our forests have always played an important role in our region. The forests of the Shawangunk Mountains provided foods such as berries and nuts and medicinal plants for our early inhabitants. They were later important to rural endeavors such as huckleberry picking and barrel-hoop making. Today, they are an important natural, economic, and recreational resource.

In our region, we have about 74,000 acres of forested lands. The largest undeveloped forested area is the Shawangunk Mountains. But we also have many smaller undeveloped forests, such as the ones that line our waterways. In other parts of this report, we talk about the value of large areas of undeveloped forests in maintaining the diversity of plants and animals. Healthy forests are also valuable for our air and water quality, for the development of soils, and for forest products such as timber, maple syrup and paper. Having large forest areas also provides room for natural processes such as forest fires to take place so that the forests can be regenerated.

Smaller forests in our villages, hamlets and developed areas are also valuable for the same reasons. These forests are primarily on privately-owned lands, as well as within our parks, schools, cemeteries, public golf courses and recreation lands. Collectively, these forests help to mitigate floods, conserve energy, and clean our air and water, creating a healthier environment for people to live in. They also provide areas for recreation and they make our communities more attractive.





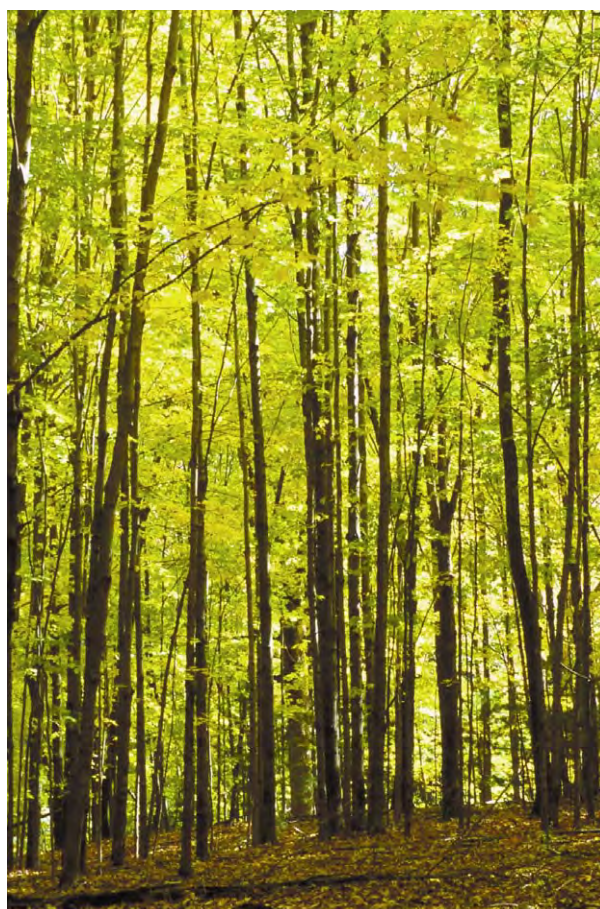
The Shawangunks are considered a globally-important forest because of their large and intact forest cover.



Smaller forests such as those pictured here in the Wallkill Valley provide habitat for a diversity of species. Trees help to mitigate floods and filter pollutants before they enter our streams. Even the hedgerows between farm fields provide natural benefits.

Strategies for Maintaining Healthy Forests

1. Seek funding to establish and plan for the long-term health of community and regional forests, including street trees, cemeteries, parks, and other public lands. NYSDEC offers grants to inventory, manage and plant urban forests, as well as to develop local plans for habitat mapping and conservation.
2. Help our planning boards understand the importance of contiguous forest lands. Our maps help to point out forested areas at different scales which should be considered. Also help planning boards understand the value of forest management and support the use of a trained forester, when relevant. This may be particularly important with even-age stands that have developed through succession of old farm fields, as well as for forested buffers surrounding wetlands.
3. Help landowners obtain information on programs available for forest preservation and management, including sustainable forestry practices. The New York State Forest Tax Law (480a) provides a partial exemption of town, county and school taxes for qualifying landowners of 50+ acres of forestland who agree to develop and follow a 10-year forest management plan. Many forest landowners with less than 50 acres have expressed interest in this program; therefore the Partnership may want to advocate for changes to the state program to make the benefits available to landowners with less than 50 acres.
4. Sponsor or support a study of regional opportunities for branding and marketing forest products. Similar to creating a regional brand for farm products such as a “Shawangunk Mountains” cheese – we can also develop branding for sustainable forest products. Catskill Wood (www.catskillwoodnet.org) is a nearby local example.



Sugar maples along Lundy Road in the Vernooey Kill State Forest.



This emergent marsh at the edge of the break in slope is aglow with fall colors.



Pumpkin picking at the Wallkill View Farm Market in New Paltz.

Our Strategies

Partnering with our Land Trusts

Conservation Financing

Resource-friendly Growth

Conservation Advocacy

Tracking our Progress



The Mohonk Preserve visitor center offers opportunities for people to learn about the many resources of the Shawangunk Mountains region.



Two historic farms were preserved through a partnership between the Open Space Institute, Walkkill Valley Land Trust, and the landowners. Pictured above is Ron Khosla of Huguenot Street Farm.



The Phillis Bridge Farm Project in Gardiner donated a conservation easement to the Walkkill Valley Land Trust and the Open Space Institute in 2003 so that the land would always remain in agriculture.

Partnering with our Land Trusts

According to the Land Trust Alliance, more than 1,600 land trusts are working in the United States, collectively preserving 37 million acres - an area that is larger than the whole state of New York.

In the Shawangunk Mountains region, our land trusts play a very important role. They are directly responsible for protecting about 12,000 acres, or 30% of our region's conserved lands. Without them, we would not have the Mohonk Preserve, Sam's Point Preserve, or the Wallkill Valley Rail Trail. Indirectly, our land trusts have also helped to facilitate many other major regional land conservation projects, such as the addition of Awosting Reserve land into Minnewaska State Park Preserve.

We are fortunate to have six active land trusts working at different yet complimentary scales. We have larger land trusts with priorities that are set at a "big-picture" scale, as well as smaller land trusts working on the ground with communities and landowners on a regular basis at the smaller scale. They often work together to accomplish mutual goals. For example, the Two Farms project in New Paltz and the Phillies Bridge Farm were collaborations between the Open Space Institute (OSI), the Wallkill Valley Land Trust, and the landowners.

There are two active large land trusts in our region: the OSI and The Nature Conservancy (TNC). The OSI has been a major partner in preservation of the Shawangunk Mountains. Recently, the OSI established a "two valley" campaign to focus on the protection of farmlands in the Wallkill and Rondout Valleys. The OSI has already completed several significant farmland protection projects in our valleys.

The Nature Conservancy has international resources and backing, but does not hold much land in fee or conservation easement in our region. TNC has primarily served as a facilitator in large conservation projects where the land was ultimately retained by the state or other entities. TNC has also been involved in land stewardship, scientific research, public outreach and planning in our region. TNC also manages Sam's Point Preserve.

In Ulster County, there are three local land trusts but there is no countywide land trust like there is in Orange County with the Orange County Land Trust, serving our Crawford and Montgomery towns as well as land nearby in Ulster County. The Mohonk Preserve focuses on the Shawangunk Mountains and the lands that are adjacent to the preserve. The Wallkill Valley Land Trust works between the mountains and the Wallkill River. The Rondout Esopus Land Conservancy works along the Rondout and Esopus Creeks. The Wawarsing/Ellenville area is not covered by any of these local land trusts.

As the figures show, the land trusts in the Shawangunk Mountains Region have been very successful in their efforts to preserve land by working with willing landowners. However, they share our realization of the importance of doing more, of the pressure on land to be developed, and of the need to preserve particular lands essential to the special character of our region.

Partnering with our Land Trusts

And they are taking steps to advance their effectiveness through staffing and programmatic changes. With funding by the Land Trust Alliance, the land trusts serving Ulster County (which includes the Orange County Land Trust) are doing a study to assess needs and opportunities in the county, such as a more formalized landowner outreach service. They will also be exploring the need for a land trust umbrella-type organization as well as other ways they may be able to share advanced services, such as GIS mapping.

Considering our common mission, we as a regional intermunicipal partnership should be as supportive as possible ... and to the greatest extent possible ... of ways in which the land trusts can be more effective in their work.

Acres Conserved in the Shawangunk Mountains Region by Our Land Trusts¹:

Land Trust	Conservation Acres ²
Mohonk Preserve	7,026
Open Space Institute	3,398
Orange County Land Trust	178
The Nature Conservancy	146
Wallkill Valley Land Trust	305
Rondout-Esopus Land Conservancy	801
Total	11,854

¹ Please note that this table only identifies acreage conserved by our land trusts *within the Shawangunk Mountains region*. Many of our land trusts have conserved additional lands outside of our region.

² Acres in fee simple and/or conservation easement as of May 2008. There are several properties where two land trusts hold a shared easement. In this case we have not counted the acreage twice, instead we have included the acreage in calculations for the primary easement holder only.

Strategies for Partnering With Our Land Trusts

1. **Become an active partner in our land trusts' efforts to coordinate and expand services.** The Partnership should request to be included in the Ulster County study and can help by serving as a liaison between the municipalities and the land trusts. The Partnership should make a commitment to this effort and provide funding to support our involvement.
2. **Help raise awareness of our land trusts at the local level** among planning boards, town boards, environmental conservation commissions and related groups. Information about the land trusts could be made available at town and village halls and building departments. The Partnership could also help to arrange presentations by the land trusts to town and village boards.
3. **Support and assist in the development of an expanded regional landowner outreach service.** The Partnership should work closely with our local and regional land trusts and other real estate, financial and land planning experts, to expand conservation-based land planning services for landowners. These professionals would work with our landowners to optimize and reconcile their goals for development, conservation, family, financial, estate, and tax planning.
4. **Support land trusts financially with the costs of easement transactions and long-term stewardship.** Consider setting aside a portion of a local conservation fund to help land trusts with transaction costs, stewardship and legal defense funds in your community. Transaction costs might include a title report, appraisal, or legal services. Stewardship costs include baseline documentation as well as monitoring and enforcement of the easement "in perpetuity." Legal defense funds help the land trust to defend the easement in the case of a legal challenge. Through mutual agreements, land trusts may also be able to provide land stewardship services on conservation easements created through the conservation subdivision process.
5. **Support assessor training and education.** Training and informational materials can be developed at the regional level to ensure that properties with conservation easements are being assessed at their restricted conservation value.
6. **Serve as a bridge between municipalities and land trusts to promote the idea of building regional networks of open space.** Developing a partnership with our land trusts in this respect will help to create more useful open space for our communities and for the land trust. It will also help to bring our land trusts into the conversations early in the process, allowing them to shape projects to meet their conservation criteria. The Partnership could help to arrange working sessions between land trusts and planning boards and environmental conservation commissions.

The People of our Land Trusts



Jennifer Garofalini, Director of Land Protection at the Mohonk Preserve, pointing out land features to Joe Alfano, Director of Development. The Mohonk Preserve protects over 7,000 acres while also providing opportunities for education and recreation.



The Open Space Institute (OSI) Board and staff members receive the Wallkill Valley Land Trust's President's Award on Joe Katz' conserved property in Gardiner. OSI has worked to protect more than 24,000 acres of the Shawangunk Ridge and more than 1,600 acres of farmland in the Wallkill Valley.

The People of our Land Trusts



Chris Duncan, the Executive Director of the Walkill Valley Land Trust (WVLT). The WVLT works between the Shawangunk Mountains and the Hudson River.



James Delaune, the Executive Director of the Orange County Land Trust (OCLT) explores a property along the edge of the southern Shawangunk Mountains. OCLT works throughout Orange County to protect “the fields, forests, wetlands, ridgelines and river corridors.”



Conservation Financing

Historically, funding support in our region has come primarily from the State of New York and from our land trusts—in particular the Mohonk Preserve and the Open Space Institute and their donors.

The recent large purchase of 2,500 acres of the Awosting Reserve (now part of Minnewaska State Park) came at a cost of \$17 million, which was supported by New York State's Environmental Protection Fund (EPF). This property includes some of the most significant lands and natural communities in our region, including our dwarf pitch pine forest. If we were to complete the 14,000 acre conservation goal for the Shawangunk Mountains established in the *New York State Open Space Conservation Plan* using this transaction as a model, it would come at a cost of \$95 million.

We continue to have need for large land purchases like the Awosting Reserve in our region. However, state funds are competitive and they are limited and must be spread throughout the state. We will take the New York State Farmland Protection Program as an example. According to the American Farmland Trust, the 2006-2007 Farmland Protection Program grant round received requests totaling \$58 million, with only \$23 million available to award. Previous grant cycles show similar patterns of unmet need.

Large land holdings are also increasingly valuable and expensive to secure. We will not be able to rely on state and federal programs alone to complete our conservation goals.

One of the benefits of our Partnership is the potential to increasingly garner our share of existing funds, such as state and federal grants and private foundation support. But, even if we are able to better leverage our share of existing funds, this will not be sufficient to fulfill our region's conservation needs. We will need additional funding to allow us to broker conservation projects using creative financing packages. The full spectrum of financial tools include real property tax abatements, state and federal income tax credits, foundation grants, capital reserve funds, municipal bonds, installment purchase agreements, and other instruments.



The Awosting Reserve.

Conservation Financing

Our Conservation Financing Strategies

I. Enable Towns in the Region to Enact a Real Estate Transfer Fee

This is a one-time fee paid by the buyer of real estate property that is then used by the municipality to preserve open space and for other conservation initiatives. Some towns in other areas of New York are already using the real estate transfer fee to create an ongoing source of funding to balance conservation with development.

In some areas, in order to preserve housing affordability, the fee has been set at 1-2% of the amount of the sale that is above the median value of homes in the area.

In order for our municipalities to take advantage of the real estate transfer fee, our New York State lawmakers would first need to pass enabling legislation, giving permission to the towns in our region to place the establishment of a real estate transfer fee on the local ballot for a voter referendum. It's up to each town to decide if they want to place it on the ballot. They do not have to.

It is only after a town places the establishment of a real estate transfer fee on the ballot, and after the voters in the town approve it, that such a fee would be established. The revenues would be placed in a dedicated fund to be used for conservation initiatives in the town.

Our Regional Partnership would present this idea to our State legislators in order to gain the enabling legislation. Our rationale for this legislation is simply that (a) our Shawangunk Mountains Region has open space, natural, agricultural, recreational and historic resources of exceptional value, and that (b) this legislation is needed in order for our towns to balance development with preservation in a way that sustains the essential character of the region, which is the foundation for our continuing economic growth.

We will reason that New York State has recognized the exceptional value of these scenic, natural, recreational and historic resources by the State designation of the Shawangunk Mountains Scenic Byway. Our I I Partnership municipalities also share a vision for the future of our region, as indicated in this Regional Open Space Plan.

The real estate transfer fee has been used in various areas in New York State, most notably in Long Island. Ten years of implementation of the Peconic Bay Region Community Preservation Fund in the east end of Long Island has resulted in the preservation of over 7,500 acres in a rapidly developing landscape. In 2006, voters in all five towns approved a referendum to extend the Community Preservation Fund from 2010 to 2030.

Conservation Financing

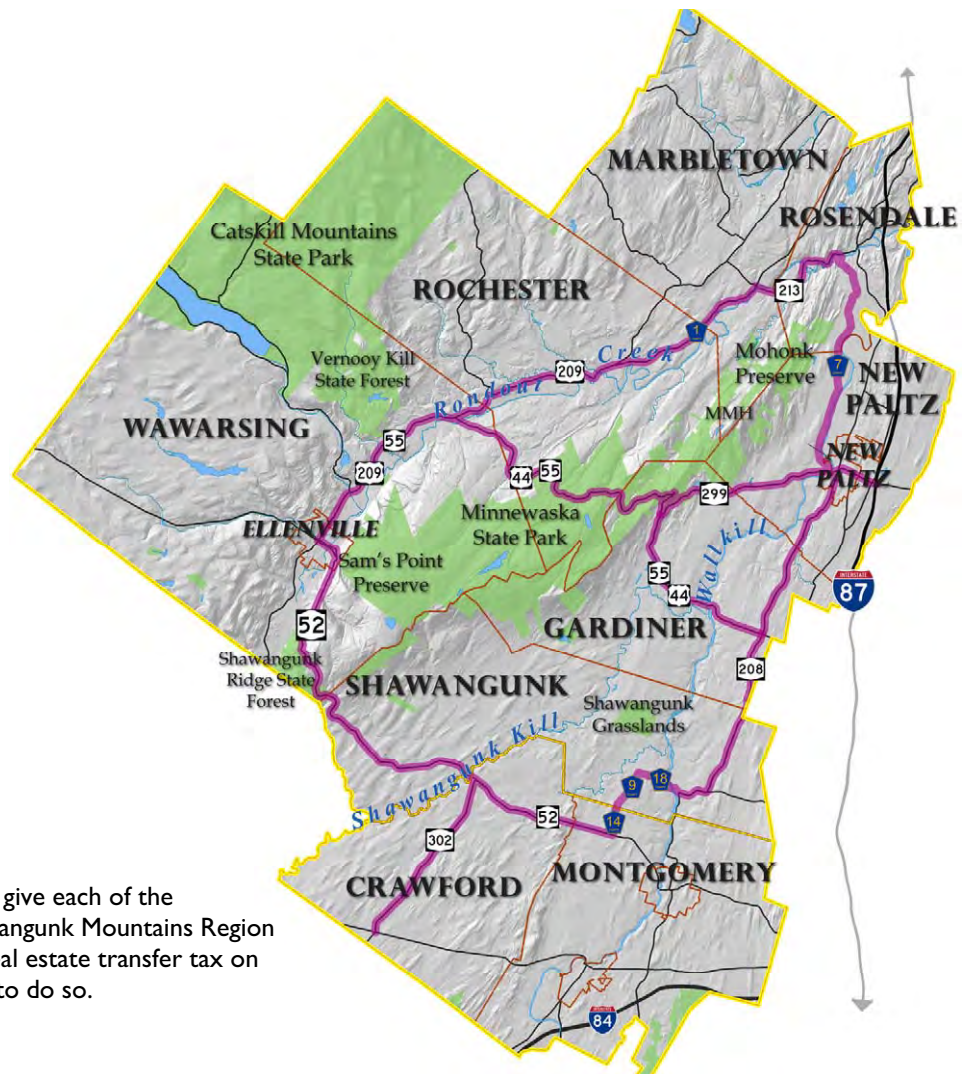
Our Conservation Financing Strategies (continued)

The Hudson Valley Community Preservation Act, passed by New York State in 2007, gives municipalities in Westchester and Putnam counties the power to create local funds through real estate transfer fee to protect natural and historic heritage, when and if local voters choose to do so.

The real estate transfer fee is also being used locally in the Town of Red Hook in Dutchess County to preserve hundreds of acres of farmland.

Certainly, the resources of the Shawangunk Mountains Region are as worthy of protection as those in the areas mentioned above.

And so we would ask, respectfully and at the appropriate time, for the right of each town in our Region to allow its voters to decide whether or not they want to enact this fee.



Enabling legislation would give each of the municipalities in the Shawangunk Mountains Region the option to place the real estate transfer tax on the ballot, if they choose to do so.

Our Conservation Financing Strategies (continued)

2. Shawangunk Mountains Region Designation

With support from state legislative delegations, state designation and a dedicated funding source should be explored to recognize the Shawangunk Mountain region as an area of special concern. To achieve this designation, a concerted and coordinated effort on behalf of the Partnership would be required; working with the state and federal officials to craft the enabling legislation and garner political support for the proposal.

The legislation would recognize the Shawangunk Mountains region as a distinct region of New York State. This is called for in the *Shawangunk Mountains Scenic Byway Corridor Management Plan (P-2)*. It would authorize state financial assistance for the Shawangunk Mountains region in their efforts to plan for, preserve, and promote land and resources of our region.

We should also continue to promote and expand the following existing conservation financing practices in our region:

3. Increase our share of state and federal grant opportunities, especially through the New York State Farmland Protection Program and Environmental Protection Fund. The Partnership can continue to help to improve the region's success rate with grants through strategic actions such as advanced planning with landowners, grant-writing assistance, and letters of support. Ensuring that the region's goals and projects are identified in the *New York State Open Space Conservation Plan* is also important.
4. Support the work of the land trust community to obtain donations of lands and easements including bargain sales, and to help land owners secure related tax benefits.
5. Expand collaborative public-private projects with the real estate community to create open space areas as part of land development activities.
6. Support local efforts to raise capital and acquire land through municipal open space bonds, budget allocations, recreation fees and other means.







Two traditional forms of growth in our region, village and hamlet. Both provide for compact settlement while preserving surrounding natural and agricultural lands. The New Paltz village is pictured at the top of the page and the hamlet of High Falls in Marletown is pictured at bottom.

Resource-Friendly Growth

The resources of the Shawangunk Mountains region traverse many different municipalities. Our resources are actually a collection of smaller, local resources - all of which are important to the health of the region. For example, each small wetland and stream that feeds a watershed is important to its health. However, most of the decisions regarding land use and development are made on a site by site basis without consideration for the larger regional context. Cumulatively, these site level decisions can damage our regional resources such as our natural communities, drinking water, productive agricultural areas, and forests.

Development and preservation do not have to be not mutually exclusive in our region. Exceptional and fragile resources such as the dwarf pine barrens of the Shawangunk Mountains should be preserved from development. But we can also grow without spoiling the beauty of our region. This requires that we understand our resources and take them into consideration when we develop.

Our plan provides maps and information regarding the significance of our regional resources. If used early in the process, this information can streamline the decision-making process, and create a more proactive approach to planning for conservation and development.

One of the major roles of our partnership is to help our municipalities understand that their local resources are part of a larger regional system of resources. There is a regional dimension too that should be considered in our planning and development efforts. For example, by identifying and considering an important scenic view at the start of a project, a development can be designed to maintain the view, and the landowner or developer also has a great asset to promote. This also helps to maintain the integrity of the Shawangunk Mountains Scenic Byway, our regional economic resource.

As another example, a conservation subdivision could consider regional connections between natural areas by designating these areas as open space in a site plan. The best time to identify and evaluate these resources is at the beginning of a project, before the parcels are carved up, roads and lot lines are drawn, and major financial decisions have been made. This would help to create open space that is more useful and beneficial for the site and region.

There are many ideas for how we can consider regional resources. Each of our municipalities will find an approach that works best. The role of the partnership is to continue to promote regional thinking in our land use planning and development decisions. The partnership is available to help our municipalities enhance existing processes, develop new tools, or to advocate for grant funding or other needs.

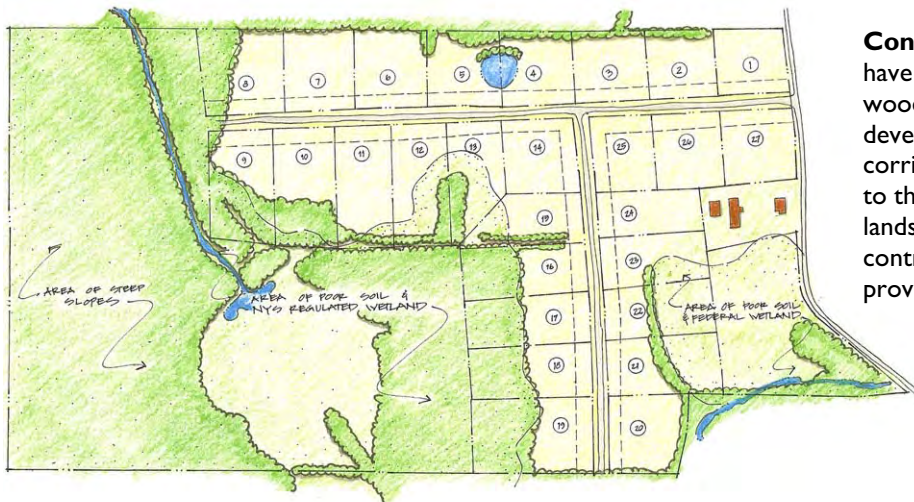


A path winding through the Mohonk Preserve.

Considering our Resources in Site Planning



Site analysis identifies natural and cultural features such as a regional stream and floodplain, local ponds and other water features, steep slopes, the forested woodland stream buffer, open agricultural lands, and hedgerows.



Conventional layout would have resulted in fragmentation of woodlands and encroachment of development on the stream corridor. It would have also led to the development of the farm lands along the roadway that contribute to scenic quality and provide other natural benefits.



Conservation design preserves a larger wooded area adjacent to the stream; it also conserves the farm fields along the major road which provide a local food source, as well as the hedgerows that help to buffer the farm from the adjacent homes. It results in trail connections for residents to enjoy the open space features.

Our Strategies for Resource-Friendly Growth

1. Offer assistance to our municipalities in how to consider regional resources in planning and development activities. Towards this end, the Partnership can serve as a resource for our boards and decision makers regarding regional resources. The Partnership can also serve as a resource when our municipalities are creating local comprehensive/master plans; helping them to integrate our regional resources into the planning process. For example, the Town of Shawangunk Comprehensive Plan includes mapping of the natural communities of the Shawangunk Mountains as well as recommendations for preserving them.
2. Provide support for local programs or policies that expand the consideration of our resources in the development process. Although there are many tools and creative ideas for accommodating growth and development while preserving resources, we will identify a few such ideas below that could be explored by our municipalities with support from the Partnership:
 - Continue to support efforts to map resources for use in local, regional and state planning efforts. Mapping of natural communities has taken place in many of our communities. The Partnership should support local initiatives to continue to fill data gaps. When this mapping is complete, the Partnership can work with other regional entities such as the Shawangunk Mountains Biodiversity Partnership (SMBP) to seek funding to create a regional natural communities map and helpful materials that explain the importance of the natural communities and lay out clear guidelines for how their intrinsic values can be maintained in development. More information on mapping local resources is provided on pages 52-55.
 - Use the State Environmental Quality Review Act (SEQRA) more effectively to consider our regional resources such as important natural communities, scenic resources, forests, water resources, and agricultural resources during environmental review. Doing this effectively requires a more dedicated process where the resources are identified and assessed up-front rather than after the project has been formulated. One way that the Partnership could assist in this effort is to develop a template for a local environmental review law. This template would identify our regional resources for consideration and establish a process for assessment of impacts to these resources. Municipalities in our region could modify and adopt the template as a local law, if desired.
 - Adopt or modify conservation subdivision regulations to require at least 40-60% of the buildable land on the site as permanent open space. Regulated land, such as steep slopes, wetlands, and floodplains, should not be considered part of this 40-60% open space to be preserved. The amount of open space to be preserved will be dictated to some extent by the permitted density of development and the availability of water and sewer services.



At Outlook Farm in New Paltz, 32 homes were sited in the woods and 20 acres of open fields were preserved in a conservation easement. This helped to preserve the views and the fields.



Along Route 209 in Marletown, a commercial building that houses several businesses uses traditional architecture and building materials.



Use of rural styles and materials helps to maintain the character of this rural roadway.

Our Strategies for Resource-Friendly Growth (continued)

- Use the Generic Environmental Impact Statements (GEIS) to plan for and coordinate development across a larger area. Instead of planning and addressing impacts on a project by project basis, the GEIS process provides a more comprehensive approach. This allows for coordination of larger, more beneficial open space areas. It can also provide cost savings – for example by planning for more efficient services (such as road systems) at a larger scale.
- Explore the idea of transfer of development rights (TDR), or incentive zoning. The concept of TDR is that development rights are transferred from an area where conservation of resources is desired (sending area) to an area where focused development is desired (receiving area). Although they can be effective, TDR programs are often complex to develop and administer. TDR programs can also be difficult to implement if there is not sufficient demand for growth in the receiving areas. A substantial amount of up-front planning is needed to identify the character of the future receiving area.

A similar result has been achieved through the use of incentive zoning by several New York communities.

3. Where there is a benefit to an intermunicipal or regional approach to addressing similar problems or opportunities, the Partnership can continue to serve as a catalyst and supporter. As an example, several of our municipalities may find that there is a benefit to creating a shared set of best practices to guide development in rural areas.



Transfer of Development Rights programs in New Jersey have preserved important lands and helped to shape more compact communities such as this one, which can be serviced more efficiently.

“Mapping the Natural Landscape” in Marbletown



This map shows how multiple layers of data were brought together and interpreted into a natural heritage vision for Marbletown. The dashed bubbles show important resource areas (farms, forests and aquifers); bright blue highlights the major stream corridors that serve as natural connections; and purple arrows show other wildlife connections between natural areas.

Mapping “the Natural Landscape” in the Shawangunk Mountains Region

When a community knows and understands the importance of its natural resources, it is better prepared to develop conservation priorities and make informed land use decisions. A map of “the natural landscape” can illustrate the locations of habitats, animals, plants, and wildlife corridors, and serve as a tool for comprehensive planning, along with considerations of farmland, scenic views, watershed resources, and so forth. The scale of the biological information included on the map will determine its appropriate use. For example, a regional map of important natural assets is too general for making site-specific determinations, but can be helpful for identifying areas that are well-suited for future growth, locating shared resources that may benefit from intermunicipal collaboration, and highlighting features that warrant special conservation efforts.

Municipalities in the Shawangunk Mountains region are fortunate to have access to several existing sources of biological information that can serve as a basis for developing a map of the natural landscape:

The **Shawangunk Ridge Biodiversity Partnership’s Green Assets program** offers a series of maps for mountain towns that cover the Shawangunk Mountain area generally east of the Rondout and west of the Wallkill and Shawangunk Kill. These maps include six natural community types, as well as base and overlay maps of elevation and slope; protected lands; tax parcels; and air photos. These natural communities are depicted in the map on page 10 with data courtesy of the **Shawangunk Ridge Biodiversity Partnership**.

The **NYSDEC Hudson River Estuary Program** can provide each town with a “habitat summary” that includes data available from the NY Natural Heritage Program (rare plant, rare animal, significant ecosystems, and associated “Important Areas” for conservation); the NYS Breeding Bird Atlas; and the NYS Herpetological Atlas.

A number of our municipalities have completed **Hudsonia’s Biodiversity Assessment Training (BAT)** and mapped natural communities in their towns. The BAT is offered annually, and many “graduates” have continued mapping in new areas following completion of the training (e.g., Gardiner and Rosendale). While this program is time-intensive, it trains community volunteers such as environmental commission members to collect new data, interpret maps, and provide recommendations for environmental reviews.

The **Metropolitan Conservation Alliance (MCA)** made conservation recommendations for New Paltz and a portion of Gardiner in its *Northern Wallkill Biodiversity Plan*. The plan outlines ‘biodiversity areas’ that were especially rich in bird, reptile, and amphibian species and habitat, based on field investigations, and offers recommendations for implementation.

Mapping “the Natural Landscape” in the Shawangunk Mountains Region (continued)

A baseline inventory of natural resources is part of a good framework for a comprehensive plan, providing important context for land use decisions. While such an inventory is not a substitute for on-site surveys necessary for project review, it can be useful for landscape-level planning, and can continuously be updated with finer-scale information. Because most of these data are available digitally, they can be incorporated into a Geographic Information System (GIS), which is extremely useful for analyzing resources and setting priorities.

When all the information is mapped together on a town scale, it will present a “big picture” view that will illustrate landscape patterns, such as large, contiguous areas of natural communities; aquatic systems connected by waterways; “hot spots” for clusters of rare species; fragmented areas of lower quality; and so forth, providing a tool for identifying conservation priorities and areas most suited for future growth. Such a map will also help communities ask the right questions during project review, assist landowners with stewardship and management, and provide developers with guidance early in the planning process.

Most of the landscape-scale data discussed on the facing page is based on ‘remote sensing’ and does not have the accuracy of field-tested information. As steps are taken to determine priorities for land acquisition, evaluate proposed land-use changes, and conduct site-specific reviews, the map of a community’s natural landscape can be used to guide what finer-scale biological surveys may be needed to fill in specific details that are essential for decision-making.



A wetland complex in New Paltz.

Mapping “the Natural Landscape” in the Shawangunk Mountains Region (continued)

The NYSDEC Hudson River Estuary Program recommends that, at a minimum, the following are included in inventories of natural resources in Shawangunk Ridge municipalities:

Wetlands: Include data from NYS Freshwater Wetlands and if available, National Wetland Inventory. Because these two sources omit many wetlands, map hydric soils to capture other wetland areas. Add wetland buffers of at least 50 meters. Pay special attention to large wetland complexes, and clusters of small or medium size wetlands, and consider adding larger buffers if local conditions or conservation needs are known.

Stream Corridors: Map perennial and intermittent streams, 100-year floodplains, and riparian buffers of at least 50 meters. To consider potential wildlife corridors and habitat connections, increase buffers to 100 meters.

Forests: Using current orthophotography and land cover data, map unfragmented, forested areas greater than 200 acres. Prioritize based on the following (from the *Orange County Open Space Plan*):

stepping stone forests (200-1,999 acres): These smaller forest ecosystems, when configured as broad corridors (not just narrow strips), provide connections and links to larger patches of habitat.

locally important (2,000-5,999 acres): These small but important forest ecosystems often represent the lower limit of intact, viable forest size for forest-dependent birds. Such bird species often require 2,500 to 7,500 acres of intact interior habitat.

regionally important (6,000-14,999 acres): These are forest blocks greater than 6,000 acres that provide habitat to more area-sensitive species and can accommodate the large-scale disturbances that maintain forest health over time.

globally important (greater than 15,000 acres): These large and intact ecosystems support characteristic, wide-ranging and area-sensitive species, especially those that depend on interior forest. Globally important forests are large enough so over time they will express a range of forest successional stages including areas that have been subjected to recent large-scale disturbance such as blowdowns and fire, areas under recovery, and mature areas. They also provide sufficient area to support enough individuals of most species to maintain genetic diversity over several generations.

Grasslands and Shrublands: Using current orthophotography and land cover data, map unfragmented areas of grassland and shrubland that are greater than 100 acres. This size is considered especially important for supporting a diversity of rare and declining birds.



Along the foothills in Gardiner, the views of the mountains contrast against the open farm.



Along Route 209, Arrowhead Farm also has spectacular views of the mountains.

Our partnership of towns and villages has the strength to advocate for changes that would help our region improve its ability to conserve land and resources. Some of the many opportunities for conservation advocacy are highlighted below.

1. Advocate for scenic criteria and a funding category under the New York State Environmental Protection Fund (and other state programs) to allow for acquisition, enhancement, restoration and stewardship of scenic resources.
2. Gain representation for Shawangunk Mountains region on the Advisory Committee for Region 3 of the *New York State Open Space Conservation Plan*. Our towns and local environmental commissions and open space committees should also become involved in this process, working with the Partnership to determine priorities and ensure that they are addressed in regular plan updates.
3. Advocate for the consideration of scenic views as a criterion for funding decisions in the state farmland protection program. Our scenic views are a major part of our region's strategy for farmland protection and retention. They help to keep our farms in business by attracting tourists and visitors. Many of our farmers have diversified four-season programs to take advantage of visitors. This important value should be recognized when funding decisions are made.
4. Continue to advocate for public access and public use of open space that is purchased with public funds, where this is appropriate.
5. Advocate for changes in assessment and appraisal policies to acknowledge the public benefits of protected land so that landowners can be fully compensated for donated or purchased conservation easements.
6. Support changes in New York Local Finance Law that would make the establishment of Land Installment Purchase Obligations more viable for municipalities.
7. Advocate for our "mountain" towns to become "Firewise communities." The national Firewise program is directed and sponsored by the Wildland/Urban Interface Working Team (WUIWT) of the National Wildfire Coordinating Group, a consortium of wildland fire organizations and federal agencies responsible for wildland fire management in the United States. Through this program communities become less fire prone by removing brush, conducting home audits and other activities. Cragmoor is the first Firewise community to be designated in NYS.

Tracking our Progress

Local Open Space Progress Report

This checklist serves as a guide to the types of actions and tools that might be used to help advance local and regional open space goals. It is not expected that our municipalities will advance all of these goals; some may be more appropriate than others.

- Current zoning and land use regulations allow landowners to cluster development in exchange for open space
- Conservation subdivision regulations require 40-60% of buildable land to be set aside as open space
- Formed an environmental conservation commission
- Formed an agricultural commission
- Identified and planned for regional resources in comprehensive plan
- Developed a process for planning board to assess and integrate regional resources into development review
- Provided local input to the *New York State Open Space Conservation Plan*
- Completed a local open space plan or watershed protection plan
- Completed a local farmland protection plan
- Updated zoning to be farm-friendly
- Supported planning board and environmental commission training on conservation-oriented planning techniques
- Adopted special land use or zoning regulations to maintain important resources such as a local wetlands/watercourse law or stream buffer regulations
- Mapped natural communities and made this information available to our planning boards and landowners
- Conducted an assessment of our biodiversity
- Developed a local community forest or tree plan
- Created a local fund for resource conservation
- Invited land trust representatives to meet with planning board to discuss priorities and common goals

It is important to keep track of our regional and local efforts, to monitor progress, celebrate success, and also to identify obstacles so they can be addressed. The Partnership can work with our land trusts, towns, counties, and other regional partners to evaluate our regional progress and successes. This could be accomplished by the Partnership through a brief annual report or summary of the progress of the *Shawangunk Mountains Regional Open Space Plan* and related efforts.

Likewise, our partnership communities can do the same, by tracking their local initiatives and sharing this information with the Partnership on a periodic basis. On the facing page is a template for tracking local goals.





Our region's immense beauty is due to our unspoiled system of resources – our mountains, forests, farms, natural communities, and scenic views. For many of us, this beauty is why we live here. This beauty also invites people to visit our region, to enjoy the views of the Shawangunks, and this provides businesses with opportunities for the economic growth we need to sustain our communities.

Preserving this beauty while also enabling growth, along with meeting the many other goals of our municipalities, is no easy trick, particularly with the budget constraints our local governments must work within.

The maps in our plan show, for the first time, how this beauty is distributed throughout the entire Shawangunk Mountains Region. This will help our individual communities see and appreciate the important connections in the region so that this context can be considered in the land use decisions made by each municipality.

Our exploration of open space indicates that we are fortunate to have nearly 25% of the region as protected land... with 90% of this in the mountains.

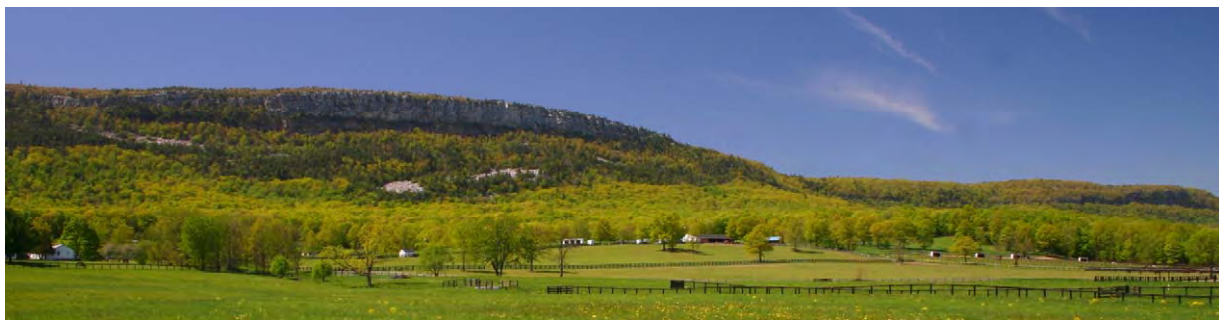
It is in the valleys, now, where we are most vulnerable to the loss of beauty, and where the challenges are complicated and the issues are often conflicted.

To be successful, it will take many efforts by many people, with various core interests, working through nonprofits and at many levels of government, approaching preservation from different angles, involved in a multitude of programs, engaged in a variety of projects.

It will be through this kind of seemingly incremental, opportunistic approach, rather than by any singular campaign, that we will be able to provide the leverage needed to protect more of our beauty in the valleys.

In our plan, we have indicated what some of these ideas and actions might be, particularly what we as a regional partnership may be best suited to undertake.

We welcome your thoughts, and we appreciate your participation.





**RESOLUTION TO APPROVE THE SHAWANGUNK MOUNTAINS
REGIONAL OPEN SPACE PLAN**

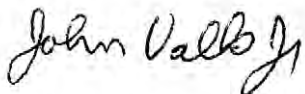
Whereas, the New York State towns of Crawford, Gardiner, Marbletown, Montgomery, New Paltz, Rochester, Rosendale, Shawangunk, and Wawarsing, and the villages of Ellenville and New Paltz have been working together since early 2000, first as a steering committee and then as the Shawangunk Mountains Regional Partnership, and;

Whereas, the partnership has completed the Shawangunk Mountains Regional Open Space Plan, which outlines opportunities to help preserve the region's open space resources, and;

Whereas, these resources are essential to the special character of the region and the NYS-designated Shawangunk Mountains Scenic Byway, enjoyed by the people of the region, and vital to the economic growth of the region through the development of our tourism industry, and;

Whereas, the partnership municipalities have unanimously executed an intermunicipal agreement which states in part ...” the challenges and opportunities facing the region are significant and that by working together from a regional perspective, a common agenda for the conservation and enhanced management of the resources of the region can be advanced in a way that supplements but does not supplant local municipal action,”;

NOW, THEREFORE, on this 5th of December 2008, the Executive Committee of the Shawangunk Mountains Regional Partnership, duly convened, does hereby approve the Shawangunk Mountains Regional Open Space Plan, as attested to below by the executive committee chairperson.



John Valk, Jr. Executive Committee Chair

This resolution was passed by a unanimous vote of the Shawangunk Mountains Regional Partnership Executive Committee members present on December 5, 2008 and those not present have submitted their ratification of the vote and support for the decision.



Ellen Sticker, Secretary

