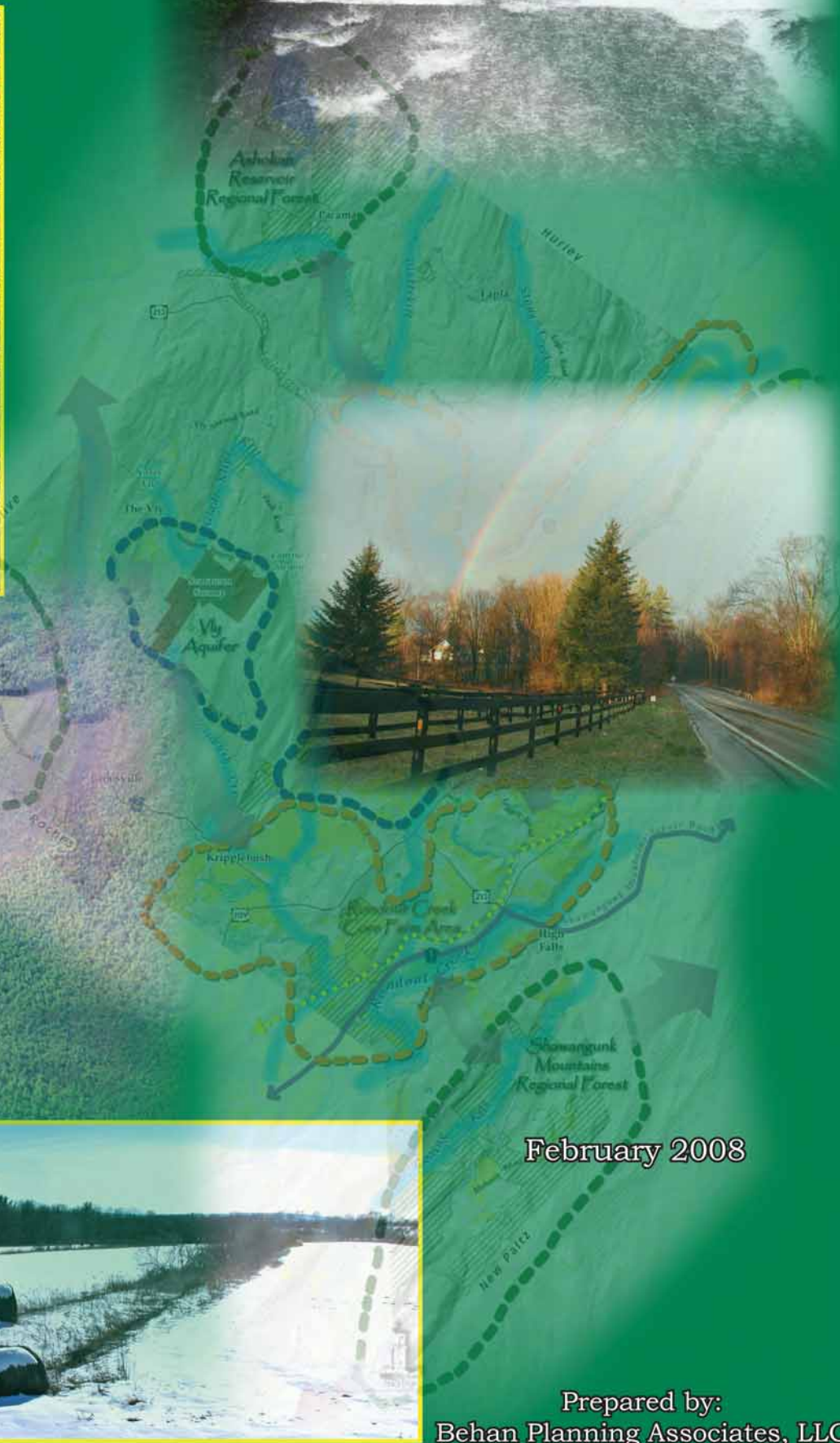


# MARBLETOWN NATURAL HERITAGE PLAN



February 2008



Prepared by:  
Behan Planning Associates, LLC



# MARBLETOWN NATURAL HERITAGE PLAN

February 2008

## **Plan Committee:**

Tracey Dewart  
Jennifer Cairo  
Barbara Esmark  
Natasha Williams

## **Plan Advisory Panel:**

Christy Balich  
Mike Biltonen  
Sydney Blum  
Chris Cole  
Mary Collins  
Mike Leone  
Michael McDonough  
John Novi  
Jim Ostrander  
Dean Palen  
Tim Ruscoe  
Steve Schneider  
Ben Shor  
Bert Smiley

## **Town Board:**

Vincent C. Martello, Chair and Supervisor  
Mark Mc Clean  
Brooke Pickering – Cole  
Sean Nutley  
John Roosa

Support for this project was provided through New York State Department of Environmental Conservation's Hudson River Estuary Grants Program and the State Department of State for Enhanced Master Planning and Zoning Incentive Award Program.

Copyright 2008 Behan Planning Associates, LLC  
All Rights Reserved



**Behan Planning Associates, LLC**  
Planning Community Futures





# MARBLETOWN NATURAL HERITAGE PLAN

## Table of Contents

|  |         |
|--|---------|
| Executive Summary  | Page i  |
| Chapter 1: Introduction  |         |
| Overview   | Page 1  |
| Social and Economic Context                                      | Page 2  |
| Local and Regional Planning Context                              | Page 3  |
| Planning Team and Goals  | Page 4  |
| Public Meetings and Outreach                                     | Page 5  |
| Chapter 2: Resource Analysis                                     |         |
| Introduction   | Page 9  |
| Regional Context   | Page 9  |
| Existing Conservation Lands                                      | Page 11 |
| Forest Lands   | Page 13 |
| Agricultural Resources   | Page 15 |
| Natural Systems  | Page 17 |
| Cultural and Recreational Systems                                | Page 19 |
| Synthesis of Resource Analysis and Community Input               | Page 20 |
| Chapter 3: Natural Heritage Vision                               |         |
| Introduction   | Page 23 |
| <i>INSERT: Marbletown Natural Heritage Vision Map</i>            |         |
| Regional Forests   | Page 26 |
| Aquifers   | Page 32 |
| Core Farm Areas  | Page 35 |
| Supporting Forests   | Page 41 |
| Streams and Waterways  | Page 43 |
| Conclusion   | Page 45 |
| Chapter 4: Action Plan   |         |
| Introduction   | Page 47 |
| <i>INSERT: Summary Chart</i>                                     |         |
| Develop a Local Conservation Program                             | Page 48 |
| Support Sustainable Land Uses                                    | Page 52 |
| Plan for Development and Economic Growth                         | Page 55 |
| Continue to Advance Research, Management, Stewardship            | Page 59 |
| Continue to Expand Natural Heritage Awareness                    | Page 61 |
| Expand Options for Conservation Financing                        | Page 62 |
| Opportunities for the Private Sector                             | Page 66 |
| Next Steps   | Page 68 |
| Conclusion   | Page 69 |
| References   |         |
| Glossary   |         |
| Appendix A: Summaries from Focus Group Sessions                  |         |
| Appendix B: Correspondence from the NYS Natural Heritage Program |         |
| Appendix C: Reference Materials                                  |         |



# EXECUTIVE SUMMARY

## Introduction

Marbletown is in a time of transition. The community's landscape is cherished by residents. The town's beautiful landscape is also being discovered for its attractive setting between the Shawangunks and Catskills; and for its convenient proximity to major urban areas such as New York City, Kingston and Albany. As a result, the town is becoming a desirable location for new homes, as well as for its unique tourism opportunities. New homes and tourists are welcome in the community, as are their contributions to the local and regional economy. The challenge for the future is to balance incoming development, tourism, and economic growth with an appropriate level of resource conservation. This will help to ensure that the reasons why people choose to live, shop, and recreate in Marbletown are preserved for the future.

The town's natural heritage plan is an implementation item of the 2005 comprehensive plan. During the comprehensive plan update, the town's future growth and development potential was analyzed. Many residents were concerned that the growth of the town, if not balanced with conservation, might affect the town's natural resources and rural character. The comprehensive plan recommended that the town develop an open space inventory and a plan for conserving resources.

The Environmental Conservation Commission (ECC) secured funds for the natural heritage plan through two grant programs: New York State Department of Environmental Conservation (DEC) Hudson River Estuary Grants Program and New York State Department of State for Enhanced Master Planning and Zoning Incentive Award Program.

The plan was guided by a four-person steering committee and a 14 person advisory panel that represents a diversity of interests including agriculture, business, recreation and conservation.

## What is natural heritage?

For the purposes of this plan, natural heritage consists of farms; forests; ground and surface waters; wetlands; and other ecological or scenic areas. Natural heritage may be public or it may be privately-owned. Below are a few of the many ways that Marbletown residents experience natural heritage.

- Fishing in the Esopus Creek or Ashokan Reservoir
- Biking along the rail-trail
- Hiking in the Mohonk Preserve
- Apple-picking at Stone Ridge Orchard
- Driving along scenic Rt. 1
- Drinking healthy and good-tasting water right from the tap
- Enjoying forest shade and cool breezes in the middle of summer
- Viewing bald eagles, herons, red foxes and fishers with your children

## Marbletown Natural Heritage Plan

Marbletown's natural heritage resources help to sustain the community in many ways. The town's aquifers provide water supplies. The Catskills and Shawangunks provide ridge views that make the town's real estate market attractive. The Rondout Valley's fertile lands sustain our farms, which provide a local food supply and bolster the regional economy and agri-tourism efforts.

To many town residents, natural heritage is also important to their livelihood – whether through agriculture, forest products, recreation, or tourism.

### What is included in the plan?

The plan includes the following main elements:

**A Natural Heritage Vision (Chapter 3):** A vision map and summary that illustrates the town's major natural heritage resources – forests, aquifers, farms, and streams. The map helps to illustrate the importance of maintaining unfragmented forests; preserving large blocks of working farms; protecting water resources; and making wildlife connections between natural lands. The vision includes the following key elements:

- **Regional forests** such as the Shawangunk Ridge and the area surrounding the Pacama Vly.
- **Core farm areas** such as those along the Esopus and Rondout floodplains.
- Major **aquifers** such as the Vly Aquifer and the School Aquifer.
- **Streams and waterways** such as the Rondout, Esopus, North Peters Kill, and many others throughout town.
- **Supporting forests** which are located throughout the town, and serve as the backbone of the town's natural heritage system.
- **Wildlife Areas** or functional areas that are used by wildlife to roam, mate, disperse, forage and conduct other essential elements of survival.

**Resource Summary Maps (Chapter 2):** Maps and text that summarize the natural heritage resources of the town. This detailed information is available to the town in digital geographic information systems (GIS) format for planning purposes. Maps within the plan include the following:

- Parks and Protected Lands
- Forest Cover
- Agricultural Landscapes
- Natural Systems
- Cultural and Recreational Systems



## Marbletown Natural Heritage Plan

**Conservation Milestones (Chapter 3):** Conservation milestones are goals for conserving a given acreage of land and/or water resources in the town. A goal of conserving an additional 3,500 acres of land in the next ten years has been set within the plan. Achieving this goal would ensure that about 20% of the town's natural heritage is permanently conserved for the future.

A recommended breakdown of the milestones is as follows:

- 1,500 acres of forest
- 750 acres of priority aquifers
- 750 acres of core farms
- 500 acres of river and floodplain

### **What are the major recommendations of the plan?**

The plan recommendations include setting up a local land preservation program; supporting sustainable land uses such as forestry and farming; planning for growth; continuing to advance research and management efforts; expanding natural heritage awareness in the community; and expanding conservation financing. Some of the key actions are identified below. For a full discussion of the recommendations, consult Chapter 4.

#### **1. Continue to develop a local land conservation program.**

- Develop selection criteria and tools (such as easement legislation) for conservation projects.
- Develop conservation projects (this may include appraisals, drafting easement language, etc.).

#### **2. Support sustainable land uses.**

- Audit the town zoning code to ensure that it is fully supportive of agriculture and forestry.
- Develop a town farmland protection plan.
- Develop a town or regional forest plan.
- Research the potential for a local term easement program for forest owners.

#### **3. Plan for development and economic growth.**

- Integrate the *Marbletown Natural Heritage Plan* data into the town's GIS to be used for planning purposes. Make it available to town boards, developers, and landowners.

## Marbletown Natural Heritage Plan

- Identify future growth areas in the town and ensure that the costs and benefits of both conservation and development are balanced through the town.
- Provide advice for landowners in applying the town's conservation development regulations, as well as in Best Management Practices, design guidelines and other conservation planning tools. Additional educational materials can be distributed in key venues (library, town hall, town newsletter, realtors, etc.).
- Create a best practices guidebook that provides advice for development and management of lands for developers, homeowners, forest land owners and agricultural land owners.

### **4. Continue to advance research, management and stewardship efforts.**

- Complete the town biodiversity map and report.
- Coordinate with regional efforts for invasive species management.
- Update the town GIS database, maps, and other information sources as new data are available and as existing data are revised.

### **5. Continue to partner with existing organization in outreach efforts (a regional approach is recommended to the recommendations below).**

- Develop outreach materials to inform landowners of their options for conservation.
- Promote and support workshops or training sessions for builders/developers.
- Integrate natural heritage information into local school curriculum.
- Develop visible signs (such as labeling rivers, aquifers at crossings) to make people more aware of natural heritage resources.

### **6. Expand options for conservation financing.**

- Urge lawmakers to support the Community Preservation Act.
- Maintain a working database of grants and funding sources.
- Conduct a recreation needs assessment and consider developing recreation fees within the town.
- Continue advancing private fundraising campaigns.

### **How will this plan be used?**

The natural heritage plan can serve as a guide to future conservation investment and actions by the town, local land trusts, and other conservation organizations. For example, the town might use the plan as a guide for submitting a farmland protection grant to conserve a priority farm for state or federal funding; it might partner with a local land trust to purchase lands for a nature preserve; or it might submit a grant application to construct a desired trail connection.

The plan can also serve as a guide for site planning, subdivision design, and other development and infrastructure decisions in the community. In this way, the plan can serve as framework for future decisions that maintain the connectivity and integrity of resources from the site to the town-wide and regional levels. In particular, the plan's detailed resource mapping (Chapter 2) can be called up to help assist in land planning.

The plan can also be used to help guide planning, zoning, and infrastructure decisions to ensure that future development maintains a balanced system of natural heritage to maintain clean water and air; working farmlands; and the rural landscapes that Marbletown residents are familiar with.

Lastly, this plan can be used to help coordinate federal, state and regional planning efforts to meet Marbletown's unique priorities.

### **How will this plan affect me as a property owner?**

The plan identifies priorities for conservation such as core farm areas, aquifers and forests. The plan is based on voluntary landowner participation, with the goal of creating financial incentives for landowners to do so. If your land is located within a priority area on the Natural Heritage Vision Map, and you own a significant acreage, the town or a partner in conservation may approach you to see if you would be interested in conservation. Your participation would be voluntary and would be based on the availability of appropriate tools and funding sources. Criteria will be established by the town to set priorities.

### **What are the benefits of implementing this plan?**

Planning for conservation helps to ensure that, as the town welcomes new residents and businesses, it continues to maintain the resources and quality of life that existing residents have come to know. This plan provides a blueprint for preserving resources by setting forth goals and a path for the town to follow towards the community's vision. Some of the many benefits of implementing the plan include the following:

#### **Clean Water**

Conserving natural heritage resources helps to maintain the quality of our surface water (such as wetlands and rivers) and groundwater resources. It is much less costly

## **Marbletown Natural Heritage Plan**

to maintain the quality of these waters by conserving and stewarding land than to construct facilities to treat drinking water. For example, by conserving land within the Catskill and Delaware watersheds, New York City has avoided most of the \$8 billion in estimated costs to construct a new water filtration plant.

Preserving natural heritage resources also helps to reduce stormwater runoff and filters pollutants from water. American Forests estimates that trees in U.S. metropolitan areas provide \$400 billion in stormwater retention benefits – when compared with the costs of constructing stormwater retention facilities.

### **Food Supply**

Marbletown's farms provide a source of food for local consumers. This local food supply helps to maintain food security and reduces the amount of energy spent in transporting food long distances. A 2002 study by Worldwatch Institute concluded that food sold in U.S. supermarkets travels an average of 1,500 miles before reaching our plates. Eating local food provides countless additional benefits, including the availability of fresh-picked, nutritious foods and the opportunity to make a physical connection to our meals, and our community.

### **Economic Value**

Working farms and forests provide income to local families and contribute to the regional economy. According to U.S. Department of Agriculture (USDA) census of agriculture, the market value of Ulster County's agricultural products was \$34.4 million in 2002 (the most recent year of the census). Recreation and tourism are major sectors in the region that are dependent on the conservation of open space, wildlife, and agricultural resources. Resources such as the Shawangunks and Ashokan Reservoir help to foster a tourism-based economy. The Mohonk Preserve reports an annual 150,000 visitors; and it is estimated that the larger northern Shawangunks region receives approximately 500,000 visitors annually. Many of these visitors also spend their dollars locally, at Marbletown's hamlets, B&Bs, and farm stands.

### **Health of the Natural Environment**

Preserving natural heritage helps to maintain functioning natural systems, which are required for the long-term health of flora and fauna. Landscape ecologists and wildlife managers support the conservation of large, unfragmented habitat "hubs" or core areas that are connected by rivers, streams, mountain passes and other natural areas, as part of a balanced natural system.

Healthy natural systems also provide benefits to people. According to the USDA, "one acre of forest absorbs six tons of carbon dioxide and puts out four tons of oxygen. This is enough to meet the annual needs of 18 people." Through photosynthesis, trees help to sequester carbon dioxide and other heat-trapping gases that contribute to climate change while they grow.

Maintaining healthy natural communities also can lessen the economic impacts of invasive and exotic species on our forests, lakes, rivers, wetlands and other natural

## Marbletown Natural Heritage Plan

and recreational resources. Invasive species can compromise our food and drinking water supplies, and can be very costly to manage. Healthy natural systems are more resilient to infestations.

### **Aesthetics**

Marbletown's aesthetic resources – such as the beautiful views of the Catskills and Shawangunks - make it an attractive and enjoyable place to live. The rural landscapes of farms, rolling hills and river valleys are also appealing to those who visit the town and its many destinations such as the historic hamlets, the farms and farm markets, and the Shawangunk Mountains. Keeping these attractive vistas is important to the economy as well as the quality-of-life for residents.

### **And What if We Don't Implement this Plan?**

In addition to compromising the community benefits discussed in the previous section, there may also be direct costs to community taxpayers associated with loss of natural heritage resources. When the costs of preserving natural heritage are compared to the costs of developing the same land, there is typically a fiscal benefit in conservation for local taxpayers. For example, when the Town of Pittsford, NY reviewed the fiscal impact of a \$9.9 million dollar open space bond, it was determined that the approximate \$64 per year cost to the average household to pay for the bond would be far less than doing nothing, as the cost to service that additional development would impact the average household by about \$250 per year for schools, road maintenance, and other community services. In Webster, NY, the fiscal model prepared for the town and school district showed that for every dollar invested in open space conservation, town residents would save an equal dollar in avoided costs associated with growth. Hence, in that community, there was no net cost of investing in open space land acquisitions. Natural heritage protection can balance and reduce the future costs of growth.

## Marbletown Natural Heritage Plan

### Sources:

Draft New York State Open Space Conservation Plan. November 2005.

American Forests. September 1997. The State of the Urban Forest: Assessing Tree Cover and Developing Goals. <http://www.americanforests.org/ufc/uea/stateof.html>.

Rich Pirog. July 2003. Checking the Food Odometer: Comparing Food Miles for Local Versus Conventional Produce Sales in Iowa Institutions. Leopold Center for Sustainable Agriculture.

New York State Open Space Conservation Plan. 2002

Darryl F. Caputo. 1979. Open Space Pays: The Socioenvironomics of Open Space Preservation. Morristown: N. J. Conservation Foundation.

Mark Correll et al. 1978. The Effects of Greenbelts on Residential Property Values: Some Findings on the Political Economy of Open Space. Land Economics.

P. Thorsnes. 2002. The value of a suburban forest preserve: estimates from sales of vacant residential building lots. Land Economics.

Arbor Day Foundation. Benefits of Trees. Accessed online. <http://www.arborday.org/trees/benefits.cfm>



## CHAPTER 1: INTRODUCTION

### Overview

Marbletown is a community that is defined by its natural heritage. The forested mountains, contrasting river valleys, and historic farms give form to the town. These mountains and valleys and distinct agricultural landscapes have shaped the settlement of the area throughout time. The mountains provided a source of fuel and building materials; the valleys provided rich soils and abundant waters for drinking, power, and transportation; and the farms speak to a sense of ecological and cultural balance dating back to the first Native American settlers and their colonial counterparts. In these ways, our natural heritage is also a distinct part of our cultural heritage.

This plan is about preserving our natural heritage –the forests, rivers and farms – for future generations.

The goal of this plan is to determine significant natural resources within Marbletown and develop recommendations for preservation of these resources.

#### GOAL OF THE NATURAL HERITAGE PLAN

The goal of this plan is to determine resources of natural heritage significance within Marbletown and develop recommendations for preservation of these resources.

Preserving our natural heritage helps to maintain a diverse range of plant and animal species, including humans. It is easy to forget that we depend on our natural resources to support our basic needs, such as drinking water, building materials and food. Natural

resources also provide scenic, recreational and economic benefits to the community.

These resources also provide “green services.” For example, wetlands help to filter our drinking water and forests help to remove (or sequester) carbon dioxide (and other heat-trapping gases that contribute to global warming) from the atmosphere by storing it in their



*Esopus Creek*

## Marbletown Natural Heritage Plan

trunks, leaves, branches and roots. By preserving our natural heritage, we are investing in our own well-being, protecting the character of the community and ensuring that these resources continue to benefit future generations in Marbletown.

However, preserving the town's natural heritage is not without its challenges. The town's scenic and rural character attracts potential residents who want to live or own a second home in the town. Individually, each new home might have little impact on the town. Collectively, however, as more homes are added, more of the town's resources will become fragmented, compromised and diminished. Balancing growth with preservation of natural heritage is a major goal for Marbletown. If planned smartly, development can be an economic asset for the town.

This plan identifies and discusses the elements that compose the town's natural heritage – such as its forests, aquifers, rivers and farms. It discusses opportunities and concerns brought forth through the planning process that are shared across a broad spectrum of the town's population and interests, such as concerns about taxes and the need for well-planned economic development. It identifies priority resources and areas for conservation efforts. And, lastly, the plan provides strategies for the town to advance its goal of balancing development and economic growth with the preservation of natural heritage.

This plan was developed using the best available data and sound principles of science and resource management. It is not meant to be a static document; rather, it is a framework that will need to be updated and re-evaluated as new data become available, as science and technology advance our understanding of species needs and resource management, and as the community's values and priorities change through time.

### **Social and Economic Context**

The many planning activities occurring in the town and region are a reflection of the current pressures of development. They are an expression of how much people care about their social, economic, and environmental surroundings, and how important they are to our quality of life.

Like so many other communities in the region, Marbletown is undergoing a transition. The resources that have long been maintained by landowners are now attracting other residents to the area. This, in turn, is raising property values in the town, forcing many residents to wonder if they can continue to hold on to their land. This is not only an economic frustration for landowners – it is an emotional frustration as they try to come to terms with the possibility of selling land that has been in their family for generations. Intuitively, landowners want to preserve their land and resources. But, in doing so, they don't want to lose their land assets.

Many of the larger-acreage landowners feel that they bear the financial burden of this responsibility, while other community residents have much to gain from their conservation efforts.

## Marbletown Natural Heritage Plan

The town administration is faced with the challenge of balancing the concerns of all residents. In doing so, all parties will need to compromise. Creative economic development endeavors are needed. The community will need to come together to agree on where and how to accommodate future development. Natural heritage preservation is necessary if the community wants to maintain its resources, and quality of life, for current and future residents. Critical aquifers and drinking water will have to be preserved to support additional growth. Healthy forests and streams are needed to support wildlife and human needs. Farmlands are needed to continue to supply the townspeople with food and ensure food security.

To be truly effective, natural heritage preservation must be a cooperative community effort, and it must be linked with land use patterns and economic development efforts. The costs and benefits of conservation should be equitably distributed through the town. Conservation activities that benefit the entire community should be considered an investment in the town's economic future; an investment in "green infrastructure." Large-acreage landowners should have options that help them to retain and steward large land holdings and current residents should be able to afford to live in the town.

### Local and Regional Planning Context

This report is part of a continuum of studies and actions initiated by the town in recent years towards achieving the community's land use, development and conservation goals. The report was called for in the most recent update of the town's comprehensive plan. A sub-committee of the town's Environmental Conservation Commission (ECC) was formed to spearhead the development of a resource index (inventory) and this natural heritage plan.

The *Marbletown Index on Natural Cultural and Historical Resources* (the index) was completed in 2005 by the Conway School of Landscape Design. The index includes maps and a summary of the natural resources in Marbletown. The town also completed an *Aquifer Protection Study* in 2005, which was prepared by Dr. Katherine Beinkafner of Mid-Hudson Geosciences. The town is currently working with the New York Rural Water Association towards advancing its goals of aquifer and water protection.

Another implementation item of the town's comprehensive plan was the recent (2006) revision of the town's zoning law and subdivision regulations to include a conservation design overlay district "to promote conservation of open space and preservation of natural resources while allowing flexibility in lot size and site design." Design standards for conservation subdivisions are included to help guide the design process.

Also related to this planning effort is the town's open space bond initiative which passed in the November 2006 election and provides up to two million dollars in

## Marbletown Natural Heritage Plan

funds for the town to create a land conservation program. A committee is currently developing criteria, legislation and outreach materials for this program.

Habitat mapping efforts are also underway in the town. Several volunteers and members of the town's ECC recently completed a biodiversity assessment training course offered by Hudsonia, Inc. This group has subsequently mapped habitats in a 7,500-acre area of town, roughly bound by Vly-Atwood Road on the west, Buck Road/Schoonmaker Road on the south, Route 209 on the east and the southern bank of the Esopus Creek on the north. A report and habitat map are being finalized to summarize this work. Additional habitat surveys conducted by Hudsonia itself under a grant are underway for the western part of town, in the Vly and Kripplebush area, and in the Rondout Creek corridor (excluding High Falls).

Similar land use, zoning, and natural resource planning activities are underway in adjacent communities. The Town of New Paltz adopted an Open Space Plan in May 2006 and voters approved a \$2 million open space bond in November of that same year. The town recently completed a study of the fiscal costs and benefits of its potential build-out. The Town of Rochester adopted a revised comprehensive plan in 2006, as well as completing a *Ground Water Protection Plan* (2006) and a *Natural Resource Inventory* (2006). The town is now in the process of updating its zoning law. The Town of Hurley completed a report on open space (*Open Space Preservation for the Town of Hurley*) and an *Aquifer Protection Study* in 2003. The Town of Rosendale is working on a revised comprehensive plan as well.

Marbletown is also part of the Shawangunk Mountains Regional Partnership, which recently sponsored the successful designation of the Shawangunk Mountains Scenic Byway (a state-designated byway). The partnership is currently developing a regional plan for preservation of the resources of the region, working with the nine towns and two villages containing the byway. Also of note, Ulster County, in partnership with NYSDOT, is sponsoring the Route 209 Sustainable Transportation and Land Use Study along the corridor from Hurley to Ellenville. Ulster County has also recently developed a sustainable economic development plan (*Ulster Tomorrow*, 2007), and the *Ulster County Open Space Plan* (December 2007), with major recommendations of identifying priority conservation areas and priority growth areas. The *Ulster County Agricultural and Farmland Protection Plan* also provides guidance and shares many of the goals of this plan.

### Planning Team and Project Goals

The Marbletown ECC secured funds for this natural heritage plan through two grant programs: New York State Department of Environmental Conservation's (DEC) Hudson River Estuary Grants Program and New York State Department of State's Enhanced Master Planning and Zoning Incentive Award Program. The plan is being guided by a four-person steering committee (a subcommittee of the ECC) and a 14 person advisory panel that represents a diversity of interests including agriculture, business, recreation and conservation.



## Marbletown Natural Heritage Plan

The town retained professional planners, Behan Planning Associates, LLC, to work in close consultation with the ECC and Advisory Panel to create the plan and facilitate the public outreach process. The following goals were established for the planning process:

- Synthesize the town's comprehensive plan, index, aquifer study, and habitat reports to identify areas of conservation importance for the town.
- Share information, ideas and findings and seek public feedback and comments throughout the project.
- Work with landowners and other interest groups to identify concerns and find mutually common ground with broad public interest and goals.
- Discuss potential solutions for the protection of natural heritage, including forests, natural areas, water resources, and agricultural resources.
- Create a Natural Heritage Plan that summarizes natural heritage priorities and provides recommendations and a strategy for their preservation.

### Public Meetings and Outreach

The following methods of public outreach have been conducted throughout the planning process. Specific dates have been identified where possible. Summaries of the conclusions of the focus group sessions and the Marbletown Landowner Association meeting are located in Appendix A.

- **A town-wide public meeting** was held on September 18, 2006 to introduce the project and review results of resource assessment.
- **Focus group meetings (3)** were conducted to gain an understanding of the issues and opportunities for stakeholder groups in Marbletown:
  - Business owners: September 27, 2006
  - Conservation organizations and land managers: September 27, 2006
  - Forests: May 10, 2007
- **A presentation to the Marbletown Landowner Association** was held at their regular meeting on December 6, 2006.
- **A presentation to the Marbletown Town Board** to review the priority natural heritage areas and discuss preliminary recommendations was held on April 3, 2007 (open to the public).
- **A public review of the draft plan** to present the draft natural heritage plan and its strategies was held on October 1, 2007.

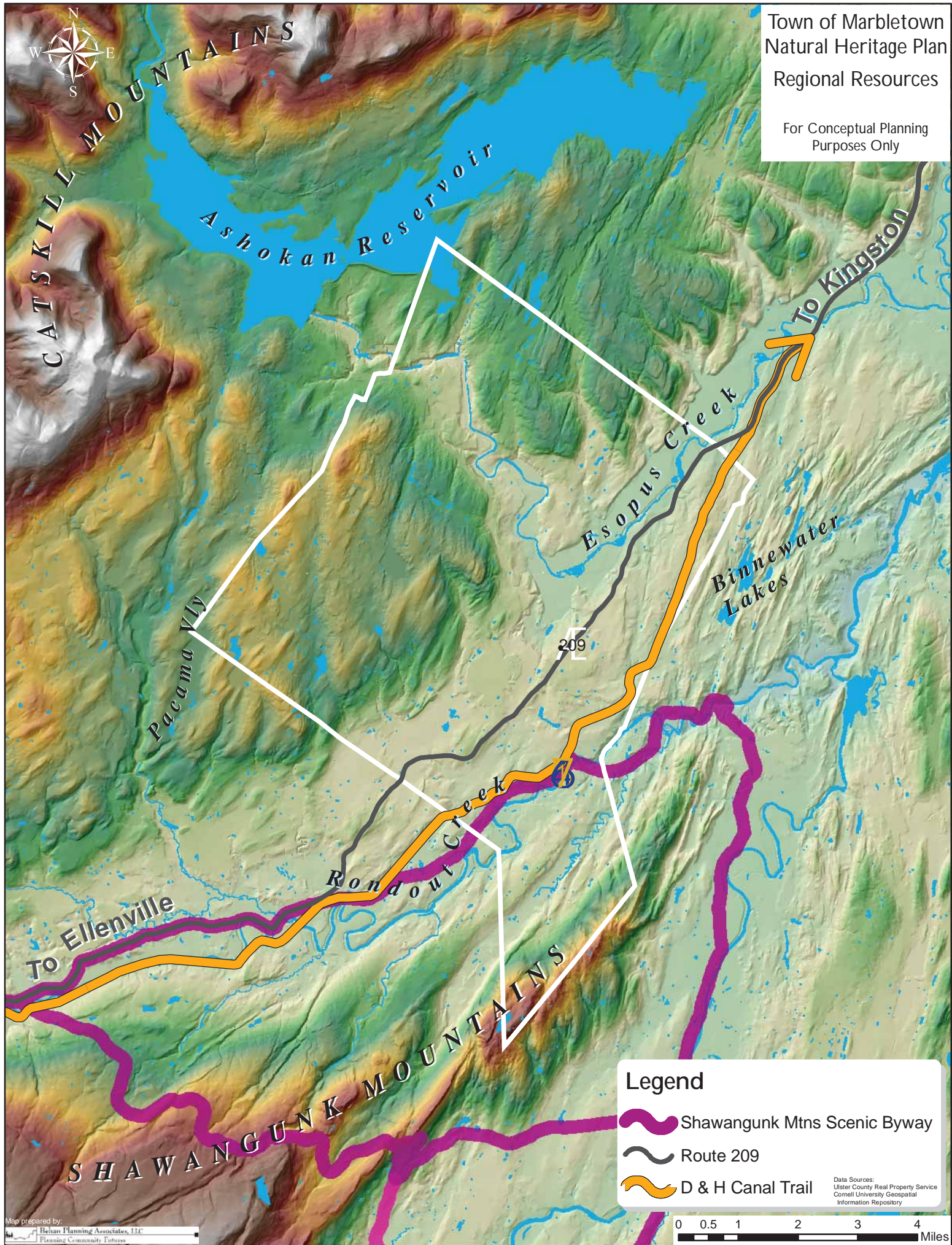
## Marbletown Natural Heritage Plan

- **A presentation to the Marbletown Town Board** was held on December 4, 2007 on the strategic action plan.
- **Quarterly advisory panel meetings were conducted** for committee and consultants to receive feedback at significant milestones or decision-making points (these meetings were open to the public).
- **Committee meetings** were held throughout the project and provided general updates on progress between committee and consultants (these meetings were open to the public).





*This page intentionally left blank*





## CHAPTER 2: RESOURCE ANALYSIS



*Sunrise over the Mountains. Photo by Sydney Blum.*

### Introduction

This chapter provides a brief overview of the town's natural heritage resources. A full inventory of Marbletown's natural heritage resources is provided in the *Marbletown Index on Natural Cultural and Historical Resources* (the index). This chapter does not restate the information within the index, but rather aims to synthesize major resource patterns and characteristics in the town. It also discusses some of the issues and opportunities that arise from this analysis.

### Regional Context

The Town of Marbletown is located near the geographic center of Ulster County, between the Catskill Mountains to the west, and the Shawangunk Mountains to the east. Two significant rivers pass through the town, the Esopus Creek in the north and east part of town and the Rondout Creek in the southern portion of town. The valleys of these rivers support many of the town's farms and agricultural lands.

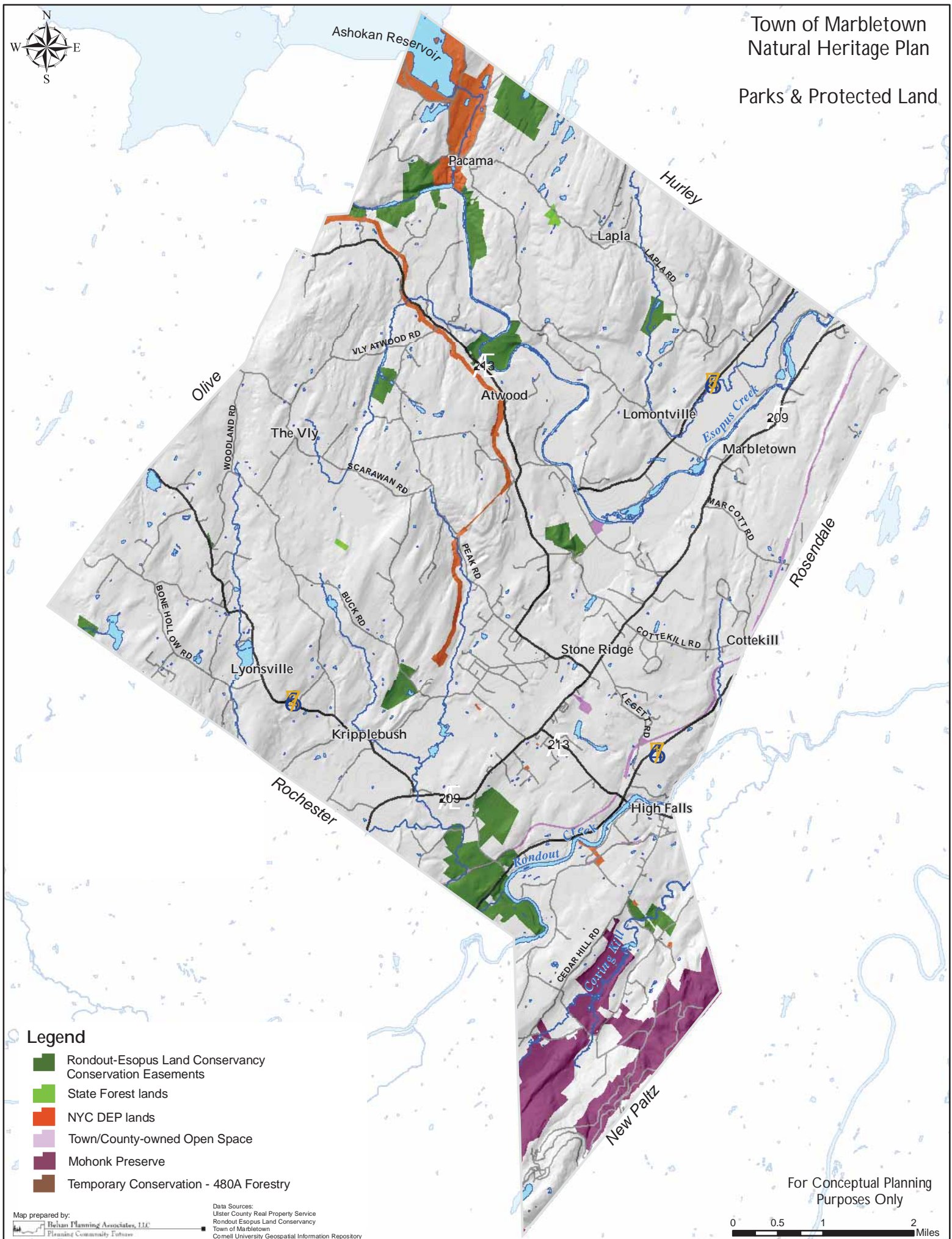
Marbletown can be reached from the New York State thruway in approximately 10 minutes via Route 209, which is a regional transportation corridor connecting the City of Kingston to the Village of Ellenville. This historic transportation corridor contains the remnants of the D&H Canal and Railroad. A portion of the Shawangunk Mountains Regional Scenic Byway passes through the Rondout Valley of Marbletown along County Route 1 / Lukas Turnpike. At the north end of town is the Ashokan Reservoir, part of the New York City water supply, and the Catskill Aqueduct passes through the center of town from the reservoir on its way to New York City.

*See the Regional Context map on the adjacent page.*



# Town of Marbletown Natural Heritage Plan

## Parks & Protected Land



### Existing Conservation Lands

#### ***Permanent Conservation:***

Approximately 10% of Marbletown's 35,700 acres is conserved through ownership or easements. The majority of these lands are clustered near the Ashokan Reservoir (the NYC watershed), the Shawangunk Mountains (Mohonk Preserve), and the Esopus and Rondout Creeks (Rondout-Esopus Land Conservancy holdings) as depicted in the map on the adjacent page. There are approximately 3,420 acres of protected land which are primarily privately owned, with approximately 1,200 acres owned by the Mohonk Preserve and 1,300 acres in conservation easements held by the Rondout-Esopus Land Conservancy. The remaining land of approximately 920 acres is in public ownership (such as those owned by the State Department of Environmental Conservation (DEC), New York City Department of Environmental Protection (DEP), and the Town of Marbletown).

For comparison, the neighboring Town of New Paltz currently has 12% of its acreage conserved, and Gardiner currently has 18% conserved (a large portion is state-owned lands of Minnewaska State Park and recent Awosting Reserve acquisition). All three towns share lands of the Mohonk Preserve.

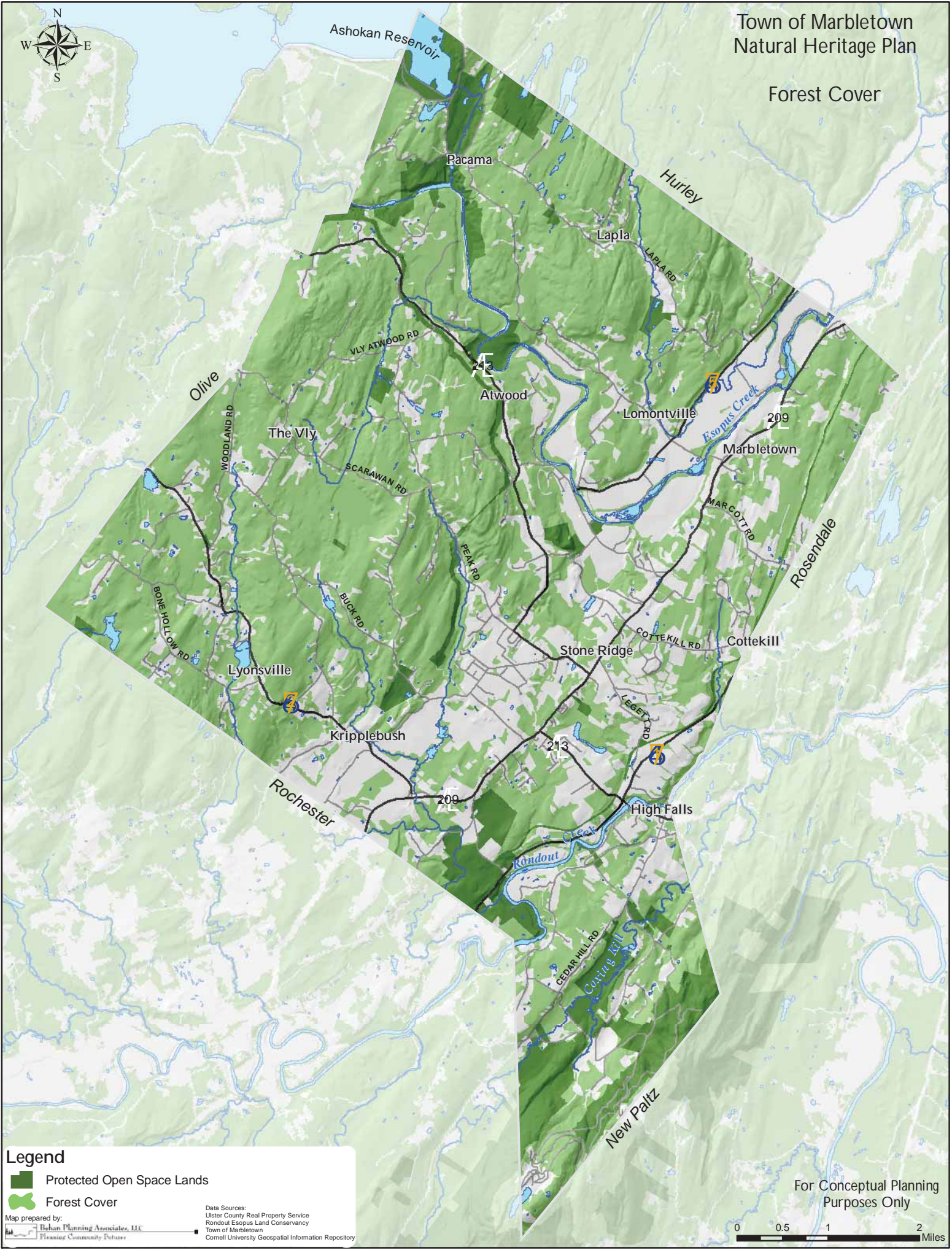
#### ***Tax Incentives and Tools that can Help Retain Farms and Forests***

There are approximately 150 acres of land in Marbletown enrolled in section 480(a) of the New York State Real Property Tax Law. Under Section 480(a) of the New York State Real Property Tax Law, landowners with 50+ contiguous acres of forest, all of which are dedicated to timber production, can apply for a partial exemption of town, county and school taxes. To receive this benefit, they must follow a 10-year forest management plan developed by a consulting forester and approved by DEC, meet DEC timber harvesting requirements and file an annual commitment with the local assessor. The forest management plan also needs to be updated every five years.

About 6,000 acres are enrolled in the state Agricultural Districts program (see farm map for location of agricultural districts), which provides qualifying agricultural landowners who apply for the agricultural assessment with a reduced property tax bill, as the land is assessed for its agricultural value (based on soil quality), rather than the fair market value, which is typically the non-farm development value. This provides some incentive for landowners to keep the property in active farmland. There is no obligation to stay in the program but there are penalties for early withdrawal.

*See the Conservation Lands map on the adjacent page.*





Town of Marbletown  
Natural Heritage Plan

Forest Cover

Legend

- Protected Open Space Lands
- Forest Cover

Map prepared by:  
Rahan Planning Associates, LLC  
Planning Community Partners

Data Sources:  
Ulster County Real Property Service  
Rondout Esopus Land Conservancy  
Town of Marbletown  
Cornell University Geospatial Information Repository

For Conceptual Planning  
Purposes Only

0 0.5 1 2 Miles



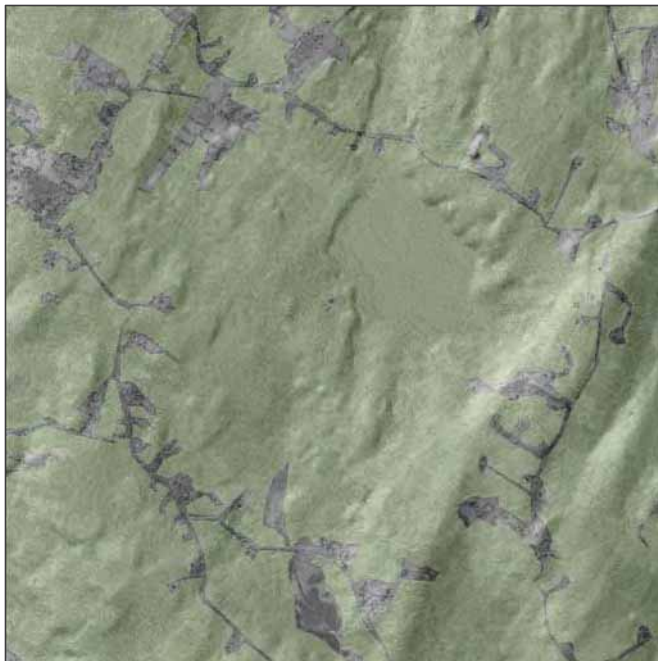
### Forest Lands

More than two-thirds of the Town of Marbletown is forested, with much of the forest occurring in contiguous blocks of 100 acres or more. The map on the facing page illustrates the expansive forest both within and surrounding the town. Some of the larger unfragmented forest blocks occur at the four corners of the town: the forest surrounding the Pacama Vly in the west, the forest bordering the Ashokan Reservoir in the north, the forest surrounding the Binnewater Lakes in the east, and the forest of the Shawangunk Ridge in the south.

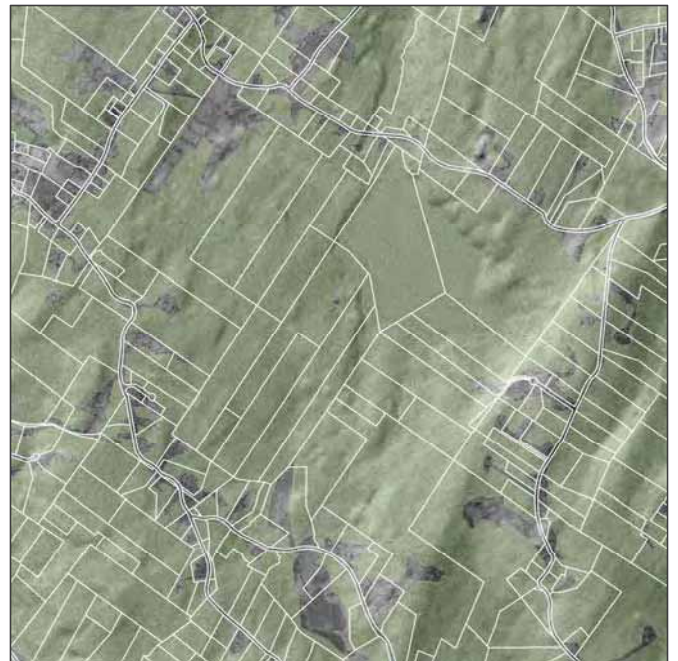
While the forests look expansive from the air, on paper they are divided into many smaller pieces, or parcels. There are over 2,000 parcels in the town with 50% or more forest cover. Many of these parcels are owned and managed by different entities, with different goals. Roads are also a major source of forest fragmentation. The forest cover map on the adjacent page includes a 25' buffer of the roads to show how roads can break up large blocks on forests.

Also of note, many of the town's forests occur on gradually-sloping lands that do not present major development constraints. Approximately 80% of the town's large forest areas (greater than 100 contiguous acres) are developable; that is they do not contain any major development constraints such as steep slopes, floodplains, mapped wetlands, or surface waters.

*See the Forest Cover map on the adjacent page.*



*Forest cover (in green) in the Vly Aquifer area showing a relatively large area of unfragmented forest between Buck and Scarawan Swamp Roads*

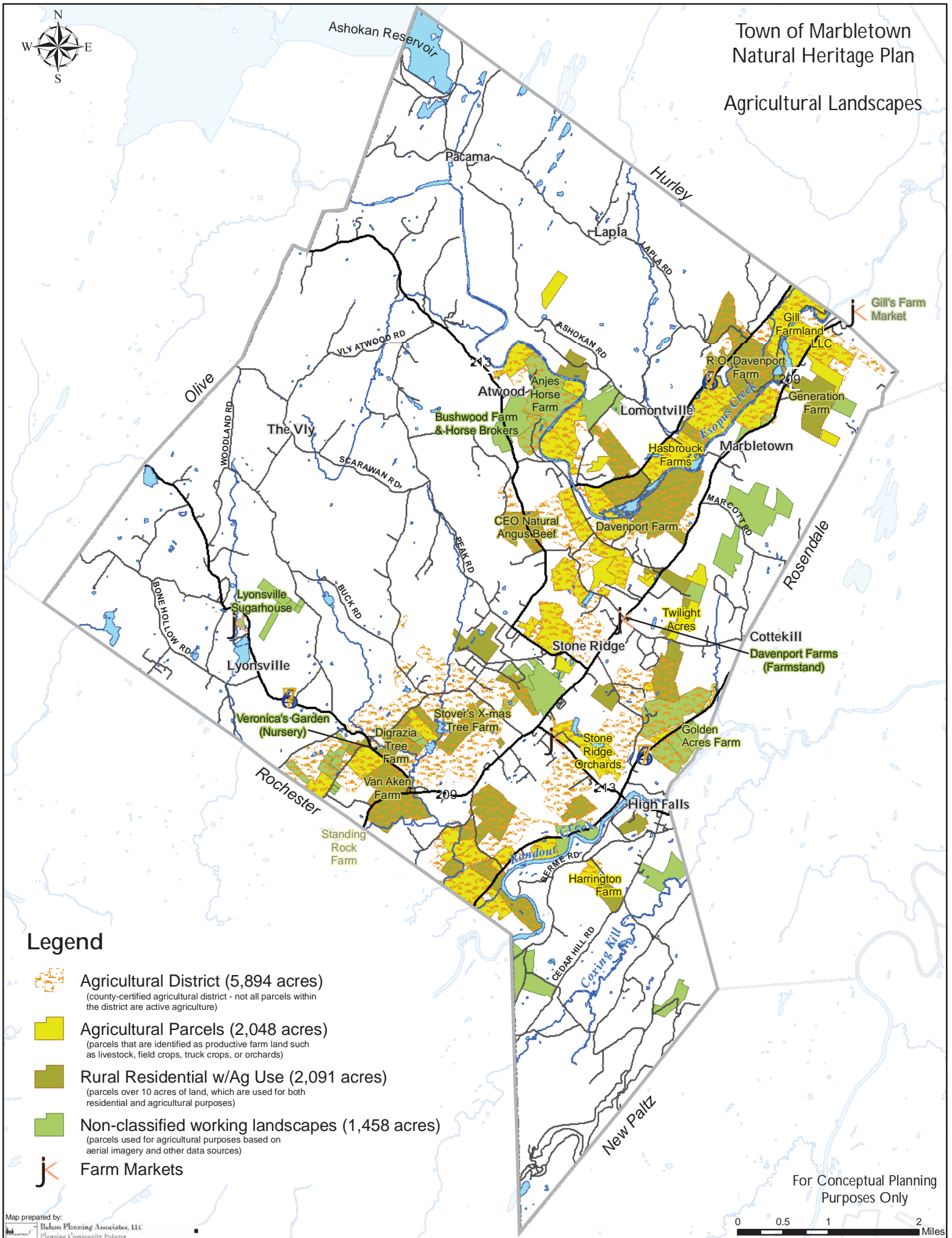


*The same area showing parcel boundaries on top of the large unfragmented forest.*



# Town of Marbletown Natural Heritage Plan

## Agricultural Landscapes





### Agricultural Resources

There are approximately 5,600 acres of farms, orchards and other agricultural lands currently in production in Marbletown, with individual parcels ranging from an acre and a half to over 300 acres. About half of these farms currently receive an agricultural tax exemption according to the town's assessment data. The agricultural district, however, covers nearly 6,000 acres of the town.

Marbletown's agricultural products include apples and other fruits, vegetables, beef, plants, flowers, trees and nursery products, dairy calves, maple syrup, and horse farms.

Marbletown's farms are located primarily in the Esopus and Rondout Valleys, with a large percentage being located along the Route 209

corridor. Some of the farms are located partly or wholly in the flood plain. However, most of the town's farm lands are free of development constraints. The location of the farms along Route 209, and the fact that approximately 70% of the active farmland is free of development constraints, makes these farm properties also ideal for development.

Over a third of Marbletown contains soil suitable for agriculture. According to soil data obtained from the United States Department of Agriculture's Natural Resource Conservation Service, there are 4,700 acres of prime farmland soil and an additional 7,300 acres of farmland soil of statewide importance located in Marbletown. Many of the prime farmland soils occur in the floodplains of the Rondout and Esopus Creeks, as well as in the area of the School Aquifer.

*See the Agricultural Resources map on the adjacent page.*



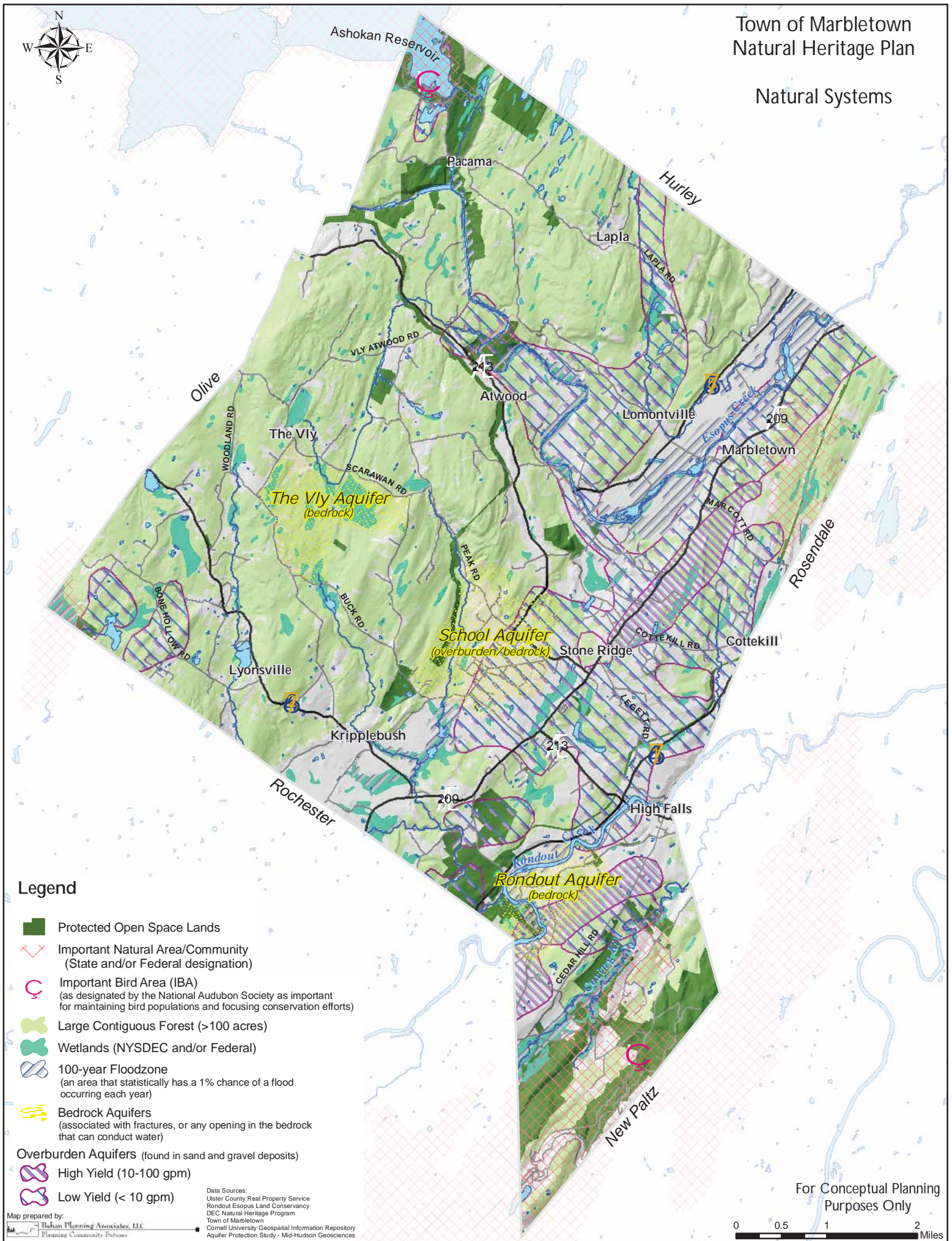
*Apple picking at one of Marbletown's Orchards*





# Town of Marbletown Natural Heritage Plan

## Natural Systems



### **Natural Systems**

Marbletown has a rich diversity of natural features, communities and species. The forests, wetlands, and streams all contribute to the vast natural landscape of the town. The shape and form of the landscape is closely tied to the underlying geology and the “recent” glacial modifications during the last glacial maximum approximately 12,000 – 20,000 years ago. The topography of Marbletown varies greatly, from the major river valleys which are less than 100 feet above mean sea level, to the Shawangunk Ridge near the location of Skytop Tower which is over 1,500 feet above sea level. Much of the north and western portion of the town are in the foothills of the Catskill Mountains and reach elevations of up to 1,200 feet.

### ***Natural Communities and Important Species***

According to the New York DEC Natural Heritage Program there are four significant ecosystems, 20 rare plant species (five sensitive), and eight rare animal species (two sensitive) located within the town. Natural areas are further described in Chapter 3.

### ***Water Resources***

There are numerous named surface water features (such as rivers, streams, ponds and lakes) throughout the town and approximately 2,100 acres of mapped wetlands in the town, with just over 1,000 acres being regulated by New York State DEC. The remaining mapped wetlands are part of the national wetland inventory and are regulated by the army corps of engineers. Numerous smaller wetlands, especially seasonal wetlands such as vernal pools, are not currently regulated.

In addition to the surface waters of Marbletown there are three large aquifers in the town: the Vly aquifer, School aquifer and Rondout aquifer. All of these aquifers have an overburden and a bedrock component. According to the 2005 Aquifer Protection Study, the Vly and School aquifers are the most critical in town for they have the ability to produce large volumes of water, but are also susceptible to contamination, especially the School aquifer. The School aquifer is well situated for use as a public water supply, as it is closer to the primary settlement areas of the town. The Vly aquifer, while further from the existing concentration of settlement reportedly has greater water supply potential. There are only 12 landowners that have property directly over the Vly aquifer, two of which are sportsmen’s clubs.

A significant water source exists in the northern portion of Marbletown in the Ashokan Reservoir, which supplies water to New York City as well as other settlement areas in the region, including the High Falls Water District, which includes High Falls and Rosendale. Just a small portion of the southwest portion of the Ashokan Reservoir and the New York City Watershed is located in Marbletown. The Catskill Aqueduct also traverses the town.

*See the Natural Systems map on the adjacent page.*







### Cultural & Recreational Systems

While this plan's focus is on natural heritage, the town's many historic and cultural resources cannot be ignored. Historic districts and stone houses add immense value to the town's character and visual quality. The former rail and canal lines tell the tales of the industrialization and settlement of the town to which much of the town's current shape owes itself. These cultural resources have economic benefits as they bring tourists to the area to visit the old canal-era houses and museum, travel through town on the rail-trail, or shop and eat in hamlets like High Falls.

Scenic resources are abundant in Marbletown and are primarily associated with the town's farms, streams, wetlands and valleys. Unique landforms such as the cliffs of Mohonk Preserve or the Hurley Flats provide visual interest with respect to scenic views. To many Marbletown residents, scenic views are part of their sense of place and community identity. In an informal survey completed by the Environmental Conservation Committee as part of this planning process, many scenic vistas were identified as significant to the townspeople. Below are some of the highest-priority vistas:

- Views of open farm lands along Rt. 209 throughout the town
- Views along Rt. 213 from High Falls to Rt. 209
- Views of the Shawangunk Ridge and the Catskills along Mohonk Rd.

In addition to the rail-trail other outdoor recreational opportunities exist such as participating in the sportsmen's clubs and other hunting opportunities throughout the town, fishing in the many creeks and lakes, hiking in the forests, visiting the Mohonk Mountain House and Mohonk Preserve, or playing a round of golf at Stone Dock Golf Course. Many people are attracted to the region for its wide range of natural and cultural resources.



*Depuy Canal House*

*See the Cultural & Recreation Systems map on the adjacent page.*

### Synthesis of Resource Analysis and Community Input

The Marbletown community has a deep sense of place that is rooted in its natural heritage. Experiencing and utilizing the natural resources is a way of life for the community. Whether it is working the lands (such as farms and forests) or living among the forests and lakes, the natural resources are a major attraction, a source of income and a primary reason for living here. The community's appreciation for their natural heritage is not without justification, for these resources – the Rondout and Esopus creeks and valleys, the Ashokan Reservoir, the Shawangunk and Catskill Mountains – are significant not only locally, but regionally.

Natural heritage is everywhere. Between the mountains and valleys there are finer-grained resources such as hemlock stands, hardwood swamps, wet meadows, hedgerows, stone walls, cliffs, gorges, springs, ponds and waterfalls. There are few places in the town without significant natural heritage.

Forests, which cover about 70% of the town, are a primary natural heritage resource. These forests provide an opportunity for recreation as well as forest products. The forests are not as visible as the open farmlands that surround the town's major population and transportation networks (Routes 209 and 213), but their significance as a resource should not be overlooked. Maintaining the health of the town's forest lands provides economic benefits and environmental services to the entire community. This plan places emphasis on forest lands because they are a significant resource in the town and because there are limited tools and solutions available for their preservation.



*Views along Route 209*

There are simply not enough funds and tools available to sufficiently preserve the abundant natural heritage in Marbletown without private landowner involvement. The town's fiscal capacity to conserve lands, even if supplemented with existing state and federal grants, is limited. The town has taken many steps towards advancing conservation efforts, including the 2006 open space bond, the adoption of conservation subdivision regulations, and many active efforts to fund research, outreach, planning (including this plan), and implementation. However, these efforts alone will not sufficiently preserve the town's abundant natural heritage.

## Marbletown Natural Heritage Plan

Preserving natural heritage in Marbletown will require a multi-pronged approach that employs many solutions and partners. This approach will not place all of the responsibility for conservation on those that own the land, but rather will seek to balance the costs and benefits of conservation throughout the community. It will seek ways to provide benefits for landowners who continue to serve as good stewards of the town's natural heritage.

Balancing conservation of open space with appropriate settlement patterns is a sustainable economic development strategy that will benefit the entire town. The need to provide jobs for young people; and affordable housing for retirees, workforce members, and those on fixed incomes is integrally connected with the town's fiscal environment as well as its future settlement patterns. The landscape itself, if managed sustainably and creatively, can also be a source of economic development for the community.

In Marbletown, the forests, open lands, and natural resources, are mostly privately owned. The landowners are charged with maintaining the town's natural heritage. Many landowners have been stewards of the town's lands and resources for generations and contain much of the institutional knowledge of the town's plant and animal species, and other natural features.

Larger parcels of lands are often considered by residents to be community "open space," even when they are privately owned. Community members often become attached to these private lands and the benefits and vistas they provide. When development or change is proposed for these lands, the community often becomes concerned.

However, change is inevitable in communities. Property values in the region (and in the state as a whole) are leading to increasingly unaffordable real property taxes, and landowners have limited options. Landowners' properties are often considered as part of their retirement package, their 401K. They have fiduciary responsibilities to their families, spouses, and others that may require them to "cash in" on the land's equity by subdividing, developing, or selling their land. Once this happens, often at a transition time (such as retirement), it is typically too late to do anything differently. The resulting development project can divide the community and at that point, it is often too late to have a discussion about conservation alternatives.

Overcoming this challenge is in some ways beyond the town's capacity. It will require economic changes in the way our regions, states, and nations value lands and resources. However, there are ways for the town to be proactive in developing solutions that help landowners preserve lands, if they choose to do so. These options will be discussed further in this plan.

*This page intentionally left blank*

## CHAPTER 3: NATURAL HERITAGE VISION

### Introduction

The vision map on the following page illustrates an interconnected system of natural heritage in Marbletown. Within this system, there are three major categories of natural heritage - **regional forests, aquifers, and core farm areas**. Within each category there are distinct areas of town that stand out as significant. For example, in addition to housing the town's largest area of working farms, the Esopus Creek Core Farm Area is significant because it provides floodplain protection, helps to preserve rare plant and animal species, and contributes towards scenic views along Routes 209 and 5. There are also many finer-grained layers of natural heritage – in particular the supporting forests and streams – that contribute significantly to the town's natural heritage.

The natural heritage vision is a coarse vision that was developed at the scale of the whole town, with consideration for regional connections. The natural heritage areas, such as the Pacama Vly and the Esopus Creek, are embedded in a much larger system of natural resources, all of which are important to the town's ecological and economic health. All of the town's forests and streams serve as the supporting framework, the skeleton, for these natural heritage areas. A closer look into any of the priority areas or supporting forests and streams would reveal finer-grained resources of significance, such as wetlands and swamps, hemlock stands, hilltops and ridges, vernal pools, seeps, springs, and limestone cliffs. The health of the supporting resources – the town's forests and waters, and the finer-grained resources within them, are both important to the town's natural heritage.

The natural heritage vision map identifies a network of resources in Marbletown that can be conserved, managed, and restored through many different tools. The implementation of conservation projects is voluntary and the recommendations in this plan are focused on developing incentives that will help landowners work towards our natural heritage goals.

In particular, the vision map:

- **Provides a snapshot of the town's natural heritage, based on current data and our best understanding of the town's resources.** It helps to identify existing conditions and areas that should be further studied. (ECC, town board, landowners, conservation organizations and other partners can consult the map for this purpose).
- **Places site-specific actions (such as development projects) into a larger context of natural heritage goals.** For example, as lands are set aside within conservation subdivisions, the map can help to coordinate larger networks of lands that meet both community and ecological goals. (landowners, developers and planning board can consult the map for this purpose).

## Marbletown Natural Heritage Plan

- **Serves as a first-filter blueprint for future investment in natural heritage by the town and other partners.** For example, the vision map can help to identify priorities for purchase of development rights or open space acquisition projects for the town, working collaboratively with landowners and county, state, federal, and private partners such as nonprofit organizations. Having this plan makes the town's applications for grant funds more compelling. (landowners, ECC, and town board can consult the map for this purpose).
- **Provides a blueprint for future land use and zoning actions that help to balance development with protection of farmlands and natural heritage.** For example, the town could provide additional zoning incentives to achieve protection of important natural heritage areas through the transfer of density, as is recommended for preservation of the town's aquifers. This type of incentive would require additional planning with the community to determine areas for focused development. (planning and zoning advisory committee, town board and developers can consult the map for this purpose).

In summary, the vision map can serve as a reference for conservation and development actions and as a first filter for prioritization of town investment in open space. As this plan becomes implemented, the town will have several tools at its disposal to partner with landowners in conservation efforts. Resources identified on the vision map (such as forest lands and farms located in the core farm areas) would be prioritized by the town, working on a voluntary basis with landowners. The town would also most likely need to conduct a second-filter analysis of priorities that would include real-world factors that enter into decision-making, such as:

- Landowner needs and goals
- Criteria of available grant funds or other funding sources
- Criteria or requirements of project partners (such as nonprofits or other public agencies)
- Public support for the project
- The public costs and benefits of the project
- Geographic distribution of projects
- The distribution of projects within resource categories (forests, aquifers, and farms)



# Marbletown Natural Heritage Vision Map

This vision map illustrates an interconnected system of natural heritage in Marbletown. Within this system, there are three major categories of natural heritage - regional forests, aquifers, and core farm areas. There are also many finer-grained layers of natural heritage – in particular the supporting forests and streams – that contribute significantly to the town’s natural heritage.

## Streams & Waterways



Rondout Creek at High Falls

**Goal:**  
Conserve riparian buffers along streams to maintain water quality, provide wildlife habitat and connectivity, and to prevent flood damage.

**Conservation Milestone:**  
500 acres (this acreage may overlap with lands in other natural heritage areas)

## Core Farm Areas



Esopus Creek Core Farm Area

**Priority Areas:**  
Esopus Creek  
Rondout Creek

**Conservation Milestone:**  
750 acres

**Goal:**  
Retain and preserve core farm lands.

## Map Legend

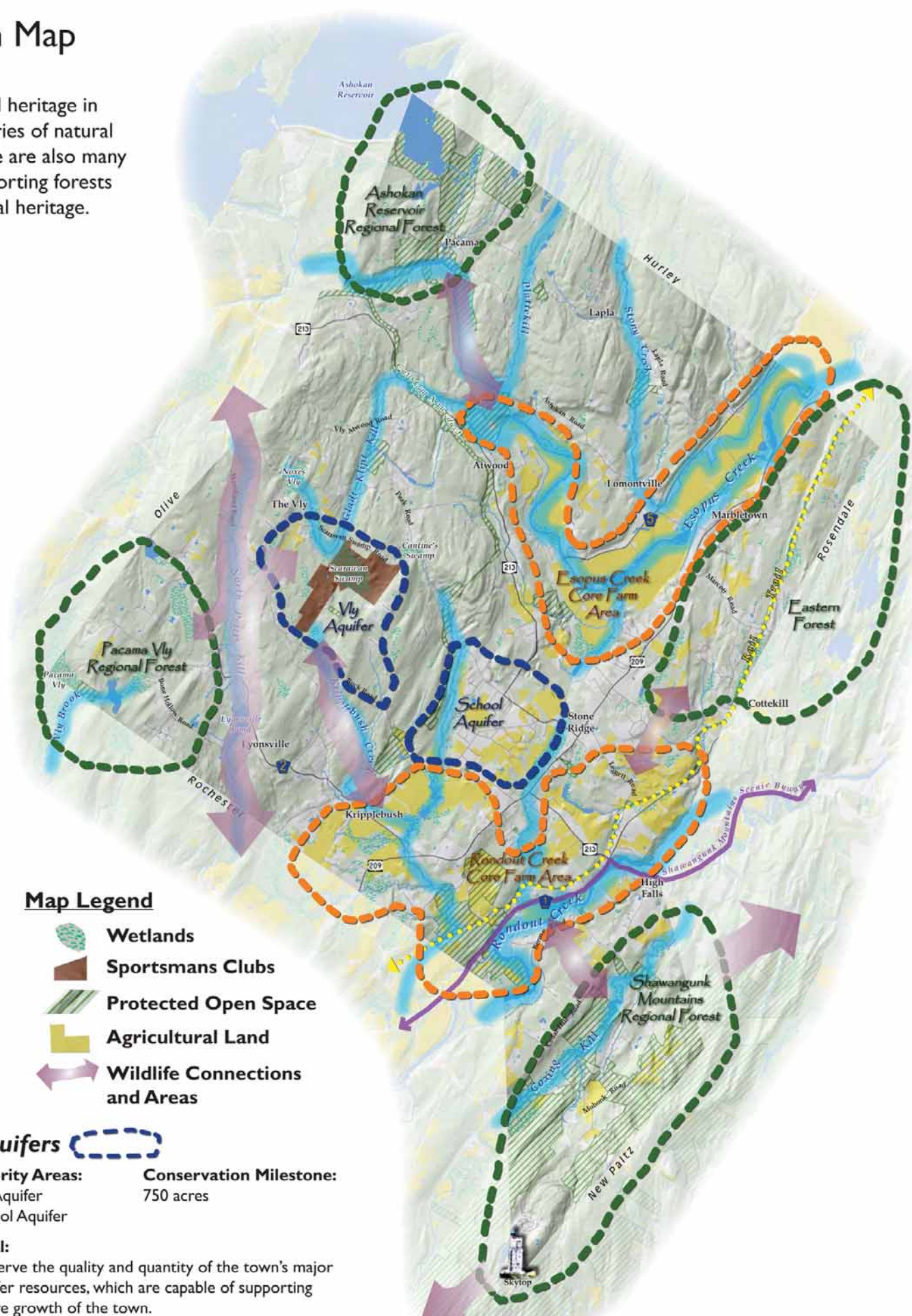
- Wetlands
- Sportsmans Clubs
- Protected Open Space
- Agricultural Land
- Wildlife Connections and Areas

## Aquifers

**Priority Areas:**  
Vly Aquifer  
School Aquifer

**Conservation Milestone:**  
750 acres

**Goal:**  
Preserve the quality and quantity of the town’s major aquifer resources, which are capable of supporting future growth of the town.



## Regional Forests



Pacama Vly Regional Forest

**Priority Areas:**  
Ashokan Reservoir  
Shawangunk Mountains  
Pacama Vly  
Eastern Forest

**Conservation Milestone:**  
1,500 acres

**Goal:**  
Conserve a network of high-quality lands within regional forests.

## Supporting Forests



One of the many supporting forests in Marbletown

**Goal:**  
Promote conservation of significant supporting forest lands, balanced with landscape-friendly uses.

**Conservation Milestone:**  
2,000 acres enrolled in a term easement program

## Marbletown Natural Heritage Plan

Sponsored by the Town of Marbletown and the Marbletown Environmental Conservation Commission (ECC)

Support for this project was provided through New York State Department of Environmental Conservation’s Hudson River Estuary Grants Program and the State Department of State for Enhanced Master Planning and Zoning Incentive Award Program.

For Conceptual Planning Purposes Only





## **A Summary of the Natural Heritage Vision**

### **Regional Forests**

Conserve a network of high-quality lands within regional forests.

### **Aquifers**

Preserve the quality and quantity of the town's major aquifer resources, which are capable of supporting future growth of the town.

### **Farms**

Retain and preserve core farmlands.

### **Supporting Forests**

Promote conservation of significant supporting forest lands, balanced with landscape-friendly uses.

### **Streams**

Conserve riparian buffers along streams to maintain water quality, provide wildlife habitat and connectivity, and prevent flood damage.



*Ashokan Reservoir*

### Regional Forests

Regional forest systems house exceptional biodiversity and natural communities, such as the red maple tamarack peat swamp of the Pacama Vly and the globally-significant forests of the Shawangunk Mountains. They also protect drinking waters and provide recreational benefits to town residents.

All of the town's forests play an important role in the town's natural heritage. However, there are several large, regional forests that have been prioritized in this plan. These large, unfragmented forests provide habitat for wildlife, as well as important water resource benefits. They include tributaries and headwaters of the town's major streams. They also include significant natural communities and biodiversity. Regional forests are summarized on the following pages. Other forested areas in the town are also important to the natural heritage vision and are discussed later in this chapter.

The major threat to forest lands in Marbletown is habitat fragmentation. Many forest lands are being broken up, or subdivided, for rural estate homes and small subdivisions of three or four homes. These homes, and the roads and driveways they require, fragment large areas of forests or wetlands into smaller pieces. This phenomenon called habitat fragmentation is a threat locally, as well as nationally, to our forest lands. Habitat fragmentation makes it harder for wildlife to mate, disperse, find food, and do other things that are critical for long-term survival.

Habitat generalists, such as the white-tailed deer, do not rely on any one condition or resource to survive. These animals are able to adapt positively to fragmented landscapes. As development

### REGIONAL FORESTS SUMMARY

#### Priority Areas:

Ashokan Reservoir  
Shawangunk Mountains  
Pacama Vly  
Eastern Forest

#### Goal:

Conserve a network of high-quality lands within regional forests.

#### Milestone:

Conserve 1,500 acres within regional forests in the next 10 years.

#### Major Recommendations:

- Preserve forest lands through conservation easement, tax incentives, purchase, and other cooperative partnerships with landowners.
- Work with landowners to create networks of recreation lands, such as hunting areas, where appropriate. Research potential tax incentives for landowners who open their land for appropriate recreational use.
- Develop a brochure or outreach tool that provides information on conservation and management tools that are available for forest landowners.
- Create best management practices and best development practices for landowners and developers within forest lands.
- Research potential local tax incentives for forest land owners who commit to a term easement program that is based on principles of sustainable land management.



## Marbletown Natural Heritage Plan

increases, their predators (including hunters) become scarce. Deer over-grazing of young trees and shoots reduces forest regeneration, which is part of the natural succession process important for forest health. Regeneration also helps to make the forest more economically viable as a timber source. Recent studies also indicate that forest fragmentation may play a role in the proliferation of Lyme disease. A study published in the February 2003 journal *Conservation Biology* reported that “patchy” forests may have more disease-carrying ticks than larger forest blocks, according to research conducted in Dutchess County.

Also of note, black bear populations have increased in numbers in the past century due to the preservation of major forest areas such as the Catskill and Adirondack Parks, as well as to the abandonment of farms and resulting regeneration of forests. Populations of black bears in New York State have also expanded their range from the forest interiors to forested areas which were once farmlands. This increase in black bear numbers and range has increased the chances of human-bear interactions, especially as this new habitat range becomes fragmented within the town, and is becoming a growing problem in the region.

In Marbletown, land parcelization also poses major threats to the health of the forest. When a parcel of land owned by one entity is broken up or subdivided into smaller parcels that are sold to several owners these smaller parcels are subject to differing management and stewardship practices. Some landowners may clear-cut land for timber, others may keep it untouched. The management practices follow arbitrary boundaries of parcel lines, and do not necessarily address whole forest health.

Without planning, these different ownership patterns may by nature result in fragmented forest lands and systems that cannot perform environmental and economic services to their highest capacity. For example, new roads will fragment large forested areas or alter stream crossings, changing drainage patterns or creating barriers for fish dispersal. Likewise, owners apply different land management or timber harvesting techniques. Planning for the forest as a whole is the best way to sustain the forest’s environmental and economic productivity.

Infestation by pests, and spread of non-native and invasive species also pose a threat to the ecological and economic benefits of the forests. While the full extent of such species in the town is not known, invasive species have been documented in Marbletown. The 2007 Draft *Marbletown Biodiversity Assessment Training (BAT) Report* notes that “invasive plant species were found in most of the site visits conducted.” Early detection and management or eradication of invasive species and pests is the best way to reduce the damage that they can cause on our forests.

The town’s forests are vast but the town’s fiscal and organizational capacity for conservation is not. Efforts to conserve forests should balance conservation easements and other permanent conservation tools with other incentives that help landowners continue to be good stewards. Landowner stewardship of forest lands is important in maintaining healthy forests for future generations.

## Marbletown Natural Heritage Plan

Within the regional forest areas, permanent conservation efforts should be focused on large parcels, especially those that help to retain unfragmented interior forest; connect existing protected areas; or serve as wildlife corridors (such as mountain passes, valleys and areas where wildlife have been observed to travel). Small parcels with exceptional diversity, or those that serve as key gaps should also be considered.

Each of the four regional forests is discussed as follows:

### ***Ashokan Reservoir Regional Forest***

The Ashokan Reservoir is part of New York City's water supply system. The reservoir and much of the lands that surround it are owned by the New York City Department of Environmental Protection (DEP). There are approximately 400 acres of forested protected lands surrounding the Ashokan Reservoir in Marbletown.

The unfragmented forests surrounding the Ashokan Reservoir provide habitat for a diversity of at-risk breeding birds, including both resident and migrating species. The reservoir provides habitat for nesting and wintering bald eagles. The bald eagle is threatened in New York State and was recently de-listed from the federal list of endangered species (where it was listed as threatened). The bald eagle has been spotted elsewhere in town.

The Ashokan Reservoir is identified as an "Important Bird Area" by the National Audubon Society. The reservoir and its "man-made" dams also have a cultural and scenic value, particularly along Route 28A in the town, which follows the southern edge of the reservoir. Lands surrounding the Ashokan Reservoir also offer public access opportunities including fishing, hiking, and hunting.



*Ashokan Reservoir*

## Marbletown Natural Heritage Plan

In addition to providing habitat for the bald eagle, the Ashokan Reservoir area supports a rare dragonfly species, the spatterdock darner, the northern slimy salamander, and the northern spring peeper.

The Ashokan Reservoir and adjacent watershed lands of New York City are identified as a priority in the *New York State Open Space Conservation Plan*. The town should continue to work with state and DEP partners towards preservation of the watershed and lands surrounding the reservoir, which provide substantial benefits to residents of New York City as well as to local communities.

### ***Pacama Vly Regional Forest***

The Pacama Vly is a conservation resource of local, regional and state significance, located in the southwest corner of Marbletown, and extending into the Towns of Olive and Rochester. This is a very unique and special area that is host to several rare natural communities, plants, and dragonfly species. The area surrounding the Pacama Vly is mostly undeveloped with very little fragmentation in the way of roads. One small 20-acre parcel adjacent to the Pacama Vly is protected with a conservation easement in Marbletown. This parcel is adjacent to an approximately 50-acre state owned parcel in Rochester.

The Pacama Vly area contains two types of unique, high-quality forested wetland communities: red maple tamarack peat swamp and hemlock northern hardwood swamp. The wetlands are surrounded by an unfragmented woodland system that connects the Towns of Marbletown, Olive and Rochester. The area surrounding the Pacama Vly also includes several major wetlands associated with the Vly Brook, connecting eastward to Roosa Pond and beyond.



*Pacama Vly*

The Pacama Vly supports several rare vascular and non-vascular plants, including an endangered fern species. It also supports two rare dragonfly species. Maintenance of the natural hydrology and water quality of the wetlands, and protection of forested areas surrounding the Vly are important to the long-term success of these species.



## Marbletown Natural Heritage Plan

This area is identified as a priority in the *New York State Open Space Conservation Plan* as the Great Pacama Vly (part of the Great Rondout Wetlands). The Pacama Vly is cited in the plan as "...the only site in the Catskills where black spruce is known to be found..." and as harboring "rare species and communities found nowhere else in the state." The state open space plan recommends expanding the current "50-acre parcel of detached State Forest Preserve to include the whole wetland and any buffer areas."

The Pacama Vly, and other wetlands in this forest matrix are protected through state DEC regulations which require a 100-foot buffer of state designated wetlands (which are over 12.4 acres). Smaller wetlands and vernal pools are not protected through state regulations. Local conservation subdivision regulations can also help to preserve wetlands through the conservation analysis and design process. However, the important habitat of the Pacama Vly extends beyond the wetlands themselves and into the adjacent uplands and surrounding forest matrix. The best way to preserve the exceptional resources of the Pacama Vly is to work collectively with the landowners and neighboring towns towards protecting forested lands adjacent to the Pacama Vly to expand the 100-foot buffer with a large area of contiguous forest.

Because much of the Pacama Vly lies in adjacent towns of Rochester and Olive, this resource presents an opportunity for an intermunicipal compact or other type of cooperative effort towards the preservation of this resource.

### ***Eastern Forest***

This unfragmented forest in the northeastern part of Marbletown extends into Rosendale's Binnewater Lakes area. It is predominantly a hemlock-northern hardwood forest, with many wetlands, lakes and ponds that support rare insect species. There are no lands



permanently protected in this area.

*Eastern Forest*

Within this forest matrix, it is important to maintain the hydrology of the lakes, ponds and wetlands as even small changes in sediment load, dissolved oxygen levels, or pesticides content can have an effect on the insect species that depend on the waters, which has results that filter up the entire food chain. The forest habitat adjacent to ponds and lakes is important because it provides habitat for recently emerged adult insects to mature.

## Marbletown Natural Heritage Plan

The rail-trail bisects this area and serves as an important recreational connection. Opportunities to preserve lands adjacent to the rail-trail, especially those with on-site wetlands and ponds, should be explored.

### ***Shawangunk Mountains***

At Lake Mohonk, the Shawangunk Mountains rise to 1,500 feet, the highest point in the town. Most of the lands associated with the Shawangunk Mountains in Marbletown are part of the Mohonk Preserve and Mohonk Mountain House. About 1,300 acres of the Shawangunk Mountains are permanently protected in Marbletown.



*Shawangunk Mountains, looking southwest from Marbletown*

The forests associated with the Shawangunk Mountains are of global significance for their size and quality (greater than 15,000 acres). Important natural communities associated with the Shawangunk Mountains in Marbletown include the Chestnut-Oak Forest and the Hemlock-Northern Hardwood Forest. The Hemlock-Northern Hardwood Forest roughly follows the Coxing Kill corridor and continues south into Rochester, whereas the Chestnut-Oak forest is located higher up the mountains, in the vicinity of the Mohonk Preserve. The Shawangunk Mountains are important for their biodiversity. They are a designated Important Bird Area (IBA) and contain a very significant number of endangered, threatened and rare species (see Appendix B for a listing).

In addition to biodiversity, the Shawangunk Mountains are known for their recreational opportunities, as well as their contribution to the scenic quality of the town and region, and the tourism economy. Many of the businesses in High Falls and Stone Ridge cater to visitors of the Shawangunk Mountains and benefit from the reciprocal relationship between the mountains and valleys.

Conservation efforts in the Shawangunk Mountains of Marbletown should be focused on preserving priority biodiversity lands on the ridge. Major connections between the mountains and the Rondout Valley should also be developed. The Green Assets maps developed by the Shawangunk Mountains Biodiversity Partnership provide more guidance into priority conservation lands and connections. These maps should be consulted for identifying priorities in this area.



### Aquifers

#### Introduction

The town and region are blessed with significant rain, snowfall and a robust system of surface water and groundwater resources. Marbletown has several options to consider toward the use of these resources, including potential access to the Catskill Aqueduct. As the town grows, the wise use and management of these natural resources will become increasingly important. Reasonable use of these resources will be based on the environmental and economic principal of sustainability.

Currently, most of Marbletown's residents get their water from the ground. Aquifers are located throughout town, and many are associated with the major river corridors – the Esopus and Rondout Creeks. However, according to the *Marbletown Aquifer Protection Study*, there are three aquifers in the town that have the potential to serve as a major public water supply, especially if a new hamlet or growth area is desired. These aquifers are the Vly Aquifer, located in the western part of town; the School Aquifer, which is centrally located in the town, within proximity of Route 209; and the Rondout Creek Aquifer. The Vly and School aquifers are discussed in this portion of the report, and the Rondout Creek Aquifer is discussed in the Rondout Creek Core Farm Area section (page 38).

Aquifer protection is critical to the town's future growth potential, as well as to maintaining the health of

#### AQUIFERS SUMMARY

##### Priorities:

Vly Aquifer  
School Aquifer

##### Goal for Aquifers:

Preserve the quality and quantity of the town's major aquifer resources, which are capable of supporting future growth of the town.

##### Conservation Milestone:

Conserve 750 acres of aquifer lands in the next 10 years.

##### Major Recommendations:

- Prioritize conservation of lands within aquifers in order for new growth and economic development to occur in the town. New development should have a guaranteed source of water that does not impact existing residents' water supply or quality.
- Link conservation of aquifers and water resources with new growth, through cooperative planning with landowners or by incentive zoning regulations that allow landowners or developers to increase density consistent with the rural character of the town in designated growth areas in exchange for preservation of aquifer lands.
- Continue to advance efforts of aquifer protection with the New York Rural Watershed Association.
- Create best practices for development and land management within aquifers.
- Further study/evaluate the Karst Aquifer resources of Marbletown to inform conservation and development actions.



## Marbletown Natural Heritage Plan

drinking waters for existing residents. Development practices can be a major threat to aquifers and water quality. Development typically leads to more paved, impervious surfaces. Impervious surfaces reduce infiltration of water into the aquifer and increase the amount of contaminants such as fertilizers from lawns and oils from automobiles, reaching the aquifer. Aquifers can be protected through conservation efforts as well as through development practices that reduce the impacts to groundwater quality.

According to the *New York State Open Space Conservation Plan*, in which the Karst Aquifer Region is a priority, the karst aquifer “follows portions of Saugerties, Kingston, Esopus, Marbletown, Rosendale, Rochester, and Ellenville, continuously outcropping just northwest and along the flanks of the Shawangunk Mountain Ridge.” The karst aquifer is in the southeast portion of Marbletown and covers a large area.

In general, karst terrain is characterized by caves, sinkholes and underground streams and lakes which can provide abundant sources of water. Karst aquifer systems can be highly interconnected and are also highly subject to contamination. Pollutants, such as agricultural or storm water runoff, can rapidly enter the karst system and do not have much opportunity for filtration before entering the groundwater, and before flowing into surface waters. For this reason, it is important to identify and protect the recharge areas of karst aquifer systems. Karst aquifer systems and associated lands are also rich in biological and geological resources and provide recreational benefits.

In order to aid in prioritization of conservation and development areas, further evaluation on the karst aquifer by professionals is necessary. This evaluation is also needed in order to identify and preserve potential significant groundwater reserves associated with the karst aquifer.

### ***The Vly Aquifer***

Located in the foothills of the Catskills, the Vly Aquifer is a large, forested area with water resources that are important to the town. The area of the Vly Aquifer is roughly outlined on the north by Scarawan Road, on the south by Buck Road, on the east by Chestnut Hill Road, and on the west by Mill Road.

The Vly Aquifer contains some of the most prolific groundwater resources in Marbletown. According to the 2005 *Aquifer Protection Study* completed for the town, it is common for this bedrock aquifer to produce yields of 25-50 gallons per minute (gpm), and it could be developed as a municipal water supply for surrounding development. The study recommends this area as a high priority for town conservation efforts.

The Vly Aquifer area is currently one of the town’s largest forested areas with very little fragmentation by roads, houses or other development features. It contains a “core” forest area of approximately 1,150 acres of woodlands and wetlands. It is

## Marbletown Natural Heritage Plan

dominated by evergreen forest species such as eastern hemlock and white pine. Several larger hardwood swamps are located within or near the Vly Aquifer area, including Scarawan Swamp, Molly Swamp, and Cantine's Swamp.

Also within this area are approximately 300 acres of lands owned by the Marbletown Sportsmen's Club and the Vly Sportsmen's Club. In general, the parcels in this area are larger and of continuous ownership, when compared to other parts of town. Efforts to preserve large contiguous parcels in this area should be made. Cooperative agreements with sportsmen's clubs and landowners towards conservation, in exchange for tax incentives or other desired benefits, would benefit the entire town.

### ***School Aquifer***

According to the town's 2005 *Aquifer Protection Study*, the school aquifer (so named because the Marbletown Elementary School is in the vicinity) is an important water resource for Marbletown and could potentially serve as a municipal water source for Stone Ridge should the town desire to grow the hamlet. The aquifer has potential for high yield in the unconsolidated sediments, as well as possibly less yield in the bedrock. However, this aquifer is highly subject to contamination (the sand and gravel is permeable) and should be protected. Kripplebush Creek and wetlands associated with the creek also bisect the School Aquifer.

Efforts to preserve lands in the School Aquifer should be made. Currently, the only lands protected in this area are those owned by NYC DEP associated with the Catskill Aqueduct (~ 35 acres). The recommendation in this plan is to link preservation of lands within the School (and Vly) aquifer to future development. This could be done in a number of ways. It could be done through revisions to zoning which identify desired development areas and provide incentives for landowners to increase density in these areas in exchange for conservation of lands (or contribution towards this effort) in the aquifers. It could also be done through a cooperative planning effort with key landowners and developers. Permissible levels of density should be kept consistent with the rural character of the town.

There are several farms in the School Aquifer which help to maintain the aquifer. Conservation of these farms in the School Aquifer should be prioritized. However, because this aquifer is highly susceptible to contamination, the town might want to work with these landowners to develop incentives for best management farm practices, which will provide a benefit for the community in terms of protecting a potential public water supply.



### Core Farm Areas

Core farm areas are large clusters of active farm lands with good agricultural soils, many of which are currently in the agricultural district. They also include overlapping resources such as riparian corridors, floodplains, aquifers, scenic vistas and wildlife habitats. Preservation of farmlands in these areas will also provide flood protection as well as the added benefits that the scenic and natural resources offer the town.

State and local trends all point to a decline in farm land acreage during the latter part of the 20th century. In Ulster County, the amount of land in farms has declined from 280,150 acres in 1940 to 83,300 acres in 2003, according to the USDA's National Agricultural Statistics Service. Likewise, the decline in the dairy industry has had a drastic effect on the landscape of Marbletown, the Hudson Valley, and Northeast. As quoted from the Center for Dairy Excellence, "the Northeast Region went from 27,620 dairy farms in 1995 to 19,660 in 2004, a reduction of nearly 8000 farms. New York and Pennsylvania had the largest decreases with 3100 and 2700 respectively." (source: <http://www.agriculture.state.pa.us/cde/cwp/view.asp?q=134634>)

*In the Hudson Valley, "there is a trend, as one farmer put it, from larger dairy farms to "horses, hay and houses." At the same time, there is an important counter-trend of farms being supported by direct sales to consumers, which increased in value by almost 70% - to \$15 million - from 1997 to 2002.*

*-State of Agriculture in the Hudson Valley,  
Glynwood Center*

In recent years, the trends in the Hudson Valley have shown some promise in the development of smaller farms with value-added and direct market approaches.





## Marbletown Natural Heritage Plan

There are two main core farm areas in Marbletown: Esopus Creek and Rondout Creek. Efforts to retain and preserve farmlands in Marbletown should be focused in these core areas, although there are some individual farms and resources outside of the core areas that are also important locally or regionally. The Open Space Institute (OSI) recently announced a campaign which focuses on farmland protection in the Wallkill and Rondout Valleys. OSI is currently working in Marbletown, Rochester, and Wawarsing to develop farmland protection projects, as well as in other areas of the Wallkill Valley.

While it is true that some of the lands within the core farmland and floodplain areas are located in areas that can not be developed (such as the floodplain), the vast majority of the town's farmlands (70%) could be developed under current zoning and land use regulations.

As noted in Chapter 1, the town's farms are extremely visible. Many are located along Route 209, Route 213 and Route 1 (The Shawangunk Mountains Scenic Byway) and provide the open foreground for landscape panoramas of the Shawangunks and Catskills. Many farms comprise significant historical landscape features in and of themselves. Development of these lands would have a significant impact on the scenic and rural character of the town. As noted in Chapter 1, many residents have noted that need for preservation of farms and there is a sense of public ownership of these lands, which are in fact privately owned.

### Core Farm Areas Summary

#### Priorities:

Esopus Creek  
Rondout Creek

#### Goal:

Retain and preserve core farm lands.

#### Milestone:

Conserve 750 acres within farmland and floodplain core areas in the next 10 years.

#### Recommendations:

- Conserve priority farms through purchase of development rights (PDR) working with willing landowners, and partnering with state and land conservation organizations to leverage funds and resources. Partner with adjacent towns of Hurley and Rochester, towards these efforts.
- Support and promote regional efforts for agri-business development, such as those being developed by the Rondout Valley Growers Association.
- Research potential tax incentives for small farms and other creative agricultural ventures that may not qualify for state agricultural exemption.



## Marbletown Natural Heritage Plan

Currently, most of the town's farmlands are located within the agricultural districts and are being assessed for their value as farmland rather than as development. This is an important tool that can help to retain farms for the future, especially as land values and taxes escalate in the region. However, even with such tax incentives, farmland owners often face an uphill battle against global markets to make farming profitable. Many farmers in the town and region are reinventing or diversifying their businesses in order to capitalize on the local customers rather than compete in the global market.

In order to retain and preserve farmlands, the town will need to take a proactive regional approach, working with private partners to expand opportunities for agri-business development as well as by investing in conservation of priority farm lands to maintain viable businesses, and as an agricultural reserve for the future.

The two main core farm areas are discussed in the following narrative.

### ***Esopus Creek***

The Esopus Creek originates in the Catskill Mountains at Winnisook Lake and enters the Hudson River to the north at Saugerties. The Esopus Creek enters Marbletown in the east from the Ashokan Dam. The Esopus Creek corridor in Marbletown changes character from the steep banks and ravine-like setting of the central and northern portion of the town along the Catskill foothills, to the wide, open valley and floodplains in the eastern portion of town.



*Esopus Creek Farmlands*



## Marbletown Natural Heritage Plan

In the eastern portion of town, the Esopus Creek's wide, fertile floodplain provides immeasurable benefits to the community in flood protection, and supports many of the town's larger farms and crops, which can be seen driving along Route 209. These open flats continue into the Town of Hurley. They are known for their productivity, specifically for growing sweet corn. In this area, the flats are an important agricultural resource, with some of the town's best soils for growing crops, and efforts should be focused on retaining working farms and lands along the Esopus floodplain.

The entire Esopus Creek corridor is also of conservation significance because it serves as important wildlife habitat, and as a riparian corridor for wildlife. However, it is the cliffs and ledges of the Esopus that are of primary conservation significance because they are home to rare plants (seven currently identified), including two state endangered plant species. Wetlands, springs and seeps associated with the Esopus and its tributaries are also of conservation significance.

### ***Rondout Creek***

The Rondout Creek originates in the eastern Catskills and flows through the southeastern portion of Marbletown, continuing past High Falls, and meeting up with the Wallkill River in Rosendale, where it continues north until draining into the Hudson River at Kingston. There are approximately 460 acres of contiguous lands preserved by the Rondout-Esopus Land Conservancy located at the southeastern border of town between Route 209 and the Rondout Creek.

The Rondout's floodplain and fertile valley support several working farms in the town, which are part of a much larger critical mass of farmlands that continue into Rochester and elsewhere in the Rondout Valley.

In Marbletown, the Rondout Creek and the lands that surround it are important for both natural and cultural reasons. There is a significant bedrock aquifer associated with the Rondout Creek that is an important drinking water source for the town. There is also a significant high-yield overburden aquifer associated with the Rondout Creek.



*Rondout Creek*



## Marbletown Natural Heritage Plan

Cultural resources, in particular those associated with the Rest Plaus Historic District and the Shawangunk Mountains Scenic Byway (Route 1 in this area) are prevalent along the Rondout Creek and overlap with other significant natural and agricultural resources, including some of the best soils for growing crops in the town.

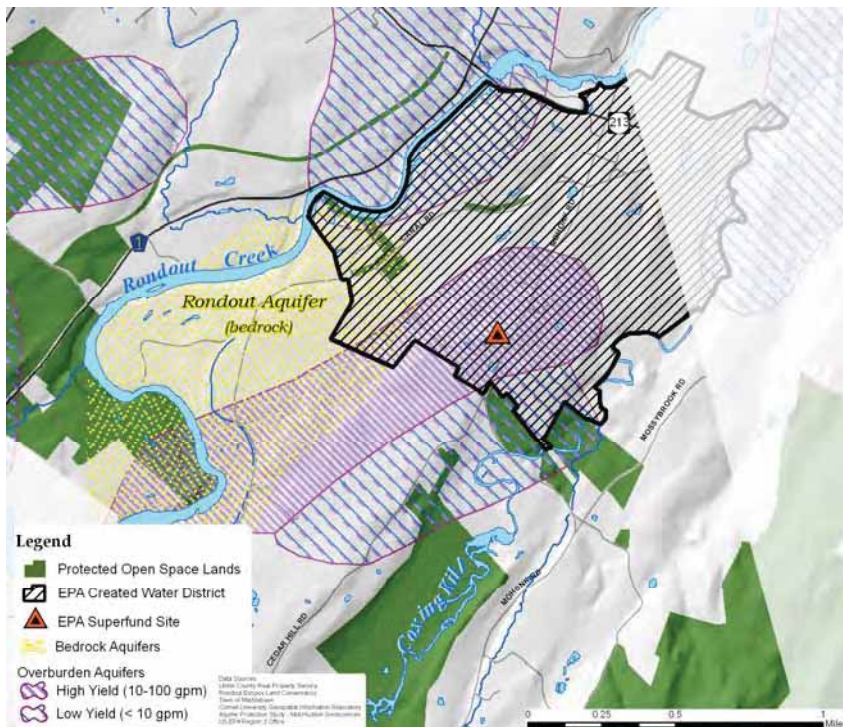
Conservation efforts in this area should be focused on the lands that provide multiple benefits of aquifer recharge, working farms, scenic and historic resource preservation, expanding the area already preserved by the Rondout-Esopus Land Conservancy, and preserving views along the scenic byway.



### Groundwater Contamination and the Rondout Creek Aquifer

There is an EPA (U.S. Environmental Protection Agency) Superfund site located within the Town of Marbletown, on Mohonk Road. The site is the Mohonk Road Industrial Plant, which has had several uses since the 1960's. Two of these uses, a metal finisher and a wet spray painting company, reportedly used solvents in their industrial processes. Solvents from one or both of these operations have contaminated the groundwater in the vicinity of the site. Since 1994, over 70 homes and business, primarily northeast of the site in the hamlet of High Falls, tested positive for volatile organic compounds (VOCs) in their private water wells. VOCs have been detected in both the overburden and bedrock aquifers. Migration of the VOC plume has spread in all directions from the site, with the predominant flow to the northeast, following the topographic gradient of the area. VOC migration in the bedrock aquifer, while generally to the northeast, has been more erratic, due to the fracture pattern of the bedrock – for example one well can test positive for VOCs and a neighboring well will be clean.

After several years of monitoring the EPA delineated what they believe to be the maximum possible extent of VOC migration, and instituted a new water district to cover this area. All private wells within the water district have been abandoned and homes and business are connected to a public water supply (the Catskill Aqueduct). The water supply was designed to accommodate 500 residents. In an effort to remove the VOCs a water pumping and treatment facility is currently in operation at the site, and a soil vapor extraction system is scheduled to be installed in the near future.



Map showing the location of the EPA Superfund site and the new water district in the vicinity of High Falls.

### Supporting Forests

The “priority areas” identified in the natural heritage vision map are embedded in a much larger matrix of supporting forest lands, which contain wetlands, streams, hilltops, ridges, and other significant natural features. This supporting forest is the backbone of the town’s natural heritage system. Preservation of supporting forests is important for ecosystem function.

Networks of larger parcels provide significant opportunities to make critical connections for wildlife (and humans). Some of the opportunities that have been observed through this planning process are as follows:

- A network of larger parcels between the Pacama Vly Regional Forest and the Vly Aquifer (a ridge west of Woodland Road provides natural connectivity), which also houses significant headwaters, wetlands, and hemlock stands, and serves as a major corridor for wildlife. This area’s adjacency to the Catskill Preserve also make it a logical conservation opportunity.
- The connection between the Shawangunk Mountains and the Rondout Valley, in which a network of larger parcels might offer the potential to link High Falls to the Mohonk Preserve along a footpath or trail. This type of mountain hamlet connection could be a major tourism draw that would help to support the businesses in High Falls.
- A system of larger parcels along the upper reaches of the Esopus Creek in the western part of town could be conserved to close a gap in conservation along riparian lands of the creek between the hamlets of Atwood and Pacama.

#### Summary for Supporting Forests

##### Goal:

Promote conservation of significant supporting forest lands, balanced with landscape-friendly uses of forest lands.

##### Milestones:

Enroll 2,000 acres of supporting forest in a term easement program.

##### Recommendations:

- Conserve and maintain key wildlife connections, such as mountain passes and stream corridors, as well as networks of large contiguous parcels of forest lands that provide for connectivity.
- Promote forest regeneration and whole forest health as a long-term economic development tool for the town. Develop outreach and communication tools to provide landowners with information about forest management, including tools, incentives, and grants available to support such efforts.
- Create a plan for the future of the town’s forests. This plan would further inventory and evaluate forest resources and identify potential woodlands (areas for sustainable harvesting) and wildlands (areas that should be preserved for their significant biodiversity). It would identify management and oversight objectives for the community’s forests and set up tools and funding to accomplish this.



## Marbletown Natural Heritage Plan

Within the supporting forests, conservation efforts should also be focused on managing forested areas that support landscape-friendly uses and serve as a source of economic development for the town, such as:

- Sustainable forest products (wood and paper products, maple syrup, mushroom production, etc.)
- Hunting, fishing and other forms of outdoor recreation
- Nature tourism and agri-tourism
- Appropriate development

As mentioned in previous portions of this chapter, promoting whole forest health is an important long-term economic development tool for the town. Healthy forests will benefit the town's landowners more effectively (for example through increased value in forest products). They will also better serve town residents with their many environmental and recreational benefits.

To do this, it is recommended that the town participate in a forest planning process. This process would evaluate the health of the town's forests on a coarse scale and then work with landowners who want to participate on a smaller scale to improve the health of the forest through conservation and management alternatives. Landowners could be offered tax incentives to participate, potentially through a term easement program. Program guidelines would need to be set up by the town based on more analysis of the town's forests, as well as of landowner needs and the town's fiscal capacity to support such a program.



*Forest surrounding the Ashokan Reservoir*

### Streams and Waterways

All of the streams and waterways in Marbletown are significant components of the town's natural heritage. In fact, most of the town's hamlets and historic settlement patterns have been based on proximity to waterways.

Portions of major rivers such as the Rondout and Esopus may be somewhat protected from development due to their large floodplains. However, there are many areas of the town where streams are unprotected, and where inappropriate development could lead to impacts to humans and wildlife, such as water quality impairment, destruction of fish habitat, and flood damage.

In addition to the Rondout and Esopus Creeks, there are many smaller streams in the town, including the Coxing Kill, Kripplebush Creek, Vly Brook, Glad Klipt Kill, Stony Creek, Plattekill, Rochester Creek, and Tongore Creek. Also associated with these streams are many wetlands and smaller drainage channels with names reflective of the natural and cultural heritage of the town.

Maintaining riparian vegetation along streams is important for overall health of the town's streams and watersheds. Current research indicates that generally, a buffer of 300 feet can protect water quality and aquatic habitat, whereas preserving adjacent and upland habitat buffer of up to 535 feet can preserve the long-term health of the ecosystem (the source of this information is a report entitled *Conservation Thresholds for Land-use Planners*, published by the Environmental Law Institute in 2003).

Current approaches to developing stream buffers call for a flexible system in which the maximum buffer width may vary to respond to land use, conservation goals (such as flood protection, erosion prevention or species protection) and site conditions (such as steep slopes, floodplains, or critical habitats). More information is available at the Stormwater Manager's Resource Center (<http://www.stormwatercenter.net>). These approaches do not entirely limit development from buffer areas, rather they call for management "zones" in which different land uses are allowed based on local conditions.

There are currently no buffer requirements designated in town code. Further analysis is needed to determine if there is a need for a local stream buffer ordinance or other measures to protect riparian buffers.

#### Summary for Streams and Waterways

Goal: Conserve riparian buffers along streams to maintain water quality, provide wildlife habitat and connectivity, and to prevent flood damage.

Milestone: Conserve 500 additional acres of streams and functional stream buffers in the next 10 years (note that this acreage may overlap with the acreages identified in other natural heritage areas).

#### Recommendations:

- Partner with landowners to conserve significant lands along streams through conservation easement.
- Develop best management practices for wetlands, streams, and riparian corridors.

## Marbletown Natural Heritage Plan

### *Wetlands*

Wetlands provide many ecological and societal benefits. For residents and landowners, they help to prevent flooding impacts by soaking up water during floods. They also help to filter out pollutants before they reach our ground and surface water supplies. Wetlands also provide irreplaceable habitat for wildlife. Declines in bird populations have been correlated to loss of wetlands and other key habitats.

Throughout our nation, wetlands have been lost to development, agriculture, and other land uses. According to the EPA, "more than 220 million acres of wetlands are thought to have existed in the lower 48 states in the 1600s. Since then extensive losses have occurred, and more than half of our original wetlands have been drained and converted to other uses"

(see <http://www.epa.gov/owow/wetlands/pdf/threats.pdf> for more information).

Wetlands greater than 12.4 acres, and a 100-foot buffer, are regulated by the DEC under the state Freshwater Wetlands Act. A permit is required to alter, fill, or grade a wetland or its 100-foot buffer. The state regulations do not apply to wetlands which are smaller than 12.4 acres, unless designated for their significance.

There are 1,059 acres of DEC-regulated wetlands in Marbletown. Wetlands are rated on a scale of I to IV, with class I being the most valuable for its hydrological and biodiversity benefits, and subject to the most stringent standards. There are 64 acres of class I DEC wetlands. The largest class I wetland is located just south of the intersection of Routes 209 and 213, in a residential area. Another class I wetland is partially located in Marbletown, at the Marbletown-Hurley border along Upland Road.

There are 696 acres of Class II DEC wetlands, which are primarily located in the southwest part of town and include the Pacama Vly, Cantine's Swamp, Scarawan Swamp, Noxes Vly, and several other unnamed wetlands located along the tributaries of North Peters Kill, Kripplebusk Creek and Vly Brook. For more information (and mapping) of wetlands, the *Marbletown Index of Natural, Cultural and Historical Resources* should be consulted.

Wetlands are also mapped through the National Wetland Inventory (NWI), however these wetlands are not currently afforded any specific protection. There are 1,368 acres of mapped NWI wetlands, with 477 acres of overlap between DEC and NWI wetlands. Thus, there are approximately 891 acres of wetlands mapped by the NWI in Marbletown that are not regulated. It is also important to note that wetland mapping is not always complete, especially with respect to smaller wetlands and seasonal wetlands, which can be difficult to map but highly-important for conservation.

Concerns related to wetlands range from filling or draining, to altering or clearing the surrounding vegetation, to changing the chemistry of the wetland through run-off. A 100-foot wetland buffer is not always large enough to protect a wetland and the species that depend upon it. Many amphibians depend on core wetland habitat, foraging and drought refuge wetlands, and the upland areas in-between in order to survive. Some species also travel between wetlands. Thus, adequate wetland buffers, as well as connectivity between wetlands, can be important for the conservation of biodiversity.



### Conclusion

This section has outlined the areas that constitute the town's natural heritage vision, including the three focus areas of regional forests, aquifers, and core farm areas, as well as supporting forests, streams and waterways. Because many of the recommendations herein are duplicated, they have been consolidated into a more succinct and detailed action plan in the following chapter.

#### A Summary of the Natural Heritage Goals

Conservation easements: 3,500 acres in 10 years (350 acres/year), with the following breakdown:

- 1,500 acres of forest
- 750 acres of priority aquifer
- 750 acres of core farms
- 500 acres of river and floodplain

Term easements: 2,000 acres in 10 years (200 acres/year)

Implementation of the goals within the natural heritage vision would add another 3,500 acres of conservation lands to the town, doubling the current 3,420 (10%) acres to about 7,000 acres (20%). In addition, enrollment of up to 2,000 acres in the recommended local term easement program would provide significant tax benefits for landowners and would add value for the entire town in increased forest health.

If broken down into annual work plan of 350 acres in conservation easements or purchase of land, and 200 acres in term easements, this is a reasonable target that can be attained by the town, particularly when linking conservation and development projects is considered.

As most of this conservation is expected to be implemented through voluntary conservation easements and a local term easement program, conservation lands will still remain in private ownership and on the tax rolls. While easements (permanent or term) may reduce the net revenue that the town collects on these lands (especially the non-farm properties that do not already receive reduced assessment), the benefits of not developing these lands are still expected to be greater and therefore this small shift in tax burden should be supported by town residents. A more detailed analysis of the fiscal costs and benefits of conservation would help to justify these assumptions and find the right balance towards these ends, especially when compared to the fiscal impacts of development.

*This page intentionally left blank*

## CHAPTER 4: ACTION PLAN

### Introduction

Fulfilling the Natural Heritage Vision for Marbletown is not a simple task. It requires long-term commitment and must be integrated into the town's planning and economic development activities to be successful. It is not enough to purchase or place an easement on a parcel of land. Conservation is a long-term partnership with private landowners, conservation organizations and others who continue to steward the land. The following pages discuss the actions recommended in the near future. A summary chart on the following page further outlines the recommended actions, with a timeframe, responsible parties, and relative cost. Also included in this chapter is a section which outlines private-sector conservation opportunities.

Since this plan is based on voluntary landowner participation, with the goal of creating financial incentives for landowners to do so, it charges the town's governing bodies with reviewing legislation and considering tax incentives for the encouragement of land conservation.

While this is a plan for the town, in many cases, preserving shared resources such as forests, watersheds and stream corridors, can be more efficiently addressed through intermunicipal or regional cooperation. Every opportunity to partner with communities and organizations in the region working towards similar efforts should be explored. For many of the recommendations listed in this chapter, there are opportunities to collaborate with Ulster County and other communities in the region to implement goals shared between the Ulster County Open Space Plan and local plans. Marbletown has already pioneered a pilot project, through Ulster County Information Services to create a web-based application, hosted on their servers and updated by their technical staff, for all GIS data. This system will serve as a model that can be duplicated throughout the county.

The recommendations in this action plan are divided into the following six major categories:

- Continue to Develop a Local Land Conservation Program
- Support Sustainable Land Uses
- Plan for Development and Economic Growth
- Continue to Advance Research, Management, and Stewardship Efforts
- Continue to Expand Natural Heritage Awareness in the Community
- Expand Options for Conservation Financing



### Continue to Develop a Local Land Conservation Program

The local land conservation program is one of the tools for implementing Marbletown's natural heritage vision. Through a local land conservation program, a process for financing, selecting, and implementing conservation projects is established. Program administration includes a dedicated committee/board to evaluate projects and make funding recommendations. It might also include professional or land trust assistance with tasks such as landowner outreach and resource-specific conservation plans, or other technical tasks such as appraisals, drafting of legislation for tax incentives, or writing grant applications. It is important that the work of the committee or board is integrated into the town's overall planning agenda.

To implement the local land conservation program, the town's committee or board would work on a voluntary basis with landowners and other partners such as nonprofit conservation organizations in a proactive manner to conserve a system of priority lands through a variety of means, such as conservation easements, tax incentives and other tools (see a listing below). The town has established the Marbletown Preservation and Investment Commission for this purpose. Town conservation funds should be focused on priority areas identified in the natural heritage plan and those that are most significant, under the most pressure, and provide the community with the most benefits. Grant funding criteria will also be factored into any project selection decisions to accomplish the town's goal of leveraging local funds to the highest extent.

#### Conservation Tools (see glossary for more information)

- Term Easement or other Local Tax Incentive
- Purchase of Development Rights (PDR)
- Estate Planning for Landowners (would include options such as Installment Purchase Agreements, limited development plans, life estate)
- Fee Simple Purchase of Land
- Zoning Incentives for Resource/Land Conservation

#### Immediate Actions:

1. Continue to **develop selection criteria** and a process for conservation projects under the town's land conservation program. Develop a working set of land conservation tools such as conservation easements, term easements, and estate planning options. The land conservation tools will be used by landowners and the conservation selection criteria will be used by the Conservation Board and Town Board to review potential applications. Continue to work with neighboring communities towards these efforts. Outreach to the community on program materials.

Summary Chart: Marbletown Natural Heritage Action Plan

| Program Areas                     | Timeframe  | Plan # | Page Ref. | Action   | Lead Party                         |
|-----------------------------------|------------|--------|-----------|--|------------------------------------|
| Land Conservation Program         | IMMEDIATE  | 1      | 48        | Develop Selection Criteria for Conservation Projects   | PIC                                |
|                                   | ONGOING    | 2      | 50        | Continue to Meet with Area Land Trusts                 | PIC                                |
|                                   | ONGOING    | 3      | 50        | Conduct Parcel Evaluation                              | PIC                                |
|                                   | SHORT-TERM | 4      | 50        | Develop Conservation Projects                          | PIC/Consultant                     |
|                                   | LONG-TERM  | 5      | 52        | Program Evaluation                                     | PIC/ECC                            |
| Sustainable Land Use              | ONGOING    | 1      | 52        | Audit Town Zoning                                      | PZC/TB/Consultant                  |
|                                   | LONG-TERM  | 3      | 53        | Local/Regional Forest Plan                             | ECC/Consultant                     |
|                                   | SHORT-TERM | 2      | 53        | Local Farmland Protection Plan                         | TB/Consultant/Designated Committee |
|                                   | LONG-TERM  | 4      | 54        | Research a Local Term Easement Program                 | TB/Consultant                      |
| Development and Economic Growth   | IMMEDIATE  | 1      | 55        | Integrate Plan Data into Development Review            | PZO                                |
|                                   | ONGOING    | 2      | 56        | Identify Growth Areas in Town                          | PZC/TB/Consultant                  |
|                                   | ONGOING    | 3      | 57        | Provide Landowner Consulting                           | PZO/Consultant                     |
|                                   | LONG-TERM  | 4      | 57        | Create Best Development Practices Guidebook            | ECC                                |
| Research, Management, Stewardship | ONGOING    | 1      | 59        | Complete Town Biodiversity Mapping                     | ECC                                |
|                                   | ONGOING    | 2      | 59        | Coordinate with Regional Planning for Invasive Species | ECC                                |
|                                   | ONGOING    | 3      | 60        | Update GIS and Other Data as Necessary                 | PZO/TB/Consultant                  |
| Expand Awareness in the Community | SHORT-TERM | 1      | 61        | Develop Landowner Outreach Materials                   | PIC/ECC                            |
|                                   | ONGOING    | 2      | 61        | Support/Promote Workshops for Builders                 | ECC/PZO                            |
|                                   | ONGOING    | 3      | 62        | Integrate Natural Heritage into School Curriculum      | ECC                                |
|                                   | LONG-TERM  | 4      | 62        | Develop Local Sign Program                             | ECC                                |
| Conservation Financing            | IMMEDIATE  | 1      | 63        | Support Community Preservation Act                     | TB/PIC                             |
|                                   |            | 2      | 63        | Create Grant/Funding Database                          | ECC/PIC                            |
|                                   | SHORT-TERM | 3      | 63        | Conduct Recreation Needs Assessment                    | PB/Consultant                      |
|                                   |            | 4      | 64        | Identify Local Financing Needs                         | PIC                                |
|                                   |            | 5      | 64        | Conduct Private Fundraising                            | Stand for Land                     |
|                                   |            | 6      | 64        | Reassess Funding Needs                                 | ECC                                |

Lead Party Key:

Planning and Zoning Committee

Planning and Zoning Office

Town Board

PZC

PZO

TB

Preservation and Investment Commission (Purchase of Development Rights Commission)

Planning and Zoning Commission

Environmental Conservation Commission

PIC

PZC

ECC





## Marbletown Natural Heritage Plan

### Lead:

- Marbletown Preservation and Investment Commission

### Potential Partners:

- Marbletown Town Board
- Adjacent communities
- Land trusts
- Ulster County Planning Department

## Land Trusts Working in Marbletown

### **Open Space Institute (OSI)**

<http://www.osiny.org>

The Open Space Institute's mission is "to protect scenic, natural and historic landscapes to ensure public enjoyment, conserve habitats and sustain community character. OSI achieves its goals through land acquisition, conservation easements, special loan programs, and creative partnerships." The Open Space Institute has protected approximately 100,000 acres in New York State. The Open Space Conservancy is the "land acquisition affiliate" of the OSI.

### **Mohonk Preserve**

<http://www.mohonkpreserve.org>

The Mohonk Preserve's mission is "to protect the Shawangunk Mountains by inspiring people to care for, enjoy, and explore the natural world." With approximately 6,600 acres in the region, the Mohonk Preserve is one of the largest owners of conservation lands, and arguably the most visible land trust due to its history, the visibility of the preserve, and the success of its environmental and outreach programs, including opportunities to learn about the Shawangunk Mountains at the Mohonk Preserve Visitor Center.

### **The Nature Conservancy**

<http://www.nature.org>

The Nature Conservancy works in all 50 states and 30 countries across the world. "The mission of The Nature Conservancy is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive." The Nature Conservancy coordinates the work of the Shawangunk Ridge Biodiversity Partnership, including the Green Assets Program, which is discussed in other portions of this plan.

### **Rondout-Esopus Land Conservancy (RELC)**

<http://www.relandconservancy.org>

The Rondout-Esopus Land Conservancy has been working since 1987 to protect "land in Ulster County, particularly along the Esopus and Rondout Creeks and other areas in the Towns of Marbletown, Rochester, and Olive." The land trust focuses on protection of "open space, forested lands, wetlands, stream corridors, and pasture land."

### **Catskill Center for Conservation and Development**

<http://www.catskillcenter.org>

"The Catskill Center for Conservation and Development is a member-supported, 501(c)(3), not-for-profit organization serving the Catskill Mountain region of New York State. The Catskill Center stimulates, conducts, and supports integrated actions to protect vital ecosystems and unique landscapes, to enhance economic opportunities for all the region's residents, to preserve cultural and historic assets and to further a regional vision and spirit."

## Marbletown Natural Heritage Plan

### Ongoing Actions:

2. **Continue to meet with area land trusts** and conservation organizations to review this plan; determine common goals; and identify any potential partnership opportunities towards implementation of the town's natural heritage plan. This action is part of the town's continuing efforts to work in partnership with regional conservation organizations. Land trusts may help to fund conservation projects, hold and monitor easements, and assist with landowner outreach. They may also have other roles such as helping with research and outreach efforts.

#### Lead:

- Marbletown Preservation and Investment Commission/Environmental Conservation Commission

#### Potential Partners:

- Open Space Institute, Mohonk Preserve, Rondout-Esopus Land Conservancy, Catskill Center for Conservation and Development, The Nature Conservancy, Shawangunk Mountains Regional Partnership and Shawangunk Mountains Biodiversity Partnership

3. **Conduct parcel evaluation** to identify parcels that meet the selection criteria within each of the natural heritage areas identified in this plan. This will likely include zooming in to each of the natural heritage areas in the plan to identify parcels that would be the most ideal candidates for conservation. The prioritization process has already been completed through this planning process; however, the projects will need to be evaluated on a case-by-case basis as funding opportunities are identified. Identification of priority parcels will serve as a focus for landowner outreach efforts by the Marbletown Preservation and Investment Commission.

#### Lead:

- Marbletown Preservation and Investment Commission

### Short-Term:

4. **Develop conservation projects.** A conservation project might constitute the purchase of an agricultural conservation easement on a farm; the purchase of a conservation easement on priority aquifer lands; or the creation of a new park through acquisition of land. Identifying and developing conservation projects will include conducting landowner outreach, advancing projects with willing landowners, (conducting appraisals, developing easement language, etc.) and identifying and applying for matching grants.

#### Lead:

- Marbletown Preservation and Investment Commission and/or Consultant

## Marbletown Natural Heritage Plan

### Potential Partners:

- Land Trusts: Open Space Institute, Mohonk Preserve, Rondout-Esopus Land Conservancy, Catskill Center for Conservation and Development, The Nature Conservancy, Shawangunk Mountains Regional Partnership and Shawangunk Mountains Biodiversity Partnership
- Landowners
- Ulster County Planning Department

### Major Funding Sources for Land Acquisition, Park Development and Purchase of Conservation Easements

#### **Hudson River Estuary Grant Program, administered by NYS DEC**

Offers grants for Open Space Planning, Inventory and Acquisition; Community-based Habitat Conservation or Stewardship; Watershed Planning and Implementation; and Hudson River Access: Boating, Fishing, Swimming, Hunting, Hiking or River-watching.

Website: <http://www.dec.ny.gov/environmentdec/33071.html>

#### **Grants Available Through NYS Office of Parks, Recreation and Historic Preservation**

The NYS Office of Parks, Recreation and Historic Preservation administers grants through the state Environmental Protection Fund (EPF) and the federal Land and Water Conservation Fund (LWCF) for land acquisition, as well as for park development.

Website: <http://nysparks.state.ny.us/grants>

#### **New York State Department of Agriculture and Markets Farmland Protection Program**

"Offers matching grants protection implementation activities described in agricultural and farmland protection plans that have been developed by counties and municipalities...The purpose of these programs is to fund local initiatives that are intended to maintain the economic viability of the State's agricultural industry and its supporting land base and to protect the environmental and landscape preservation values associated with agriculture." The program's matching funds support the purchase of development rights of qualifying agricultural properties.

Website: <http://www.agmkt.state.ny.us/RFPS.html>

#### **Federal Farm and Ranchland Protection Program**

"The Farm and Ranch Land Protection Program (FRPP) provides matching funds to help purchase development rights to keep productive farm and ranchland in agricultural uses. Working through existing programs, USDA partners with State, tribal, or local governments and non-governmental organizations to acquire conservation easements or other interests in land from landowners. USDA provides up to 50 percent of the fair market easement value of the conservation easement."

Website: <http://www.nrcs.usda.gov/programs/frpp>



## Marbletown Natural Heritage Plan

### Long-Term:

5. Regularly conduct a **program evaluation** to ensure that the land conservation program is meeting the goals set forth in this plan (Chapter 3 summarizes the acreage goals). As an example, the Town of Clifton Park (Saratoga County, NY) recently published an open space report card that highlighted success towards achieving the town's goals as set forth in its 2001 open space plan (this is included in Appendix C).

### Lead:

- Marbletown Preservation and Investment Commission and/or Environmental Conservation Commission

### Potential Funding Source:

- Private fundraising efforts such as those already completed by the ECC

## Support Sustainable Land Uses

Support and promote sustainable, landscape-friendly land uses, such as low-impact outdoor recreation activities (hunting, fishing, hiking), agriculture, forestry, and associated tourism. Provide incentives and support landowners towards this end.

### Ongoing:

1. **Audit the town's zoning** to ensure that it is forest and farm-friendly and make necessary changes. For example, allowed uses in forested rural districts (such as A3 and A4) should allow support activities for forestry and agriculture, they should also allow wood product manufacturing and furniture. Involve landowners in this review. **This may also be completed through local farmland protection or forest planning initiatives (see #2 and #3 on the next page).**

### Lead:

- Consultants with Marbletown Planning and Zoning Committee and Marbletown Town Board

### Potential Partners:

- Landowners and Residents of Marbletown
- Marbletown Planning Board
- Ulster County Planning
- Organizations such as the Rondout Valley Growers Association and the Marbletown Landowner Association and Rondout Valley Business Association
- Ulster County Planning Department

## Marbletown Natural Heritage Plan

### Short-term:

2. Develop a **local farmland protection plan**. Develop a local plan to identify priority agricultural resources, identify opportunities to expand economic development initiatives within the town, and ensure that local regulations are supportive for farmers. The New York State Department of Agriculture and Markets currently provides grants for local farmland protection plans.

#### Lead:

- Town Board with consultant and designated committee

#### Potential Partners:

- Farmers, landowners, and agricultural business owners
- Marbletown Planning Board
- Ulster County Planning Department and County Farm Board
- Organizations such as the Rondout Valley Growers Association, American Farmland Trust, and Cornell Cooperative Extension
- Land trusts

### Long-Term:

3. Develop a **local or regional forest plan**. Conduct research and outreach and make long-term recommendations on forest preservation, management, economic development, education, and other initiatives. This plan should explore U.S. and international models for private landowner conservation, such as the Massachusetts Woodland Cooperative and Costa Rica's Payment for Environmental Services (PES) program. The Massachusetts Woodland Cooperative is a forest landowner cooperative with that follows principles of sustainable forestry and works together to process and market their materials (see Appendix C for more information of the Massachusetts Woodland Cooperative). This type of landowner-sponsored cooperative would require leadership from landowners in order to be initiated, and represents a private-sector conservation solution. Costa Rica's PES program pays landowners, primarily through a tax on fuel consumption, for the environmental services that the forests provide. The direct payments to landowners support conservation, stewardship and

#### **"The Mission of the Massachusetts Woodland Cooperative:**

Founded with the purpose of sustaining the working forests of the region, our business maintains high standards of responsible management on member properties, purchases its members' logs at harvest time, and coordinates value-added processing by local businesses. We then market our finished wood products throughout the region as **HomeGrown Wood™**."

Source: Website of **Massachusetts Woodland Cooperative**,  
<http://www.masswoodlands.coop>

## Marbletown Natural Heritage Plan

reforestation. While the funding and administration of such as program at the town level raises many questions, the concept of the PES program could be indirectly applied through tax benefits such as a term easement program rather than through payments for services.

There are many excellent publications available to help forest landowners sustainably manage their lands for a variety of purposes. As a more immediate action, a few of these reference documents could be purchased and distributed to town landowners, or provided for reference in the library at town hall. Sources for these references are identified in the following section.

### Lead:

- Environmental Conservation Commission with Consultant

### Potential Partners:

- Planning and Zoning Commission
- Landowners, Residents and Businesses of Marbletown
- Regional Sportsmen's Clubs
- Regional Foresters and Consultants
- NYS Department of Environmental Conservation (DEC)
- Land Trusts
- Ulster County Planning Department and Ulster County Development Corporation

### References:

- Massachusetts Woodland Cooperative:  
<http://www.masswoodlands.coop/>
- New York Forest Owners Association:  
<http://www.nyfoa.org/>
- The Natural Resource, Agriculture and Engineering Service:  
<http://www.nraes.org/>

### Useful publications for sale:

- *Forest Resource Management: A Landowner's Guide to Getting Started*
- *Forest Landowner's Guide to Evaluating and Choosing a Natural Resource-Based Enterprise*
- *The Woods in Your Backyard: Learning to Create and Enhance Natural Areas around Your Home*

4. Research the potential for a **local term easement/tax abatement program** for small farms and forests (those that do not meet requirements for the state Agricultural Districts or 480a program). This incentive would provide participating landowners with tax incentives if they agree to place a term easement on their



## Marbletown Natural Heritage Plan

land which adheres to sustainable principles for use and management of the land. Term easements would be voluntary and the landowner could receive a tax benefit (through reduction of taxes); easements could not be purchased. Term easements can be coupled with a right of first refusal for the town, should the property go up for sale. Sustainable use of the land may be as simple as leaving the land “as-is” or it may be more complex, depending on the goals of the landowner and the state of the land. Also research the potential for a term easement for lands that provide recreational opportunities such as hunting or fishing. The fiscal implications of these programs should be explored before any programs are developed.

Examples of local term easement programs in New York include the Town of Perinton, Monroe County and Town of Clifton Park, Saratoga County. As of 2006, the Town of Clifton Park had about 2,500 acres enrolled in a term easement program. Clifton Park’s term easement legislation is provided as an example in Appendix C.

### Lead:

- Marbletown Town Board with consultant

### Potential Partners:

- Marbletown Preservation and Investment Commission
- Marbletown Environmental Conservation Commission
- Landowners
- DEC and other forest resource experts

## **Plan for Development and Economic Growth**

Identify locations for, and promote appropriate growth and economic development in Marbletown. Supplement existing land use tools, such as the town’s conservation subdivision regulations, with guidelines to create development that respects and complements natural heritage.

### Immediate:

1. **Integrate the Natural Heritage Plan data** and recommendations into the town’s development review process.
  - Update the town’s GIS database and make it available to landowners and developers for planning purposes.
  - Provide additional guidance within the existing conservation subdivision guidelines that outlines the data layers and resources that should be discussed and mapped for each project. This should be reviewed early in the development process with applicants so that the town’s guidelines are clear. This saves the landowner or developer time and money in the long run.

## Marbletown Natural Heritage Plan

- Conduct orientation sessions with the planning board, planning administrative staff, town planners and any others involved in development review. Orientation should introduce them to the natural heritage data and interpretation of the data for review of development projects. Conducting the training at the start of an existing project would be an ideal way to do this and would also help to identify any areas that would be strengthened through the process.

### Lead:

- Marbletown Planning and Zoning Office

### Potential Partners:

- Marbletown Town Board
- Marbletown Planning Board
- Town Staff

### Ongoing:

2. **Identify acceptable growth areas** in Marbletown and ensure that benefits and costs of conservation and development are equitably distributed throughout landowners. This can be done in a number of ways, from project specific efforts (such as “cooperative planning” with landowners and developers) to a town-wide growth and economic development planning effort such as a Generic Environmental Impact Statement (GEIS). This process would help to identify impacts of the build-out of the town and create measures to mitigate such impacts.

This goal of equitably distributing conservation and development benefits can be accomplished through area-wide planning (for example, a developer can purchase conservation lands to support aquifer/watershed protection associated with a project) or through incentive zoning or transfer of development rights.

### Lead:

- Consultant working with Marbletown Planning and Zoning Committee and Marbletown Town Board

### Potential Partners:

- Landowners, Residents and Businesses of Marbletown
- Marbletown Planning Board
- Ulster County Planning Department and Ulster County Development Corporation

### Potential Funding Source:

- Quality Communities Grant Program of New York State  
Website: <http://www.qualitycommunities.org/index.asp>

## Marbletown Natural Heritage Plan

3. Provide **landowner consulting** services in: creating conservation development; following best development/management practices; and for identifying conservation and stewardship options. This could be done in a similar manner to the town's current pre-application review period, where a town planner reviews options with a landowner or developer before a project is fully established. These services could also be provided to developers and their consultants (surveyors, engineers).

### Lead:

- Marbletown Planning and Zoning Office (consultant may also be needed to assist with larger projects)

### Potential Partners:

- Marbletown Town Board
- Marbletown Planning Board
- Landowners and developers

### Long-Term:

4. **Create best practices for development/resource management** within the town's natural landscape (forests, farms, floodplains/aquifer recharge areas, wetlands and streams). Guidelines can discuss site planning issues such as laying out lots, roads or driveways, as well as topics related to the built environment such as clearing and grading, planting, and surface treatments. Guidelines can also address management issues such as landscape planting or the creation of streamside buffers. Guidelines can be used by homeowners and developers for new development as well as improvements.

Because many of the landscape features are shared across the town's borders, this project should be conducted in partnership with other communities in the region. Guidebooks can also be used by the reviewing board as a reference document to help ensure the quality of these natural resources are sustained. There are several guidebooks available over the internet toward this end, some of which are referenced on the following page.

### Lead:

- Marbletown Environmental Conservation Commission

### Potential Partners:

- Rondout Creek Watershed Council



## Marbletown Natural Heritage Plan

- Cornell Cooperative Extension of Ulster County (sponsored the Upper Esopus Creek Management Plan – for the portion of the creek above the Ashokan Reservoir).

### Sources for Best Management Practices

- *Landscaping for Water Quality* by Cornell Cooperative Extension

*Available online at:*

<http://counties.cce.cornell.edu/onondaga/document/pdf/envi/landscaping%20for%20water%20quality.pdf>

- *Town of Clinton, Recommended Model Development Principles* by the Center for Watershed Protection, Dutchess County and other partners

*Available online at:*

<http://www.townofclinton.com/pdf/ClintonBSDrev8.pdf>

- *Forestry Habitat Management Guidelines for Vernal Pool Wildlife* by the Metropolitan Conservation Alliance (MCA Technical Paper Series: No. 6)

*Available online at:*

[http://www.maine.gov/doc/mfs/pubs/pdf/vernal\\_pool\\_hmg.pdf](http://www.maine.gov/doc/mfs/pubs/pdf/vernal_pool_hmg.pdf)

- *Best Development Practices: Conserving Pool-Breeding Amphibians in Residential and Commercial Developments in Northeastern United States* by the Metropolitan Conservation Alliance (MCA Technical Paper Series: No. 5)

*Available from the Wildlife Conservation Society:*

<http://www.wcs.org/international/northamerica/mca/publications#>

- *Better Site Design: A Handbook for Changing Development Rules in Your Community*, Center for Watershed Protection

*Available online at:* <http://www.cwp.org/PublicationStore/bsd.htm>

### Continue to Advance Research, Management and Stewardship Efforts

This plan is a living document, with data that change as natural communities evolve, and as land use and settlement patterns change. Preserving natural heritage will require continued adaptation, as data change and as science and management practices increase our understanding of resource and species needs. The following short-term activities are recommended:

#### Ongoing:

1. Complete the **biodiversity assessment/mapping process** for the town and update or refine the priorities herein based on this process. The mapping project should identify specific habitats and areas that are important so that conservation efforts can be focused. The data should be compiled into a GIS that can be used by the town boards. As communities adjacent to Marbletown begin to map habitats, this data should also be evaluated for intermunicipal and regional opportunities. This data can be used by landowners, developers, the Marbletown Planning Board and the Marbletown Preservation and Investment Commission to assess conservation priorities and by the Planning Board to identify opportunities for conservation development.

#### Lead:

Marbletown Environmental Conservation Commission

#### Potential Partners:

- Town Board/Town Planner; Hudsonia Ltd.

#### Potential Funding Source:

- Hudson River Estuary Grant Program: offers grants for open space planning; community based conservation and stewardship; watershed planning; and Hudson River Access for communities within the Hudson River Estuary boundaries.

Website: <http://www.dec.ny.gov/environmentdec/33071.html>

2. **Coordinate with regional planning efforts for invasive species.** This effort might best be accomplished through town participation in the Partnership for Regional Invasive Species Management (PRISM) efforts. These efforts should be coordinated with forest inventory and planning efforts where there is overlap. Mapping of species populations can also help with these efforts. Develop educational materials and work with landowners towards early detection and removal of invasive species.

#### Lead:

Marbletown Environmental Conservation Commission or Regional PRISMs (see below partners)

## Marbletown Natural Heritage Plan

### Potential Partners:

- Marbletown Highway Department
- Lower Hudson PRISM
- Catskill PRISM

### Funding Sources:

- New York State DEC, Aquatic Invasive Species Eradication Grant Program: offers grants to municipalities and not-for-profits to eradicate invasive species within water bodies and wetlands.

Website: <http://www.dec.ny.gov/animals/32861.html>

- New York State DEC, Terrestrial Invasive Species Eradication Grant Program: offers grants to municipalities and not-for-profits to eradicate terrestrial invasive species.

Website: <http://www.dec.ny.gov/animals/33358.html>

### New York State Plant and Invasive Species References

- Catskill Streams Website:  
<http://www.catskillstreams.org/>

*Information for streamside landowners in the Catskills.*

- New York Flora Atlas Website:  
<http://atlas.nyflora.org/>

*Searchable atlas of plants in New York (identifies status as native or not native).*

- *Final Report of the New York Invasive Species Task Force, Fall 2005*

Online at: [http://www.dec.ny.gov/docs/wildlife\\_pdf/istfreport1105.pdf](http://www.dec.ny.gov/docs/wildlife_pdf/istfreport1105.pdf)

3. **Continue to update the town GIS database, maps, and other information sources** as new data are available and as existing data are revised. Print and publish map updates in the town hall and other public places so that information is available to landowners and developers to guide project development. This information can be used by the planning board in the review of projects.

### Lead:

- Marbletown Planning and Zoning Office with Town Board (and consultant as necessary)



### **Continue to Expand Natural Heritage Awareness in the Community**

Schools, landowners, community groups, conservation organizations, and businesses all have a role in preserving natural heritage. They can all benefit from preserving the town's natural heritage. Many organizations and groups are currently working on outreach of particular topics related to natural heritage in the town and region, including (but by no means limited to) the Mohonk Preserve, the Catskill Center for Conservation and Development, Rondout-Esopus Land Conservancy, Rondout Valley Growers Association, Shawangunk Mountains Regional Partnership, Shawangunk Mountains Biodiversity Partnership, and many local schools and youth groups. The town should continue to partner with these existing organizations, and others, towards these goals.

#### **Short-Term:**

1. Create **landowner outreach materials** providing information on existing conservation opportunities such as state and federal tax incentives for conservation easements, the state 480a program, town conservation fund, and available grants and cost-share programs. Work with area realtors and other appropriate businesses to distribute informational materials to landowners and developers. Appendix C includes information on some of these landowner tools.

#### **Lead:**

- Marbletown Preservation and Investment Commission (with Marbletown Environmental Conservation Commission)

#### **Partners:**

- Marbletown Town Board
- Regional Land Trusts
- Realtors
- Businesses

#### **Ongoing:**

2. **Promote and support workshops or training for builders and developers** to provide background on conservation development. The town can support these efforts by participating in workshops, as well as promotion of events.

#### **Lead:**

- Marbletown Environmental Conservation Commission and Marbletown Planning and Zoning Office

#### **Potential Partners:**

- Developers, builders and others in the construction industry
- Realtors
- Architects and landscape architects
- Interested landowners

## Marbletown Natural Heritage Plan

3. **Integrate Marbletown's natural heritage information into the region's school curriculum** and other venues for youth. Efforts towards this end are already underway and should continue to be supported.

Lead:

- Marbletown Environmental Conservation Commission

Potential Partners:

- Teachers, Students and School Administrations
- Land Trusts and Other Conservation Organizations

Long-term:

4. Increase public awareness of resources by **developing signs and interpretive information** about the town's natural heritage that can be placed in highly-visual locations (such as at stream crossings on major roads, in hamlets, and at the town park). This could be done jointly with the above recommendation, working with schools on developing the sign information and locations.

Lead:

- Marbletown Environmental Conservation Commission

Potential Partners:

- Teachers, students and school administrations
- Land trusts and other conservation organizations
- Residents, businesses, and other interested individuals

## Expand Options for Conservation Financing

Currently, there are very few tools available for the town to finance conservation efforts. The town has a two million dollar conservation fund that was approved by voters in November 2006. Other than this fund, the town can apply for state, federal and private grants to support conservation efforts. These grant funds are limited, and in many cases stretched thin across the state and nation. Private donations and fund-raising events have also been conducted in Marbletown and help to support planning and outreach efforts. Additional local financing sources will be needed in order for the town to proactively conserve lands and support additional planning and stewardship activities. The Environmental Conservation Commission and the Preservation and Investment Commission should continue to work with the Town Board and other related partners towards this end. Recommended financing actions include the following:

## Marbletown Natural Heritage Plan

### Immediate:

1. Urge lawmakers to **support the Community Preservation Act**. This would allow municipalities in New York State the option of creating a voter-approved community preservation fund by imposing a real estate transfer tax of up to 2 percent of the purchase price above the median home value in the county. The Community Preservation Act would authorize towns to do so without further approval from the Legislature. If necessary, the town could ask for individual approval from the State Legislature to submit such a referendum.

#### Lead:

- Marbletown Town Board and the Marbletown Preservation and Investment Commission

#### Potential Partners:

- Land Trusts
- Ulster County and other Regional Organizations

2. Create a **working database of grants and funding sources**. In order to be successful in state and federal grants, it is important to keep up to date on projects so that when new grant application deadlines are announced, projects are ready to go. This means being ahead of the curve in working with landowners to develop projects, matching funds and conservation partners. Keeping an up-to-date log of potential grant sources and their criteria and expected application dates helps towards this end. See the text box on page 51 for web links to some of the major sources of grant funding available to Marbletown.

#### Lead:

- Marbletown Environmental Conservation Commission and/or Marbletown Preservation and Investment Commission

#### Potential Partners:

- Land Trusts
- Ulster County
- Adjacent Municipalities

### Short-Term:

3. **Conduct a recreation needs assessment** and set appropriate recreation fees for development in Marbletown. Under state law, communities are authorized to collect a recreation fee in lieu of parkland or recreational amenities, which can be placed in a fund used to advance the town's park and recreational goals. An assessment of the town's needs (based on current and future growth) should be conducted in order to develop the recreation fees. A survey of fees collected by other communities in the area would also be useful.

#### Lead:

- Consultant or Marbletown Youth and Recreation Commission



## Marbletown Natural Heritage Plan

### Potential Partners:

- Marbletown Town Board
- Marbletown Environmental Conservation Commission
- Town Youth and Recreation Clubs, Organizations and Schools

### Example:

*A Recreational Needs Assessment for the Town of Dryden Recreation Commission* (Town of Dryden, NY)

Available Online: <http://www.dryden.ny.us/DRCNeedsAssessment.pdf>

4. **Identify local financing needs.** Once a land conservation program has been established, priority parcels identified, and landowner outreach conducted, the town will have a better idea of the level of interest in conservation. At this time, a more detailed financing plan should be developed to guide conservation actions. This financing plan should strive to find creative sources of funding to match the funds the town taxpayers have already contributed.

### Lead:

- Marbletown Preservation and Investment Commission

### Potential Partners:

- Marbletown Town Board
- Marbletown Environmental Conservation Commission

5. **Conduct private fundraising.** Great strides have already been made towards private fundraising. The most recent "Stand for the Land" campaign raised significant funds to match the Environmental Conservation Commission's education and outreach efforts. Private fundraising should continue to be explored to support the town's conservation efforts.

### Lead:

- Stand for Land

### Potential Partners:

- Marbletown Preservation and Investment Commission
- Marbletown Environmental Conservation Commission
- Regional Land Trusts and Conservation Organizations

6. **Funding needs for the conservation program should continuously be evaluated and augmented as necessary** to meet program goals. Conservation does not end with the purchase of land or easements. Long-term stewardship is required in order to preserve our natural heritage. Town-owned parks and open space areas

## **Marbletown Natural Heritage Plan**

should also have plans for management of their conservation values. Funding sources to support these activities should be explored.

Lead:

- Marbletown Environmental Conservation Commission

### **Opportunities for the Private Sector**

As discussed in the Introduction to the plan, the town's fiscal capacity to support conservation is limited. Concerns about the redistribution of a limited supply of town tax base have also been raised. While this plan is primarily focused on town-level recommendations for conservation as a guide for the town boards and residents, there are also many opportunities for private sector involvement. Some of the potential projects and opportunities that have been discussed through this process are highlighted below. The participation and leadership of town residents, businesses, institutions, and organizations is critical for the long-term success of the Natural Heritage Program.

#### **Adopt-A-Roadside or Adopt-A-Stream Programs**

Adopt-a-roadside or adopt-a-stream programs are often sponsored by institutions, businesses, or other community development organizations. In Marbletown, these programs could be established to conduct invasive species removal along roadsides or work with landowners to plant or restore stream buffers. Local businesses can be solicited for plant materials and equipment donations. Development of such a program could be coordinated by the Marbletown Environmental Conservation Commission, although the activities would be sponsored and conducted by the private sector.

#### **Landowner-Sponsored Forest Management Planning**

Managing a small forest for values such as timber harvest or wildlife management can be difficult for the small parcel owner. Also, for those property owners interested in realizing the financial benefits of a timber harvest, it may be difficult to attract sufficient interest in the timber sale if the parcel is isolated and not of sufficient size to attract a competitive purchase offer.

For landowners who are interested, a more comprehensive approach to timber management can yield mutual benefits. A coordinated initiative by forest land owners to develop cooperative timber management plans for their properties can set the stage for larger, more attractive timber sales and reduce the costs and impacts of logging roads by coordinating skid roads and landings. Further opportunities can be explored for additional mutually beneficial activities such as coordinating leases for sportsman's groups, exploration of conservation easement options in partnership with conservation organizations, and for other cooperative initiatives.

In addition to the DEC, which has several forest-related programs and support staff, for interested forest landowners, there are several non-profit support networks available. One example is the master forest owners (MFO) program. All MFOs are graduates of a 4-day training program, where they learn about sawtimber and wildlife management, forest economics, and ecology. The MFOs continue to receive information updates, attend refresher classes and maintain contact with natural resource managers from private, public, and academic organizations (see <http://www.dnr.cornell.edu/ext/mfo/index.htm> ). The New York Forest Owners

## Marbletown Natural Heritage Plan

Association ([www.nyfoa.org](http://www.nyfoa.org)) is a state-wide group dedicated to promote sustainable forestry practices and improved stewardship on privately owned woodlands.

### **Market Research on Sustainable Forest Products**

There may be a need for market research on forest product related economic development, such as value-added products, alternative energy and green building materials in the region. This type of market research could be sponsored by private landowners, businesses, forestry groups or other foundations to address the specific opportunities and needs of the landowners.

### **Natural Resource Apprentice Program**

There are many residents of Marbletown who have extensive knowledge of the town's natural heritage. These local experts could provide training services to interested residents on a number of topics, such as plant and animal identification, sustainable forest resource management, or invasive species identification and removal. This will help to maintain the town's natural heritage into the future. This group could also develop articles that highlight topics of interest related to natural heritage for distribution in the town's newsletter.

### **Realtor-Sponsored Conservation Information Services**

Local realtors can help to advance the town's goals by distributing information and brochures developed by the town to new residents of Marbletown. Realtors are often the first point of contact for new residents and can help provide future landowners with useful information about land management and conservation.



## Marbletown Natural Heritage Plan

### Next Steps

To accomplish the goals of this plan, the following “next-step” short-term actions are recommended for immediate follow-up:

- Conduct a workshop with town boards to review the recommendations in this report and develop a working plan of action. Identify a party to complete each task and establish necessary protocols for coordination. This plan makes recommendations on the lead party for each recommendation. The boards should meet together to discuss these recommendations in light of their existing priorities. They should refine the recommendations as necessary, and develop timelines and strategies for advancing each recommendation. The summary chart in this plan can be used as a starting point for this conversation.

Lead:

- Marbletown Environmental Conservation Commission
- Develop a summary brochure that synthesizes this plan’s goals with the outreach efforts of the Preservation and Investment Committee. The Natural Heritage Vision Map might be on one side, with a list of tools for landowners on the other. One of these tools will be the town’s land conservation program. The state 480a program and a local term easement program (if established) are tools available for forest land owners. There are also grants and financial incentives for landowners interested in conservation and agricultural economic development. Many of these tools are summarized in Appendix C.

Lead:

- Marbletown Environmental Conservation Commission
- Conduct preliminary research on developing a local term easement program. Explore term easement options and commitments with landowners:
  - What size parcel could apply?
  - What would be required of the landowner?
  - Terms of the easement?
  - What amount of tax abatement could be supported fiscally? (fiscal impacts to town taxpayers).

Lead:

- Marbletown Town Board/Consultant
- Seek funding to identify priority development/growth areas in Marbletown. The identification of priority growth areas should be coupled with a build-out analysis. Additional research on the capacity of the town’s aquifers to support compact growth, and the fiscal costs and benefits associated with growth and potential municipal water supply should also be conducted.

Lead:

- Marbletown Planning and Zoning Committee

### **Conclusion**

This chapter has provided a plan of action for the town to advance its Natural Heritage Vision. Fulfilling this plan of action will require leadership and partnership among town boards, landowners, conservation organizations, businesses, and many others – in order to be successful. The action plan calls for investment in planning for conservation, as well as in embracing resource-friendly development, economic development activities and private-sector solutions. Accomplishing the goals of this plan will help the town to further resource conservation goals in balance with economic development.



## REFERENCES

- Brian F. Allan, Felicia Keesing, Richard S. Ostfeld. 2003. Effect of Forest Fragmentation on Lyme Disease Risk. *Conservation Biology* 17 (1), 267–272.
- Catskill Center for Conservation and Development. 2002. *Future of Marbletown*.
- Conway School of Landscape Design. 2005. *Marbletown Index of Natural, Cultural and Historical Resources*.
- David Church and John Myers. 1993. Shawangunk Ridge. *Conservation and Design Guidebook*. Catskill Center for Conservation and Development, Inc.
- Erik Kiviat. 1991. The *Northern Shawangunks*. *An Ecological Survey*. Mohonk Preserve, Inc. Shawangunk Ridge Biodiversity Partnership.
- Jane E. Dayly 2004. *The State of Agriculture in the Hudson Valley*. Glynwood Center.
- Katherine J. Beinkafner. 2005. *Aquifer Protection Study for the Town of Marbletown*.
- Marbletown, Town of. *Zoning Law of the Town of Marbletown*.
- Marbletown, Town of. 2005. *Comprehensive Plan*.
- Marbletown Biodiversity Assessment Training (BAT) Group. 2006. *Marbletown BAT Report (Draft)*.
- New York State Department of Environmental Conservation, Division of Fish, Wildlife and Marine Resources. 2007. *BLACK BEARS IN NEW YORK: Natural History, Range, and Interactions with People. Second Edition*
- Shawangunk Mountains Scenic Byway Steering Committee. 2005. *Shawangunk Mountains Scenic Byway Corridor Management Plan*.
- Shawangunk Ridge Biodiversity Partnership. 2006. *Green Assets: Planning for People and Nature Along the Shawangunk Ridge*.
- Ulster County Agricultural and Farmland Protection Board. 1997. *Ulster County Agricultural and Farmland Protection Plan*.
- Ulster County Environmental Management Council (EMC) and Ulster County Planning Board. 2007. *Ulster County Open Space Plan (Draft)*.
- Ulster County Planning Board, Ulster County Development Corporation, and Ulster County Industrial Development Agency. 2007. *Ulster Tomorrow*.





## Glossary

**Agricultural District.** Article 25-AA of the Agriculture and Markets Law is intended to conserve and protect agricultural land for agricultural production and as a valued natural and ecological resource. Under this statute, territory can be designated as an agricultural district. To be eligible for designation, an agricultural district must be certified at the county level for participation in the state program. Once a district is designated, participating farmers and farmland owners within it can receive reduced property assessments and relief from local nuisance claims and certain forms of local regulation. Farm operations within agricultural districts also enjoy a measure of protection from proposals by municipalities to construct infrastructure such as water and sewer systems, which are generally intended to serve non-farm structures and developments.

**Aquifer.** A saturated geologic formation that receives, stores, and/or transmits groundwater that can be withdrawn and used for human purposes. An ***unconsolidated surficial aquifer*** (also known as an *overburden aquifer*) is an aquifer associated with sand and gravel deposits. These unconsolidated deposits generally rest on top of bedrock. A ***bedrock aquifer*** is an aquifer associated with fractures and other openings within “solid” rock that are capable of transmitting water.



Trees and vegetation provide a natural buffer along a stream.

**Biodiversity.** The biological variety of plant and animal life in all forms, as well as their interactions with the non-living (abiotic) environment. Includes ecosystem diversity, species diversity, and genetic diversity.

**Buffer.** An area and/or a physical or visual feature that separates different land uses. The buffer may incorporate natural features such as woodlands, attractive fencing, stone walls, and hedgerows wherever feasible, or requires the creation of a planted landscape buffer where no natural features exists.

**Build-out analysis.** A projection of a community’s future development growth that is based upon the maximum theoretical development of all lands under the current zoning and regulatory controls.

**Cluster Development (Subdivision).** A technique that allows flexibility in design and subdivision of land by allowing the developer to cluster buildings on a portion of a site to preserve a larger area of open space. Cluster development allows a municipality to maintain its traditional open space character, while at the same time providing new development. The use of clustering can help a municipality achieve planning goals that

## Marbletown Natural Heritage Plan

call for protection of open space, scenic views, agricultural lands, woodlands and other open landscapes, while placing development away from environmentally sensitive areas.

**Comprehensive Plan.** A document that is created and updated locally that helps to guide the long-term protection, enhancement, growth and development of a municipality. This plan includes text, maps, charts, reports and other materials that help to illustrate and describe the plan's goals and objectives, concepts, policies and guidelines.



In this residential development, homes are clustered closer together and open space is preserved as a common area.

**Conservation.** The use of a resource while not diminishing or damaging its natural resource value. This implies knowing the particular values that the resource possesses and having a specific plan in place to ensure the balance of its use and protection.

**Conservation Design (or Analysis).** A process for area planning, subdivision planning or site planning in which the natural setting and primary resources (for example streams, wetlands, wildlife habitat, historic buildings, scenery and viewsheds) are given high priority. This process differs from conventional design in that the resources are considered and integrated into the overall design before lots, roads, and the built environment are laid out.

**Conservation Subdivision.** A subdivision where a substantial portion of the open space resources are identified and set aside for conservation or recreation through a detailed site analysis process for open space resources.

**Conservation Easement.** A voluntary legal agreement between the landowner and the municipality, or a third party such as a land trust, to protect land from development by permanently restricting the use and development of the property, thereby preserving its natural or cultural features. The legally binding agreement is filed in the office of the county clerk in the same manner as a deed. The landowner retains ownership of the land, and all of the rights of ownership except the ability to develop the land. The specific restrictions are detailed in the easement agreement.

**Cultural Resources.** The cultural features of a community reflect the ways in which the people who have lived there have used their natural environment to suit their economic needs and social patterns, and may include such types of resources described as agricultural, institutional, historic, and archeological, among others.

**Design Guidelines.** Often illustrated concepts that help to guide new development or reuse with respect to the natural and built resources that a community values and seeks

## Marbletown Natural Heritage Plan

to protect. Design guidelines can address topics such as site and landscape design, architecture, materials, colors and signs. They are generally informational and collaborative in nature, creating an opportunity for project sponsors to review the guidelines prior to designing a project with the advantage of understanding the goals of the community and the planning board.

**Farmland, Prime.** As defined by the National Resources Conservation Service (NRCS), prime farmland is “land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also available for these uses (the land could be cropland, pastureland, rangeland, forest land, or other land, but not urban built-up land or water).”

**Farmland, Statewide Importance.** Lands with a good combination of physical and chemical features for the production of agricultural crops.

**Fee Simple.** The purchase of property outright with full rights.

**Fiscal Impacts.** The costs and revenues that will result from a particular proposed project, program or plan.

**Green Infrastructure.** An interconnected system of natural lands, parks, waterways and open spaces that helps to sustain environmental health, economy and quality of life.

**Growth Management.** The process of guiding development, through a system of land use techniques, in a direction that is environmentally and fiscally sound and that helps to preserve quality of life. The goals of growth management often include encouraging urban infill, reducing sprawl, and promoting economic development.

**Hamlet.** A cluster of dwellings and/or other uses, such as commercial and retail, often at a crossroads, that is much smaller in scale than a village or downtown.

**Installment Purchase Agreement (IPA).** A PDR program where the landowner receives semi-annual tax-exempt interest on the PDR value of the land for a period of time (typically 20 to 30 years). At the end of the payment term the principal balance is paid to the landowner. The landowner can choose to end the IPA early and take the principal at any time.



Farmlands are important open space components in a rural landscape.

**Life Estate.** Ownership of land (or other assets) that is limited to the life of the owner.

**Limited Development Plan.** Similar to a conservation design, a limited development plan identifies important resources to protect; unlike a conservation design however,



## Marbletown Natural Heritage Plan

where often the number of units remain the same as under a conventional development, a limited development generally creates less development than zoning allows for on a particular property.

**Municipal Bond.** A bond issued by a local government to pay for special projects, such as infrastructure improvements or open space preservation.

**Open Space.** Open space consists of farmland, woodland, and other ecological, recreational, and scenic land that helps to define the character of a community. Open space may be public or privately owned. Some open space is **permanently protected** from development such as parks, nature preserves, and wetlands while other parcels are subject to development. A community's definition of open space often depends on the context. A narrow pathway, a small pocket park, or even a cemetery surrounded by development can constitute open space in some communities.

**Overlay District (or zone).** The overlay zoning technique is a modification of the system of conventionally mapped zoning districts. An overlay zone applies a common set of standards to a designated area that may cut across several different conventional or "underlying" zoning districts. The standards of the overlay zone apply in addition to those of the underlying zoning district. Some common examples of overlay zones are the flood zones administered by many communities under the national flood insurance program, historic district overlay zones, areas of very severe slopes, waterfront zones, and environmentally sensitive areas.

**Purchase of Development Rights (PDR).** A purchase of development-rights (PDR) program involves the purchase by a municipal or other government agency or private land conservation organization of development rights from private landowners whose land it seeks to preserve in its current state without further development. The PDR system can protect farmland as well as ecologically important lands or scenic parcels essential to rural character of the community. Under PDR, the land remains in private ownership and the government acquires non-agricultural development rights. These development rights once purchased by government (typically) or a land trust, are usually extinguished. Landowners who participate receive payment equal to the development value of the property. In return, the property owner agrees to keep the land forever in forest, agriculture or other conservation-type use. The owner typically files property covenants similar to a conservation easement limiting the use of the property to conservation-based activities.

**Performance Standards.** Criteria established to protect a community's natural and built resources and quality of living through such matters as, but not limited to, noise, air pollution, emissions, odors, wastes, traffic impacts, and visual impact. Typically, land development and use are regulated through zoning by a series of such performance standards that provide criteria for limiting the impacts of development.

**Permissive Referendum.** An action that is subject to permissive referendum means that the Town Board may take an action without having a general vote of the residents.

## Marbletown Natural Heritage Plan

Registered voters may petition the decision of the municipal board – and require a ballot referendum for all voters to weigh in on the issue.

**Preservation.** An active process of stewardship with the goal of protection of a resource in its existing, natural or original state. An example is historic preservation of a building.

**Real Estate Transfer Fee.** A State or local fee paid when title passes from one owner to another.

**Recreational Resources.** Recreational resources may be described as areas in which the following types of leisure activities may occur: existing or planned hiking, biking, and canoeing; ball fields, tennis courts, basketball courts, golf courses, skating rinks, ski slopes, and swimming pools; and waterfront activities such as boating and fishing. Recreational resources also include nature preserves, community gardens, and other outdoor areas for quiet public enjoyment.

**Riparian Corridor.** A vegetated corridor along the bank and floodplain of a stream, river or other waterway; a transitional zone between a terrestrial area and an aquatic area.

**Scenic Corridor.** A scenic corridor is a viewshed that contains scenic vistas that may include natural and cultural resources.

**Site Plan (Review).** Site Plan Review is part of the development review process by which the physical elements of a proposed use are reviewed to ensure that they are compatible with the physical characteristics of the site, as well as with the existing and potential uses of the surrounding area. A site plan provides detail on the future development of streets, parking areas, underground utilities, building “footprints”, sidewalks, landscaping, etc. through a scale drawing.



Open farmland contributes to the scenic quality of the adjacent roadway.

**Sprawl.** Ever-expanding metropolitan strip and suburban areas consuming huge amounts of farmland, forestland, and natural resources that wastes lands and resources while often abandoning people, places and private investments at the center, in the hearts of towns and villages.

**Subdivision Regulations.** A set of laws or regulations for the division of land, lot, or parcel into units for the purpose of development and/or sale.

**Term (Conservation) Easement.** A term conservation easement is a voluntary legal agreement between a landowner and a municipality that is written to last for a period of

## Marbletown Natural Heritage Plan

years, most commonly for 5 to 20 years. A term conservation easement is not a permanent easement, and thus does not guarantee long-term protection of resources.

**Viewshed.** A particular panorama that is valued for its aesthetic or cultural attributes. Buildings, structures, places, or natural features may be considered to contribute to, or detract from the quality of viewshed experience.

**Wetlands.** Areas that are saturated by either fresh or salt water for at least a period of time during the growing season. In state regulations, they are defined chiefly by the forms of vegetation present. Wetlands provide a number of benefits to a community, including habitat protection, recreational opportunities, water supply protection, flood protection, and scenic beauty.

**Wildlife Corridor.** A continuous area, often containing critical vegetated habitat or cover, that facilitates the movement of wildlife through an urban, suburban, or rural environment.

# MARBLETOWN NATURAL HERITAGE PLAN

## **Appendix A: Summaries from Focus Group Sessions**





# **Marbletown Natural Heritage Plan**

## **Business Owners Focus Group**

**Wednesday, September 27, 2006**

### **Summary Notes**

#### Participants

Robert Mann, Marbletown Multi Arts  
Ken Davenport, Reliant Energy  
Mike Biltonen, Blue Marble Farms  
Barbara Esmark, BE Gallery  
Thomas LaFera, Table Rock Tours  
Karen Davis, Davis Custom Builders/Prudential Realty

#### Group Discussion Points

1. Open space conservation should be balanced with economic investment.
  - Need an economic development strategy
  - All types of people need to live here
  - Need to provide opportunities for an aging population
  - Need to keep people who grew up in the area
  - Promote/protect 209 corridor/businesses
  - College is a critical opportunity -should be connected to town/economic centers
  - Weekenders are important to the economy
  
2. There is a fine line between open space plan, zoning, conservation subdivision regulations.
  - All of these actions involve landowner equity
  - Community members and landowners do not necessarily see the distinction
  
3. Need to help people understand the need for a local open space plan.
  - There are many other pressing issues
  - How is it different from a regional open space plan?
  - Are we going to end up with many different plans that do not meet up?
  - How does it differ from Ulster County OSP, Shawangunk Regional Open Space Plan, 209 Corridor Study?

4. Open space plan needs to be fiscally sustainable.
  - Community can not afford what they want (tax burden)
  - Town needs revenue for other purposes
  - “Tourist” communities are not affordable for everyday people
5. Open space resources are important to town businesses.
  - They bring people to the region
  - Mohonk Preserve and ridge
  - Historic hamlets
  - Water
  - Natural beauty/charm
  - Recreational opportunities – biking, walking, hiking, equestrian
6. Conservation projects should provide a public benefit.
  - Specific opportunities for public access to Rondout and Esopus Creeks
7. We need to continually ask questions and make sure that the plan is economically driven.
  - May be able to privatize OS protection to a higher level
  - Pick a few key projects
  - Balance with other needs in town
8. We need to be able to say yes to good development – get behind it.
  - Need to identify economic opportunities and promote them just as we are with OS conservation
  - Need to support good development projects – say yes more often

# **Marbletown Natural Heritage Plan**

Conservation Professionals Focus Group  
Wednesday, September 27, 2006, 12-2 pm  
Summary Notes

## Participants

Jennifer Garofalini, Mohonk Preserve  
Brooke Pickering Cole, CDC  
Kim Massie  
Walter Levy, Rondout-Esopus Land Conservancy  
Steve Rice, D&H Canal Corridor  
Laura Heady, Hudsonia  
Cara Lee, Biodiversity Partnership/Green Assets/TNC  
Jennifer Cairo, DEP/Natural Resources Management

## General Notes

### 1. Habitat mapping projects underway:

Hudsonia – 2 study areas:

- Western part of town, including the Vly and the Kripplebush area, up to Scarawan Rd. in the north
- Rondout Creek corridor in Marbletown (excepting High Falls area)

Biodiversity Assessment Training:

- Center of town between Rt. 209. in the east and the Vly in the west; and between the Esopus Creek in the north and Schoonmaker Rd. and Buck Rd in the south

### 2. Recreational efforts underway – rail-trail loop to major destinations

## Group Discussion Points and Conclusions

### 1. Major conservation opportunities/patterns

- Esopus Creek – many large parcels along creek
- Expanding ridge conservation area
- Conservation corridor up to Ashokan Reservoir



- Rondout to Catskills Corridor
  - Catskill-Shawangunks Corridor (OSI working on Corridor to Catskills)
  - Eastern corner of town – Rosendale –Binnewater Lakes area
  - Williams Lake – ecology, recreation, water supply
2. How do we handle the lack of sufficient data?
    - Make sure to incorporate data as available during plan development (such as habitat mapping projects)
    - Call for new studies/data if a specific area is thought to be important
    - Continue to seek advice of resource experts
    - Plan should ask for updates as new data become available
  3. Other important areas:
    - Esopus Creek – cliffs and unique areas
    - Large forest area between Rt. 231 and Atwood on Esopus creek
    - May be areas for bog turtle, marble bedrock, wet meadow habitats, fens, floodplain areas
    - Winchell’s Falls, Cathedral Gorge on Esopus (field campus in Olive)
  4. Protection of floodplains becoming more of a challenge as development increases. Opportunity to integrate more floodplain protection into plan.
  5. Education and promotion of forest conservation needed.
    - Need to help people understand the importance of large, contiguous forests
    - Forests are not as visible to many (farms and river valleys often more visible)
    - Opportunity to work with recreation enthusiasts (hunting clubs, fishing, etc.)

Meeting Notes  
Marbletown Landowners Association (MLA)

December 6, 2006  
John Behan, Behan Planning

1. John Behan distributed: open space questionnaires (did not get any back- most attendees had already seen/filled out the questionnaire), information on the new NYS law for increased tax benefits for donation of conservation easement, info on 480a, tax break for commercial forest land owners, and copies of the agricultural rating map.
2. Landowners concerned that increased property values are leading to increasingly unaffordable real property taxes (lot of frustration voiced). Long discussion on this. Three main outcomes:
  - a. Consider looking at existing tax breaks more closely (e.g. 480 a) and getting enrolled—and if the program does not work well—working with local and state officials to redesign the law to make more attractive.
  - b. Consider additional local program, e.g., term conservation easements. (Noted that this would require local support at the tax burden shifts more toward owners of developed land.)
  - c. Continue to develop support for property tax reform—esp. for funding of schools—toward a more income or capital flow (more fitting current economy) rather than land-based approach (which fit the older, more agrarian economy which is not the current economic base of the region, state or nation.)
3. Reviewed what we had heard to date from community and resource inventory to date.
4. Questions and discussion on who were the “willing landowners”. Participants questioned why do plan (and bond) without these. Discussed Behan observation that “willing landowner” is not a fixed object but a point of view that can change over time. John noted his experience in working with landowners who, at first, may not classify themselves as “willing landowners” so much as willing to listen and talk, and, who ultimately found conservation options valuable for them and ended up working out land conservation deals for their property that they were happy with. Suggested more could be done with landowner outreach for the plan.
5. Reviewed summary maps of priorities to date.
6. In conclusion, no major problems voiced over draft priorities maps. Group would like to know when copies of maps would be available on the web and when draft plan/public meetings are coming so they can continue to be involved. John invited back to future meeting.

Meeting Notes  
Marbletown Landowners Association (MLA)  
December 6, 2006

Rod Basten, President, called the Marbletown Landowners Association, Inc. meeting to order at 7:12 PM. There were 22 members in attendance at Town Hall.

Behan Planning Associates Presentation:

John Behan told the MLA that his firm was hired to develop a Resource Heritage Plan for Marbletown. His firm was not involved in the PDR, but would be interested to work with Marbletown as they have worked with other towns. John Behan's presentation consisted of the benefits of the Heritage Plan for the town and its residents, the goal of the plan, inventory of town resources, maps of natural systems, and priority cultural and recreational resources. One of the benefits that created an avalanche of questions was that land value would be strengthened. Many MLA members questioned the value of this since it would increase taxes. Behan then explained that there were programs available to large landowners to reduce assessments (e.g., conservation easements), but one member stated that a minority of large landowners would get tax benefits because the majority of residents only own a small amount of land.

In creating the plan Behan has received many suggestions including

1) tax burden is an obstacle to retaining land, 2) landowners bear burden of public benefit, 3) the plan needs flexibility, one does not fit all, 4) more options are needed, 5) there should be private sector conservation approaches, and 6) the need to say yes to open development.

When questioned why he was hired by the town to develop this plan he answered that he was asked to organize resources and organize an action plan. Projects are happening in town and this will provide guidelines for the future. His scope is to develop the plan, how it is executed is dependent on the town. His reasons for speaking to the MLA were 1) there should be lots of hands on the project, 2) to get the land owners interested, 3) for long term management issues of certain areas there needs to be a plan made up by all interested groups, 4) the town needs to be competitive for grants, and 5) we must have a wildlife habitat that works.

The Heritage Plan will be presented to the town in early spring.

# Marbletown Natural Heritage Plan

Meeting Summary  
Forest Focus Group  
May 10, 2007

## In attendance:

Jeff Rider, DEC Region 3  
Jeff Wiegert, DEC Region 3  
Ryan Trapani, Catskill Forest Association  
George Numrich  
Sydney Blum  
Jim Ostrander  
John Stockin, Lyonsville Sugarhouse

## Issues discussed:

Increasing taxes are a problem for forest landowners. They can not make enough money off of the land to pay the taxes. Some will have to sell if the situation does not change.

The town's forests require long-term commitment and management in order to regenerate. Many of the town's forest lands do not have much value for forestry because they have been harvested w/o management. There are still some small (30-40) woodlots of good quality.

The deer population is a major problem (forest fragmentation and open lots in the woods attract deer) because the deer eat young trees and make it hard for forests to regenerate.

## Existing tools for forest landowners discussed:

- Right to practice forestry act (similar to right to farm act) – protects landowners from restrictive local laws.  
<http://www.dec.ny.gov/environmentdec/25536.html>
- State 480A program – (see attached summary for more detail)  
<http://www.dec.ny.gov/lands/5236.html>
- FLEP – a cost share program for timber/wildlife/recreation enhancements (administered by DEC for USFS)  
<http://www.dec.ny.gov/animals/7535.html>



- Conservation easements – tax benefits can vary depending on landowner situation.

Future opportunities discussed:

Local term easement program: local tax relief is desired by forest landowners. This may have some fiscal impacts but would benefit of the community. Development of a local term easement program was discussed. Landowners might be willing to commit to such a program (possibly with sustainable management goals) if the tax benefits were worth it.

Green building materials/LEED certification and landowners cooperatives: state forest lands are green certified (third party certification). Is there a market for green products? Prices for green products are too high. More hardwoods needed. Until local and national chains start selling green building materials and prices become more competitive, it will be hard to make a profit on green.

## The New York State Forest Tax Law (480a)

Under Section 480(a) of the New York State Real Property Tax Law, landowners with 50+ contiguous acres of forest, all of which are dedicated to timber production, can apply for a partial exemption of town, county and school taxes. To receive this benefit, they must follow a 10-year forest management plan developed by a consulting forester and approved by DEC, meet DEC timber harvesting requirements and file an annual commitment with the local assessor. The forest management plan also needs to be updated every five years.

This program can provide much-needed tax breaks for landowners, but the commitments and obligations should be carefully evaluated before enrolling. Below are some of the concerns and benefits that have been raised through the planning process for the Natural Heritage Plan regarding the New York State Forest Tax Law.

Town:

- There are many landowners with less than 50 contiguous acres in Marbletown that would not meet program requirements. These landowners represent the majority of the town's forests and there are currently no major tools available to reduce their taxes.
- There is no mechanism for replacing loss of tax revenue associated with this program. The tax burden is shifted to other landowners in the town. However, the program does provide a public benefit and therefore the shift in tax burden is expected to be supported by the community.
- The management plan helps to preserve the long-term health of the forest and all of the benefits that forests provide to the community, such as water quality protection and flood prevention.

Landowner:

- The program exempts up to 80% of assessment from taxation and can help landowners hold on to land when faced with increasing taxes.
- The program requires a forest management plan, which is an initial up-front cost for the landowner. An enrolled landowner may also be expected to do non commercial forest improvement work and boundary line maintenance; however, in the long-term the enrollment usually increases profitability and more than not recoups the initial costs of planning.
- The program requires a long-term commitment and there are strict penalties for early withdrawal.
- A stumpage fee of 6% is collected at the time of harvest by the county.

Please note that a DEC forester is available to discuss the program with landowners that meet the basic criteria (ownership of 50+ contiguous acres of forest lands) to determine whether the 480a program is a match for their needs and situation. Contact the DEC Region 3 office at (845) 256-3018 for more information



# MARBLETOWN NATURAL HERITAGE PLAN

## **Appendix B: Correspondence from the NYS Natural Heritage Program**





# New York State Department of Environmental Conservation

## Hudson River Estuary Program, Central Office

625 Broadway, 5<sup>th</sup> floor, Albany, New York 12230-4757

Phone: (518) 402-8860 • FAX: (518) 402-8925

Website: [www.dec.ny.gov](http://www.dec.ny.gov)



Alexander B. Grannis  
Commissioner

October 16, 2007

To: Melissa Barry, Behan Planning Associates

From: Karen Strong, Biodiversity Outreach Coordinator, NYS DEC Hudson River Estuary Program

Re: Known Important Habitat in the Town of Marbletown

Natural habitats are of great importance to towns in the Hudson River Valley. Not only are they a source of great beauty and scenic vistas, but they provide vital ecosystem goods and services to all of us, including cleaning our air and water and helping protect people from Lyme disease. In addition, the Hudson Valley is a unique place in New York State, it boasts a rich diversity of species and high quality habitats. Marbletown is no exception. Nestled between the Shawangunk Ridge and the Catskill Mountains, Marbletown is home to a range of high quality habitats from forests, to wetlands and floodplains. Especially noted is the presence of several species of rare dragonflies. New York is one of the most diverse states for dragonflies and damselflies. These species are not only beautiful, but also eat harmful insects, including mosquitoes, both as larvae and adults. For more information on the conservation of the plants, animals, and habitats listed in this document, please contact Laura Heady, Biodiversity Outreach Coordinator for the Southern Hudson Valley at 845.256.3061 or [ltheady@gw.dec.state.ny.us](mailto:ltheady@gw.dec.state.ny.us).

To identify the important habitats of the Town of Marbletown, I used data from the New York Natural Heritage Program Database. Additional data were gathered from the NY Reptile and Amphibian Atlas and the NY State Breeding Bird Atlas. These data are listed in the tables at the end of the summary. Other possible sources of information include biology professors at SUNY Ulster, and The Olive Natural Heritage Society (<http://www.onhs.org/>).

### **Documented Important Habitats in the Town of Marbletown**

#### *Shawangunk Ridge*

A small portion of the Shawangunk Ridge is located in the Town of Marbletown, but this section contains a great diversity of species and habitats. High quality chestnut oak and hemlock Northern Hardwood forests are prevalent. Also present are such species as the Northern Copperhead, Timber Rattlesnake (State threatened), the Eastern Box turtle (state species of special concern), Five-lined Skink, Wood Turtle (state species of special concern), and Mottled Darner Dragonfly. All of these species require healthy, connected habitats to thrive, something that is clearly present in the Ridge portion of Marbletown. Maintaining the healthy, connected forests is vital to the persistence of these species.

### *Vly Swamp*

Vly Swamp lies on the border of Marbletown, Rochester, and Olive. Two unique and high quality forested wetland types are found here, hemlock northern hardwood swamp and Red Maple Tamarack Peat Swamp. Two rare dragonfly species, the Taper-tailed Darner and the Arrowhead Spiketail use these wetlands. Conservation of the wetland watershed will help ensure this unique place persists over time.

### *The Esopus Creek Corridor*

Streams and stream corridors are important habitats for a variety of plants and animals. In the Esopus Creek, seven rare plants have been documented on the surrounding cliffs and wetlands. Animal species that have been reported here include Wood Turtle, Red-backed Salamander, and Pickerel frog. Animal species will often use up to 1000 meters of land on either side of the stream. Maintaining natural vegetation near the creek where possible will help conserve important habitat in this region. Building is compatible, but should be kept as far from the stream as practical.

### *Ashokan Reservoir and Vicinity*

Bald Eagles use the reservoir and a rare dragonfly, the Spatterdock Darner, uses the beaver pond spillway in Marbletown. Also found in the vicinity were a Northern Spring Peeper and a Northern Slimy Salamander. Slimy salamanders are indeed slimy, but they also require pristine habitats. You probably wouldn't see one unless you were looking for it.

### *NE Corner of Town near Rosendale*

This area has patches of high quality Hemlock Northern Hardwood forest shared with Rosendale to the east. Forests are important to Hudson Valley communities for a variety of reasons, including cleaning air, protecting water supply, keeping Lyme disease at bay, and of course, contributing to Marbletown's biodiversity.

### *Other species or habitats of concern that occur in Marbletown*

There is an old (1970) bog turtle record from Stone Ridge. Bog turtles are on the federal endangered species list as a threatened species.

Vernal pools are temporary wetlands that serve as the only breeding habitat for several species of special concern. The salamanders, frogs, and other animals that use the pool when it is wet use other habitats during different parts of the year. For example, the spotted salamander spends most of its time on the forest floor, and uses the pool only once a year, in March and April, to breed. A vernal pool in town was documented to have Jefferson's Salamander (NYS Species of Special Concern), Spotted Salamander and Wood Frog. Though the pool is the recognizable feature, the surrounding forest is the primary habitat of these creatures. Because Marbletown has an intact landscape, there are probably more high quality vernal pools like this one.

Streams and stream corridors are important habitat to a variety of species, including rare plants and amphibians and reptiles. Northern Red Salamanders require clean, siltless streams and have been found in several areas in Marbletown. Because they are linear, stream corridors also link

other habitats. Connections between habitats are important for the long term survival of biodiversity.

There are a few more rare dragonfly records, Arrowhead Spiketail and Spatterdock Darner from the Ripplebush/Krumville area.

Sources of data:

### **The New York Natural Heritage Program**

The New York Natural Heritage Program is a joint program of the Nature Conservancy and NYS DEC. They are also part of a continent-wide network of natural heritage programs called NatureServe. NY Natural Heritage works throughout New York State to identify rare plants and animals as well as significant ecological communities, which might be rare or of exceptionally high quality when compared to other examples in the state. Inventory by Heritage biologists is ongoing statewide. For more information about this program, visit [www.nynhp.org](http://www.nynhp.org).

A search of the New York Natural Heritage Program database for the Town of Marbletown yielded 51 records, some rare species and significant ecosystems occur more than once in the Town. Those rare plants, rare animals, and significant ecosystems are shown in Table 1.

### **The New York Amphibian and Reptile Atlas**

Review of the New York Amphibian and Reptile Atlas yielded 27 species. The project relied on volunteers to submit records of reptiles and amphibians from 1990 – 1999. Species information was included in descriptions of other areas where it added information about habitat quality. Most of the records come from the small part of town on the Shawangunk Ridge. For more information about the Atlas, visit <http://www.dec.ny.gov/animals/277.html>

### **NY State Breeding Bird Atlas 2000-2005 Data**

The Breeding Bird Atlas is a comprehensive, statewide survey that assists in identifying the current distribution of breeding birds in New York. The 1988 publication, "The Atlas of Breeding Birds in New York State" edited by Robert F. Andrle and Janet R. Carroll, was the result of the first Breeding Bird Atlas Project in New York, conducted from 1980 to 1985. The current Atlas is the second generation of Breeding Bird Atlases in New York. The effort was repeated to see what changes may have occurred in the twenty years since field work on the first Atlas began. For more information on the Breeding Bird Atlas and the methodologies used to collect the data please visit: <http://www.dec.ny.gov/animals/7312.html>



**Table 1. Rare plants, rare animals and significant ecosystems found in the Town of Marbletown** A search of the NY Natural Heritage database also found the following lists of rare plant and animal species. Sensitive species are those species most subject to collection and disturbance if their identity and location are publicized. \*\*Updated information: A number of plant and animal taxonomic names have been updated since the 2006 report. *Sedum rosea* (roseroot stonecrop) is now *Rhodiola rosea*. *Clemmys muhlenbergii* (bog turtle) is now *Glyptemys muhlenbergii*. *Aeshna mutata* (Spatterdock Darner) is now *Rhionaeschna mutata*.

#### Significant Ecosystems

| COMMON NAME                      | NOTES                         |
|----------------------------------|-------------------------------|
| Chestnut Oak Forest              | High quality common ecosystem |
| Hemlock-Hardwood Swamp           | High quality common ecosystem |
| Hemlock-Northern Hardwood Forest | High quality common ecosystem |
| Red Maple-Tamarack Peat Swamp    | High quality common ecosystem |

#### Rare Plant Species

| SCIENTIFIC NAME                                | COMMON NAME                 | NOTES                   |
|--|-----------------------------|-------------------------|
| <i>Aphanorrhagma serratum</i>                  | Aphanorrhagma               | Rare non-vascular plant |
| <i>Minuartia glabra</i>                        | Appalachian Sandwort        | NYS Threatened          |
| <i>Vittaria appalachiana</i>                   | Appalachian Shoestring Fern | NYS Endangered          |
| <i>Juncus trifidus</i>                         | Arctic Rush                 | NYS Threatened          |
| <i>Entodon brevisetus</i>                      | Entodon                     | Rare non-vascular plant |
| <i>Scutellaria integrifolia</i>                | Hyssop-skullcap             | NYS Endangered          |
| <i>Isopterygiopsis muelleriana</i>             | Isopterygiopsis             | Rare non-vascular plant |
| <i>Rhododendron canadense</i>                  | Rhodora                     | NYS Threatened          |
| <i>Isoetes riparia</i>                         | Riverbank Quillwort         | NYS Endangered          |
| <i>Rhodiola rosea</i>                          | Roserooot                   | NYS Endangered          |
| <i>Geum virginianum</i>                        | Rough Avens                 | NYS Endangered          |
| <i>Geum verum</i>                              | Spring Avens                | NYS Endangered          |
| <i>Ranunculus hispidus</i> var. <i>nitidus</i> | Swamp Buttercup             | NYS Endangered          |
| <i>Vernonia gigantea</i> ssp. <i>gigantea</i>  | Tall Ironweed               | NYS Endangered          |
| <i>Juncus subcaudatus</i>                      | Woods-rush                  | NYS Endangered          |

#### Sensitive Rare Plant Species

| SCIENTIFIC NAME            | COMMON NAME           | NOTES                      |
|----------------------------|-----------------------|----------------------------|
| <i>Woodsia alpina</i>      | Alpine Cliff Fern     | NYS Endangered             |
| <i>Asplenium bradleyi</i>  | Bradley's Spleenwort  | NYS Endangered             |
| <i>Asplenium montanum</i>  | Mountain Spleenwort   | NYS Threatened             |
| <i>Aplectrum hyemale</i>   | Puttyroot             | NYS Endangered             |
| <i>Isotria medeoloides</i> | Small Whorled Pogonia | Federal Listing-Threatened |

#### Rare Animal Species

| SCIENTIFIC NAME                | COMMON NAME         | NOTES                 |
|--------------------------------|---------------------|-----------------------|
| <i>Neotoma magister</i> h      | Allegheny Woodrat   | NYS Endangered        |
| <i>Cordulegaster obliqua</i> * | Arrowhead Spiketail | Uncommon invertebrate |
| <i>Podilymbus podiceps</i> *   | Pied-billed Grebe   | NYS Threatened        |
| <i>Rhionaeshna mutata</i> *    | Spatterdock Darner  | Uncommon invertebrate |
| <i>Gomphaeschna antilope</i> * | Taper-tailed Darner | Uncommon invertebrate |
| <i>Asterocampa clyton</i>      | Tawny Emperor       | Rare butterfly        |

Sensitive Rare Animal Species (not mapped)

| SCIENTIFIC NAME                   | COMMON NAME | NOTES                      |
|-----------------------------------|-------------|----------------------------|
| <i>Haliaeetus leucocephalus</i> * | Bald Eagle  | NYS Threatened             |
| <i>Glyptemys muhlenbergii</i> h   | Bog Turtle  | Federal Listing-Threatened |

h Signifies a historic record.

\* Species of greatest conservation need. Criteria for this listing based from The State Wildlife Grants program which provides funds for conservation efforts aimed at preventing fish and wildlife populations from declining, reducing the potential for these species to be listed as endangered. For more information see: <http://www.dec.ny.gov/animals/7179.html>

**Table 2. Amphibian and Reptile species of conservation concern in the Town of Marletown.** List derived from the NY Amphibian and Reptile Atlas, it includes only species that are development sensitive based on information from DEC and the Wildlife Conservation Society.

| SCIENTIFIC NAME                         | COMMON NAME               | NOTES  |
|---|---------------------------|--|
| <i>Elaphe o. obsoleta</i> *             | Black Rat Snake           |  |
| <i>Terrapene c. carolina</i> *          | Eastern Box Turtle        | NYS Special Concern                          |
| <i>Eumeces fasciatus</i> *              | Five-lined Skink          |  |
| <i>Hyla versicolor</i>                  | Gray Treefrog             | Development sensitive                        |
| <i>Ambystoma jeffersonianum</i>         | Jefferson Salamander      | NYS Special Concern                          |
| <i>Coluber c. constrictor</i> *         | Northern Black Racer      |  |
| <i>Agkistrodon contortrix mokasen</i> * | Northern Copperhead       |  |
| <i>Desmognathus fuscus</i>              | Northern Dusky Salamander | Development sensitive                        |
| <i>Diadophis punctatus edwardsii</i>    | Northern Ringneck Snake   | Development sensitive                        |
| <i>Plethodon glutinosus</i>             | Northern Slimy Salamander |  |
| <i>Notophthalmus v. viridescens</i>     | Red-spotted Newt          | Development sensitive                        |
| <i>Liophorophis vernalis</i> *          | Smooth Green Snake        |  |
| <i>Ambystoma maculatum</i>              | Spotted Salamander        | Vernal pool indicator, development sensitive |
| <i>Crotalus horridus</i> *              | Timber Rattlesnake        | NYS Threatened                               |
| <i>Rana sylvatica</i>                   | Wood Frog                 | Vernal pool indicator, development sensitive |
| <i>Glyptemys insculpta</i> *            | Wood Turtle               | NYS Special Concern                          |

\* Species of greatest conservation need. Criteria for this listing based from DEC's State Wildlife Grants program which provides funds for conservation efforts aimed at preventing fish and wildlife populations from declining, reducing the potential for these species to be listed as endangered. For more information see: <http://www.dec.ny.gov/animals/7179.html>

**Table 3. Breeding Bird species of conservation concern in the Town of Marbletown.** List derived from the NYS Breeding Bird Atlas, it includes only species that are a conservation priority based on information from DEC and the National Audubon Society of New York.

| Common Name             | Scientific Name                   | Hudson Valley Conservation Priority (Audubon NY) | NYS Legal Status |
|-------------------------|-----------------------------------|--|------------------|
| Acadian Flycatcher      | <i>Empidonax virescens</i>        | M  |                  |
| American Black Duck     | <i>Anas rubripes</i>              | H  |                  |
| American Kestrel        | <i>Falco sparverius</i>           | M  |                  |
| American Woodcock*      | <i>Scolopax minor</i>             | H  |                  |
| Bald Eagle*             | <i>Haliaeetus leucocephalus</i>   | H  | Threatened       |
| Baltimore Oriole        | <i>Icterus galbula</i>            | M  |                  |
| Belted Kingfisher       | <i>Ceryle alcyon</i>              | M  |                  |
| Black-and-white Warbler | <i>Mniotilta varia</i>            | M  |                  |
| Black-billed Cuckoo*    | <i>Coccyzus erythrophthalmus</i>  | M  |                  |
| Blackburnian Warbler    | <i>Dendroica fusca</i>            | M  |                  |
| Blue-winged Warbler*    | <i>Vermivora pinus</i>            | H  |                  |
| Bobolink*               | <i>Dolichonyx oryzivorus</i>      | M  |                  |
| Broad-winged Hawk       | <i>Buteo platypterus</i>          | M  |                  |
| Brown Thrasher*         | <i>Toxostoma rufum</i>            | M  |                  |
| Cerulean Warbler*       | <i>Dendroica cerulea</i>          | H  | Special Concern  |
| Chimney Swift           | <i>Chaetura pelagica</i>          | M  |                  |
| Cooper's Hawk*          | <i>Accipiter cooperii</i>         | M  | Special Concern  |
| Downy Woodpecker        | <i>Picoides pubescens</i>         | M  |                  |
| Eastern Kingbird        | <i>Tyrannus tyrannus</i>          | M  |                  |
| Eastern Meadowlark*     | <i>Sturnella magna</i>            | M  |                  |
| Eastern Towhee          | <i>Pipilo erythrophthalmus</i>    | M  |                  |
| Eastern Wood-Pewee      | <i>Contopus virens</i>            | M  |                  |
| Field Sparrow           | <i>Spizella pusilla</i>           | M  |                  |
| Indigo Bunting          | <i>Passerina cyanea</i>           | M  |                  |
| Louisiana Waterthrush*  | <i>Seiurus motacilla</i>          | M  |                  |
| Northern Flicker        | <i>Colaptes auratus</i>           | M  |                  |
| Osprey*                 | <i>Pandion haliaetus</i>          | M  | Special Concern  |
| Pied-billed Grebe*      | <i>Podilymbus podiceps</i>        | H  | Threatened       |
| Prairie Warbler*        | <i>Dendroica discolor</i>         | H  |                  |
| Purple Finch            | <i>Carpodacus purpureus</i>       | M  |                  |
| Red-headed Woodpecker*  | <i>Melanerpes erythrocephalus</i> | H  | Special Concern  |
| Red-shouldered Hawk*    | <i>Buteo lineatus</i>             | M  | Special Concern  |
| Rose-breasted Grosbeak  | <i>Pheucticus ludovicianus</i>    | M  |                  |
| Ruffed Grouse*          | <i>Bonasa umbellus</i>            | M  |                  |
| Common Name con't       | Scientific Name                   | Hudson Valley Conservation Priority (Audubon NY) | NYS Legal Status |

|                       |                                  |   |                 |
|-----------------------|----------------------------------|---|-----------------|
| Savannah Sparrow      | <i>Passerculus sandwichensis</i> | M |                 |
| Scarlet Tanager*      | <i>Piranga olivacea</i>          | M |                 |
| Sharp-shinned Hawk*   | <i>Accipiter striatus</i>        | M | Special Concern |
| Veery                 | <i>Catharus fuscescens</i>       | M |                 |
| Whip-poor-will*       | <i>Caprimulgus vociferus</i>     | M | Special Concern |
| Willow Flycatcher     | <i>Empidonax traillii</i>        | H |                 |
| Wood Thrush*          | <i>Hylocichla mustelina</i>      | H |                 |
| Worm-eating Warbler   | <i>Helmitheros vermivorus</i>    | H |                 |
| Yellow-throated Vireo | <i>Vireo flavifrons</i>          | M |                 |

\* Species of greatest conservation need. Criteria for this listing based from DEC's State Wildlife Grants program which provides funds for conservation efforts aimed at preventing fish and wildlife populations from declining, reducing the potential for these species to be listed as endangered. For more information see: <http://www.dec.ny.gov/animals/7179.html>





# MARBLETOWN NATURAL HERITAGE PLAN

## **Appendix C: Reference Materials**



## An Overview of Tax Issues for Forest Owners

**Introduction** Taxes are one of the most complicated issues facing landowners today. To operate our governments, whether at the local, state or federal level, we all pay enormous amounts of tax. With proper planning, some of these taxes can be reduced or eliminated. The purpose of this presentation is to introduce you to some of the issues facing landowners. In no way can this introduction adequately cover these complicated issues. My goal is to highlight a few of the main ideas in three areas: property taxes, income taxes and estate taxes. I will not be able to address many subtleties and nuances involved with properly seeking tax relief, and I will not be able to advise you about the applicability of these taxes to your situation. Also, other strategies are not covered due to time constraints. This presentation should merely awaken you to some of the issues. Your next step will be to schedule an appointment with your forester, lawyer or accountant.

### Property Taxes

**The Problem** Property taxes provide the primary method of revenue generation for towns and counties. Back when wealth was measured by land holdings, this tax was related to a landowner's ability to pay. Unfortunately, today most landowners do not earn income from their land. Property taxes must be paid out of income from other sources, such as wages. To add insult to injury, local governments have many more expensive demands than in the past. Some landowners have faced property tax hikes by as much as 1,000%. This disconnect between property taxes and ability to pay places enormous pressure on landowners. Here are three ways to lessen the burden.

**Assessment Challenge** Assessors must determine value for hundreds of properties in their town. In order to accomplish this feat, they use rules of thumb and formulas. They do not have the resources to inspect every acre. In the end, property assessments may not accurately reflect the actual value. Every spring, landowners can challenge, and hopefully reduce, their assessment. Start with your assessor. Schedule an appointment during March or April and explain why your assessment should be reduced. Sometimes this informal meeting will solve the problem. If not, then a formal complaint must be made in the form of a grievance to the board of assessment review, usually around May 1st. If that fails, then the decision of the board can be challenged in court. Through all of this process, the burden of proof is on the property owner. Formal challenges must be based on one of four grounds: (1) unequal assessment, (2) excessive assessment, (3) unlawful assessment, or (4) misclassification.

**Forest Tax Law** New York State has enacted a property tax relief program for landowners who agree to follow a timber management plan. The official name is *The Forest Tax Law* but a lot of people call it *480-a* due to the chapter number in the Real Property Tax Law. For historical reasons, it is a timber oriented program and enrollees must be willing to engage in logging. Other management goals may be included in the plan, so long as they do not interfere with timber management. Only properties with at least 50 acres of forest land qualify. 480-a provides up to 80% reduction in the assessment on forested acres. Actual tax savings for the entire property are always less than 80%, sometime significantly less. The landowner must recommit annually to continue to receive the reduction. Each commitment requires the landowner to follow their management plan for 10 years. The plan must be updated every five years. NYS DEC approves your application and plan. Whenever you have a timber sale, you pay six percent to the county. Failure to follow the rules can result in penalties of two and one half to five times the tax savings you have received.

**Conservation Easements** In theory, granting a conservation easement should split the property tax burden between the landowner and the recipient land trust. When a landowner grants a conservation easement, he or she is donating or selling some, but not all, of the property's ownership rights. Usually development rights are transferred to the land trust. Such a transfer prevents the landowner from subdividing the property and constructing multiple structures on the property. Again, in theory, the land trust received some of the assessed value in the transfer, so it should pay taxes on that portion of the value. The landowner would pay the rest of the property tax. In the real world, however, land trusts are tax exempt and assessors need the tax revenue, so the landowner is stuck with the entire property tax bill. The only exception to this practice concerns conservation easements sold to New York City. NYC will pay for development rights and pay its share of the property taxes. Nevertheless, sales of conservation easement to NYC (or for that matter, any land trust) are complicated, time consuming and not automatic.

### Income Taxes

**The Problem** Landowners generally are taxed on income they produce during the year. Some of that income may come from the property, but much of it will come from other sources. Since the Internal Revenue Code offers a variety of provisions to reduce taxes by engaging in specific activities, it is relevant to inquire whether rural property activities can be used for tax relief. Here are two such areas, and others may apply to your situation.

**Conservation Easements** Donations of conservation easements to non-profit land trusts or government agencies result in a charitable contribution eligible for a deduction. The donation must be for conservation purposes as defined in the Internal Revenue Code. Since the benefit is a deduction, you only gain if you have income upon which to apply the deduction. The carry-over rules apply, if you cannot use the entire deduction in the first year.



**Catskill Forest Association, Inc.**

PO Box 336

Arkville, New York 12406 USA

PH: 845-586-3054

FX: 845-586-4071

cfa@catskill.net

www.catskillforest.org



**Timber Sales** Many landowners forget to consider the income tax consequences of selling timber. Without proper planning, timber revenue will be treated as ordinary income. Capital gains treatment usually results in lower taxes, and, therefore, is preferable. For some taxpayers in low income tax brackets, modest timber sales may not warrant the time and expense of seeking capital gains treatment, so every situation must be examined. Achieving capital gains treatment requires satisfying several complicated steps, and the help of an accountant, lawyer and forester most likely will be necessary. For example, does your level of involvement define you as an active or passive participant? Is this a business, investment or personal use? How long have you held the asset? What operating expenses and carrying charges are deductible? In addition, record keeping and reporting requirements are very particular. You even have to attribute a portion of the basis of the property to timber value, one of the tasks performed by a forester.

## **Estate Taxes**

**The Problem** Estate taxes, due shortly after a person's death, can collect up to 55% of the value of the estate. This imposition is bad enough for persons with liquid assets, but devastating to families owning land. To pay the tax, some families literally must sell the farm. Proper planning during your life, however, can greatly reduce, or entirely eliminate, the estate tax.

**Unified Credit** The first bit of good news is that Congress exempts the first \$675,000 (in 2001) from tax. Taxes apply to the part of the estate exceeding that amount. Therefore, if your entire estate is less than that amount, you will not pay estate taxes. Many people fail to realize what assets will be counted and undervalue their estate. Accountants and lawyers who provide estate planning services have checklists to pin down the right value.

**Credit Shelter Trusts** Congress gave married couples a unique estate tax deferment procedure. One spouse can transfer all of his or her estate to the other without paying estate taxes. The taxes come due after the death of the surviving spouse. On the other hand, each spouse can take the unified credit mentioned above. The best estate tax savings strategy combines the unified credit with the marital deduction. \$675,000 of the first dying spouse's estate is given to someone other than the surviving spouse and the rest is given to the surviving spouse. The \$675,000 is taxable, but no tax is due because of the unified credit. No tax is due on the rest because of the marital deduction. The surviving spouse will pay tax on a smaller estate and also is eligible for the unified credit. In the end, the couple achieved a combined unified credit of \$1,350,000. What if you do not want someone other than the surviving spouse to receive the first dying spouse's \$675,000? You set up a trust (the credit shelter trust) to receive the bequest, naming the surviving spouse as the beneficiary.

**Family Limited Partnership** Another estate tax savings strategy involves gifting some or all of the estate during a person's lifetime. If you give away all of your estate, you have nothing to be taxed. To properly implement this strategy, very careful planning is required. For one thing, you may only give someone \$10,000 per year tax free. This works well for cash and other liquid assets, but how do you give only \$10,000 worth of a rural property and keep the property intact? One way is to set up a family limited partnership. The partnership owns the property, and at first you, as general partner, hold most of the shares in the partnership. Over time, you transfer partnership shares to your family members (the limited partners) until they hold most of the partnership shares and you hold just a little. They now have the value, not your estate.

**Conservation Easements** Donations or sales of conservation easements also help with estate planning. Granting a conservation easement reduces the value your estate, so you have less to be taxed. Likewise, a donation of a conservation easement made in a bequest is eligible as a charitable deduction from the estate tax.

**Life Insurance** Some families purchase life insurance to provide liquid assets at death to pay the estate tax. That way the farm is protected, but life insurance can be very expensive for the elderly.

## **More Information**

*Taxpayer's Guide: How to File a Complaint on Your Assessment.* NYS Board of Equalization and Assessment. 1990 booklet. Available free from your assessor.

*Information Concerning the Forest Tax Law.* NYS DEC. 1995 brochure. Available free from DEC regional offices. DEC also has copies of the law and regulations.

*Forest Owner's Guide to the Federal Income Tax.* USDA Forest Service. Agricultural Handbook No. 708. 1995. Available for \$17 from the Catskill Forest Association.

*Estate Planning for Forest Landowners.* USDA Forest Service. Agricultural Handbook No.xxx. 1999. Available for \$17 from the Catskill Forest Association.

*Preserving Family Lands: Essential Tax Strategies for the Landowner.* Stephen J. Small. 1992. Available from the Landowner Planning Center, PO Box 4508, Boston, MA 02101-4508.

## Conservation Easements Maintain Open Space and Reduce Taxes

Forest landowners face a number of challenges to keeping and maintaining forested parcels. High property tax rates and few incentives to actively manage make it difficult to retain forest land, especially when a landowner owns property for reasons other than harvesting timber for income. Wildlife conservation, erosion control, recreation, and other activities rarely pay for themselves, much less provide income to offset costly tax bills. Even so, such activities are the leading reasons why people purchase and hold forest land. Landowners can become frustrated when they perceive timber sales and subdivisions as the only answers, even when their ownership goals are otherwise. *"At least I will be able to keep the house!"* Fortunately, in the past several decades a new legal concept has developed that may help landowners, depending on the situation, to decrease their property, income and estate tax burdens, retain most of their use and enjoyment of their land, and ensure the forested, open space character of their land in perpetuity. This concept is called a conservation easement.

A conservation easement is a legal agreement between a landowner and a non-profit organization or a government agency (in the rest of this article, I will call all of these groups "land trusts"). Through the conservation easement contract, the landowner *permanently* transfers to the land trust certain rights to develop or use their property in order to protect important natural features. For example, some of the transferred rights may include the right to subdivide the property into smaller lots, erect billboards and cellular phone towers, and the like. By law, the land trust also is prevented from engaging in these activities. Thus, practically speaking, these rights are extinguished forever. Nevertheless, this agreement allows the landowner to retain many other property rights, such as living in the house or camp, cutting trees and managing the forest, hunting and hiking. Properties encumbered by a conservation easement can be sold, bequeathed or transferred as any other property, but all current and future owners are bound to the terms of the easement agreement.

Many different organizations purchase or acquire conservation easements in New York State. Just around the Catskills there are a number of private, non-profit land trusts as well as New York State and New York City conservation easement programs. These organizations hold conservation easements to fulfill a number of missions. The non-profit land trusts typically seek to protect endangered species, critical plant and animal habitats, unique natural features (waterfalls, scenic vistas, etc.), farmland, and fishing holes. While NYS and NYC may also protect such natural features, they each have other specific goals. NYS sometimes protects recreational trails and access leading across private land to state land. Within its watershed, NYC uses conservation easements to protect the quality of its water supply.

Private, non-profit land trusts usually accept conservation easements as donations. Their limited funding rarely allows them to purchase conservation easements. In fact, many land trusts will not accept a donation without a parallel donation of cash to cover operating costs. Regardless, landowners find these land trusts attractive for a number of reasons. First, the land trust and the landowner usually share a common conservation vision of the uniqueness of the property. Both want to see the unique features protected forever. Second, the donation of a conservation easement (as well as the cash) is a charitable gift, which qualifies as an income tax deduction. Therefore, for landowners with sufficient disposable income, the granting of a conservation easement is an income tax shelter. Third, the donation reduces the size of the landowner's estate by the appraised value of the transferred rights. If the landowner's estate is large enough to pay estate taxes, the donation will reduce or eliminate the taxes due. Unfortunately for New York landowners, even though these donations reduce the value of the property rights retained by the landowner, property taxes do not decrease. Not only are land trusts, as non-profits, exempt from paying property taxes, they do not have the funding to pay taxes. Since local governments must collect revenue somehow, they leave the burden with the landowner. Otherwise, the neighbors' property tax bills would rise.

While similar to traditional land trust programs in many respects, the NYC conservation easement program has several unique aspects. This program, as part of the Memorandum of Agreement between NYC and its upstate watershed communities, created within NYC's Department of Environmental Protection (DEP) the Land Acquisition and Stewardship Program (LASP) for the upstate Catskill/Delaware and Croton watersheds. Through the LASP, DEP purchases conservation easements on properties within its watershed. This program recognizes the vast body of research concluding that undeveloped, well-managed forests are the most desirable land cover for water quality protection. Even though, based on this research, NYC has designated forestry as the most desirable land use in the watershed, rising tax bills and other fiscal pressures compel many forest landowners to fragment, subdivide, and develop their properties. Such land use changes, along with the new sources of water pollution they bring, concern NYC. Not surprisingly, LASP has priority areas where it is concentrating its acquisition of land and conservation easements. LASP, however, will deal with all landowners interested in the program.

Unlike traditional land trust transactions, LASP pays for the conservation easements it acquires. It pays full fair market value based on appraisals from an independent, certified appraiser. Since the easement is purchased, no income tax deduction is available. Rather, the landowner may be subject to income taxes on the purchase price. However, such an arrangement may be more attractive to a landowner needing cash rather than an income tax deduction. In addition, LASP also will pay a portion of the property taxes, based on the proportional value of the easement relative to the overall value of the property. This incentive helps landowners reduce the annual costs of owning the property. As with traditional land trust transactions, estate taxes may be reduced or eliminated.

NYC also funds a specialized easement program for lands that are actively farmed. This program, coordinated by the Watershed Agricultural Council (WAC), seeks to obtain easements on properties with a operated under a WAC Whole Farm Plan. It allows the farmer to continue farming while promoting proper farming practices that protect water quality.

Conservation easements, including NYC's LASP, are entered into on the basis of a willing donor/seller and a willing donee/buyer, and are fully voluntary. Both parties must fully agree to the terms of the agreement. Landowners must be aware that the documents involved are lengthy and complex. To ensure that the landowner's interests are protected, landowners considering a conservation easement should first seek advice from a variety of professionals familiar with conservation easements, including a lawyer, an accountant, and a forester. These individuals will help the landowner determine if a conservation easement will fit their goals for the property. Remember, conservation easements last forever.



**Catskill Forest Association, Inc.**

PO Box 336

Arkville, New York 12406 USA

PH: 845-586-3054

FX: 845-586-4071

cfa@catskill.net

[www.catskillforest.org](http://www.catskillforest.org)

er, and inattention to negotiations may result in permanent loss of important property rights. The cost to negotiate the documents can be considerable and may take months or years to conclude. Landowners must be prepared to spend the time and money involved, *even if an acceptable agreement is never reached and the parties terminate the transaction!*

### **Land Trusts in the Catskill Region**

Catskill Center for Conservation and Development

Rondout-Esopus Land Conservancy

Woodstock Land Conservancy

Schoharie Land Trust

Delaware Highland Conservancy

Albany County Land Conservancy

Durham Valley Land Trust

Otsego Land Trust

Shawangunk Conservancy

Shawangunk Valley Conservancy

Wallkill Valley Land Trust

American Farmland Trust

Trust for Public Land

The Nature Conservancy

©2001 Catskill Forest Association, Inc.  
All Rights Reserved

## **The Massachusetts Woodlands Cooperative: Poised for Expansion**

by:

David Damery (Lecturer, Department of Natural Resources Conservation, University of Massachusetts)

Jay Healy, (Executive Director, Massachusetts Woodlands Cooperative)

Susan Campbell (Associate Director, Massachusetts Woodlands Cooperative)

Arthur Eve (President, Massachusetts Woodlands Cooperative)

Original Publication: Damery, David, Jay Healy, Susan Campbell and Arthur Eve. 2004. "The Massachusetts Woodlands Cooperative: Poised for Expansion" *The Woodland Steward* 32(6), Spring, 2004 4-5

The forest of northern hardwoods, white pine and hemlock that blankets much of the western Massachusetts landscape is in reality a patchwork quilt of non-industrial family plots--about 220,000 of them in all, ranging in size from several dozen to several hundred acres. In 1999, a group of forest landowners recognized that a cooperative structure would enable them to strengthen their bargaining power, pool their resources, add value to their forest products, enrich the local economy, and maintain the region's rural quality of life. With help from the University of Massachusetts, they surveyed nearly 1,000 of the region's small landowners in order to develop a list of potential services the co-op might offer. Priority was given to forest and wildlife management, preservation and protection. In 2001 these landowners incorporated as the Massachusetts Woodlands Cooperative, LLC and since then they have continued to research and learn, develop their land, and plan their business.

The Massachusetts Woodlands Cooperative is a forest landowner management, processing and marketing cooperative organized by and on behalf of forest landowners in western Massachusetts. The mission of the Cooperative is to maintain the environment and character of western Massachusetts through the protection, enhancement and careful economic development of one of the region's most plentiful resources, the forest. The Massachusetts Woodlands Cooperative is a business that is owned and controlled by members who use its services. People typically unite in a cooperative to: (1) get services otherwise not available; (2) obtain quality supplies at the right time; (3) gain access to markets; and (4) increase their bargaining power. When profits are generated from efficient operations or adding value to products, these earnings are returned to members in proportion to their use of the cooperative.

The Cooperative became "green certified" under the group certification process provided by the Forest Stewardship Council (FSC) in the spring of 2003. Green certification is similar to organic labeling of produce. It is an independent assessment of forestry practices to determine if the management is sustainable. Green certification will enable the Cooperative to sell forest products with a label showing that these products are from an environmentally friendly operation. The green certification principles and criteria established by FSC support the values, beliefs and operating principles of the Cooperative. Obtaining FSC certification will assist the Cooperative in its efforts to: (1) set high standards in our approach to forest stewardship; (2) provide an internationally accepted way of assessing the extent to which these standards are met; and (3) add value to the products that are produced and marketed through the Cooperative.

Membership in the cooperative is by invitation to forest landowners who meet the following criteria: (1) accepts the values and operating principles of the cooperative, (2) remains in good standing by paying membership fees and patronizing the cooperative, (3) owns 10 or more acres of forestland in western Massachusetts, and (4) has in place (or is willing to develop) a forest management plan that meets the green certification standards that have been set by the cooperative.

In January of 2004, the Massachusetts Woodlands Cooperative was awarded a three year, \$499,253 grant from the U.S. Department of Agriculture. The goal of this grant is to expand niche markets for the Co-op that focus on Forest Stewardship Council (FSC) green certified materials and other value-added forest products. Project activities will include:

1. Develop Niche Markets: Develop and implement niche markets for flooring, timber frame materials, and residual wood products (e.g., bark mulch, firewood, and pallet wood). This will be accomplished by gathering, sorting and marketing logs according to grade and species and processing selected logs into value-added products.
2. Green Certification: The Co-op is already green certified under the group certification process provided by the Forest Stewardship Council (FSC). However, in order to market the Cooperative's value-added products as green certified, the Co-op will also need to apply for and receive group Chain-of-Custody certification from FSC. This will require: (1) development of a system for monitoring forest materials as they are transformed into value-added products; and (2) establishing a network of value-added producers who are interested in obtaining FSC certified wood from the Cooperative.
3. Database Development: We plan to expand the Cooperative database so that it will: (1) provide detailed information on forest material that is available for harvesting from members; (2) monitor forest materials as they are transformed into value added products; (3) organize information needed for the Cooperative to function as a business (cost of goods purchased, inventory, sales, marketing, etc.), and (4) link the database with the Cooperative's website so that members and those who work on their land can have password access to information about the property.
4. Expand Membership and Land Base: The Cooperative currently has 27 members who together manage 3500 acres of forest land. During the next three years, the Co-op will expand its membership base to 125 members with over 20,000 acres of forest land and identify 25 regional artisans, craftspeople, area businesses and other woodworkers who will: (1) become associate members of the Co-op; (2) receive Group FSC Chain-of-Custody certification as a part of their membership; and (3) create value-added products from FSC green certified material that is harvested from member forests.
5. Biomass Assessment: The Cooperative will assess the market potential for the use of forest based biomass fuels in Southern New England by analyzing supply and cost data for forest based biomass fuels.
6. Information Dissemination: We will compile, organize and disseminate information about the project and the Cooperative.



The USDA grant will provide the Cooperative with the working capital needed to accomplish the above tasks. With this grant, the Cooperative has employed a management team and opened an office at One Sugarloaf Street in South Deerfield in conjunction with CISA (Community Involved in Sustaining Agriculture). Those interested in learning more about the Massachusetts Woodlands Cooperative should check out the Co-op's website ([masswoodlands.coop](http://masswoodlands.coop)).





# Threats to Wetlands

Destroying or degrading wetlands can lead to serious consequences, such as increased flooding, extinction of species, and decline in water quality. We can avoid these consequences by maintaining the valuable wetlands we still have and restoring lost or impaired wetlands where possible.

## What Is the Status of Our Nation's Wetlands?

More than 220 million acres of wetlands are thought to have existed in the lower 48 states in the 1600s. Since then extensive losses have occurred, and more than half of our original wetlands have been drained and converted to other uses. The mid-1950s to the mid-1970s were a time of major national wetland loss. Since then the rate of loss has slowed.

The National Audubon Society notes that bird populations continue to decrease as wetlands are destroyed. In the past 15 years alone, the continental duck breeding population fell from 45 million to 31 million birds, a decline of 31 percent. The number of birds migrating over the Gulf of Mexico, which rely on coastal wetlands as staging areas (especially in Louisiana and Mississippi), has decreased by one-half since the mid-1960s. Approximately 100 million wetland acres remain in the 48 contiguous states, but they

continue to be lost at a rate of about 60,000 acres annually. Draining wetlands for agricultural purposes is significant, but declining, while development pressure is emerging as the largest cause of wetland loss.

Unfortunately, many remaining wetlands are in poor condition and many created wetlands fail to replace the diverse plant and animal communities of those destroyed.

When a wetland functions properly, it provides water quality protection, fish and wildlife habitat, natural floodwater storage, and reduction in the erosive potential of surface water. A degraded wetland is less able to effectively perform these functions. For this reason, wetland degradation is as big a problem as outright wetland loss, though often more difficult to identify and quantify.



## What Is Adversely Affecting Our Wetlands?

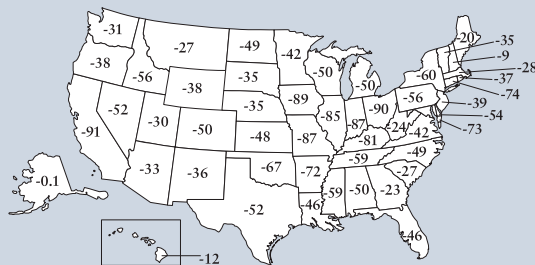
Human activities cause wetland degradation and loss by changing water quality, quantity, and flow rates; increasing pollutant inputs; and changing species composition as a result of disturbance and the introduction of nonnative species. Common human activities that cause degradation include the following:

**Hydrologic Alterations.** A wetland's characteristics evolve when hydrologic conditions cause the water table to saturate or inundate the soil for a certain amount of time each year. Any change in hydrology can significantly alter the soil chemistry and plant and animal communities. Common hydrologic alterations in wetland areas include:

- Deposition of fill material for development.
- Drainage for development, farming, and mosquito control.
- Dredging and stream channelization for navigation, development, and flood control.
- Diking and damming to form ponds and lakes.
- Diversion of flow to or from wetlands.
- Addition of impervious surfaces in the watershed, thereby increasing water and pollutant runoff into wetlands.

**Pollution Inputs.** Although wetlands are capable of absorbing pollutants from the surface water, there is a limit to their capacity to do so. The primary pollutants causing wet-land degradation are sediment, fertilizer, human sewage, animal waste, road salts, pesticides, heavy metals, and

Percentage of Wetlands  
Acreage Lost, 1780s–1980s



Twenty-two states have lost at least 50 percent of their original wetlands. Since the 1970s, the most extensive losses have been in Louisiana, Mississippi, Arkansas, Florida, South Carolina, and North Carolina.

Source: *Wetlands*,  
2<sup>nd</sup> edition,  
Van Nostrand and  
Reinholdt, 1993.

selenium. Pollutants can originate from many sources, including:

- Runoff from urban, agricultural, silvicultural, and mining areas.
- Air pollution from cars, factories, and power plants.
- Old landfills and dumps that leak toxic substances.
- Marinas, where boats increase turbidity and release pollutants.



Pollutants such as sediment, nutrients, pesticides, and heavy metals degrade wetlands and water quality across the country.

**Vegetation Damage.** Wetland plants are susceptible to degradation if subjected to hydrological changes and pollution inputs. Other activities that can impair wetland vegetation include:

- Grazing by domestic animals.
- Introduction of nonnative plants that compete with natives.
- Removal of vegetation for peat mining.

### What Can You Do?

Nearly 75 percent of all wetlands are privately owned, making it imperative that the public participate in wetland management and protection. Here are some things you can do:

- Conserve and restore wetlands on your property.
- Support local wetlands and watershed protection initiatives by donating materials, time, or money.

- Work with your local municipalities and state to develop laws and ordinances that protect and restore wetlands.
- Purchase federal duck stamps from your local post office to support wetland acquisition.
- Participate in the Clean Water Act Section 404 program and state regulatory programs by reviewing public notices and commenting on applications.
- Encourage neighbors and developers to protect the function and value of wetlands in your watershed.
- Avoid wetland alteration or degradation during project construction.
- Maintain wetlands and adjacent buffer strips as open space.
- Reduce the amount of fertilizers, herbicides, and pesticides applied to lawns and gardens.



Swamp tupelo

## The Wetland Fact Sheet Series

American Avocet



[Wetlands Overview](#)

[Types of Wetlands](#)

[Functions & Values of Wetlands](#)

[Threats to Wetlands](#)

[Wetland Restoration](#)

[Funding Wetland Projects](#)

[Wetland Monitoring & Assessment](#)

[Sustainable Communities](#)

[Volunteering for Wetlands](#)

[Teaching about Wetlands](#)

For more information, visit [www.epa.gov/owow/wetlands](http://www.epa.gov/owow/wetlands).

## Wetland Resources

A Global Overview of Wetland Loss and Degradation. Available on The Ramsar Convention on Wetlands' web site at [www.ramsar.org/about\\_wetland\\_loss.htm](http://www.ramsar.org/about_wetland_loss.htm).

Wetland Issues. Available on-line at [www.ncseonline.org/NLE/CRSreports/Wetlands/wet-5.cfm](http://www.ncseonline.org/NLE/CRSreports/Wetlands/wet-5.cfm).

Wetlands Loss and Degradation. Visit the North Carolina State University Water Quality Group's on-line informational database, WATERSHEDSS, at [h2osparc.wq.ncsu.edu/info/wetlands/wetloss.html](http://h2osparc.wq.ncsu.edu/info/wetlands/wetloss.html).

Wetlands and Agriculture: Private Interests and Public Benefits, Ralph E. Heimlich et al. USDA-ERS Report No. 765. Available on-line at [www.ers.usda.gov/publications/aer765](http://www.ers.usda.gov/publications/aer765).



Local Law No. 1 of 2004, a local law amending Chapter 125,  
Conservation Easement of the Town Code, as adopted by Local Law No. 12 of 1996

Chapter 125, CONSERVATION EASEMENT

[HISTORY: Adopted by the Town Board of the Town of Clifton Park 12-16-1996 by L.L. No. 12-1996. Amendments noted where applicable.]

GENERAL REFERENCES

Environmental Conservation Commission -- See Ch. 13.

Farming -- See Ch. 102.

Freshwater wetlands and stream protection -- See Ch. 124.

Land development -- See Ch. 141.

Parks and preserves -- See Ch. 152.

Subdivision of land -- See Ch. 179.

Zoning -- See Ch. 208.

Planned development districts -- See Ch. A217.

§ 125-1. Title.

This chapter shall hereinafter be known and cited as the "Conservation Easement Law of the Town of Clifton Park."

§ 125-2. Purpose.

It is the purpose of this chapter to provide for the acquisition of interests or rights in real property for the preservation of historic buildings and landmarks and open space and areas which shall constitute a public purpose for which public funds may be expended or advanced after due notice and a public hearing, by which the Town of Clifton Park may acquire, by purchase, gift, grant, bequest, devise, lease or otherwise, the fee or any lesser interest, development right, easement, covenant or other contractual right necessary to acquire open space or open area or historic buildings or landmarks as the same are defined in § 125-5 herein.

§ 125-3. Legislative authority.

In accordance with § 247 of the General Municipal Law of the State of New York, the Town Board of the Town of Clifton Park has the authority to acquire such interests or rights in land. Pursuant to the above authority, the Town Board has prepared and adopted this chapter setting forth standards to be followed in the acquisition of such interest.

§ 125-4. Jurisdiction.

This chapter shall apply to the entire area of the Town of Clifton Park.

§ 125-5. Definitions.

For the purpose of this chapter, the terms used herein are defined as follows:

FARM or FARMING -- As defined in §§ 208-7 and 208-8 of the Town Code.

HISTORIC BUILDINGS OR LANDMARKS -- As described in Article XIII of Chapter 208 of the Town Code.

LOT -- As defined in § 208-7 of the Town Code.



**OPEN SPACE or OPEN AREA --** Any space or area characterized by natural scenic beauty or whose existing openness, natural condition or present state of use, if retained, would enhance the present or potential value of abutting or surrounding urban development or would maintain or enhance the conservation of natural or scenic resources. For the purposes of this section, natural resources shall include but not be limited to agricultural lands defined as open lands actually used in bona fide agricultural production.

**§ 125-6. Procedure for granting easement.**

**A. Proposal by owner.** Any owner or owners of land which constitutes an historic building or landmark for an historic conservation easement or a minimum of 15 acres per lot, or a minimum of 7.5 acres each for any two adjoining lots for a conservation easement may submit a proposal to the Town Clerk, who shall refer such application to the Town Board. The Town Board shall refer such application to the Historic Preservation Commission or to the Environmental Specialist, as appropriate, and the Planning Board for review and comments within 45 days if deemed necessary and/or appropriate. Such proposal shall be submitted on a conservation easement application form available in the Town Clerk's office. It must include a copy of a full size tax map showing the property, if the entire parcel is being encumbered, or a copy of a survey map and metes and bounds description of the proposed area if it is part of a parcel.

**B. Review by Historic Preservation Commission or Environmental Specialist in conjunction with the Planning Board.** Upon receipt of such proposal, the Historic Preservation Commission or Environmental Specialist and Planning Board shall investigate the area to determine if the proposal would be of benefit to the people of the Town of Clifton Park. If the Historic Preservation Commission or Environmental Specialist and Planning Board, if such a referral has been made by the Town Board, determines that it is in the public interest to accept such a proposal, each shall recommend to the Town Board that it hold a public hearing for the purpose of determining whether or not the town should accept such proposal.

**C. Public hearing by Town Board.** The Town Board shall, within 45 days of receipt of such advisory opinion, hold a public hearing concerning such proposal at a place within the Town of Clifton Park. At least 10 days' notice of the time and place of such hearing shall be published in a paper of general circulation in such town, by the Town Clerk. A written notice of such proposal shall be mailed by the applicant to all adjacent property owners and to any municipality whose boundaries are within 500 feet of the boundaries of said proposed area and to the school district in which it is located. Receipts of mailing shall be submitted to the Town Clerk's office prior to the date of the public hearing.

**D. Determination.** The Town Board, after receiving the reports of the Historic Preservation Commission or Environmental Specialist and the Clifton Park Planning Board and after such public hearing, may adopt the proposal or any modification thereof it deems appropriate or may reject it in its entirety.

E. Recording agreement. If such proposal is adopted by the Town Board, it shall be executed by the owner or owners in written form and in a form suitable for recording in the Town Clerk's office.

F. Cancellation. Said agreement may not be canceled by either party. However, the owner or owners thereof may petition the Town Board for cancellation upon good cause shown, and such cancellation may be granted only upon payment of the penalties provided in § 125-8 herein.

G. The owner shall pay to the town a fee of \$15 which shall be deemed a reasonable sum to cover the costs of administration, no part of which shall be returnable to the applicant.

§ 125-7. Valuation for taxation.

After acquisition of any such interest pursuant to this chapter, the valuation placed upon such area for purposes of real estate taxation shall take into account and be limited by the limitation on the future use of the land.

§ 125-8. Penalty for violation or cancellation.

In the following paragraph "substantial" will be defined as a 100% increase in the density of the parcel which will trigger a review and final determination by the combined efforts of the Town Assessor, Director of Planning and Environmental Specialist. The determination of substantial as it relates to historic structures will be referred to the Historic Preservation Commission, as it has expertise in this area and will review the project to make a determination on the penalty.

If there is a substantial violation of the terms and conditions of the easement agreement or if said agreement is canceled by the Town Board upon petition, the then owner or owners of said property must pay to the Town of Clifton Park the following amounts:

A. All taxes granted abatement under and pursuant to the Historic Preservation Commission or Environmental Specialist easement agreement, said taxes to include the state, county, town, school districts and all special improvement districts and other taxing units to which the property is subject. Said back taxes shall be limited as follows: Any easement broken before its 11th year will be subject to a five-year maximum rollback; an easement broken between its 11th and 15th year will be subject to a four-year maximum rollback; an easement broken in its 16th year or later will be subject to a three-year maximum rollback.

B. The penalty assessed on the basis of the previous year's tax abatement multiplied by a factor equal to the term of the easement divided by the current year of the easement. This factor shall not exceed five.

C. Property covered by a conservation easement that is destroyed by fire or natural disaster will not be penalized unless the future use of the land or buildings is changed.



§ 125-9. Types of Easements.

In applying for the easement, the applicant should state the type of easement proposed. The following types of easements may be proposed:

a Conservation easement: the applicant agrees that land under easement will not be developed, built upon or otherwise changed during the term of the easement.

b Conservation easement (farming purposes): the same as Subsection a, except that farm structures as described in §§ 208-7 and 208-8 of the Town Code which are used as part of an active agricultural operation, are permitted, and are granted the same percentage(%) of easement value remaining taxable on the land. The land and buildings under easement shall be principally and actively used for farming purposes for the term of the easement, but approved farming easement applicants can also apply for other tax saving programs without penalty. The conservation easement will be applied first, and can not be shifted from one program to another.

c Conservation easement (historic preservation): the applicant shall preserve the Historic Building or Landmark as described in Article XIII of Chapter 208 of the Town Code.

Land covered by a conservation easement may be sold at any time, but the terms and conditions of the easement shall run with the land and continue until its expiration.

§ 125-10. Duration.

Easements proposed must be subject to a minimum term of 15 years. There is no maximum term.

§ 125-11. Valuation percentages.

The assessor is legally required to take into account and be limited by the limitation on the future use of the land resulting from the easement. The following table of tax assessment is presently in use.

Percent of Pre-Easement Value Remaining Taxable

| Years | Conservation | Farming Purposes | Historic Preservation |
|-------|--------------|------------------|-----------------------|
| 15    | 20           | 15               | 15                    |
| 16    | 19           | 14               | 14                    |
| 17    | 18           | 13               | 13                    |
| 18    | 17           | 12               | 12                    |
| 19    | 16           | 11               | 11                    |
| 20    | 15           | 10               | 10                    |
| 21    | 14           | 10               | 10                    |
| 22    | 13           | 10               | 10                    |
| 23    | 12           | 10               | 10                    |
| 24    | 11           | 10               | 10                    |
| 25±   | 10           | 10               | 10                    |

Other than for historic preservation easements, it will be required that a parcel which include a principal dwelling exclude a one acre, (43,560 square feet) area with a maximum of three acres (130,680 square feet) encompassing the dwellings and designate that area as an exception to the easement.

The easement may be canceled by applying to the Town Board. At the time of such cancellation or if the terms of the easement have been violated by the landowner, the town will assess rollback taxes and a penalty as outlined in § 125-8 of this chapter. The penalty shall be assessed against all the land under easement, except in the case of the death of a sole owner in which case the penalty will be assessed only against that portion which is to be developed or changed in use within one year of the date of death. Thereafter, the penalty and back taxes will be levied upon the land under easement.

(Applied to the previous year's tax reduction)

Term



## CONSERVATION EASEMENT

### *125 Attachment 1*

#### **Policy Statement**

Clifton Park continues to grow. Each year, more and more people are buying land and building homes in the town as the area continues to expand. Pressures to find buildable land will necessarily move sights westward.

People want to live in Clifton Park for many reasons. The town is a wonderful place to live. It is convenient to job centers, it has an excellent school system and well-managed, active recreation programs; but, most of all, Clifton Park is exceptionally scenic, with lots of historic landmarks, wooded hills and rolling fields.

Many of Clifton Park's first suburban residents came here to escape the crowded urban environment of the city, but the city has followed. In a few cases, not much thought was given to the need to preserve some of Clifton Park's original character - the very historic and environmental quality that attracts people to the town.

Open space and historic conservation is more than aesthetics. There are other needs for open space in Clifton Park. Open space areas can help to meet basic human needs for places to relax or play, to meet with friends and neighbors, to enclose neighborhoods so they can be easily identified as social communities, to link homes with shopping centers so they can be safely reached by walking or cycling.

Rural areas with valuable mineral, agricultural and forest lands need to be set aside for sand, gravel, food and timber production, especially when the future supplies of these goods from other areas are becoming more and more uncertain.

Finally, many open lands in Clifton Park play important parts in the ecological system; they absorb floodwaters, prevent soil erosion, provide habitat for wildlife, help cleanse the air of pollutants and moderate the climate by providing shade and windbreaks. They help to reduce dust and noise pollution and provide visual relief from the often cluttered urban landscape. These wetlands must be protected.

Our commitment is to the citizens of Clifton Park, those who live here now and those who will live here in future years. On your behalf, we are dedicated to keeping Clifton Park as a community of people who have a close relationship with the land. Open land is a part of our lives, and we are all part of the Clifton Park environment. What we do with our lands and landmarks will shape our future and our children's future.

We are committed to Clifton Park's future as a community with coexisting suburban, rural and agricultural areas which welcomes development interests consistent with the preservation of these characteristics.



## CLIFTON PARK CODE

We are also concerned with our lands which represent valuable areas of regulated resource. We want to maintain farming and forest production as a viable way of life. We believe suburban and rural interests can coexist in harmony but that Clifton Park's future growth should be related to the existing characteristics.

Our neighborhoods and communities should be separated as distinct areas instead of mindless extensions of suburban sprawl.

Parks and recreation areas should be closely related to neighborhoods and communities; places people can walk or cycle to, rather than drive.

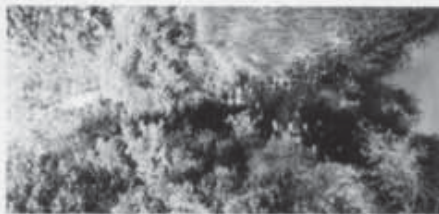
Commercial and employment centers should be screened from, but linked to, residential areas.

Development should minimize disturbance to the land; neighborhoods with trees, streams and soils left intact.

It is this Board's intention and desire to preserve open space and historic landmarks whether they are isolated or adjacent to residential or commercial development.



## Investing in Clifton Park's Quality of Life



The Clifton Park Town Board has:

- Secured nearly 700 acres of 5-year goal of 1,350 acres
- Built 12 miles of public trails
- Adopted a Town-Wide Open Space Plan in 2003
- Created a dedicated Open Space Capital Reserve Fund in 2003
- Adopted a Land Conservation Plan for Western Clifton Park and New Zoning Tools in 2005
- Hired an Open Space Coordinator, Dec. 2005
- Appointed a New Open Space, Trails and Riverfront Committee, Jan. 2006



### What is PDR?

Purchase of development rights (PDR) is effectively the act of creating a permanent conservation easement on a property to limit future growth on the parcel.

### Public Benefits of PDR of Farmlands:

Permanent open space and scenic vistas of farmlands; property remains on tax rolls at agricultural or open space assessment; local food security; a local farm business remains productive contributing to the local economy; farm employees continue to have jobs; and families and visitors retain a connection to Clifton Park's farming heritage.

## Outreach to Interested Landowners

The Town of Clifton Park is interested in exploring additional conservation opportunities. A number of options are available, including but not limited to:

- **Purchase/Sale or Donation of Lands;**
- **Purchase of Development Rights** (permanent conservation easements);
- **Application to town's Term Conservation Easement property tax program** (minimum 15-year commitment);
- **Purchase/Sale of a Trail Easement;**
- **Bargain Sale Option.**

### Interested in Conserving your Property?

- **Interested in Volunteering to work on Open Space Conservation and Trails Tasks and Projects?**

*Please call or e-mail Jennifer Viggiani, the town's Open Space Coordinator.*



### Open Space Coordinator

Jennifer Viggiani, AICP  
(518) 371-6054  
jviggiani@cliftonpark.org

## Town of Clifton Park

**Fall 2006**

# OPEN SPACE Report Card

### Clifton Park Town Board

Supervisor Phil Barrett

Tom Paolucci

Sandy Roth

Roy Speckhard

Lynda Walowit

(518) 371-6651

### Open Space, Trails and Riverfront Committee

David J. Miller, Co-Chair  
Jim Romano, Co-Chair






## Clifton Park's Open Space Successes - Since 2001

### 1. Wildlife Preserves and Passive Recreation

| GOALS  |   |
|--|---|
| * Protect 500—1,000 acres  |   |
| * Protect Drinking Water Resources   |   |
| ACHIEVEMENTS   |   |
| <b>Round Lake Reservoir</b>  |  |
| Nature preserve area in heart of Country Knolls. Trails and parking access to be improved.   | 80 acres  |
| <b>Dwaas Kill Natural Area</b>   | 250 acres   |
| Nature preserve area to be established between Knolls Rd., Carlton Rd., Van Patten Dr. and railroad, and Pierce Rd. Nature trails and access to be designed and created. |   |
| <b>Riverview Road Addition</b>   | 15 acres  |
| Parcel offers water quality (aquifer) protection and is adjacent to the Vischer Ferry Nature & Historic Preserve.  |   |
| <b>Mohawk River Waterfront</b>   | 6 acres   |
| Pending acquisition for passive uses and scenic views of the waterfront.   |   |



### 2. Farmland Protection

| GOALS  |   |
|--|---|
| Protect 300—600 acres working farms & farmland   |   |
| ACHIEVEMENTS   |   |
| <b>Riverview Orchards - Purchase of Development Rights (PDR)</b>   |  |
| Permanent conservation easement for Riverview Road farm located along the Mohawk Scenic Towpath Byway.               | 85 acres  |
| <b>King Crest Farm - Purchase of Development Rights (PDR)</b>  | 41 acres  |
| Permanent conservation easement for King Crest Farm located on north side of Grooms Road just west of Grooms Corners |   |

### 3. Scenic Landscapes, Places

| GOALS  |               |
|--|---------------|
| Help preserve scenic, cultural and historic landscapes, sites and hamlets. Identify 4 to 6 historic sites, roads, in the near term.  |               |
| ACHIEVEMENTS   |               |
| <b>Restoration of Historic Grooms Tavern—site of first town meeting</b>  | Historic site |
| <b>Mohawk Towpath Scenic Byway</b>   | Scenic byway  |
| Riverview Road and its historic, unique, riverfront environs earned designation as part of a state and national scenic byway, connecting a large region from Watford to Schenectady. |               |

### 4. Parklands

| GOALS   |          |
|---|----------|
| * One (1) large recreation park (150 ± ac)  |          |
| * One to two small size parks (10—20 ac each)   |          |
| * Access to water-based recreation.   |          |
| ACHIEVEMENTS  |          |
| <b>Lands on Route 146</b>   | 97 acres |
| Potential active and passive recreation parkland on north side of Rte. 146 at Not Rd. Acquired in 2005; public access and uses to be developed. |          |
| <b>Veteran's Memorial Park Addition, MacElroy Road</b>  | 78 acres |
| Acquired 78 acres to add to existing 60-acre public park and preserve for a total of 138 acres.   |          |

### 5. Town-wide Trails & Pathways



| GOALS - 6 to 10 miles                  |          |
|--|----------|
| ACHIEVEMENTS since 2000                |          |
| <b>1. Ushers Road Trail</b>            | 12 miles |
| <b>2. Longkill Road Trail</b>          | 1 mi.    |
| <b>3. Vischer Ferry Road Trail</b>     | 0.5 mi.  |
| <b>4. Clifton Park Center Trail</b>    | 1.2 mi.  |
| <b>5. Clifton Park Center Trail</b>    | 4.3 mi.  |
| <b>5. Moe Road Trail</b>               | 3.4 mi.  |
| <b>6. Van Patten Drive Trail</b>       | 1.6 mi.  |
| <b>7. Dakota Trail (on Klinns Rd.)</b> | 500 feet |