

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

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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

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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.

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- 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.

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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

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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

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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.

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Sources:

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