

# Town of Hurley, New York

## Open Space Plan: 2018



Prepared by the Town of Hurley Conservation Advisory Council  
with Planit Main Street, Inc.

Adopted by Town of Hurley Town Board - July 2018



### **Vision Statement**

The Open Space Plan creates a vision for Hurley, which encourages residents to act as partners in conservation and remain active and engaged in determining the future of our town. The purpose of this plan is to assist in protecting Hurley's most significant open space resources by providing information regarding the importance of those resources, offering a guide through the various voluntary land protection and financing options, and providing short term and long-term recommendations that will contribute to the protection of the environmental and economic health of our community.

The CAC operated with the following goal in mind: *To preserve and protect the open space in Hurley through voluntary efforts in order to enhance the quality of life for its residents and preserve the rural character of the community. When we speak of open space we are referring to land with minimum or no development, the protection of which would conserve important natural resources, farmland, cultural resources, wildlife habitat, and recreational uses, resulting in the creation of conservation development patterns that provide fiscal and economic benefits to our community.*

## **ACKNOWLEDGMENTS**

### **Town Board**

John Perry, Supervisor  
Michael Boms, Councilman  
John Dittus, Councilman  
John Gill, Councilman  
Barbara Zell, Councilwoman

### **Town Officials**

Judy S. Mayhon, Town Clerk/Tax Collector  
Michael Shultis, Highway Superintendent  
Kathy Steinhilber, Assessor

### **Conservation Advisory Committee**

Joan Paccione, Chairman  
Ralph Durham, Member  
Kristen Schara, Member  
David Yozzo, PhD, Member  
Harvey Monder, PhD, Member  
Nancy Johnson, PhD, Member

### **Consultant**

Planit Main Street, Inc.  
Alan J. Sorensen, AICP, President

### **Special Thanks:**

Funding for this assignment was provided, in part, through a grant from the *Hudson River Valley Greenway*. The Town of Hurley Town Board and the Conservation Advisory Council wishes to convey its appreciation for the funding provided through the Greenway, which has enabled this Open Space Plan update to proceed. Special thanks to former CAC members Virginia Starke, Thomas Schneller, Maeve Maurer and Karen Roux for their efforts and support of this project.



**Hudson River  
Valley Greenway**

## Table of Contents

<b>1.0 Introduction</b>	<b>1</b>
Purpose of the Open Space Plan	2
What is Open Space?	2
Why should we preserve Open Space?	3
What are the objectives of the Plan?	4
<b>2.0 Parks and Recreation</b>	<b>5</b>
West Hurley Park	6
Neighborhood Park in West Hurley	9
Glenford	12
Old Hurley – Pathways to the Future	12
Grace Macaluso Park	14
<b>3.0 Special Interest Areas</b>	<b>16</b>
Binnewater Forest	18
The Hurley Flats, Including the Esopus Creek	25
Hurley Mountain and Escarpment	31
Millbrook Woods	37
Southside	44
<b>4.0 Implementation and Future Studies</b>	<b>49</b>
<b>5.0 Citations</b>	<b>58</b>
<b>6.0 Appendices</b>	<b>59</b>
Appendix A – Bluestone Wild Forest/Onteora Hiking Trails Map	60
<b>Maps:</b>	
Map 1 – West Hurley Park	7
Map 2 – Parks and Pathways	8
Map 3 – West Hurley Parks and Pathways	11
Map 4 – Old Hurley Pathways	13
Map 5 – Grace Macaluso Park	15
Map 6 – Areas of Special Interest	17
Map 7 – Binnewater Forest	19
Map 8 – Binnewater Forest	20
Map 9 – Hurley Flats	26
Map 10 – Hurley Mountain and Escarpment	32
Map 11 – Millbrook Woods	38
Map 12- Southside	45



## 1.0 Introduction

The Town of Hurley includes a unique mixture of open space resources. Its northwestern limits include the upper slopes of Ohayo and Tonshi Mountains, with a maximum elevation of 1,920 feet above sea level, which slope steeply down to New York City's Ashokan Reservoir, about 40% of which is within the Town. The large central portion of Town is an elevated upland plateau characterized by steep, wooded ravines, which drop abruptly to the flatlands lying on either side of the Esopus Creek at an elevation of about 160 feet.

These flats, known as the Hurley Flats, contain highly productive soils and help to define Hurley's agricultural heritage. A large portion of the Hurley Flats are owned by the NoVo foundation, which has established the *Hudson Valley Farm Hub* here to conduct agricultural research involving sustainable and resilient growing methods, while training existing farmers in new farming techniques and incubating new farmers through the lease of lands (see [www.hvfarmhub.org](http://www.hvfarmhub.org)).

The southeast portion of Town consists of lower, rolling wooded lands. This area also includes the hamlet of Old Hurley, a national historic landmark listed on the National Register of Historic places due to its concentration of well-preserved early 18<sup>th</sup> century stone houses. This area of the Town also contains a rail trail along the Ontario & Western rail bed that runs parallel to NYS Route 209. The O&W Rail Trail not only provides passive and active recreational opportunities for local residents, but it is also an important wildlife corridor within an area recognized for its biodiversity.

The Hurley Town Board has called for this Open Space Preservation Plan to be an integral part of the Comprehensive Town Plan, which was adopted by the Town Board in 2006. The goal of that Plan is also that of the Open Space Preservation Plan:

"Our challenge is to create a plan that honors and preserves the best of Hurley – its beauty, its history, its agricultural roots, respect for landowners' rights, its friendliness and its convenience – while acknowledging and preparing for the inevitable economic and demographic changes that come with time."

### GOAL

"OUR CHALLENGE IS TO  
CREATE A PLAN THAT  
HONORS AND PRESERVES  
THE BEST OF HURLEY –  
ITS BEAUTY, ITS HISTORY,  
ITS AGRICULTURAL  
ROOTS, RESPECT FOR  
LANDOWNERS' RIGHTS,  
ITS FRIENDLINESS AND ITS  
CONVENIENCE – WHILE  
ACKNOWLEDGING AND  
PREPARING FOR THE  
INEVITABLE ECONOMIC  
AND DEMOGRAPHIC  
CHANGES THAT COME  
WITH TIME."

### Purpose of the Open Space Plan

The Open Space Plan inventories existing open space resources in the Town of Hurley and presents a vision for the future of these valuable resources. The Plan also provides a snapshot of data on the land and soil resources, topographic considerations, wetlands, floodplains, lakes, streams and watersheds. The goal of the plan is to highlight the importance of our open space resources, both environmentally and economically, and provide a collaborative framework for preserving and conserving the open space resources in the Town.

The Open Space Plan is a plan of action, designed to encourage resource protection on a voluntary basis. The Plan includes specific goals, objectives and policies that are intended to enhance recreational opportunities and protect open space in the Town. Adoption of the Plan by the Town Board does not affect the zoning law with respect to the use of the land as regulated by the Town. It does not, in any way, restrict existing property rights. The Plan is a document subject to periodic review and modification as goals are achieved and conditions within the Town of Hurley change. The principles of adaptive management, or “learning by doing” are encouraged through this Plan.

### What Is Open Space?

The term “Open Space” can have broad and varied definitions. For purposes of this Plan, open space is defined as undeveloped lands including farmlands, stream corridors, wetlands and woodlands along with park or conservation lands with minimal or no development.” Some open spaces, such as stream corridors or wetlands, are in their natural state helping to provide important environmental functions. Agricultural land and woodlands provide economic opportunities while also protecting scenic vistas and providing wildlife habitat. Even low-impact recreational resources, such as the O&W Rail Trail help to protect natural resources.

These open space resources, together with well-preserved early 18<sup>th</sup> century stone houses in the hamlet of Old Hurley and farmsteads along the Flats, define the uniquely rural heritage of Hurley. These attributes of the Town provide residents with an exceptional quality of life. Hurley’s qualities have made it an attractive location for many commuters and second homeowners, which are forces that will continue to put development pressure on the Town. It is thus important to have an Open Space Plan so Hurley can accommodate growth while preserving its rural heritage.

## OPEN SPACE DEFINED

“THE TERM “OPEN SPACE” CAN HAVE BROAD AND VARIED DEFINITIONS. FOR PURPOSES OF THIS PLAN, OPEN SPACE IS DEFINED AS UNDEVELOPED LANDS INCLUDING FARMLANDS, STREAM CORRIDORS, WETLANDS AND WOODLANDS ALONG WITH PARK OR CONSERVATION LANDS WITH MINIMAL OR NO DEVELOPMENT.”

### Why should we preserve Open Space?

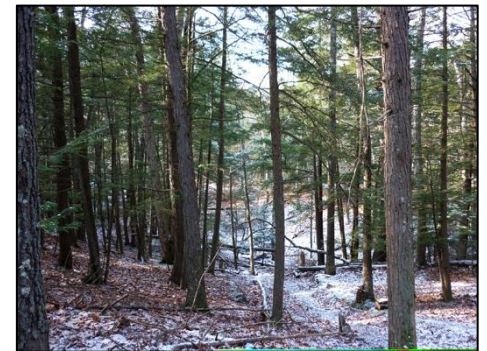
According to the Trust for Public Lands report *“The Economic Benefits of Parks and Open Space, How Land Conservation Helps Communities Grow Smart and Protect the Bottom Line”* property values rise in communities where open space is conserved because people are attracted to places that offer open space and trails. This is not surprising given how well local residents utilize the O&W Rail Trail year-round. The ability to walk to this trail from the hamlet of Old Hurley makes it an even more desirable recreational amenity that also attracts users from other areas.

Scenic vistas, historic centers and active agricultural lands also provide a high quality of life that is often sought by second homeowners. Second homeowners help to offset the tax burden on local residents by contributing to the tax base without placing a corresponding burden on local school districts. Agriculture and forestry are important components of Hurley’s open space but are also an important part of the economic base in the Town of Hurley. According to *“Agriculture-Based Economic Development in NYS: Trends and Prospects”* (Schmit, T.M. and N.L. Bills, 2012), the employment multiplier for agricultural and forestry services approaches a relatively robust 2.0, suggesting one additional job for every new job created in these sectors. Furthermore, it’s been shown that residential development costs roughly \$1.20 in services for each dollar received in taxes while open space, including agriculture, costs about \$.35.

Agriculture and farmland protection is important to preserving the rural heritage of Hurley. Farming provides opportunities to buy local produce at local farm stands, which helps to maintain Hurley’s agricultural heritage and the connection to the land for all its residents. Local farms and farm stands also attract visitors to the Town, which in turn helps to support the local economy.

One of the most important functions of natural open space (e.g. wetlands, woodlands, conservation lands) is the protection of wildlife by providing habitat that is critical to their survival. The undeveloped land in the Town serves to maintain the area’s wide variety of animals and plants, ranging from eagles and bears to salamanders and snakes, and from high-elevation stands of spruce and fir to wetland plant communities in low-elevation depressions and riparian areas.

Lastly, publicly accessible open space for hiking, cross-country skiing, kayaking, or nature photography also has physiological and psychological benefits (The Trust for Public Land 2006).



**Above** (top to bottom): One of the gateways to O&W Rail Trail within the Town of Hurley; view from within the Binnewater Forest; and view of Grace Macaluso property, which is presently under the Stewardship of the Catskill Center for Conservation and Development and would be an ideal setting for a Town of Hurley park.

### What are the objectives of the Plan?

Our challenge is to create a plan that honors and preserves the best of Hurley – its beauty, its history, its agricultural roots, respect for landowners' rights, its friendliness and its convenience – while acknowledging and preparing for the inevitable economic and demographic changes that come with time. The specific objectives to be achieved are as follows:

- To preserve active farms and agricultural lands/soils so we will always have scenic cultivated fields, fresh vegetables for sale in the summer and pumpkins to pick in the fall;
- To protect water quality for future generations;
- To protect and improve water quality in surface water bodies so they are clean and healthy, so residents will always be able to cast their lines and catch a fish;
- To provide adequate parks and recreational facilities enabling our children to enjoy playgrounds and participate in recreational programs and where everyone can remain fit and enjoy the outdoors;
- To direct growth into developed areas to conserve open space;
- To provide the Town with a vision for open space protection;
- To identify parcels of land with high open space value;
- To develop a variety of conservation tools for protecting important open space resources;
- To identify funding opportunities for farmland protection, open space conservation, park enhancements and trail development;
- To allow our local businesses to grow and prosper while respecting and protecting access to the abundant natural habitats so that all can spot a turtle by a pond or hear the call of a barred owl.

Conserving open space resources is important in itself, but it will also be necessary to permit planned growth. Poorly designed and unplanned development can permanently mar or destroy these open spaces, pollute the water through runoff, and foul the air through increased traffic. On the other hand, land use regulations resulting from a community-developed open space plan can guide the patterns of development to avoid loss or damage to Hurley's important natural and cultural resources while providing guidance for suitable places to live for our children and new residents.



**Above** (top to bottom): View of historic stone houses along Main Street in the hamlet of Old Hurley; view of active farmland in the Hurley Flats, which are some of the most productive farmlands in New York State; and Wynkoop Road Bridge over the Esopus Creek, which is an important tributary to the Hudson River. This Plan strives to conserve such resources to protect Hurley's rural heritage.



## 2.0 Parks and Recreation

The Town of Hurley has one Town Park, West Hurley Park, which is situated off Dug Hill Road. The 53.3-acre West Hurley Park includes a pavilion with restrooms, two (2) tennis courts, an outdoor basketball court, playground, swings, and a multi-purpose sports field that is utilized for baseball/softball, soccer and other field games. The West Hurley Park also abuts about 30 acres of New York State Department of Environmental Conservation (NYSDEC) forestlands, which are protected open space.

The National Recreation and Parks Association (NRPA) established standards and development guidelines for community parks and recreational needs. These standards are based upon population size and could be used to help the Town plan for future parks and recreational areas. The population of the Town of Hurley was 6,314 persons at the 2010 census. The table below provides an overview of needed recreation facilities based upon population size.

Table 2-1 Recreational Demand			
Facility Type	Standard per 1000 persons	Need	Provided at WH Park
Neighborhood Park	1 acre	6.3 acres	53.3 acres
District Park with restrooms, playfields & tot lots.	2 acres	12.6 acres	12.3 acres (developed area)
Field Games (football, soccer, lacrosse, etc.)	3 acres	18.9 acres	3 acres (measured on map)
Tennis Courts	½ court	3 courts	2
Basketball Courts	1 per 5000	1	1
Baseball	1 per 5000	1.2	2
Soccer	1 per 10,000	.63	1/2

The *Hurley Comprehensive Plan* identified the need to provide adequate public recreation space and variety as the population grows, in locations easily accessible to the population centers. Based upon NRPA standards, the Town provides many of the recreational facilities recommended for a community of its size. However, based upon population size, an additional tennis court would be warranted along with another 15 acres devoted to field games. Furthermore, West Hurley Park is not situated in a population center and is only accessible by car. The provision of neighborhood parks and/or trails in the hamlets of Old Hurley and West Hurley are necessary to fully meet the needs described in the Comprehensive Plan. Some recommendations for providing neighborhood parks and other public recreation space are provided in the narrative that follows.



**Above** (top to bottom): Tennis courts at West Hurley Park; playground equipment at the Park; and view of multi-purpose baseball and soccer fields at the Park. In 2007, the Town developed plans for improvements at the park and this Open Space Plan supports continued improvements at West Hurley Park.

### West Hurley Park

In 2007, the Town developed a Master Plan calling for additional improvements to West Hurley Park. This Open Space Plan support the improvements that were proposed for the park, but also recommends other improvements to the park that would provide for passive recreational opportunities for local residents in addition to active recreation and field sports.

The West Hurley Park consists of 53.3-acres, of which roughly 12.3 acres is developed. This leaves an additional 40 or more acres through which hiking trails could be developed. If a passive recreation trail were developed at the park it could potentially extend into adjacent NYSDEC forestlands.



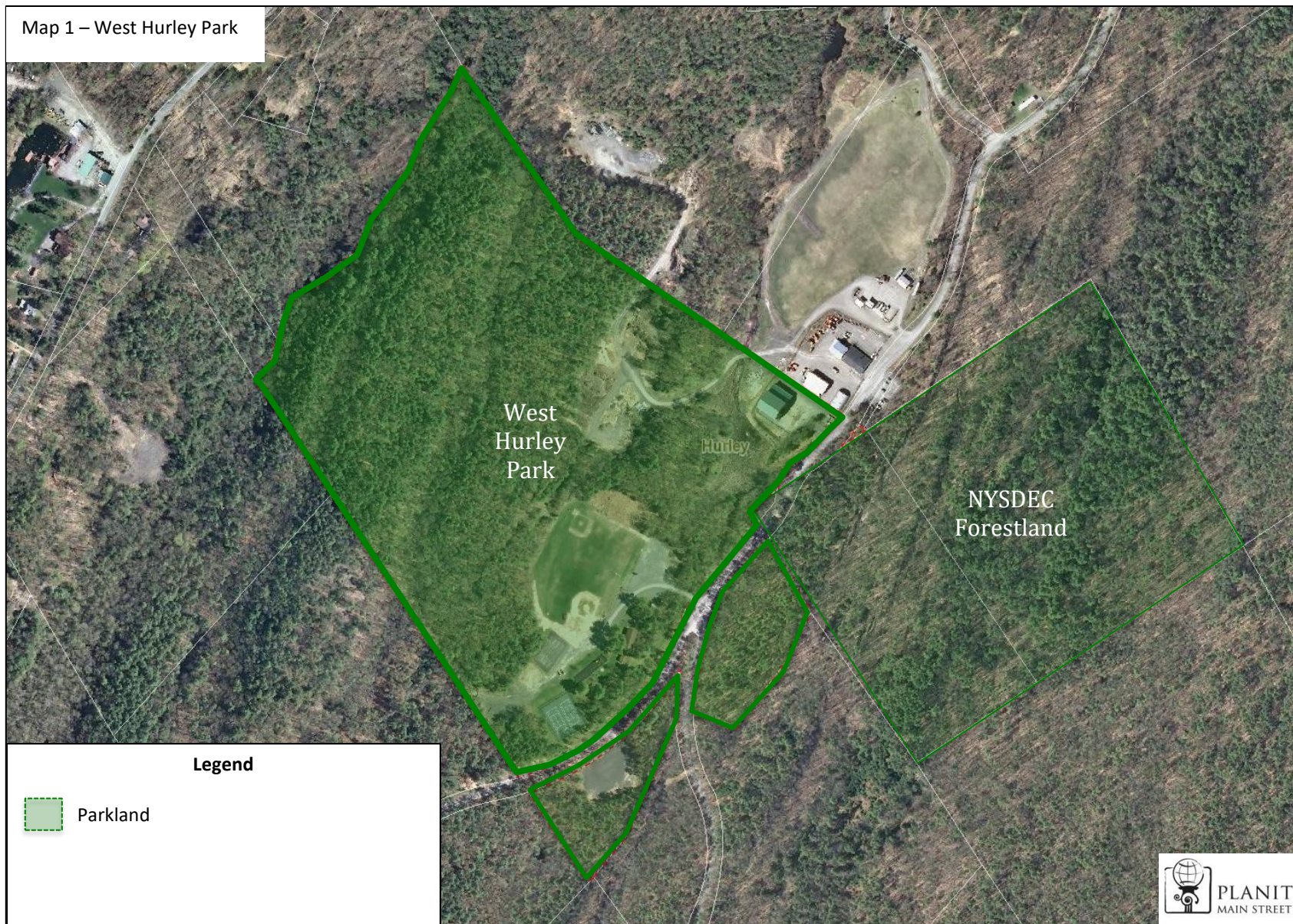
Any trail development on NYSDEC lands would require the cooperation of the State but would have the benefit of creating recreational opportunities for residents on lands that are already publicly owned. The West Hurley Park parking area is already sufficient to accommodate additional use. The nearby Onteora Lake Trails at the Bluestone Wild Forest in the Town of Kingston is an example of the type of trail system that could be developed through a Town and NYSDEC partnership (see Appendix A).

A West Hurley Park map is provided on the next page. The Parks & Pathways map on page 8 shows publicly owned open space in the Town (Town of Hurley, Ulster County, NYSDEC and NYCDEP) along with existing and proposed parks and trails (i.e. pathways to the future).

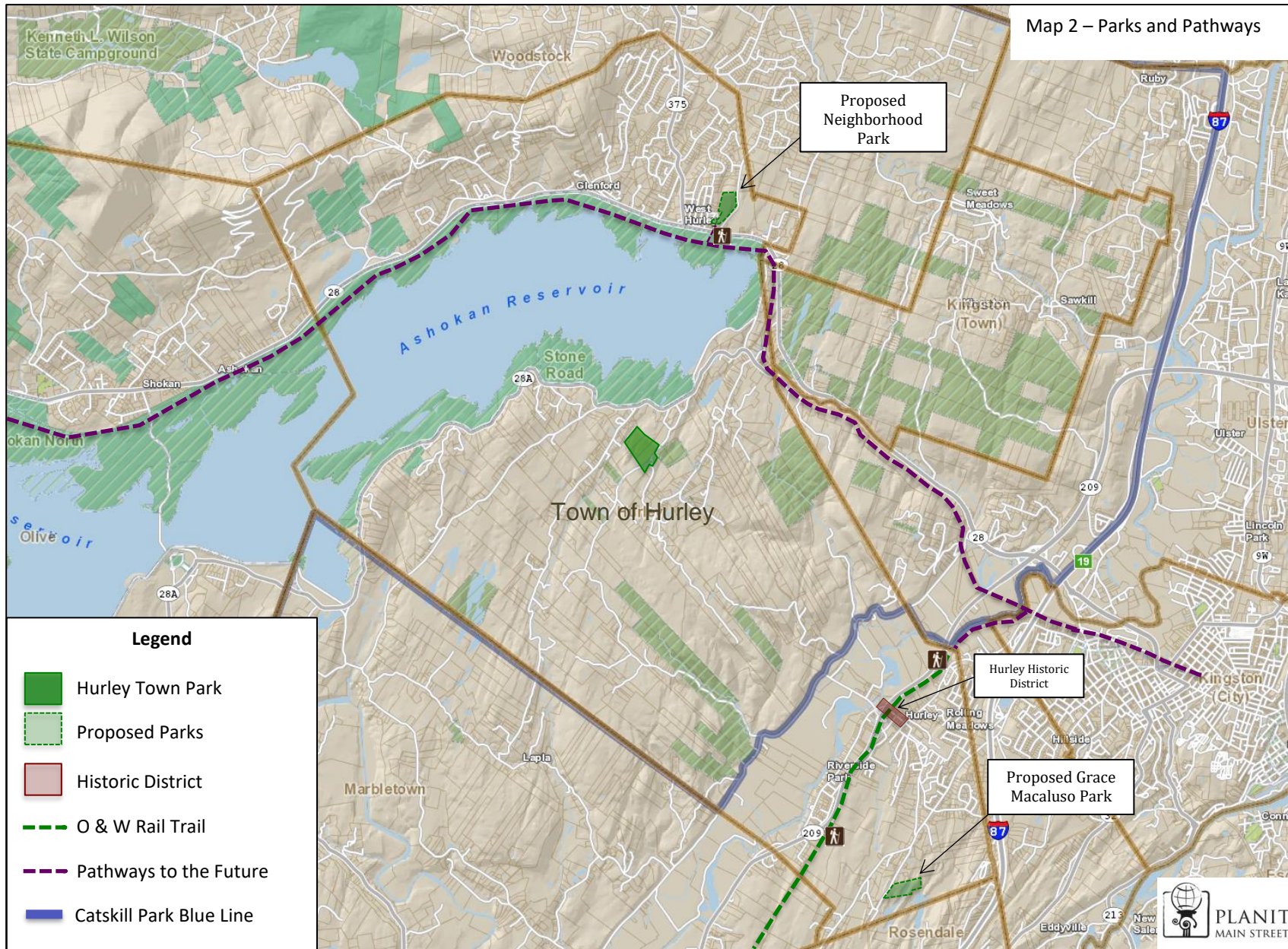
### WEST HURLEY PARK

“THE WEST HURLEY PARK CONSISTS OF 53.3-ACRES, OF WHICH ROUGHLY 12.3 ACRES IS DEVELOPED. THIS LEAVES AN ADDITIONAL 40 OR MORE ACRES THROUGH WHICH HIKING TRAILS COULD BE DEVELOPED.”











### Neighborhood Park in West Hurley

The hamlet of West Hurley is one of the largest population centers in the Town of Hurley, yet this hamlet does not have access to neighborhood parks or trails. As a result, West Hurley residents must drive to public recreation facilities. However, there are opportunities to provide for a neighborhood park or create a trail system in West Hurley. Doing so would require the cooperation of the Town Board with Ulster County, West Hurley Fire District and/or the NYCDEP.

The West Hurley Fire District recently acquired a 1.8-acre parcel from the school district that is adjacent to the firehouse. The property consists of a wide lawn area with an old baseball diamond. The Fire District is developing a future use plan this property, which could include some recreational amenities. This Plan supports efforts to develop recreational amenities on this site in response to the needs for such facilities in West Hurley.

Central School District No. 1 (Onteora) is selling its 34.5-acre school site on Rowe Lane that contains a play yard. Local residents have utilized the playground even though it is not well maintained, which speaks to the demand for recreational opportunities in the hamlet. The loss of this playground would take away one of the few recreational outlets for local families.

It is a recommendation of this Open Space Plan for the Fire District to acquire a portion of the subject property for park and recreation use. While the acquisition of a few acres for active and passive park purposes would be ideal, the acquisition of 1.5 acres that includes the existing playground with some surrounding lands is recommended to accommodate more playground equipment and other recreation activities. The acquisition of this land by the Fire District is strongly supported by this Open Space Plan.

Each year, the New York State Office of Parks, Recreation and Historic Preservation's Environmental Protection Fund (EPF) provides grants to municipalities, not-for-profit organizations and other governmental entities for the acquisition, planning, development and improvements of parks. This Plan supports Town efforts to work with the Fire District to seek these funds to improve existing park resources as well as to acquire and develop new parkland.



**Above** (top to bottom): View of play yard at West Hurley school grounds that are presently utilized by families for recreational needs; view of playground within the play yard; and view of baseball diamond on former school lot that was recently acquired by the West Hurley Fire District. The West Hurley School grounds are owned by School District No. 1. A portion of these lands could be set aside for parkland.

Removing a few acres from the school property for park purposes is unlikely to adversely affect the school property value, but the loss of this land to development would forever forego the opportunity to develop a neighborhood park that is in walking distance for West Hurley residents. Fire District acquisition of this parkland may also warrant a traffic control device at Wall Street and NYS Route 28, which could open up the possibility for a pedestrian crossing in the future since their acquisition of lands within 500 feet of NYS Route 28 may warrant a traffic control device.

Other recreational opportunities in West Hurley include the Ulster County/New York City Department of Environmental Protection (NYCDEP) proposed development of the 11.5-mile Ashokan Rail Trail along the Ulster and Delaware (U & D) rail bed, which is anticipated to include multiple trailheads and support facilities. This Plan recommends that the Town Board be an active player in such discussions to ensure that proposed improvements are easily accessible to the residents of West Hurley and the Town of Hurley overall.

The development of the Ashokan Rail Trail would give West Hurley residents access to a recreational resource that could be used year-round, like the O&W Rail Trail. The proposed Ashokan Rail Trail would include trailheads and parking areas. However, for West Hurley residents, the positive impacts would be greatly enhanced if they were able to walk to the rail trail. In this respect the design of the Ashokan Rail Trail should incorporate a direct pedestrian connection between the trail and the hamlet of West Hurley, if feasible to do so.

Unlocking NYCDEP lands for greater recreational opportunities should include pedestrian connections to the future Ashokan Rail Trail and the hamlet of West Hurley. Some conceptual ideas for such improvements are provided on Map 3 – West Hurley Parks and Pathways. These illustrations are simply intended to form the basis for future discussions and hopefully agreements between the Town and other governmental agencies to enhance park and recreational opportunities in the hamlet of West Hurley.

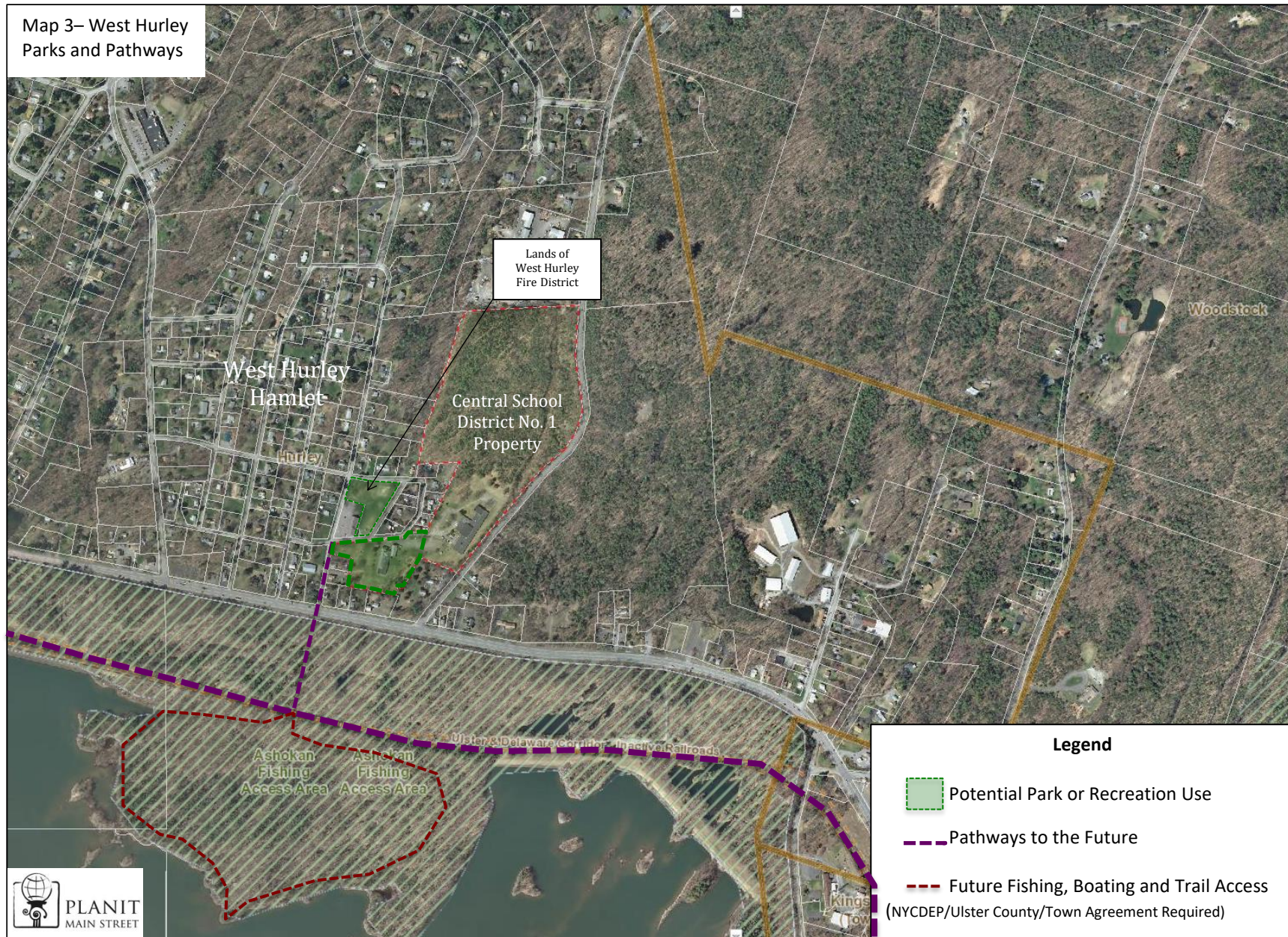
There are also funding opportunities to help with trail development. The aforementioned, NYSOPRHP grant program provides funding to municipalities, not-for-profit organizations and other governmental entities for the acquisition, planning, development and improvements of parks. Applications that involve the cooperation among local governments earn extra points, which is why this Plan supports the Town playing a more active role in regional trail development.

## ASHOKAN RAIL TRAIL

“THE DEVELOPMENT OF A  
ASHOKAN RAIL TRAIL  
WOULD GIVE WEST  
HURLEY RESIDENTS’  
ACCESS TO A  
RECREATIONAL  
RESOURCE THAT COULD  
BE USED YEAR-ROUND,  
LIKE THE O&W RAIL  
TRAIL.”



Map 3– West Hurley  
Parks and Pathways





### Glenford

The hamlet of Glenford is situated in the Town's northwest area near the Ashokan Reservoir's Glenford Dike, which was recently cleared of vegetation and is situated alongside the proposed Ashokan Rail Trail that is being spearheaded by Ulster County and the NYCDEP. This Plan recommends the Town of Hurley coordinate with the County and NYCDEP to explore opportunities to enhance public access and recreational opportunities in the vicinity of the hamlet of Glenford.



### Old Hurley - Pathways to the Future

The O&W Rail Trail runs parallel to NYS Route 209 and through the hamlet of Old Hurley. For many Old Hurley residents, the rail trail is only a few minutes' walk from surrounding neighborhoods down to Route 209. Rolling Meadows is a large subdivision that is situated to the east of Old Hurley. The western edge of Rolling Meadows to Main Street in Old Hurley is less than ½ mile walking distance, yet there is no designated pathway between these two centers.

There may be some limited opportunities to develop a pathway to connect Rolling Meadows and Old Hurley. However, doing so would require the voluntary cooperation of several property owners to either sell some land for a pathway or to grant an easement for such purposes.

There is also a need in Old Hurley/Rolling Meadows for active recreational facilities like ball fields, tennis courts or basketball courts. Ideally, such facilities would be situated in areas where local residents could walk to them. Presently, the closest recreational facilities within the Town are located at the West Hurley Park, which is a five-mile drive from the hamlet of Old Hurley. A small neighborhood park with a playground within the hamlet of Old Hurley would also enhance recreational opportunities for local residents and could be situated on a site as small as an acre. This Plan recommends future evaluation of potential parkland and pathways in West Hurley.









### Grace Macaluso Park

There are 32-acres of conservation lands, located off Walton Lane, that was deeded to the Catskill Center for Conservation and Development in the will of Grace Macaluso. The Rondout-Esopus Conservancy has indicated an interest in a conservation easement, which would preserve the land in perpetuity. The Conservancy has already performed extensive surveying work on the parcel and has entered into talks with the Catskill Center for Conservation and Development. The Catskill Center has not yet developed an intended use plan for this property, but this Open Space Plan recommends the Town coordinate with the Catskill Center to see if future plans can also help meet the passive recreational needs for residents in the Town of Hurley.

The site contains a small stream crossed by a stone bridge, a meadow, and land sloping steeply down to the north end of Twin Lakes with a large wetland at the north end. On the other side of the lake, still within this property, is a steep slope with a hemlock forest, leading up to a hardwood forest. The property contains several uninhabitable structures, which should be demolished. The site has no paved areas; however, there is a dirt driveway and dirt paths.

The Binnewater Hills and Lakes (BHAL) assessment done by Hudsonia, Ltd. In 2014 identified some significant habitats on this property such as Upland Shrubland, Hardwood Forests, Mixed Forest, Calcareous Crest, Ledge, Talus and Conifer Forests (Hudsonia 2014). This Open Space Plan recommends that this property be developed into a passive park that would enable residents to walk, sit, look at the fine scenery and just relax or enjoy nature.

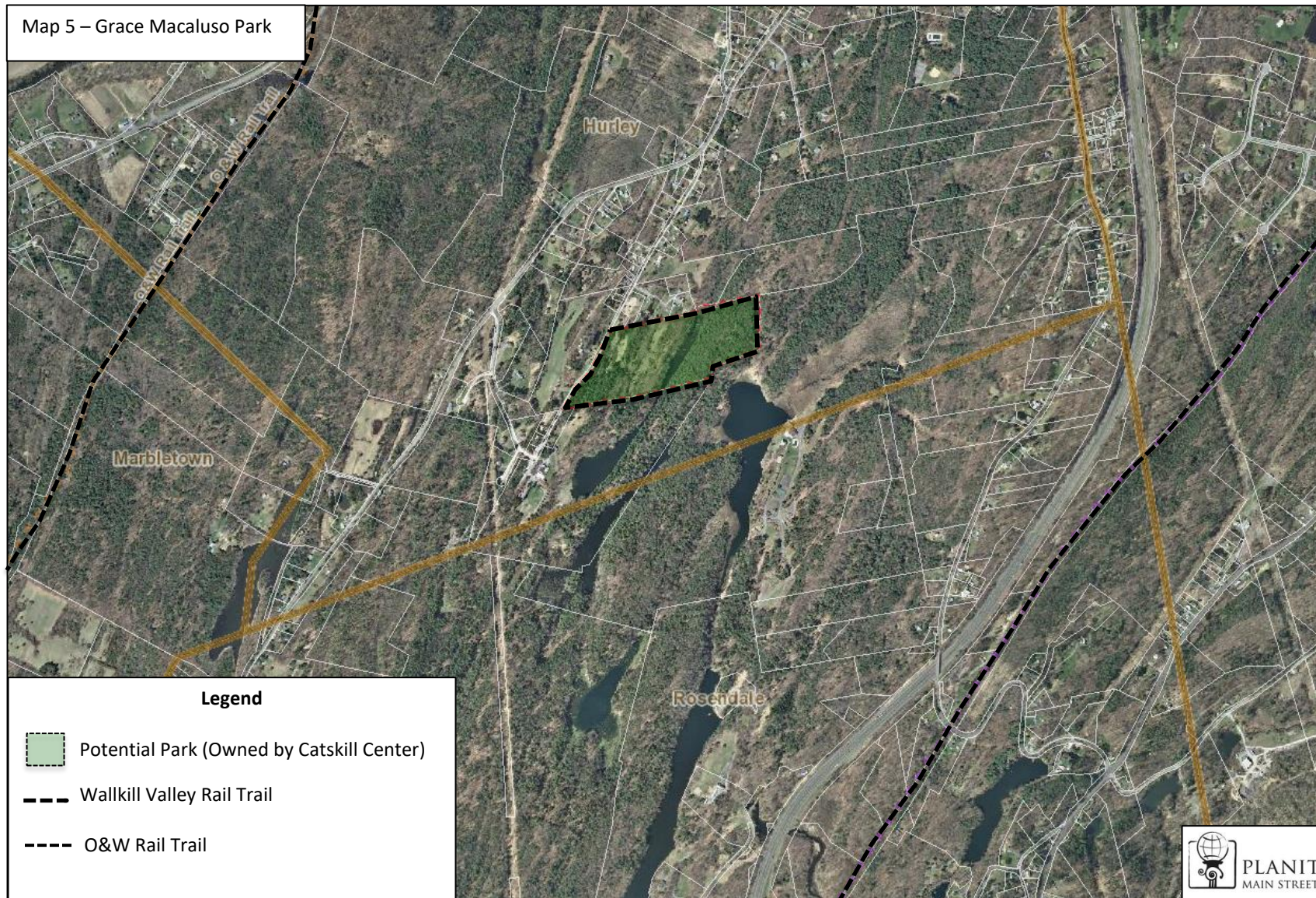
### Conservation Goals

- Provide guidance to the Catskill Center on site's history and on the CAC goals for the area;
- Assist the Center and/or Rondout-Esopus Conservancy in creating a conservation easement on this property;
- Assist with fund raising, volunteer organizing, and development of the property into a passive park with paths and benches; and
- Support plans to secure NYSDEC EPF Municipal Grant Program funding for park improvements.



**Above** (top to bottom): View of Grace Macaluso property looking south toward Twin Lakes from Walton Lane; view of logging road within the Grace Macaluso property showing the mature canopy of trees consisting of a mix of coniferous and deciduous species; and view of a clearing near the center of the property. A trail system could be developed on this property for passive recreation and educational purposes.







### 3.0 Special Interest Areas

There are several areas in Hurley with unique physiographic conditions that distinguish them from other areas of the Town. These may include natural drainage features or wetlands, soil characteristics, the topography, biodiversity, and wildlife habitat. The Conservation Advisory Council (CAC) has identified five (5) such areas within the Town as follows:

- 1) Binnewater Forest,
- 2) Hurley Flats,
- 3) Hurley Mountain and Escarpment,
- 4) Millbrook Woods, and
- 5) Southside.

These areas are broadly defined on Map 6 – Special Interest Areas. The distinctive character of these areas is reflected in the natural and built environment we see today, which was influenced by the physiographic conditions of each area.

To a large degree, the Town's Zoning Map reflects the uniqueness of these areas, which are primarily situated within the A-4 Very-Low-Density Residential, A-2.5 Low-Density Residential and R-1 Moderate-Density Residential Zoning Districts. The A-4 Zoning District was delineated to include the most sensitive environmental areas in the Town: those areas where specific physical conditions require that particular care be taken to ensure that development will not affect (or be affected by) identified environmental constraints.

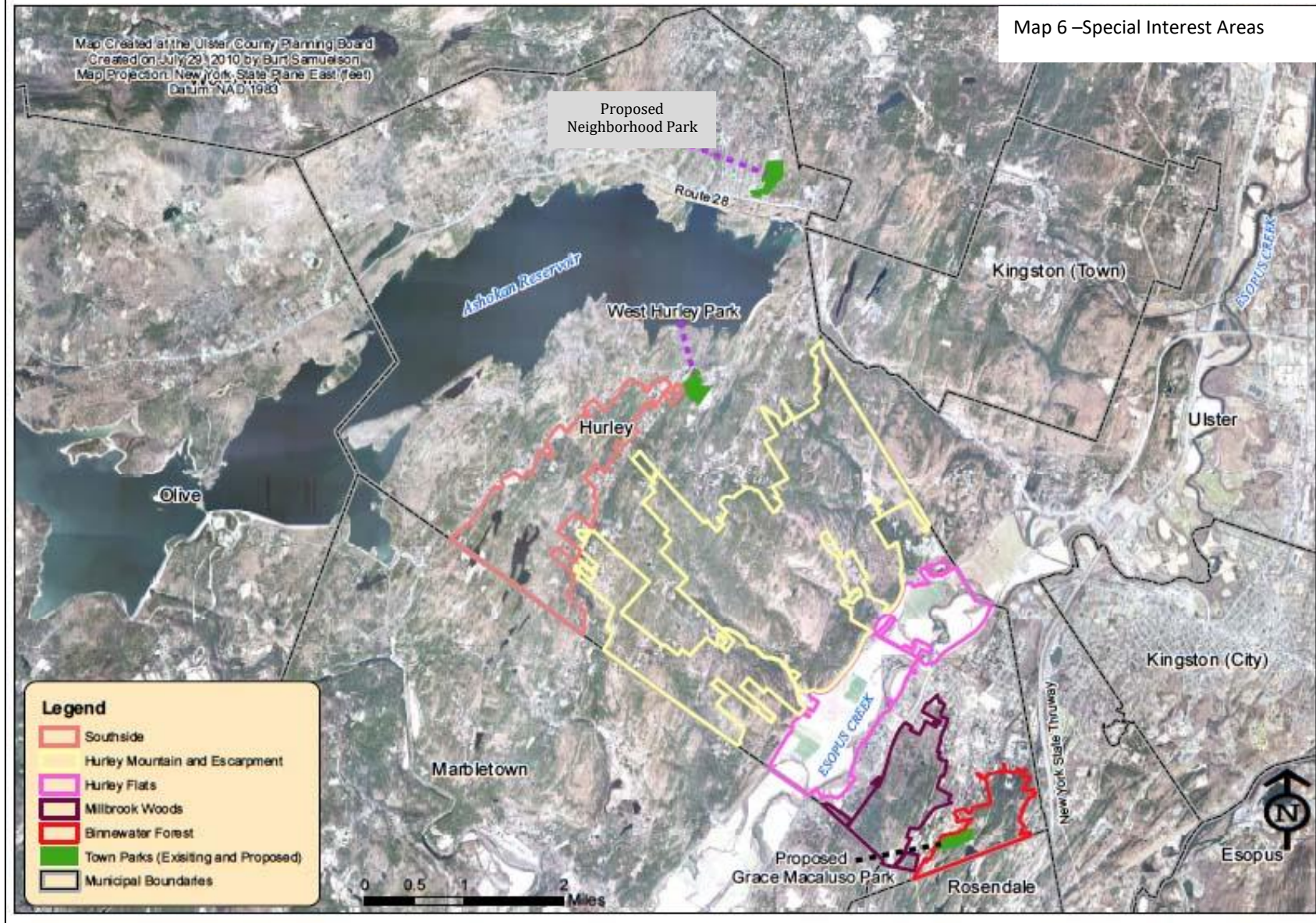
The A-2.5 Zoning District includes much of the remaining rural area of the Town. Many of the same environmental factors present in the very-low-density area are present here, but the extent of these factors, either individually or in combination with each other, is smaller and more discontinuous. The R-1 Moderate-Density Residential Zoning District includes the periphery of the established hamlets of Hurley and West Hurley. In contrast to the low- and very-low-density areas, there are rarely two or more significant environmental constraints present in these areas, the most common of which is soil characteristics. The Millbrook Woods lies largely within the R-1 Moderate-Density Residential Zoning District.

#### SPECIAL INTEREST AREAS

“THERE ARE SEVERAL  
AREAS IN HURLEY WITH  
UNIQUE PHYSIOGRAPHIC  
CONDITIONS THAT  
DISTINGUISH THEM FROM  
OTHER AREAS OF THE  
TOWN. THESE MAY  
INCLUDE NATURAL  
DRAINAGE WAYS OR  
WETLANDS, SOIL  
CHARACTERISTICS, THE  
SLOPE OF THE LAND,  
BIODIVERSITY, AND  
WILDLIFE HABITAT.”



### Town of Hurley Special Interest Areas



***Binnewater Forest Area***

The Town of Hurley's 2004 Open Space Plan identified the Binnewater Forest Area as a priority place to preserve open space because of its "... lakes, swamps, streams, hills, fern forest, pine groves and hiking trails" (Shuster Associates 2004). This 2015 Open Space Plan update continues to support this open space policy. This mostly undeveloped area in Old Hurley is one of the most attractive and, at the same time, one of the most environmentally sensitive areas in Hurley.

Consisting of approximately 377 acres, the Binnewater Forest Area lies just south and west of the houses on DeWitt Mills Road, south to the Rosendale town line, west to just past Twin Lakes and northwest to the houses on Walton Lane and Lucas Avenue (see Map 7 on page 19). In Hurley, this area encompasses portions of Twin Lakes and First Lake, which are part of the larger Binnewater Lakes system that continues into the Town of Rosendale. This area is zoned A-2.5 Low-Density Residential, which is a reflection of environmental constraints in this area.

**Wetlands and Habitat Protection**

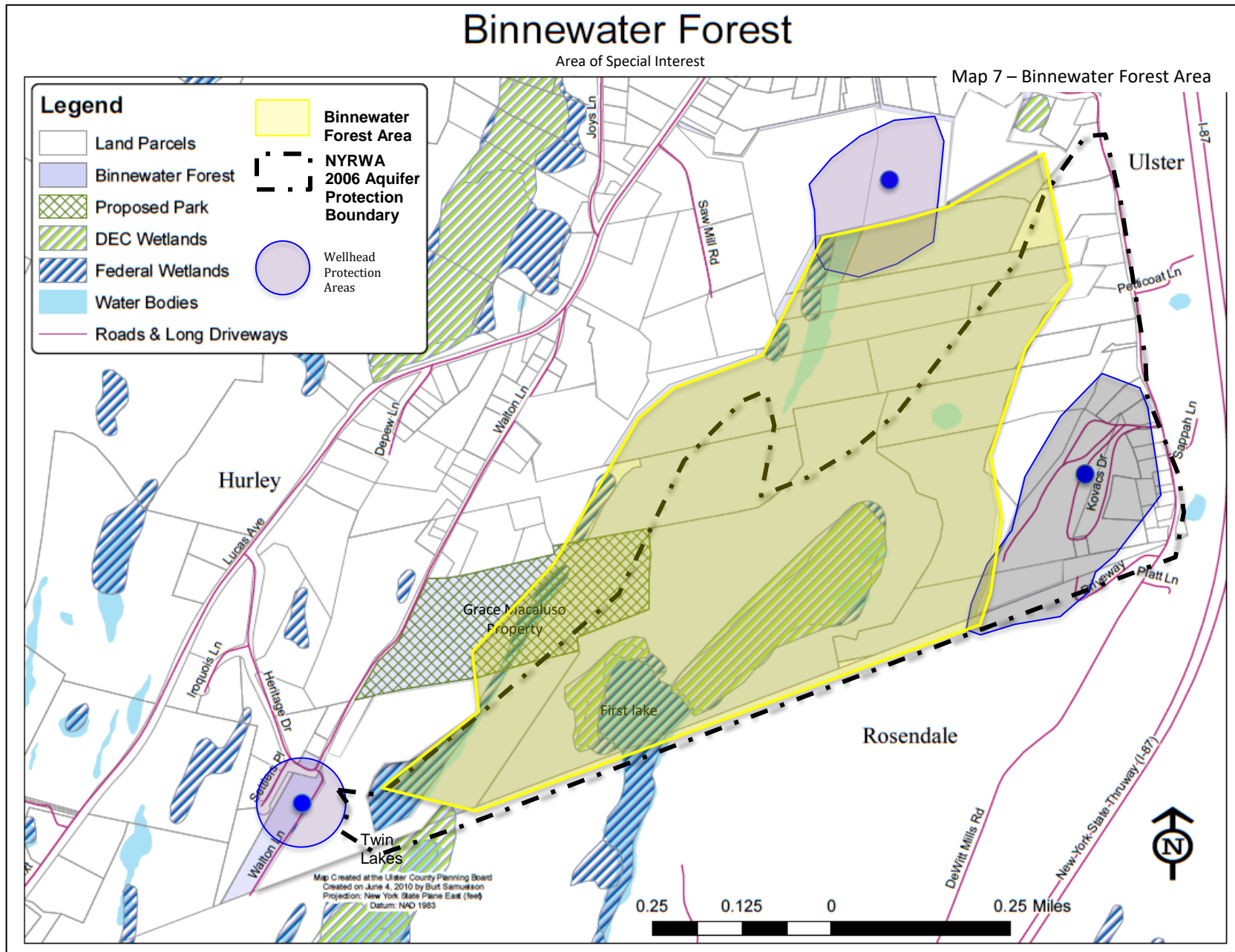
Twin Lakes becomes an extensive hardwood swamp at the opposite end of the lake from the Twin Lakes Lodge. Half of First Lake is in Hurley with the rest in the town of Rosendale. There is no road access to First Lake from Hurley. The Hurley portion of this lake is surrounded by a wet meadow and marshes, most of which are New York state-regulated wetlands. In referring to these wetlands, Hudsonia Ltd. stated, "We mapped another extensive wetland complex adjacent to and north of Twin Lakes and First Lake. This complex included hardwood and shrub swamps, mixed forest swamps, intermittent woodland pools, and wet meadows. Wetland complexes with especially high habitat value include extensive complexes, those with a wide variety of wetland types, and those that have intact upland habitat between the wetlands."

The Binnewater Hills and Lakes (BHAL) assessment by Hudsonia, Ltd. identified significant habitats in the Binnewater Forest Area including: Upland Shrubland, Hardwood Forests, Mixed Forest, Calcareous Crest, Ledge, Talus, Conifer Forests, March (First Lake), Hardwood Swamp, Shrub Swamp, Floodplain Hardwood Forest, Intermittent Woodland Pool, Circumneutral Bog Lake, (First Lake), Open Water, Streams, Springs and Small Seeps (Hudsonia 2014).

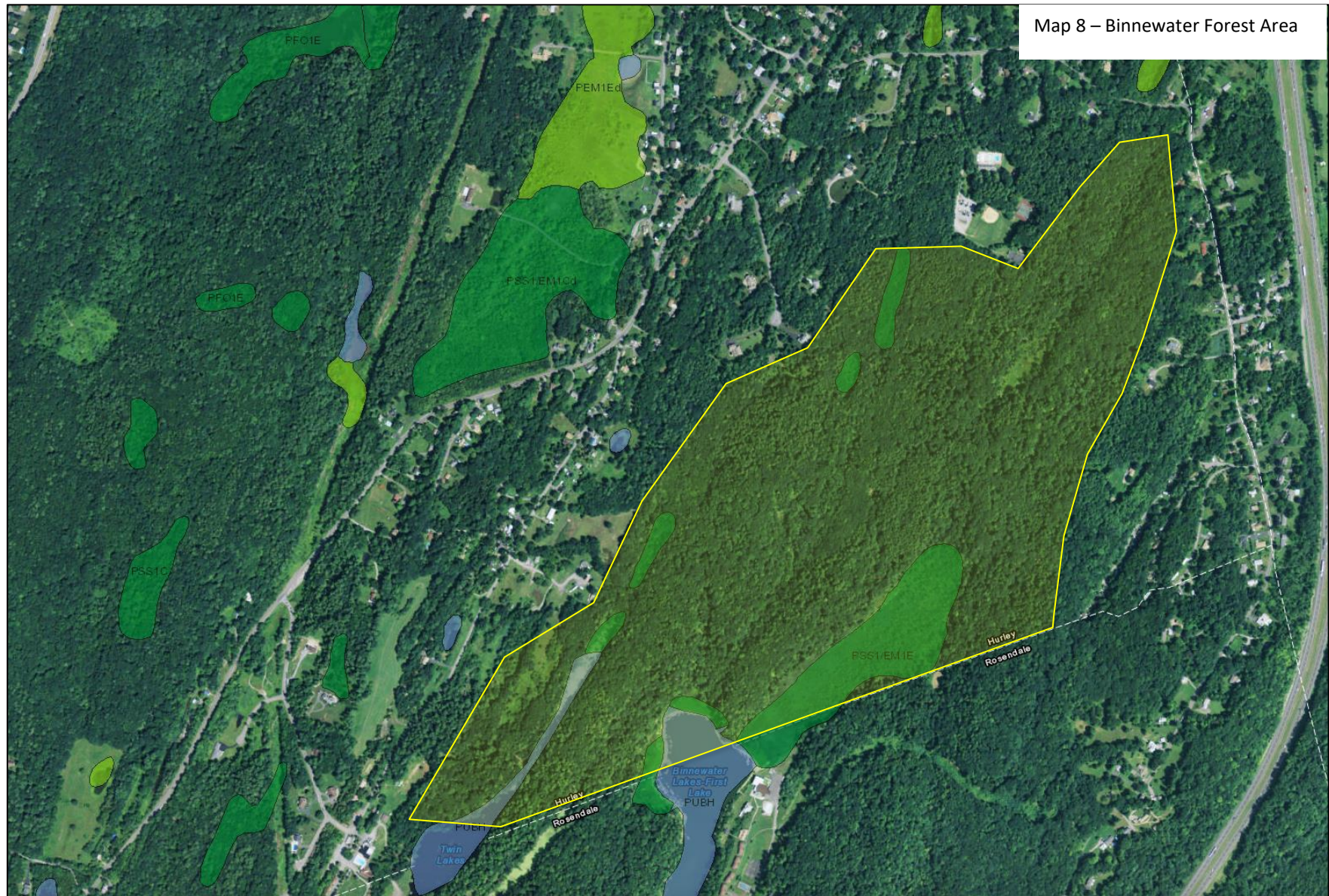
**BINNEWATER  
FOREST**

"THIS AREA IS A  
PRIORITY PLACE TO  
PRESERVE OPEN  
SPACE BECAUSE OF  
ITS "... LAKES,  
SWAMPS, STREAMS,  
HILLS, FERN FOREST,  
PINE GROVES AND  
HIKING TRAILS"  
(SHUSTER  
ASSOCIATES  
2004)."











All three of these important types are included in this complex which, according to the assessment, is most likely a high-quality habitat for plants and animals and the wet meadows “could be calcareous wet meadows which often support rare plants and invertebrates specially adapted to calcium-rich situations” (Hudsonia 2008). It is a priority objective of this Plan to ensure strict compliance with State and federal wetland regulations in this area to protect these resources.

#### Forests and Habitat Protection

The Hudsonia habitat assessment report stated that most of this Binnewater Forest area consists of a contiguous upland forest composed of patches of hardwood, some of conifer and some mixed. The report noted that, “Large, unfragmented forests are important habitat for many wildlife species of conservation concern, including many forest interior-breeding songbirds and forest-dwelling birds of prey such as sharp-shinned hawk.” More detailed environmental reviews were recommended to determine any presence of rare or endangered animals and plants.

#### Water Quality and Aquifer Recharge Protection

The Binnewater Forest area overlies a karst aquifer system, which is defined as an irregular limestone region that may include underground and sinking streams, sinkholes, mines, lakes and caverns. NYSDEC’s 2009 Open Space Conservation Plan lists this geologic feature as a priority area to be preserved in Ulster County. The Plan notes, “The area is rich in biological, geological and historical resources, provides diverse outdoor recreational opportunities and critical water reserves.”

According to the *Groundwater Protection Plan for Old Hurley* (NYRWA 2006) about half of the bedrock in this location consists of Esopus shale, meaning that water does not permeate the ground easily, encouraging the formation of wetlands. As for the other half of the area, the NYRWA report states that the aquifer further to the southeast contains several limestone formations that form caves and other karst features in the region. The Groundwater Protection Plan states that in this area, groundwater “has the potential to flow rapidly through large, interconnected void spaces.” Karst formations can transmit contaminants long distances over relatively short time periods with little or no inactivation or removal of the contaminants.

### BINNEWATER FOREST

“IMPORTANT  
CONSERVATION  
GOALS IN THIS AREA  
INCLUDE  
PRESERVATION OF  
WETLAND SYSTEMS  
AND GEOLOGIC  
FORMATIONS AND  
MAINTAINING OPEN  
SPACE  
CONNECTIONS  
BETWEEN UPLAND  
AND WETLAND  
HABITATS.”

Based upon the above factors, care must be taken to ensure adequate aquifer protection measures are employed when reviewing development proposals within the Binnewater Forest Area. Strategies for mitigating potential adverse impacts are provided in the Groundwater Protection Plan for Old Hurley and this Open Space Plan supports those strategies.

### Recreation

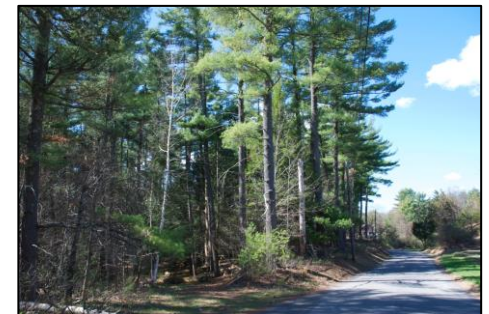
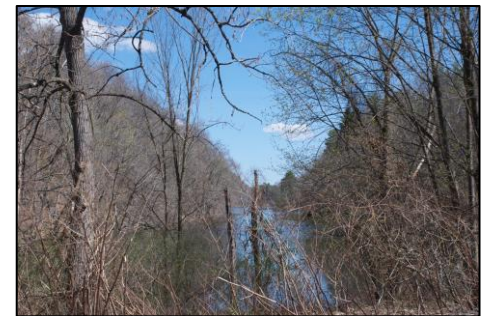
Much of this mostly undeveloped land is already being used for recreational purposes. About 40 acres is owned by the Twin Lakes Lodge with 14 cabin accommodations and situated directly on Twin Lake. The Hurley Recreation Association's 41 acres includes a recreation complex with a competition-sized pool, a children's pool, a playground, tennis courts, a basketball court and a baseball field. This Open Space Plan supports the continued use of these properties for these active recreational uses.

There are another 92 acres within the Binnewater Forest Area that are owned by a New Jersey-based church group. These lands are undeveloped and not reachable from any Hurley road. However, the Hurley CAC has observed an increased in the use of off-road vehicles in this area, which deters wildlife and destroys sensitive habitats. Measures to deter such activity in this area should be explored further to protect sensitive habitats from potential adverse impacts.

### Summary

The unique physical and natural characteristics of lands within the Binnewater Forest Area suggest that greater care must be taken in the review of development proposals within this area of the Town. Measures to mitigate the fragmentation of wildlife corridors, to protect groundwater quality and to ensure the protection of wetlands are needed to preserve this area for future generations. This Open Space Plan recognizes that the lands within the Binnewater Forest Area are privately owned and that property owners must be allowed to utilize their properties for the land uses that are permitted within the Town's A-2.5 Zoning District.

However, when potential adverse impacts to the environment are presented by proposed uses, then appropriate mitigation measures must be employed to ensure such impacts are mitigated to the fullest extent practicable. The following policies are provided to help strike this balance.



**Above** (top to bottom): Lakefront gazebo on the grounds of Twin Lakes Lodge; woodland pool within the interior of the Binnewater Forest Area; and view of Grace Macaluso property looking south from Walton Lane toward the Twin Lakes Resort. This Open Space Plan supports the continued use of the Twin Lakes Lodge and Hurley Recreation Property for present uses, which provide a balance between commercial and recreational use.



*Land Resources: Open Space, Trails and Setbacks*

- NR.1. Promote land-use decisions that encourage the protection and sustainable use of natural resources.
- NR.2. Consider the importance of protecting natural resources in the review of any development proposal.
- NR.3. Work with the Catskill Center for Conservation and Development to develop trailheads and footpaths within the Grace Macaluso property.
- NR.4. Ensure strict compliance with NYSDEC and USACE wetland regulations to protect wetland habitats.
- NR.5. Encourage the provision of greenway linkages between properties through a voluntary conservation easement program.
- NR.6. Support Catskill Center efforts to secure EPF Municipal Grant Program funding for trailhead and trail improvements within the Grace Macaluso property.

*Geologic Features: Swamps, Woodland Pools and Wet Meadows*

- NR.7. Encourage the preservation of the swamps, woodland pools, wet meadows and the natural contours of the land, which provide high quality habitat for a variety of plants and animals.
- NR.8. During the development review process, ensure that natural resources, including native habitat of threatened or endangered species, are protected.
- NR.9. Conserve and protect wildlife corridors between development sites consisting of natural vegetation, forested areas, wetlands and undeveloped steep slopes.

*Water Resources: Wetlands, Floodplains, Aquifer, Streams and Water Bodies*

- NR.10. Implement Stormwater Pollution Prevention Plan (SWPPP) best management practices in accordance with NYSDEC regulations.
- NR.11. Minimize impact of new development on the natural resources through best management practices (BMP), low-impact design standards and conservation subdivision techniques.

## BINNEWATER FOREST

“PROMOTE LAND-USE  
DECISIONS THAT  
ENCOURAGE THE  
PROTECTION AND  
SUSTAINABLE USE OF  
NATURAL  
RESOURCES WITHIN  
THE BINNEWATER  
FOREST AREA.”

- Require onsite stormwater management to reduce runoff and nonpoint source pollution.
- Minimize the amount of tree loss and impervious cover for new projects, consistent with permitted land-use intensity.
- Situate buildings to minimize driveway length and preserve trees.
- Encourage clustering of development away from environmentally sensitive land such as woodlands, wetlands and steep slopes.

NR.12. Conserve the riparian zone along streams and tributaries and protect the wooded areas along woodland pools.

NR.13. Ensure that all developments comply with NYSDEC and USACE wetland regulations.

NR.14. Cooperate with the Town of Rosendale to protect groundwater resources through an intermunicipal aquifer protection law and following the recommendations contained in the 2006 Groundwater Protection Plan.

NR.15. Keep current A-2.5 Zoning designation for lands that lie within the Binnewater Forest Area.

*Natural Habitat: Threatened and Endangered Species, Night Sky and Invasive Plants and Animals*

NR.16. Encourage conservation of threatened or endangered species habitat through appropriate site design, best management practices and conservation easements.

NR.17. Regulate outdoor lighting to balance nighttime visibility and security needs while protecting the night sky, natural environment and wildlife habitats.

NR.18. Work with NYSDEC to identify threats related to invasive species and secure funding through the NYSDEC Invasive Species Eradication program to eradicate such species when identified.

NR.19. Develop a joint Conservation Plan for Binnewater Forest Area with the Town of Rosendale.

The information provided in this chapter is provided for general planning purposes and is not intended to be a substitute for detailed site-specific information. Proposed land-use applications will need to provide additional details as may be appropriate and necessary for a particular site.

## BINNEWATER FOREST

“COOPERATE WITH THE TOWN OF ROSENDALE TO PROTECT GROUNDWATER RESOURCES THROUGH AN INTERMUNICIPAL AQUIFER PROTECTION LAW AND FOLLOWING THE RECOMMENDATIONS CONTAINED IN THE 2006 GROUNDWATER PROTECTION PLAN.”



***Hurley Flats***

This area has been used for agricultural purposes since long before European settlers arrived. For many years, the primary crop cultivated on these fields was sweet corn. An ear of corn is part of the Town logo and most residents consider these fields to be what makes Hurley, Hurley. Much more than any other place, it is what defines Hurley and consequently, the Flats are the most important area recommended by the CAC to be protected as open space. The area runs from the Marbletown line to the Town of Ulster town line and from just below the steep slopes on the west side of Hurley Mountain Road to the Esopus Creek and, north of Wynkoop Road, through the low-lying area up to Route 209 (Map 9). The National Resources Conservation Service has designated large portions of the Hurley Flats as Prime Farmland Soils. This land is all zoned A-4 (Very-Low-Density Residential) in keeping with the desired continued use for farming.

**Agriculture and Soils**

Some 1,100 acres of the Flats are currently farmland with some added acreage for the Esopus Creek and its buffer zone as well as for housing along Hurley Mountain Road, Evergreen Lane, Brinks Lane and Wynkoop Road. A conservation easement preserves some 279 acres of this area (the former Paul Farm) forever as farmland (Map 9).

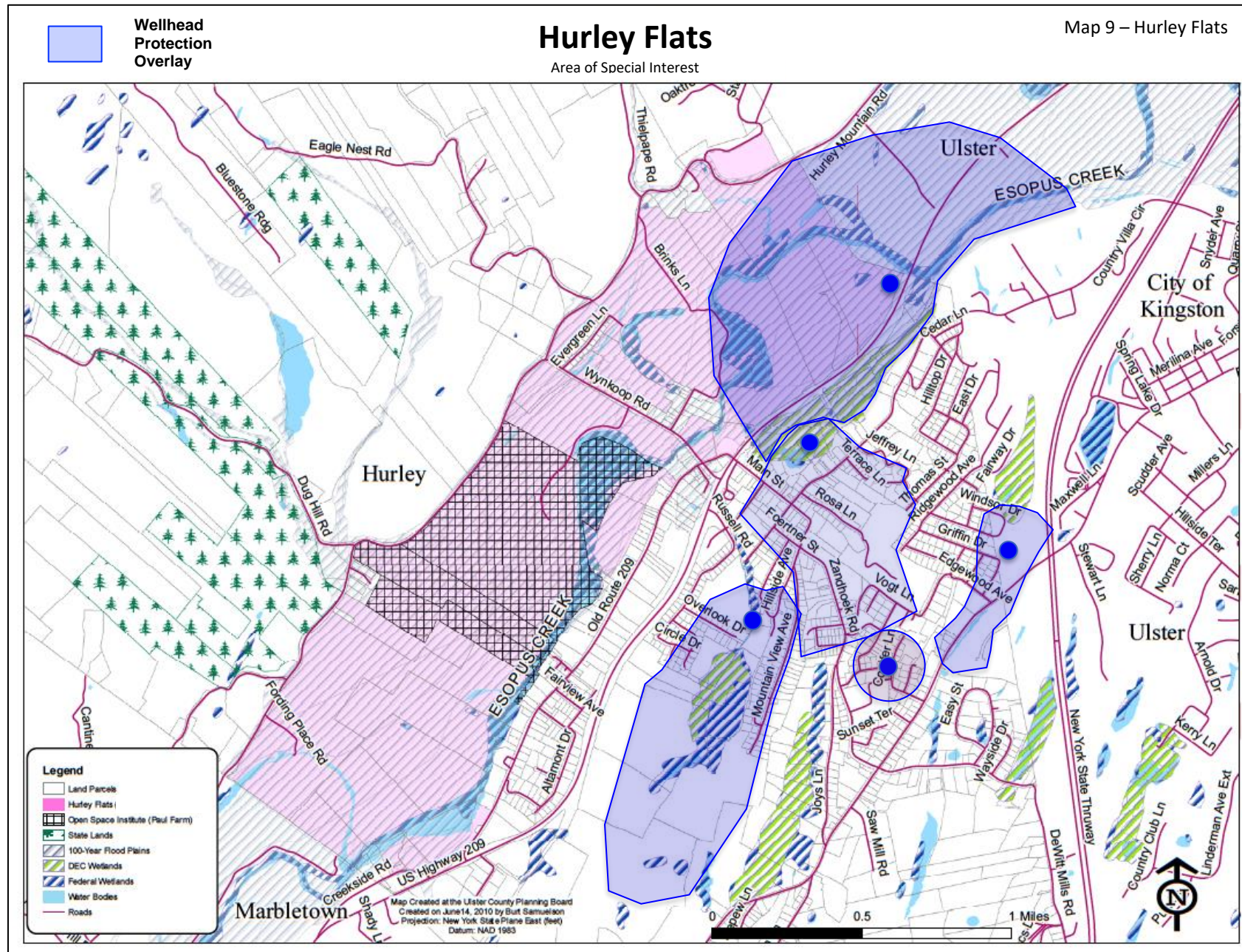
As noted in the Introduction of this Open Space Plan, a large portion of the Hurley Flats are owned by the NoVo Foundation, which has established the Hudson Valley Farm Hub to conduct agricultural research involving sustainable and resilient growing methods, while training existing farmers in new farming techniques and incubating new farmers through the lease of lands. This Plan supports the intended use of these lands for the Hudson Valley Farm Hub.

The A-4 (Very-Low-Density Residential) Zoning District permits residences on lots with a minimum land area of four acres. However, since much of the Hurley Flats is both within a FEMA-designated 100-year floodplain and included in a certified Ulster County Agricultural District, it is inappropriate for large-scale residential subdivisions. However, it is very well suited for continued agricultural use, a use for which it is recommended in the Town's adopted 2006 Comprehensive Plan and this 2016 Open Space Plan.

**HURLEY FLATS**

“AN EAR OF CORN IS  
PART OF THE TOWN  
LOGO AND MOST  
RESIDENTS  
CONSIDER THESE  
FIELDS TO BE WHAT  
MAKES HURLEY,  
HURLEY.”







### Historic and Scenic Vistas and Roads

Several historic homes lie within the boundaries of this area, including two which are included in the Hurley National Historic District. The scenic views over the farmlands to the Shawangunk Mountains from Wynkoop and Hurley Mountain Roads are outstanding. These historic resources also play an important role in defining the unique sense of place and rural character of the Town of Hurley. This Open Space Plan strongly encourages the preservation of these historic resources along with the protection of scenic vistas within this area of the Town.

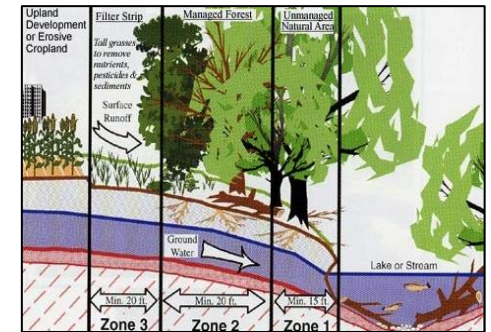
### Water Resources

The Flats are an “Area of Concern” because several of the wells used for the Town’s drinking water as well as the Town’s major aquifers are located within or very close to farming activities. The existing groundwater must also remain clean to sustain the agricultural use. Of particular worry is the potential for groundwater contamination in this area due to road salt and possible chemical and septic tank spills (Mid-Hudson Geosciences 2003). This plan recommends use of farming best management practices within areas that are in close proximity to the Rolling Meadows Water Company wells and the prohibition of storing chemicals within 1,000 feet of the Town’s wells.

This Open Space Plan also recommends that the Riparian Zone along the Esopus Creek be protected to control erosion and help prevent sediment pollution. Clearing for agricultural or residential purposes should be discouraged. However, some clearing to provide public access to the river for kayaking, fishing or swimming would be appropriate provided best management practices were implemented in accordance with NYSDEC and FEMA guidelines.

### Recreation on the Esopus

The Esopus Creek is an inviting natural resource. Unfortunately, there is limited public access to the creek and this Open Space Plan recommends the Town explore opportunities to increase public access. Locations that may be suitable for public access include the lands adjacent to the Wynkoop Road Bridge in Hurley (e.g. kayaking and fishing access) and lands accessible via private drive to the creek opposite Firehouse Drive in Hurley. The latter also presents an opportunity for swimming. However, these lands are privately owned and not open to the public at this time.



**Above** (top to bottom): Illustration showing unmanaged natural zone, managed forest zone and filter strip (i.e. Zones 1, 2 and 3); and views of riparian zone along the Esopus Creek. Natural riparian zones help to prevent excessive erosion of stream banks during flooding. When riparian zones are removed, rip rap is often required to stabilize stream banks.

Source: Illustration from Southeast Michigan Resource Conservation and Development Council.

Summary

The best approach to protect Open Space in the Hurley Flats is to encourage continued use of the land for agricultural purposes. This is also the only way to preserve scenic vistas that are made possible through the cultivation of land, that would otherwise quickly become overgrown with dense vegetation. Still, farming best management practices should be employed to protect groundwater resources for future generations. Locally grown produce, is also an important food source for residents and maintains the community's connection to the land.

This Open Space Plan reaffirms the recommendation in the 2004 Open Space Plan that the existing zoning laws should be amended "to confirm that the Town encourages agricultural uses so as to preserve open space and the rural character of the Town and to promote production of food."

This Plan further recommends the Town explore opportunities to enhance public access to the Esopus Creek by working with private landowners, NYSDEC and Ulster County to develop shared public access resources. By cooperating with each of these stakeholders, the Town would be better able to secure potential State or federal funding for improvements and share the cost of maintaining such improvements with State and County government.

The following policies are provided to help protect and enhance open space resources within the Hurley Flats:

**HURLEY FLATS**

"THE BEST APPROACH TO PROTECT OPEN SPACE IN THE HURLEY FLATS IS TO ENCOURAGE CONTINUED USE OF THE LAND FOR AGRICULTURAL PURPOSES. THIS IS ALSO THE ONLY WAY TO PRESERVE SCENIC VISTAS THAT ARE MADE POSSIBLE THROUGH THE CULTIVATION OF LAND, THAT WOULD OTHERWISE QUICKLY BECOME OVERGROWN WITH DENSE VEGETATION."



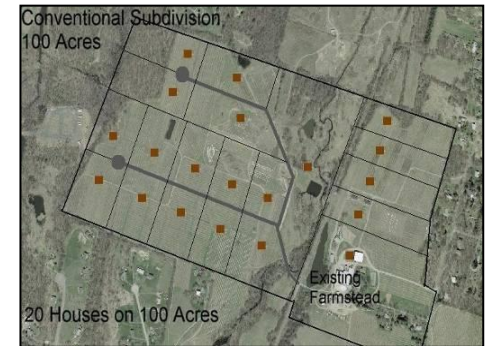
### *Agricultural Resources: Ag and Farmland Protection*

#### **Goal AG-1: Ensure long-term protection of agricultural-land resources for agriculture, open space and scenic resources.**

- AG.1. Encourage both private and public efforts to preserve and manage agricultural lands through purchase of development rights (PDR), transfer of development rights (TDR), participation in the NYS Agricultural and Markets Districts.
- AG.2. Require sufficient vegetative buffer on the nonagricultural land, so farms are buffered from homes.
- AG.3. Encourage and participate in the New York Farm Link Program to match farmers who are selling their farms with people who are looking to purchase a farm.
- AG.4. Require conservation subdivision design to preserve prime soils when farmland is subdivided.

#### **Goal AG-2: Retain and encourage a diversity of economically viable farm types.**

- AG.5. Encourage shared, or “cooperative” infrastructure development (e.g., storage and processing facilities, locations for Community Supported Agriculture (CSA) drop-off and pickup, regional food hubs, etc.).
- AG.6. Increase community engagement and consumer demand for locally grown food.
  - Work with regional economic-development entities and County and local governments to give local agriculture a higher priority and more visibility.
  - Help connect institutional, restaurant and wholesale opportunities with agricultural producers.
  - Revise animal control and zoning laws to allow more residents to raise or keep micro-livestock.
  - Encourage beekeeping on farms and on lands surrounding farms to ensure sustainable supply of bees that are needed to pollinate crops.
- AG.7. Review and revise regulations pertaining to farm operations to ensure these laws do not needlessly inhibit farming (e.g., farm stands, year-round farmers markets, greenhouses, value-added product operations, home-food production, U-picks, CSAs, and agritourism sites).
- AG.8. Continue support for agricultural programs provided by Ulster County’s Cornell Cooperative Extension (CCE) and NYS Agriculture and Markets.



**Above** (top to bottom): The illustrations provided above show how a conservation subdivision can be used to retain large tracts of farmland. The top illustration shows a conventional subdivision of 100 acres into 20 five-acre lots in a hypothetical community where the zoning requires a minimum lot size of five acres per lot. The illustration below it shows a conservation (cluster) subdivision where the 20 building lots are clustered on 33 acres of the site – leaving 67 acres of prime farmland within a conservation easement. The conservation easement can be held by a homeowner’s association, land trust, or sold to an adjacent farmer for the agricultural value of the property that is lower than the use value if it were developed. The aerial photos are of the Town of Franklin, NY.

### *Natural Resources: Groundwater, Riparian Zones and Streams*

- NR.1. Conserve the riparian zone along the Esopus Creek and its tributaries.
- NR.2. Pursue land easements or utilize other conservation measures along the entire length of the Esopus Creek to create a large greenway that also serves to enhance the riparian buffer while ensuring access for irrigation for agricultural purposes.
- NR.3. Minimize impact of new development on the natural resources through best management practices (BMP), low-impact design standards and conservation subdivision techniques.
  - Minimize tree loss and impervious cover, consistent with permitted land-use intensity.
  - Situate buildings to minimize driveway length and preserve trees.
  - Encourage clustering of development away from environmentally sensitive land such as woodlands, wetlands and steep slopes.

### *Recreational & Historic Resources: Public Access to Esopus Creek and Historic Preservation*

- RH.1. Work with property owners, NYSDEC and the County to increase public access to the Esopus Creek.
- RH.2. Provide support letters to individuals or organizations that seek grant funding for historic preservation through the NYS Office of Parks, Recreation and Historic Preservation.
- HR.3. Support nominations for individual listing of properties on the National Register of Historic Places.

### *Land Resources: Land Use Regulations*

- LR.1. Promote land-use decisions that encourage the protection and sustainable use of Town's agricultural resources.
- LR.2. Support the right to farm and the continued use of prime agricultural lands for farming.
- LR.3. Consider importance of protecting natural resources in the review of any development proposals.
- LR.4. Review existing zoning laws to confirm that the Town encourages agricultural uses so as to preserve open space and the rural character of the Town and to promote production of food.
- LR.5. Amend subdivision regulations to require the use of conservation or "cluster" subdivisions when farmland is proposed to be used for residential subdivision purposes.



**Above** (top to bottom): Photo of agricultural buildings and administrative offices for the Hudson Valley Farm Hub; fields off of Wynkoop Road near the new bridge; and view of entrance to Farm Hub off of Hurley Mountain Road with cultivated fields and scenic vista as a backdrop. Farming protects open space, scenic vistas, and is necessary to maintain our food supply. This Plan strongly supports the use of the Hurley Flats for agriculture and farming.



### ***Hurley Mountain and Escarpment***

This land is bounded by Hurley Mountain Road to the east; to the west by upper Dug Hill Road and Morgan Hill Road; and to the north by Gallis Hill. There is also a large section bounded by Lomontville and Johnson Hill Road (see Map 10). There are many vistas and overlooks that face east on the Hurley Flats and west towards the Catskills. Almost all of this area is within the Catskill Park Blue Line of the New York State Department of Environmental Conservation. There are some NYSDEC properties and others that are under New York State timber harvest programs and many large tracts of undeveloped property. Part of this area is zoned A-4 (Very-Low-Density Residential) on the Old Hurley side and A-2.5 (Low-Density Residential) on the West Hurley side.

#### Historic

Long before the early Dutch settlers came, native Leni Lenape tribes had hunting camps along the Hurley Mountain escarpment. Piles of oyster shells can be found along some of the original trails, evidence of extensive trade with tribes of the Lower Hudson Valley. Remnants of the old paths and byways used by these early inhabitants still exist while others became logging roads and later were paved as town roads. The Hurley Mountain area was once part of the Hurley Patentee which was divided into long slender woodlots that were used by the early settlers for firewood and lumber. Later, when valuable bluestone was discovered, mining took place along many of the Hurley uplands. Old roadbeds such as the Steenykill Turnpike still exist deep in the forest while the numerous quarries have long since reverted back to dense forest. Some old stone walls mark property lines and indicate the early farms that were scratched out of the woodlands. A proper assessment of building foundations, roadbeds, quarries and trails by historians could help to determine the historical and cultural resource value of this area.

#### Soils and Slopes

This area is primarily shallow soil with the shale and bluestone only inches below the surface. The size of the trees and the frequent blow-downs verify this. There are many steep slopes and ridges that face towards the flats but also lie within the rough hills. There is very poor soil percolation and during rainy periods there is rapid runoff especially where land has been cleared.



### **HURLEY MOUNTAIN AND ESCARPMENT**

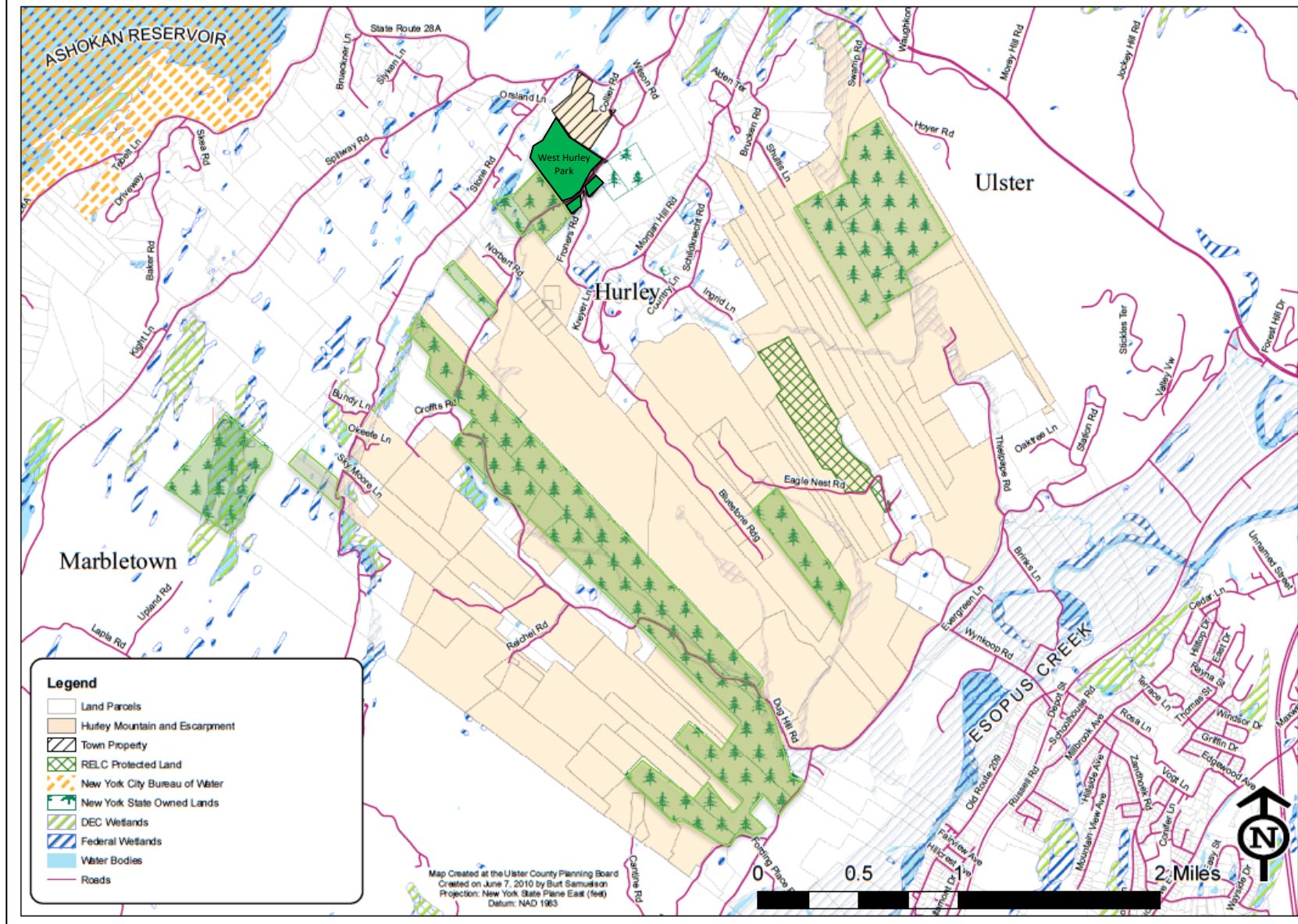
“THE FORESTED  
HILLSIDES ALONG  
HURLEY MOUNTAIN AND  
ESCARPMENT HELP TO  
DEFINE THE RURAL  
CHARACTER OF THE  
TOWN OF HURLEY.”



# Hurley Mountain and Escarpment

Area of Special Interest

Map 10 – Hurley Mountain





The eastern edge of this area consists of the Hurley Mountain ridge which is a steep escarpment which all who live in Old Hurley view just beyond the corn fields. This escarpment has escaped any development, thus maintaining its rural character.

### Habitats

The Hurley Mountain area lies within the Catskill Park. The majority of the area is forest with a variety of trees including pitch pine, hemlock, white pine, various oak, hickory, beech, cherry and some flowering trees such as dogwood. Understory vegetation include low bush blueberry, various unique wild flowers and seasonal blooms with some small patches of mountain laurel. Vegetation varies depending on the slope, whether facing north or south. A great diversity of wildlife abounds.

There are numerous wetlands and vernal pools in this area, some of which are New York state-regulated. Many streams and seeps flow together to form some larger named creeks. There are at least four good sized waterfalls that very rarely dry up and many smaller falls that are seasonal. NYSDEC owns property in this area and is interested in expanding its holdings (Map 10).

### Water

There is limited groundwater in this area with some small aquifers. However, most well water comes from the shale bedrock with widely varying flow amounts. Many property owners find water at about 200 feet while others have had to dig wells below 500 feet. Some property owners have experienced dry wells in drought years due to shallow water tables and salt runoff has affected streams during winter melts. The A-4 Very Low-Density Residential Zoning is a reflection of the areas inability to support higher density development.

### Recreation

The West Hurley Town Park is also located near the area's northwest corner. It includes ball fields, a pavilion, facilities, tennis courts, a playground, and a short hiking /biking trail. A few parcels of NYSDEC Forest Preserve are located here under the Bluestone Ridge Wild Forest Unit Management Plan (see map page 60). There are many trails throughout this area and more trail segments could be developed if easements or properties were acquired. Doing so would create an extensive trail network that that would attract outdoor enthusiasts from outside our area.

### Town of Hurley, New York



**Above** (top to bottom): Farm at end of Thielpape Road that lies in valley floor within the Hurley Mountain area just south of NYSDEC forestlands; view from same farm looking east toward ridgeline; and view from Wynkoop Road looking south across Hurley Flats with Hurley Mountain situated to the right. This Plan supports efforts to keep open clearings in this area to provide a variety of food sources and natural habitats.

Another recreation opportunity for this area is hunting. Much of the NYSDEC property is hunted and many of the adjacent lands allow some hunting by permission of private landowners. Expanding this opportunity would greatly enhance the hunting experience. There are plentiful game populations which would be maintained by preserving wildlife migration corridors.

There are some outstanding views and an escarpment trail along the Hurley Mountain ridgeline. It may be possible to work with entities such as the Trust for Public Lands or the Open Space Institute (OSI) to acquire lands for public open space. In the past, OSI has coordinated with the NYSDEC to acquire lands, which are then sold to DEC for public parkland. This Plan supports parkland acquisition efforts by NYSDEC that further public open space provided by the State.

#### Scenic Views

The A-4 Very Low Density Residential Zoning District includes those areas of the Town in which development may pose the greatest potential for visual impacts. These districts include the escarpment above the Hurley Flats and the agricultural lands of the Flats. The Town of Hurley Town Code § 210-42 - Visual Assessment provides a procedure to assess the visual impact of proposed development in the A-4 District and establishes standards and guidelines to minimize such impacts. Visual Assessment reviews are conducted routinely by the Planning Board and this Open Space Plan strongly endorses the requirement for Visual Assessment of new developments.

#### Summary

A vast majority of Hurley Mountain and the escarpment are heavily wooded with a variety of trees. While some of these lands are public parkland or within a conservation easement, the vast majority of this area is privately owned. Not all open space has to be open to the public in order to provide natural resource protection and protect scenic views. It is therefore recommended the Town cooperate with private landowners to manage their land in a manner that protects the unique qualities of Hurley Mountain and the Escarpment, while allowing for use of land as permitted in the A-4 Zoning District. One approach to protecting open space along Hurley Mountain is to encourage participation in NYSDEC's forestry management program.

### HURLEY MOUNTAIN AND ESCARPMENT

“A VAST MAJORITY  
OF HURLEY  
MOUNTAIN AND THE  
ESCARPMENT ARE  
HEAVILY WOODED  
WITH A VARIETY OF  
TREES INCLUDING  
PITCH PINE,  
HEMLOCK, WHITE  
PINE, VARIOUS OAK,  
HICKORY, BEECH,  
CHERRY AND SOME  
FLOWERING TREES  
SUCH AS  
DOGWOOD.”



Section 480-a of the New York State Real Property Tax Law provides qualifying forest owners with as much as an 80% reduction in assessed value provided the landowner commits to keeping his/her land as forested space for a minimum of 10 years, and to follow a forest management plan prepared by a forester and approved by the NYSDEC.

Much of the southern edge of Hurley Mountain and Escarpment borders the Town of Marbletown and many of the same landscape features exist there as well. Cooperation between the two towns to preserve these open space highlands could be helpful along certain properties. The northern side of Hurley Mountain and Escarpment borders the Town of Ulster and access to certain NYSDEC properties could be enhanced by acquiring easements on properties there.

*The following policies are provided to help protect and enhance open space resources within the Hurley Mountain and Escarpment area.*

*Forestry Resources: Management of Forestland*

**Goal FR-1: Ensure long-term protection of forest resources for forestry, open space and scenic resources.**

- FR.1. Encourage private landowner efforts to preserve and manage forest land through participation in Section 480-a of the New York State Real Property Tax Law.
- FR.2. Coordinate with NYSDEC, The Trust for Public Lands, Open Space Institute, Nature Conservancy, and Rondout-Esopus Land Conservancy to secure funding for land, or development rights purchase.

**Goal NR-1: Protect natural resources and plant and animal habitats.**

*Natural Resources: Groundwater, Riparian Zones and Streams*

- NR.1. Maintain A-4 Very Low Density Residential Zoning and A-2.5 Low Density Residential Zoning designation for Hurley Mountain and Escarpment.
- NR.2. Minimize impact of new development on the natural resources through best management practices (BMP), low-impact design standards and conservation subdivision techniques.
- NR.3. Protect numerous wetlands, streams and other unique habitats that harbor aquatic plant and animal species.

## HURLEY MOUNTAIN AND ESCARPMENT

“SECTION 480-A OF THE NEW YORK STATE REAL PROPERTY TAX LAW PROVIDES QUALIFYING FOREST OWNERS WITH AS MUCH AS AN 80% REDUCTION IN ASSESSED VALUE PROVIDED THE LANDOWNER COMMITS TO KEEPING HIS/HER LAND AS FORESTED SPACE FOR A MINIMUM OF 10 YEARS, AND TO FOLLOW A FOREST MANAGEMENT PLAN PREPARED BY A FORESTER AND APPROVED BY THE STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION.”

NR.4. Conduct a comprehensive biodiversity study of the Hurley Mountain and Escarpment.

**Goal LR-1: Utilize zoning, subdivision and site plan review laws to protect land resources while allowing for development in accordance with the A-4 and A-2.5 residential zoning districts.**

*Land Resources: Land Use Regulations*

LR.1. Consider the importance of protecting natural resources in the review of development proposals.

LR.2. Amend subdivision regulations to require the use of conservation or “cluster” subdivisions when forestland is proposed to be used for residential subdivision purposes.

- Minimize tree loss and impervious cover, consistent with permitted land-use intensity.
- Situate buildings to minimize driveway length and preserve trees.
- Encourage clustering of development away from environmentally sensitive land such as woodlands, wetlands and steep slopes.

LR.3. Require sufficient vegetative buffer for any proposed development of residential building lots within the A-4 Very Low Density Residential District.

LR.4. Continue to apply the Visual Assessment provisions of § 210-42 of the Town Code to mitigate potentially significant visual impacts associated with new development.

**Goal RR-1: Enhance Public Open Space for passive and active recreation use.**

*Recreational Resources: Public and private passive and active creation.*

RR.1. Create a trail system that can be used for recreation, hiking, biking and/or hunting.

RR.2. Preserving the large plots of Hurley Mountain woods by supporting efforts by NYSDEC to adding to and connecting with existing NYSDEC properties to create a more continuous forest for wildlife, recreation and hunting opportunities.

RR.3. Preserve the Hurley Mountain ridgeline viewshed from development to help keep the rural character of the uplands for all those who live in the flats to enjoy.

## HURLEY MOUNTAIN AND ESCARPMENT

“THE CAC  
RECOMMENDS  
PRESERVING THE  
LARGE PLOTS OF  
HURLEY MOUNTAIN  
WOODS AND ADDING  
TO AND CONNECTING  
WITH THE NYSDEC  
PROPERTIES TO  
CREATE A MORE  
CONTINUOUS  
FOREST FOR  
WILDLIFE,  
RECREATION AND  
HUNTING  
OPPORTUNITIES.”



***Millbrook Woods***

Millbrook Woods consists of the undeveloped land bounded to the South by the Town of Hurley border with Marbletown; to the West by the O&W Rail Trail/Route 209; to the North by Foertner Street; to the Northeast by Lucas Avenue/Joys Lane; and to the East by Lucas Avenue to the Rosendale town line (Map 11).

The area primarily consists of undeveloped woodland with federally regulated wetlands, mostly along the O&W Rail Trail, and part of a state-protected wetland at the southern end. Mill Brook flows into a 19-acre New York State-regulated wetland and eventually to its confluence at the Esopus Creek. The area also contains Hidden Lake, seasonal streams, swamps and waterfalls, vernal pools, large hemlock and hardwood forests, limestone ridges and outcroppings, steep slopes, and glacially deposited boulders. Bedrock is primarily limestone. Most is zoned R-1 (Moderate Density Res.) with approximately 25% of the area zoned R-2 (Low-Density Residential).

**History**

Two hundred years ago this area included the Hurley Commons. Among the historic remnants from this era are stone fences and portions of the prehistoric Indian Trail to the Wallkill Valley. This route was later used from 1670 to 1735 by the colonial settlers as the main road to the New Paltz area. The area also includes the Town's important mill dam from that era. Should that now-crumbling dam fail, undoubtedly the entire Hidden Lake would disappear with serious consequences for Millbrook and its surroundings. Arrowheads and other Esopus Indian artifacts are a common find. Much of this land was once used for farming, particularly for hops, a primary ingredient in beer.

**Recreation**

A good part of this property lies next to the popular O&W Rail Trail, which is a recreational trail that accommodates hiking and biking. One of the most attractive features of the O&W Rail Trail is the natural environment through which it passes. It is important for the future of the Rail Trail to maintain the woodlands and wetlands bordering it and to keep road crossings to a minimum for the safety and enjoyment of the trail users.

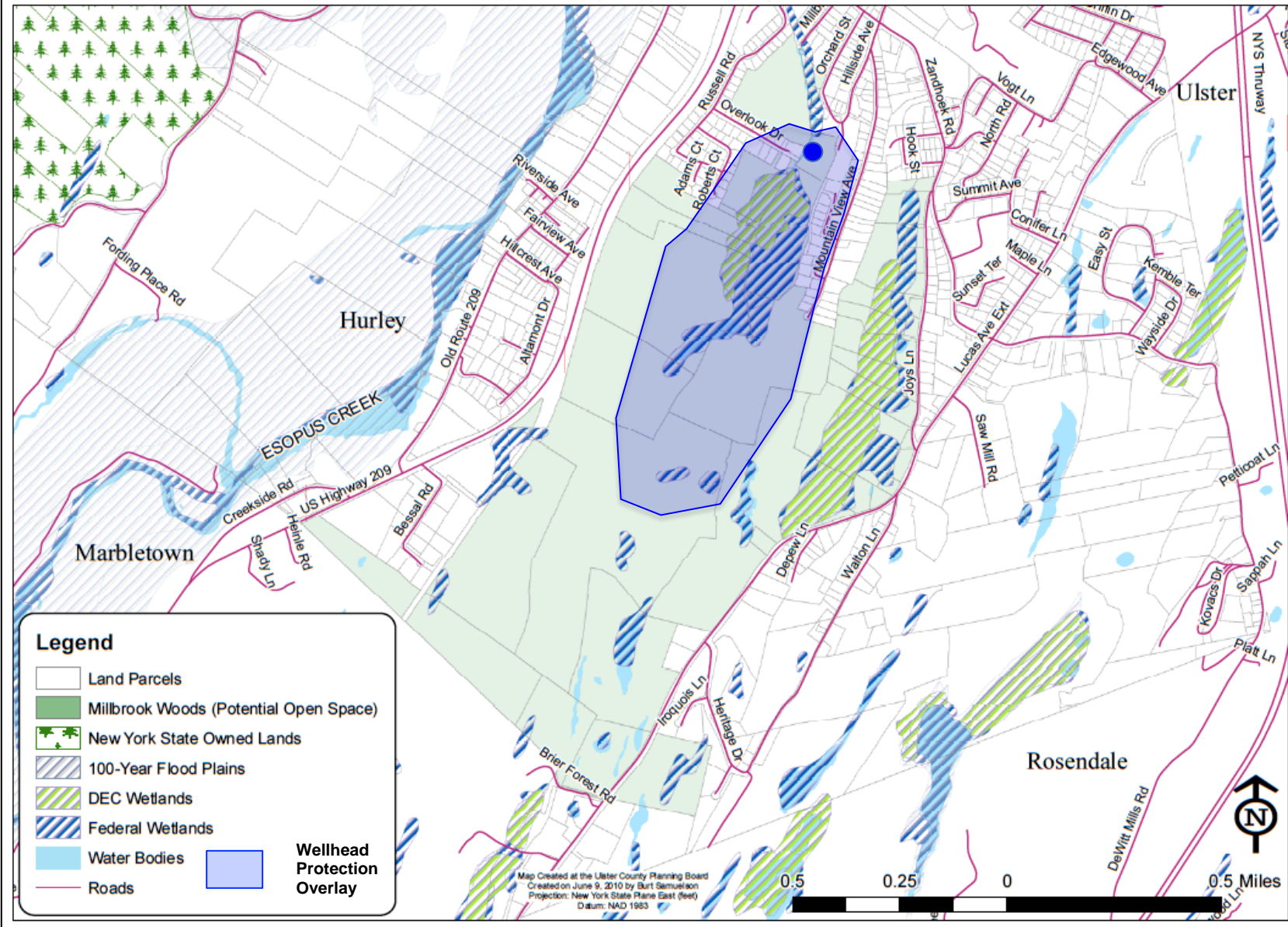
**MILLBROOK WOODS**

“ONE OF THE MOST  
ATTRACTIVE FEATURES  
OF THE O&W RAIL TRAIL  
IS THE NATURAL  
ENVIRONMENT THROUGH  
WHICH IT PASSES.”

# Millbrook Woods

Area of Special Interest

Map 11 – Millbrook Woods





One of the recommendations of the *Hurley Comprehensive Plan* is to expand the Town's trail system and the CAC suggests this area would be an ideal location. There are a variety of informal hiking trails throughout this area of the Town, which are used by many as an extension of the Rail Trail. However, many of these trail extensions are situated on private lands that are not open to the public. This Plan recommends expanding the trail system from the O&W Rail Trail by negotiating easements from private landowners and/or utilizing lightly trafficked Town roads.

### Water

Millbrook is a primary source of recharge for the Orchard Street Well and Spring, one of Rolling Meadows Water Company's major wells. Since this well is relatively shallow at 15-20 feet in depth, the water supply would be at risk if the stream were to become polluted. The area's underlying aquifer currently produces significant quantities of water; however, the water level in this aquifer fluctuates considerably throughout the year (NYRWA 2006).

According to the water corporation, "The Orchard Street wells have a high susceptibility rating for nitrates and microbes and a medium susceptibility to industrial solvents and other industrial contaminants." The primary source of nitrates in this area is leaching of septic tanks. "Microbes" refers to bacteria and other micro-organisms, including viruses, some of which may be considered pathogens, potentially transmitting diseases. Nitrates can enter groundwater from septic systems, fertilizers and animal waste and, in moderately high concentrations, can affect blood cell function in infants. Thus, lack of water resource protection undoubtedly can have a dramatic impact on Hurley residents.

The 2006 New York Rural Water Association's *Groundwater Protection Plan for Old Hurley* lists this entire area as an "Open Space Critical to Groundwater Resources." Because this is such a critical groundwater resource area, almost all of the Mill Creek woods area should be included in an aquifer protection overlay district and a very large part should be included in a wellhead protection area (NYRWA 2006). This report recommends at least a 500-foot buffer zone around the well as does the New York State Department of Health's Source Water Assessment Program which was created to protect groundwater sources and wellhead areas supplying public drinking water systems.

## MILLBROOK WOODS

"THE 2006 NEW YORK RURAL WATER ASSOCIATION'S *GROUNDWATER PROTECTION PLAN FOR OLD HURLEY* LISTS THIS ENTIRE AREA AS AN "OPEN SPACE CRITICAL TO GROUNDWATER RESOURCES."

### Habitat

Wildlife frequenting this area includes deer, bear, coyote, beaver and turkeys. A habitat assessment of most of Old Hurley, conducted in 2008 by Hudsonia, Ltd., includes the following: “Large, unfragmented forests [of 100 acres or more] are important habitat for many wildlife species of conservation concern, including many forest interior-breeding songbirds and forest-dwelling birds of prey...” Landscapes that are fragmented by roads, utility corridors and developed land limit animal movements and interactions, disrupting patterns of dispersal, reproduction, competition, and predation. Conservation measures may include minimizing intrusions into the interior of these patches, protecting wetlands and streams from siltation and other pollutants, maintaining broad buffer zones along streams, and maintaining broad corridors between habitats of concern” (Hudsonia 2008). In order to protect its valuable biodiversity, this area deserves special attention in land-use planning.

### Zoning

Approximately 75% of this area has an R-1 designation (Moderate-Density Residential). The Hurley Zoning Code states that such a designation “includes the periphery of the established hamlets of Hurley and West Hurley. The balance is zoned R-2 residential. In contrast to the low-and very-low-density areas (A.2.5 and A.4), there are rarely two or more significant environmental constraints present in these areas, the most common of which is soil characteristics.

In addition, there is good access onto local streets, proximity to community facilities and major regional highways. Some portion of these areas is presently served by community water systems and other areas could conceivably be served by community utilities.”

This designation does not apply to most of the Millbrook Woods because of 1) such environmental constraints as steep slopes, federally and New York State-regulated wetlands, and the need for water resource protection; 2) the lack of access to major roads—Route 209 is blocked by the O&W Rail trail while the other boundaries only front on narrow residential streets unsuitable for heavy traffic; 3) no part of it is served by community utilities, and 4) it is not near any community facilities. The Zoning Code should be changed for this area.

## MILLBROOK WOODS

“LARGE,  
UNFRAGMENTED  
FORESTS [OF 100  
ACRES OR MORE]  
ARE IMPORTANT  
HABITAT FOR MANY  
WILDLIFE SPECIES  
OF CONSERVATION  
CONCERN,  
INCLUDING MANY  
FOREST INTERIOR-  
BREEDING  
SONGBIRDS AND  
FOREST-DWELLING  
BIRDS OF PREY.”

HUDSONIA, LTD.



Summary

The unique physical and natural characteristics of lands within the Millbrook Woods area suggest greater care must be taken in the review of development proposals within this area of the Town. Measures to mitigate the fragmentation of wildlife corridors, protect groundwater quality and ensure the protection of wetlands are needed to preserve this area for future generations. This Open Space Plan recognizes that the lands within Millbrook Woods are privately owned and that property owners must be allowed to utilize their properties for the land uses that are permitted within the Town's R-1 and A-2.5 Zoning District.

However, when potential adverse impacts to the environment are presented by proposed uses, then appropriate mitigation measures must be employed to ensure such impacts are mitigated to the fullest extent practicable. The following policies are provided to help strike this balance.

**Goal LR-1: Promote land-use decisions that protect and result in sustainable use of natural resources.***Land Resources: Open Space, Trails and Setbacks*

- LR.1. Consider the importance of protecting natural resources in the review of development proposals.
- LR.2. Continue to support enhancements and upkeep of the O & W Rail Trail.
- LR.3. Ensure strict compliance with NYSDEC and USACE wetland regulations to protect wetland habitats.
- LR.4. Encourage the provision of greenway linkages between properties through a voluntary conservation easement program.
- LR.5. Determine which historic features should be maintained.

**Goal NR-1: Protect natural features and habitat within Millbrook Woods.***Geologic Features: Swamps, Woodland Pools and Wet Meadows*

- NR.1. Encourage the preservation of swamps, woodland pools, wet meadows and the natural contours of the land, which provide high quality habitat for a variety of plants and animals.

**MILLBROOK WOODS**

“PROMOTE LAND-USE DECISIONS THAT PROTECT AND RESULT IN SUSTAINABLE USE OF NATURAL RESOURCES.”

- NR.2. During the development review process, ensure that natural resources, including native habitat for threatened or endangered species, are protected.
- NR.3. Conserve and protect wildlife corridors between development sites consisting of natural vegetation, forested areas, wetlands and undeveloped steep slopes.

*Water Resources: Wetlands, Floodplains, Aquifer, Streams and Water Bodies*

- NR.4. Implement SWPPP best management practices in accordance with NYSDEC regulations.
- NR.5. Minimize impact of new development on the natural resources through best management practices (BMP), low-impact design standards and conservation subdivision techniques.
- Require onsite stormwater management to reduce runoff and nonpoint source pollution.
  - Minimize the amount of tree loss and impervious cover for new projects, consistent with permitted land-use intensity.
  - Situate buildings to minimize driveway length and preserve trees.
  - Encourage clustering of development away from environmentally sensitive areas such as woodlands, wetlands and steep slopes.
- NR.6. Conserve the riparian zone along streams and tributaries and protect wooded areas along woodland pools.
- NR.7. Ensure that all developments comply with NYSDEC and USACE wetland regulations.
- NR.8. Work with the Town of Marbletown to protect groundwater resources through an intermunicipal aquifer and wellhead protection law and following the recommendations contained in the New York Rural Water Association's *Groundwater Protection Plan for Old Hurley (NYRWA 2006)*.
- NR.9. Consider A-2.5 zoning designation for certain lands that lie within Millbrook Woods.

*Natural Habitat: Threatened & Endangered Species, Night Sky and Invasive Plants and Animals*

- NR.10. Encourage conservation of threatened or endangered species habitat through appropriate site design, best management practices and conservation easements.
- NR.11. Regulate outdoor lighting to balance nighttime visibility and security needs while protecting the night sky, natural environment and wildlife habitats.

## MILLBROOK WOODS

“COOPERATE WITH THE TOWN OF MARBLETOWN TO PROTECT GROUNDWATER RESOURCES THROUGH AN INTERMUNICIPAL AQUIFER AND WELLHEAD PROTECTION LAW AND FOLLOWING THE RECOMMENDATIONS CONTAINED IN THE 2006 GROUNDWATER PROTECTION PLAN FOR OLD HURLEY.”



NR.12. Work with NYSDEC to identify threats related to invasive species and secure funding through the NYSDEC Invasive Species Eradication program to eradicate such species when identified.

NR.13. Develop a joint Conservation Plan for Millbrook Woods with the Town of Marbletown.

NR.14. Perform further habitat studies in order to protect threatened and endangered species.

The information provided in this chapter is provided for general planning purposes and is not intended to be a substitute for detailed site-specific information. Proposed land-use applications will need to provide additional details as may be appropriate and necessary for a particular site.

## MILLBROOK WOODS

“WORK WITH  
NYSDEC TO  
IDENTIFY THREATS  
RELATED TO  
INVASIVE SPECIES  
AND SECURE  
FUNDING THROUGH  
THE NYSDEC  
INVASIVE SPECIES  
ERADICATION  
PROGRAM TO  
ERADICATE SUCH  
SPECIES WHEN  
IDENTIFIED.”

### ***Southside***

Perhaps the largest area of undeveloped forested land in Hurley lies in West Hurley's "Southside" between the Ashokan Reservoir and Stone Road, including lands abutting Route 28A, Spillway Road, and Stone Road. Some of the parcels off Stone Road are contiguous with areas of undeveloped lands that border Dug Hill Road, Hurley Mountain Road, and the Marbletown/Hurley border. Zoning is set at A-4 (Very-Low-Density Residential along the reservoir) and A-2.5 (Low-Density Residential) for the remaining area (see Map 13).

At present most homes are built close to the roads thus creating large areas of open land behind them. Most land owners seem interested in preserving their land and several landowners have already entered into conservancy agreements. A significant portion of the 933 acres which the State of New York owns in Hurley is within this area as part of the New York State Forest Preserve. Additionally, the New York City Department of Environmental Protection (NYCDEP) maintains ownership/jurisdiction of the land around the Ashokan Reservoir.

### **History**

Early Southside inhabitants supported themselves by hunting and gathering, farming, and bluestone quarrying. Many finds of archeological interest await discovery -- from arrowheads to artifacts found at old farm and quarry sites. Although of this area was once farmed, the land was not very suitable for this purpose. Today the area is mainly residential, and lands once cleared are returning to forest. Timbering and hunting are presently the main economic uses.

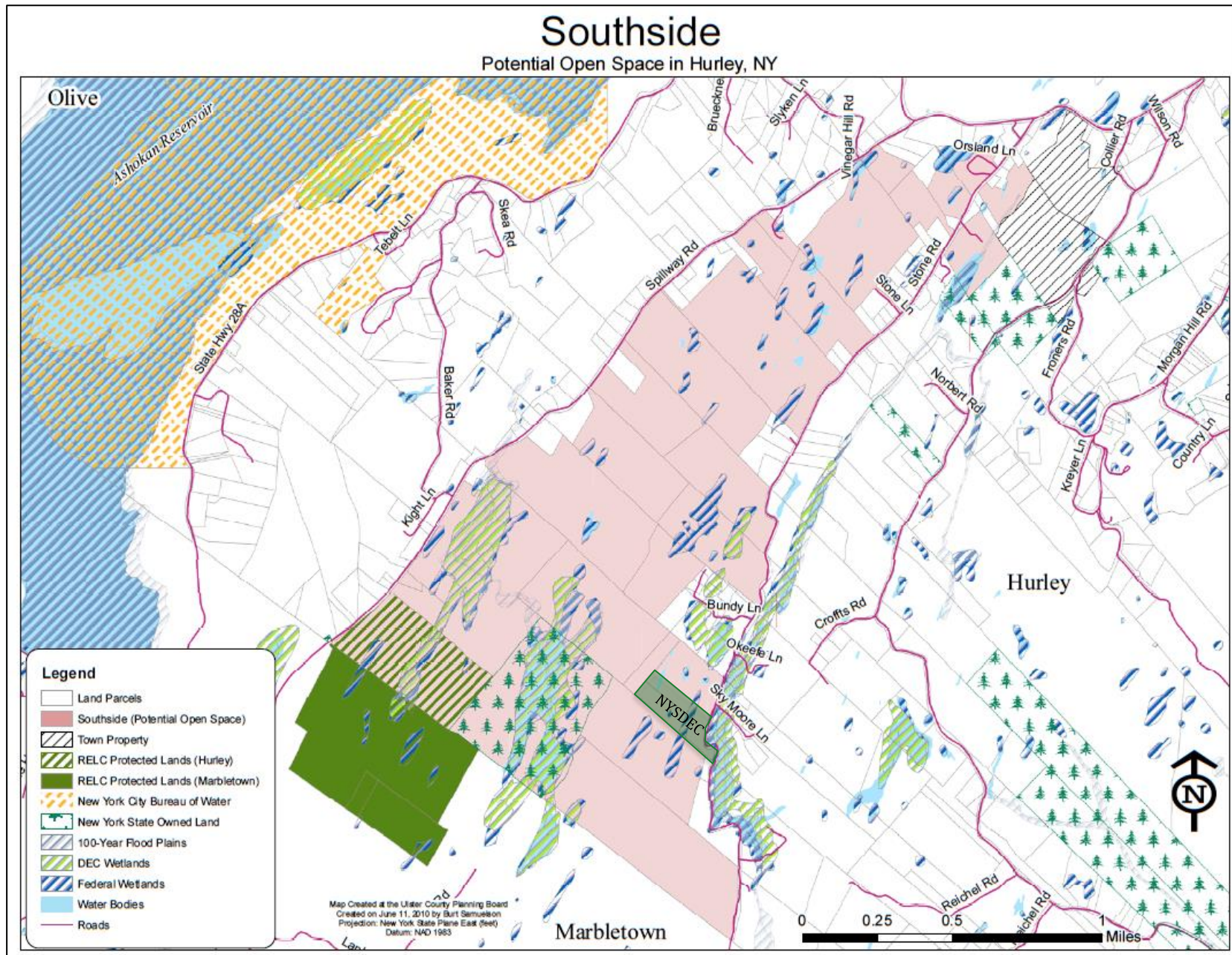
### **Soils and slopes**

In most sections the soil is not deep and bedrock lies close to the surface. This creates areas of rapid drainage as well as wetlands since the topography falls in a series of "steps" from the Ashokan Reservoir to the Hurley Flats. Several places have slopes that are too steep for development, and their rocky nature yields poor results on percolation tests.

## **SOUTHSIDE**

"PERHAPS THE LARGEST AREA OF UNDEVELOPED FORESTED LAND IN HURLEY LIES IN WEST HURLEY'S "SOUTHSIDE" BETWEEN THE ASHOKAN RESERVOIR AND STONE ROAD, INCLUDING LANDS ABUTTING ROUTE 28A, SPILLWAY ROAD, AND STONE ROAD."







### Habitats

This large area contains complex and varied habitats, including:

- Woodlands - mixed hardwood and pine with some old hemlock stands;
- Fields - some kept open by mowing, others slowly returning to forest;
- Ponds - man-made or created by past quarrying or beaver activity;
- Wetlands – including two New York state-regulated wetlands, one of 83.9 acres and the other of 51.5 acres which, according to NYSDEC, may support threatened and endangered species.
- There are also many smaller wetlands and ephemeral ponds and streams.

Because the area is large and contains a rich variety of interlocking habitats, it supports a very diverse population of plants and animals and is an important corridor for migration. In addition, because the area is large with these diverse habitats, our community benefits from free ecosystem services relating to water purity, stormwater/flood control, and sequestration of carbon. This diverse habitat also makes the area well-suited to hunting in areas removed from residential land uses.

### Water

This extensive area may prove to be very important in the replenishment of local aquifers and a future key to smart development in this and other parts of Hurley. Local wetlands and ponds slow water drainage, thus allowing time for the natural purification of and retention of storm water for slow release. A hydrologic study of the area was completed in 2006 by the New York Rural Water Association (NYRWA), which stated the value of this area for water quality.

### Recreation

This area provides recreation for hunters, walkers, cross country skiers, birdwatchers, botanists, and even the occasional kayaker.

### Town of Hurley, New York



**Above** (top to bottom): Various views from within the Southside Area, which is known for rock outcrops, steep terrain and mix of deciduous and coniferous forest cover. This area has been used for various purposes over the years and the remains of quarries, old farmsteads and other activities can be found throughout.

Intermunicipal Cooperation

Many of the important features discussed above extend into the neighboring township of Marbletown and will be strongly affected by policies developed there or in Hurley.

Summary

The unique physical and natural characteristics of lands within the Southside area suggest greater care must be taken in the review of development proposals within this area of the Town. Measures to mitigate the fragmentation of wildlife corridors, protect groundwater quality and ensure the protection of wetlands are needed to preserve this area for future generations.

This Open Space Plan recognizes that the lands within Southside are privately owned and that property owners must be allowed to utilize their properties for the land uses that are permitted within the Town's A-2.5 and A-4 Zoning Districts.

However, when potential adverse impacts to the environment are presented by proposed uses, then appropriate mitigation measures must be employed to ensure such impacts are mitigated to the fullest extent practicable. The following policies are provided to help strike this balance.

**Goal LR-1: Promote land-use decisions that protect and result in sustainable use of natural resources.**

*Land Resources: Open Space and Setbacks*

- LR.1. Consider the importance of protecting natural resources in the review of development proposals.
- LR.2. Utilize provisions of Visual Assessment reviews to mitigate visual impacts from new development.
- LR.3. Ensure strict compliance with NYSDEC and USACE wetland regulations to protect wetland habitats.
- LR.4. Encourage the provision of greenway linkages between properties through a voluntary conservation easement program to protect wildlife corridors.
- LR.5. Maintain the Town's A-2.5 and A-4 Zoning District designation for Southside.

## SOUTHSIDE

“THIS OPEN SPACE PLAN RECOGNIZES THAT THE LANDS WITHIN SOUTHSIDE ARE PRIVATELY OWNED AND THAT PROPERTY OWNERS MUST BE ALLOWED TO UTILIZE THEIR PROPERTIES FOR THE LAND USES THAT ARE PERMITTED WITHIN THE TOWN'S A-2.5 AND A-4 ZONING DISTRICTS.”



LR.6. Conduct additional habitat studies to assess the presence of threatened and endangered species and to determine how peripheral developments might affect these biodiverse environments.

LR.7. Set up an intermunicipal committee to more effectively protect this highly valuable area

**Goal NR-1: Protect natural features and habitat within Millbrook Woods.**

*Geologic Features: Swamps, Woodland Pools and Water Resources*

NR.1. Encourage the preservation of the swamps, woodland pools, wet meadows and the natural contours of the land, which provide high quality habitat for a variety of plants and animals.

NR.2. Preserve undeveloped areas as open space through conservation easements and/or encouraging purchase by NYSDEC or the Town.

NR.3. Disseminate the findings of the hydrologic studies to promote a better understanding and protection of this area's function in the Town's water supply.

**Goal RR-1: Enhance Public Open Space for passive and active recreation use.**

*Recreational Resources: Public and private passive and active creation.*

RR.1. Create a trail system that can be used for recreation, hiking, biking and/or hunting.

RR.2. Maintain the recreational and aesthetic enjoyment of "wild Hurley" by preserving present logging roads and trails.

RR.3. Preserve the large plots of Southside by supporting efforts by NYSDEC to add to and connect with existing NYSDEC properties to create a more continuous forest for wildlife, recreation and hunting opportunities.

## SOUTHSIDE

"DISSEMINATE THE FINDINGS OF THE HYDROLOGIC STUDIES TO PROMOTE A BETTER UNDERSTANDING AND PROTECTION OF THIS AREA'S FUNCTION IN THE TOWN'S WATER SUPPLY."

#### 4.0 Implementation and Future Studies

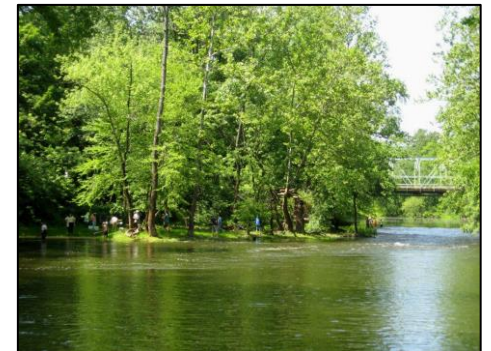
The Town of Hurley Conservation Advisory Council (CAC) was created in accordance with New York State General Municipal Law by the Town of Hurley Town Board for the purpose of advising in the development, management and protection of the municipality's natural resources. The all-volunteer Hurley CAC consists of a maximum of nine members, each with a two-year term.

The Town of Hurley Town Board tasked the Hurley CAC with the creation of an Open Space Plan for the Town of Hurley. The CAC has strived to create a document which will help to achieve the goal of managing and protecting Hurley's natural resources in a manner that balances private property owner interest with that of protecting natural resources.

The vast majority of open spaces resources in the Town of Hurley are private lands that are utilized for agriculture, forestry, and other low impact land uses. This Open Space Plan also accepts that property owners must be allowed to utilize their properties for the land uses that are permitted within the Town's Zoning Districts. However, when potential adverse impacts to the environment are presented by proposed uses, then appropriate mitigation measures must be employed to ensure such impacts are mitigated to the fullest extent practicable. The CAC also recommends periodic updates of water surveys, studies, and testing to monitor water quality. In addition, the hamlets of Glenford and West Hurley should continue to be evaluated for recreation and open space preservation opportunities.

In Chapter 2.0 (Parks and Recreation), specific recommendations are provided to enhance parks and recreation activity within the Town's West Hurley Park. Additional recommendation for expanding parks and trails within the Town are also provided in Chapter 2.0. In Chapter 3.0 (Special Interest Areas), specific goals and policies are put forth that, if followed in the development review process, will help to conserve the Town's natural resources and open space, while allowing for appropriate land use development.

The following pages provide a summary of the major recommendations that are part of this Plan. The recommendations are organized under the broad topic areas. For each subject there is a list of specific recommendations, along with an indication of when the recommendation should be implemented and the party responsible for ensuring that the recommendation is followed.



**Above** (top to bottom): Various views from Hurley CAC's BioBlitz along the Esopus Creek. The riparian zone along the Esopus Creek helps to stabilize the stream bank during storm events and provides critical habitat for a variety of animal and plant species.

Town of Hurley Open Space Plan Implementation Plan				
No.	Recommendations	Action	Timeframe	Responsibility
<b>Parks and Recreation:</b> Also refer to Chapter 2.0 of the Open Space Plan				
<b>1</b>	Continue to operate, maintain and make improvements to the West Hurley Park.	Policy	On-going	Town Board CAC
<b>2</b>	Create a passive recreation trail within West Hurley Park and cooperate with NYSDEC to create trail connections between the Town park and DEC lands.			Town Board CAC
<b>3</b>	Coordinate with NYSDEC, NYCDEP, Ulster County and other stakeholders to expand multi-purpose recreational trails (i.e. pathways to the future) [Map 2].			Town Board CAC
<b>4</b>	Coordinate with the West Hurley Fire District, School District No. 1 and NYCDEP to acquire portion of 34.5-acre former school site on Rowe Lane for neighborhood park.			Town Board CAC School/Fire District
<b>5</b>	Support efforts by Ulster County to develop other recreational opportunities along the Ulster & Delaware railroad right-of-way			Town Board Ulster County CAC
<b>6</b>	Work closely with NYCDEP to create better public access and more recreational opportunities for the public on NYCDEP lands (e.g. fishing, boating, swimming).			Town Board NYCDEP CAC
<b>7</b>	Explore opportunities to improve pedestrian access between Rolling Meadows and Old Hurley by further analyzing pathways to the future on Map 4.			Town Board CAC
<b>8</b>	Work with and support efforts by the Catskill Center for Conservation & Development to enhance the 32-acre Grace Macaluso property for recreation.			Town Board CAC
<b>Special Interest Areas: Binnewater Forest</b>				
<b>9</b>	NR.1. Promote land-use decisions that encourage the protection and sustainable use of natural resources.			Planning Board CAC
<b>10</b>	NR.2. Consider importance of protecting natural resources in the review of any development proposal.			Planning Board CAC
<b>11</b>	NR.3. Work with the Catskill Center for Conservation and Development to develop trailheads and footpaths within the Grace Macaluso property.			Town Board CAC
<b>12</b>	NR.4. Ensure strict compliance with NYSDEC and USACE wetland regulations to protect wetland habitats.			Town Board Planning Board



Town of Hurley Open Space Plan Implementation Plan				
No.	Recommendations	Action	Timeframe	Responsibility
<b>Special Interest Areas: Binnewater Forest</b>				
<b>13</b>	NR.5. Encourage the provision of greenway linkages between properties through a voluntary conservation easement program.			Planning Board Town Board
<b>14</b>	NR.6. Support Catskill Center efforts to secure EPF Municipal Grant Program funding for trailhead and trail improvements within the Grace Macaluso property.			Planning Board Town Board
<b>15</b>	NR.7. Encourage the preservation of swamps, woodland pools, wet meadows and the natural contours of the land, which provide high quality habitat for a variety of plants and animals.			Planning Board Town Board
<b>16</b>	NR.8. During the development review process, ensure that natural resources, including native habitat for threatened or endangered species, are protected.			Planning Board Town Board
<b>17</b>	NR.9. Conserve and protect wildlife corridors between development sites consisting of natural vegetation, forested areas, wetlands and undeveloped steep slopes.			Planning Board Town Board
<b>18</b>	NR.10. Implement SWPPP best management practices in accordance with NYSDEC regulations.			Planning Board Town Board
<b>19</b>	NR.11. Minimize impact of new development on the natural resources through best management practices (BMP), low-impact design standards and conservation subdivision techniques (see page 24 for details).			Planning Board Town Board
<b>20</b>	NR.12. Conserve the riparian zone along streams and tributaries and protect wooded areas along woodland pools.			Planning Board Town Board
<b>21</b>	NR.13. Ensure that all developments comply with NYSDEC and USACE wetland regulations.			Planning Board Town Board
<b>22</b>	NR.14. Cooperate with the Town of Rosendale to protect groundwater resources through an intermunicipal aquifer protection law and following the recommendations contained in the 2006 Groundwater Protection Plan.			Planning Board Town Board
<b>23</b>	NR.15. Keep current A-2.5 Zoning designation for lands that lie within the Binnewater Forest Area.			Planning Board Town Board

Town of Hurley Space Plan Implementation Plan				
No.	Recommendations	Action	Timeframe	Responsibility
<b>Special Interest Areas: Binnewater Forest</b>				
<b>24</b>	NR.16. Encourage conservation of threatened or endangered species habitat through appropriate site design, best management practices and conservation easements.			Planning Board Town Board
<b>25</b>	NR.17. Regulate outdoor lighting to balance nighttime visibility and security needs while protecting the night sky, natural environment and wildlife habitats.			Planning Board Town Board
<b>26</b>	NR.18. Work with NYSDEC to identify threats related to invasive species and secure funding through the NYSDEC Invasive Species Eradication program to eradicate such species when identified.			Planning Board Town Board
<b>27</b>	NR.19. Develop a joint Conservation Plan for Binnewater Forest Area with the Town of Rosendale.			Planning Board Town Board
<b>Special Interest Areas: Hurley Flats</b>				
<b>28</b>	AG.1. Encourage both private and public efforts to preserve and manage agricultural lands through purchase of development rights (PDR), transfer of development rights (TDR), and participation in the NYS Agricultural & Markets Districts.			Planning Board Town Board
<b>29</b>	AG.2. Require sufficient vegetative buffer on the nonagricultural land, so farms are buffered from homes.			Planning Board Town Board
<b>30</b>	AG.3. Encourage participation in the New York Farm Link Program to match farmers who are selling their farms with people who are looking to purchase a farm.			Planning Board Town Board
<b>31</b>	AG.4. Require conservation subdivision design to preserve prime soils when farmland is subdivided.			Planning Board Town Board
<b>32</b>	AG.5. Encourage shared, or “cooperative” infrastructure development (e.g., storage and processing facilities, locations for Community Supported Agriculture (CSA) drop-off and pickup, regional food hubs, etc.).			Planning Board Town Board
<b>33</b>	AG.6. Increase community engagement and consumer demand for locally grown food (see page 29 for details).			Planning Board Town Board

Town of Hurley Space Plan Implementation Plan				
No.	Recommendations	Action	Timeframe	Responsibility
<b>Special Interest Areas: Hurley Flats</b>				
<b>34</b>	AG.7. Review and revise regulations pertaining to farm operations to ensure these laws do not needlessly inhibit farming.			Planning Board Town Board
<b>35</b>	AG.8. Continue support for agricultural programs provided by Ulster County's Cornell Cooperative Extension (CCE) and NYS Agriculture and Markets.			Planning Board Town Board
<b>36</b>	NR.1. Conserve the riparian zone along the Esopus Creek and its tributaries			Planning Board Town Board
<b>37</b>	NR.2. Pursue land easements or utilize other conservation measures along the entire length of the Esopus Creek to create a large greenway that also serves to enhance the riparian buffer.			Planning Board Town Board
<b>38</b>	NR.3. Minimize impact of new development on the natural resources through best management practices (BMP), low-impact design standards and conservation subdivision techniques (see page 30 for details).			Planning Board Town Board
<b>39</b>	RH.1. Work with property owners, NYSDEC and the County to increase public access to the Esopus Creek.			Planning Board Town Board
<b>40</b>	RH.2. Provide support letters to individuals or organizations that seek grant funding for historic preservation through the NYS Office of Parks, Recreation & Historic Preservation.			Planning Board Town Board
<b>41</b>	LR.1. Promote land-use decisions that encourage the protection and sustainable use of Town's agricultural resources.			Planning Board Town Board
<b>42</b>	LR.2. Support the <i>right-to-farm</i> and the continue use of prime agricultural lands for farming.			Planning Board Town Board
<b>43</b>	LR.3. Consider the importance of protecting natural resources in the review of any development proposals.			Planning Board Town Board
<b>44</b>	LR.4. Review existing zoning laws to confirm the Town encourages agricultural uses so as to preserve open space and the rural character of the Town and to promote production of food.			Planning Board Town Board
<b>45</b>	LR.5. Amend subdivision regulations to require the use of conservation or "cluster" subdivisions when farmland is proposed to be used for residential subdivision purposes.			Planning Board Town Board



Town of Hurley Space Plan Implementation Plan				
No.	Recommendations	Action	Timeframe	Responsibility
<b>Special Interest Areas: Hurley Mountain &amp; Escarpment</b>				
<b>46</b>	FR.1. Encourage private landowner efforts to preserve and manage forest lands through participation in Section 480-a of the New York State Real Property Tax Law.			Planning Board Town Board
<b>47</b>	FR.2. Coordinate with NYSDEC, The Trust for Public Lands, Open Space Institute, Nature Conservancy, and Rondout-Esopus Land Conservancy to secure funding for land, or development rights purchase.			Planning Board Town Board
<b>48</b>	NR.1. Maintain A-4 Very Low Density Residential Zoning and A-2.5 Low Density Residential Zoning designation for Hurley Mountain & Escarpment.			Planning Board Town Board
<b>49</b>	NR.2. Minimize impact of new development on the natural resources through best management practices (BMP), low-impact design standards and conservation subdivision techniques.			Planning Board Town Board
<b>50</b>	NR.3. Protect numerous wetlands, streams and other unique habitats that harbor aquatic plant and animal species.			Planning Board Town Board
<b>51</b>	NR.4. Conduct a comprehensive biodiversity study of the Hurley Mountain and Escarpment.			Planning Board Town Board
<b>52</b>	LR.1. Consider importance of protecting natural resources in the review of any development proposals.			Planning Board Town Board
<b>53</b>	LR.2. Amend subdivision regulations to require the use of conservation or "cluster" subdivisions when forestland is proposed to be used for residential subdivision purposes (see page 35 for details).			Planning Board Town Board
<b>54</b>	LR.3. Require sufficient vegetative buffer for any proposed development of residential building lots within the A-4 Very Low Density Residential District.			Planning Board Town Board
<b>55</b>	LR.4. Continue to apply the <i>Visual Assessment</i> provisions of § 210-42 of the Town Code to mitigate potentially significant visual impacts associated with new development.			Planning Board Town Board
<b>56</b>	RR.1. Create a trail system that can be used for recreation, hiking, biking and/or hunting.			Planning Board Town Board

Town of Hurley Space Plan Implementation Plan				
No.	Recommendations	Action	Timeframe	Responsibility
<b>Special Interest Areas: Hurley Mountain &amp; Escarpment</b>				
<b>57</b>	RR.2. Preserving the large plots of Hurley Mountain woods by supporting efforts by NYSDEC to adding to and connecting with existing NYSDEC properties to create a more continuous forest for wildlife, recreation and hunting opportunities.			Planning Board Town Board
<b>58</b>	RR.3. Preserve the Hurley Mountain ridgeline viewshed from development to help keep the rural character of the uplands for all those who live in the flats to enjoy.			Planning Board Town Board
<b>Special Interest Areas: Millbrook Woods</b>				
<b>60</b>	LR.1. Consider the importance of protecting natural resources in the review of any development proposal.			Planning Board Town Board
<b>61</b>	LR.2. Continue to support enhancements and upkeep of the O & W Rail Trail.			Planning Board Town Board
<b>62</b>	LR.3. Ensure strict compliance with NYSDEC and USACE wetland regulations to protect wetland habitats.			Planning Board Town Board
<b>63</b>	LR.4. Encourage the provision of greenway linkages between properties through a voluntary conservation easement program.			Planning Board Town Board
<b>64</b>	LR.5. Determine which historic remains should be maintained.			Planning Board Town Board
<b>65</b>	NR.1. Encourage the preservation of the swamps, woodland pools, wet meadows and the natural contours of the land, which provide high quality habitat for a variety of plants and animals.			Planning Board Town Board
<b>66</b>	NR.2. During the development review process, ensure that natural resources, including native habitat for threatened or endangered species, are protected.			Planning Board Town Board
<b>67</b>	NR.3. Conserve and protect wildlife corridors between development sites consisting of natural vegetation, forested areas, wetlands and undeveloped steep slopes.			CAC Planning Board Town Board

Town of Hurley Space Plan Implementation Plan				
No.	Recommendations	Action	Timeframe	Responsibility
<b>Special Interest Areas: Millbrook Woods</b>				
<b>68</b>	NR.4. Implement SWPPP best management practices in accordance with NYSDEC regulations.			Planning Board Town Board
<b>69</b>	NR.5. Minimize the impact of new development on natural resources through best management practices (BMP), low-impact design standards and conservation subdivision techniques (see page 42 for details)..			Planning Board Town Board
<b>70</b>	NR.6. Conserve the riparian zone along streams and tributaries and protect wooded areas along woodland pools.			Planning Board Town Board
<b>71</b>	NR.7. Ensure that all developments comply with NYSDEC and USACE wetland regulations.			Planning Board Town Board
<b>72</b>	NR.8. Work with the Town of Marbletown to protect groundwater resources through an intermunicipal aquifer and wellhead protection law and following the recommendations contained in the 2006 New York Rural Water Association's <i>Groundwater Protection Plan for Old Hurley</i> .			Planning Board Town Board
<b>73</b>	NR.9. Consider A-2.5 zoning designation for certain lands that lie within Millbrook Woods.			Planning Board Town Board
<b>74</b>	NR.10. Encourage conservation of threatened or endangered species habitat through appropriate site design, best management practices and conservation easements			Planning Board Town Board
<b>75</b>	NR.11. Regulate outdoor lighting to balance nighttime visibility and security needs while protecting the night sky, natural environment and wildlife habitats.			Planning Board Town Board
<b>76</b>	NR.12. Work with NYSDEC to identify threats related to invasive species and secure funding through the NYSDEC Invasive Species Eradication program to eradicate such species when identified.			Planning Board Town Board
<b>77</b>	NR.13. Develop a joint Conservation Plan for Millbrook Woods with the Town of Marbletown.			CAC Town Board
<b>78</b>	NR.14. Perform further habitat studies in order to protect threatened and endangered species.			CAC Town Board



Town of Hurley Space Plan Implementation Plan				
No.	Recommendations	Action	Timeframe	Responsibility
<b>Special Interest Areas: Southside</b>				
<b>79</b>	LR.1. Consider the importance of protecting natural resources in the review of any development proposal.			Planning Board Town Board
<b>80</b>	LR.2. Utilize provisions of Visual Assessment reviews to mitigate visual impacts from new development.			Planning Board Town Board
<b>81</b>	LR.3. Ensure strict compliance with NYSDEC and USACE wetland regulations to protect wetland habitats.			Planning Board Town Board
<b>82</b>	LR.4. Encourage the provision of greenway linkages between properties through a voluntary conservation easement program to protect wildlife corridors.			Planning Board Town Board
<b>83</b>	LR.5. Maintain the Town's A-2.5 and A-4 Zoning District designation for Southside.			Planning/Town Board
<b>84</b>	LR.6. Conduct additional habitat studies to assess presence of threatened and endangered species as well as understanding how peripheral developments might affect these biodiverse environments.			Planning Board Town Board
<b>85</b>	LR.7. Set up an intermunicipal committee to protect this highly valuable area.			Planning/Town Board
<b>86</b>	NR.1. Encourage the preservation of swamps, woodland pools, wet meadows and the natural contours of the land, which provide high quality habitat for a variety of plants and animals.			Planning Board Town Board
<b>87</b>	NR.2. Preserve undeveloped areas as open space through conservation easements and/or encouraging purchase by NYSDEC or the Town.			Planning Board Town Board
<b>88</b>	NR.3. Disseminate the findings of the hydrologic studies to promote understanding and protection of this area's function in the Town's water supply.			CAC Town Board
<b>89</b>	RR.1. Create a trail system for recreation, hiking, biking and/or hunting.			CAC/Town Board
<b>90</b>	RR.2. Maintain the recreational and aesthetic enjoyment of "wild Hurley" by preserving present logging roads and trails.			CAC Town Board
<b>91</b>	RR.3. Preserve the large plots of Southside by supporting efforts by NYSDEC to add to and connect with existing NYSDEC properties to create a more continuous forest for wildlife, recreation and hunting opportunities.			CAC Town Board

## 5.0 Citations

Catskill Mountain Club. 2006-07. Bluestone Ridge Wild Forest Unit Management Plan Map.

Hudsonia. 2008. Memorandum accompanying the Town of Hurley, NY Habitat Map. Hudsonia, Ltd., Annandale-on-Hudson, NY.

Hudsonia. 2014. Binnewater Hills and Lakes Assessment (BHLA). Hudsonia, Ltd., Annandale-on-Hudson, NY.

Lancaster, R.A. (Ed.) 1990. Recreation, Park, and Open Space Standards and Guidelines. Ashburn, VA: National Recreation and Park Association

Mid Hudson Geosciences Report 2003.

NYRWA 2006. Groundwater Protection Plan for the Old Hurley Area, Ulster County, NY. New York Rural Water Association, Claverack, NY.

NYSDEC. 2009. Open Space Conservation Plan. New York State Department of Environmental Conservation, Albany, NY.

Shuster Associates, 2004. Town of Hurley Open Space Plan.

## 6.0 Appendices



## Appendix A – Bluestone Wild Forest/Onteora Hiking Trails Map

