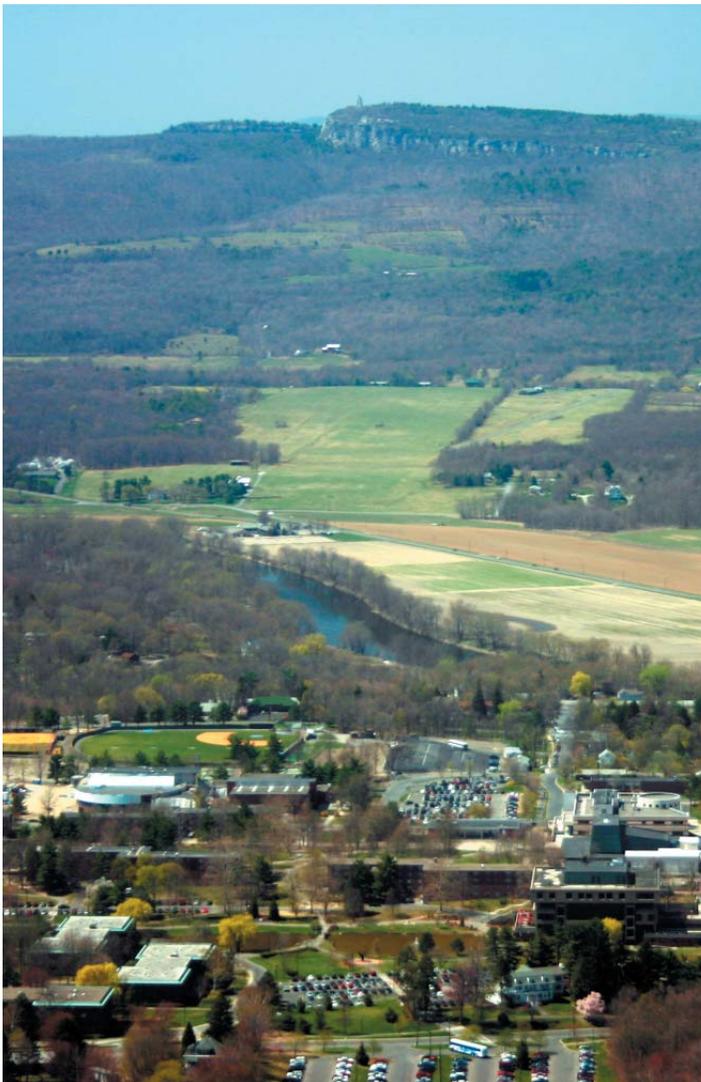


Landscape Overview

The landscape character of New Paltz is best understood within its regional context. The majority of New Paltz's central landscape consists of a flat to gently sloping valley that is situated between the Shawangunk Ridge and the Hudson Highlands. The Shawangunk Ridge and the Wallkill River and Valley are dominant landscape features that shape the region and provide visual continuity to the western landscape. The dramatic relief between the Wallkill River Valley



An aerial “cross-section” depicting many of New Paltz’ most prominent landscape features, including the edge of the central village, the Wallkill River, farmlands, and foothills leading up to the forested ridge.

and the steep slopes of the Shawangunk Ridge is one of the community’s most defining features, as is evidenced by the vast collection of landscape photography and paintings “looking west” towards the ridge.

Historically, settlement in the area was focused in the Village, adjacent to the floodplains of the Wallkill River and tributaries, and in the hamlets that formed at the intersection of country roads and/or railroads. The Wallkill Valley provided the flatter working landscape of farms and farmlands, with an important railway connection to New York City, Poughkeepsie, and other regional markets. Thus, the majority of settlement occurred in the valley and especially along the major roadways and railways that provided connections between farms and markets.

In contrast, the Shawangunk Ridge in the west was a vacation destination and remained relatively undeveloped. However, it is important to note that the ridge has had a history of human transformation, including burning of forest vegetation by Native Americans and early European settlers, as well as mineral mining and clearing of trees for farming and development.

Natural, Cultural and Agricultural Resources

New Paltz is rich in natural and cultural history. The landscape of New Paltz as we see it today is a product of both natural and human processes and interactions. This interaction between humans and nature has shaped many of the treasured landscapes which we now consider to be open space - such as the farm fields and river edges. Even the ridges

and forests have been altered to some degree by human intervention throughout history. In order to conserve the community's existing rural character and charm, a balanced composition of both "natural" and "cultural" landscapes and features will need to be protected. A cultural resource analysis is currently underway, to better understand the scenic and rural resources in strategic areas of the Town (as a separate project).

The resources of New Paltz are diverse and include natural, cultural/historical, and agricultural resources. Natural resources are those that are generally considered a product of natural processes, including water resources such as rivers, streams, floodplains and wetlands as well as forests, wooded hillsides and ridges, and fields. Cultural resources are experienced or produced by humans and include scenic roads and viewsheds, landscapes or built features such as the Skytop Tower (although physically outside of New Paltz), and historic hamlets such as Springtown and Ohioville. Agricultural resources include active farms and farmlands, farm stands, and farm markets throughout New Paltz. These

resources will be discussed in detail in the following section and are illustrated in the resource maps in Appendix A.

Open Space Vision: A Landscape Approach

It is impossible to plan for open space in New Paltz without understanding the context of the landscape, which has such a profound effect on land uses and human experiences. **The open space vision for the New Paltz community reflects landscape-level "character areas": places with similar natural and physiological features that determine the character of the land's uses and open space resources.** They include the following:

- Shawangunk Ridge
- Butternut-Canaan Foothills
- Wallkill Flats and River Corridor
- North Woods and Eastern Wetlands
- Orchards, Farms and Ridge-views
- Heart of New Paltz
- Scenic Cultural Landscapes



Open landscapes such as the one pictured above help to create diverse experiences and frame the scenic ridge in the background.

With the exception of the scenic cultural landscapes, which occur in locations throughout the community, each character area is conceptually identified in a geographic area of the Town and Village and all are depicted on the *New Paltz Community Open Space Vision Map*. Each of the character areas is discussed further in the following sections along with general conservation concepts for these areas.

New Paltz Community Open Space Vision Map

Shawangunk Ridge

Key wildlife corridor and unfragmented-high-quality habitat west of the "break-in-slope"

- Partner with landowners and conservation organizations to permanently protect remaining ridge habitat not currently part of the Mohonk Preserve
- Protect ridge views (views to and from the ridge) from the impacts of new development
- Connect habitat corridors to adjacent lands

Scenic Landscapes

Rural, traditional and historic character: views from scenic roads, rural hamlets, historic cultural landscapes and traditional village settlement pattern (located throughout Town)

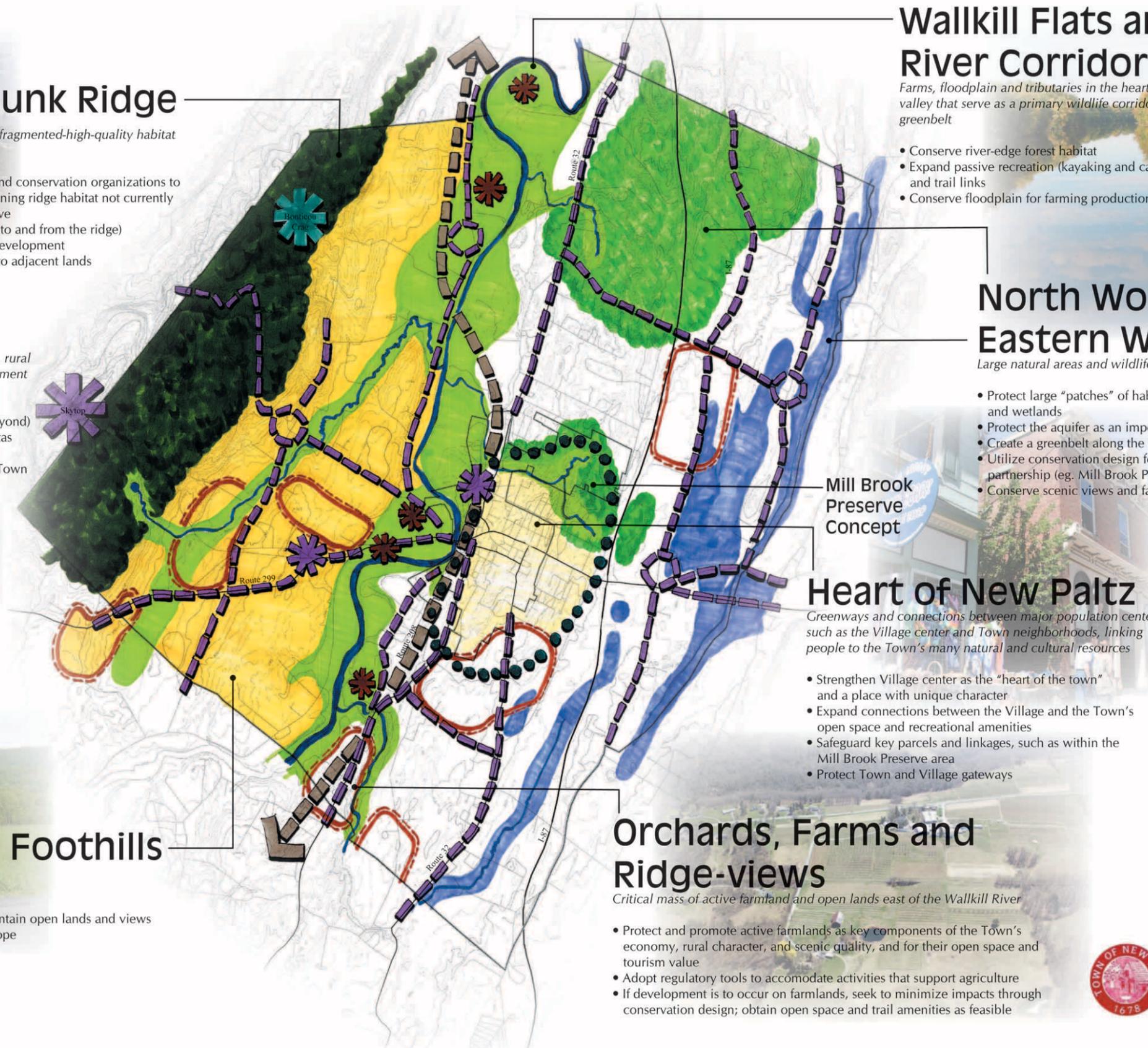
- Protect the "village-to-ridge" scenic gateway (Route 299 and beyond)
- Protect and expand access (visual and/or physical) to scenic vistas and historic and cultural landmarks
- Maintain and protect scenic roadway corridors throughout the Town
- Protect the character of historic hamlet and settlement areas



Butterville-Canaan Foothills

Woodlands and open lands at the base of the ridge

- Conserve active farmlands and agricultural heritage
- Utilize conservation design for new development to maintain open lands and views
- Develop transition "buffer" in land use along break-in-slope



Walkkill Flats and River Corridor

Farms, floodplain and tributaries in the heart of the valley that serve as a primary wildlife corridor and greenbelt

- Conserve river-edge forest habitat
- Expand passive recreation (kayaking and canoeing, eg.) and trail links
- Conserve floodplain for farming production

North Woods and Eastern Wetlands

Large natural areas and wildlife corridors (forest, woodlands, streams and wetlands)

- Protect large "patches" of habitat; minimize fragmentation of woodlands and wetlands
- Protect the aquifer as an important water supply
- Create a greenbelt along the Town's eastern edge
- Utilize conservation design for new development; use model of cooperative partnership (eg. Mill Brook Preserve)
- Conserve scenic views and farmlands

Mill Brook Preserve Concept

Heart of New Paltz

Greenways and connections between major population centers such as the Village center and Town neighborhoods, linking people to the Town's many natural and cultural resources

- Strengthen Village center as the "heart of the town" and a place with unique character
- Expand connections between the Village and the Town's open space and recreational amenities
- Safeguard key parcels and linkages, such as within the Mill Brook Preserve area
- Protect Town and Village gateways

Orchards, Farms and Ridge-views

Critical mass of active farmland and open lands east of the Walkkill River

- Protect and promote active farmlands as key components of the Town's economy, rural character, and scenic quality, and for their open space and tourism value
- Adopt regulatory tools to accommodate activities that support agriculture
- If development is to occur on farmlands, seek to minimize impacts through conservation design; obtain open space and trail amenities as feasible

Vision Map Legend

- Major Historic Landmark
- Major Natural Landmark
- Core Farming Area
- Core Farming Area in Walkkill Plains
- Rural Hamlet
- Walkkill Rail Trail
- Scenic Roadway
- Greenway Connection



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Prepared as part of the New Paltz Open Space Plan

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Planning Community Futures

Character Areas and Conservation Concepts



Shawangunk Ridge

Key wildlife corridor and unfragmented high-quality habitat west of the “break-in-slope”

The Shawangunk Ridge is perhaps the most dominant landscape feature in New Paltz and provides a distinct edge along the western side of the Town that extends both north and south into adjacent communities. The ridge technically begins at the “break-in-slope,” the topographic line at which the percent slope dramatically increases, resulting in a steep incline.

The Shawangunk Ridge is a unique geological feature that extends in a southwest-northeast direction from northern New Jersey to the Town of Rosendale in Ulster County. It traverses three counties and approximately 16 towns. The Nature Conservancy (TNC) has identified the Shawangunk Ridge as one of the “last great places”

because of its significant ecology including rare and endangered species habitat. According to TNC, the Shawangunk Mountains support over 35 natural communities, “including one of only two ridgetop dwarf pine barrens in the world, chestnut oak forests, hemlock forests, pitch pine forests, lakes, rivers and wetlands.” In addition, according to TNC, 27 rare plant and animal species have been documented to exist in the Shawangunks.

The Shawangunk Mountains support over 35 natural communities, “including one of only two ridgetop dwarf pine barrens in the world, chestnut oak forests, hemlock forests, pitch pine forests, lakes, rivers and wetlands.”

-The Nature Conservancy

In the Town of New Paltz, a large area of the Shawangunk Ridge is permanently protected as part of the Mohonk Preserve. This preserve includes over 6,500 acres, approximately 1,200



A panoramic vista atop the Shawangunk Ridge.

of which are located within the Town of New Paltz. The Mohonk Preserve was established in 1963 as the first land trust to protect the Shawangunk Ridge. It has since grown to become one of the region's most respected land protectors, stewards, and educators.

While not within the Town of New Paltz, the ridge contains two distinctive cultural icons: Skytop Tower and the Mohonk Mountain House. Skytop Tower is the fourth of a series of towers built from 1873 to 1923. Looking west from eastern portions of the Town and Village, Skytop Tower is a visual icon and an important reminder of human history on the ridge. The Mohonk Mountain House, a 19th century building and resort that was created by visionary Alfred H. Smiley in 1869, is now a National Historic Landmark and continues to serve as a resort and hotel. Also worth noting, the Bonticou Crag is a unique geological feature along the ridge in the northern portion of the Town.

The ridge and its associated chestnut oak forest is perhaps the most ecologically-fragile and significant feature in the Town and should be preserved and protected to the highest extent possible. As identified by TNC, the most significant threat to the ridge is “encroaching development...particularly along the base of the ridge.” In New Paltz, a good portion of the ridge top

is protected as part of the Mohonk Preserve, however, there are numerous parcels along the base of the ridge above the “break-in-slope” that are unprotected. Some of these parcels have been subdivided and developed with residential houses while others remain relatively open.

Also worth noting, there are several large parcels of land along the ridge top that are privately owned and managed as part of the Mohonk Mountain House.

While these parcels are currently being managed and stewarded as open space with minimal resort-style tourism, they do not as of yet have permanently protected status. Permanently protecting the remaining ridge habitat is critical to the ecological integrity of the ridge. Also of importance is the need for habitat connectivity between the ridge and other major wildlife habitats such as wetland and stream corridors.

Another major concern related to the ridge is its increasing popularity as a recreational destination. With opportunities for hiking, rock-climbing, fishing, and much more, the ridge's fragile ecosystem is often taxed to its limits by the human impacts of recreation. The Mohonk Preserve has so far been addressing this issue by



The popularity of the Mohonk Preserve as a recreational destination calls for limits on the amount of visitors in order to protect the fragile ecosystem.

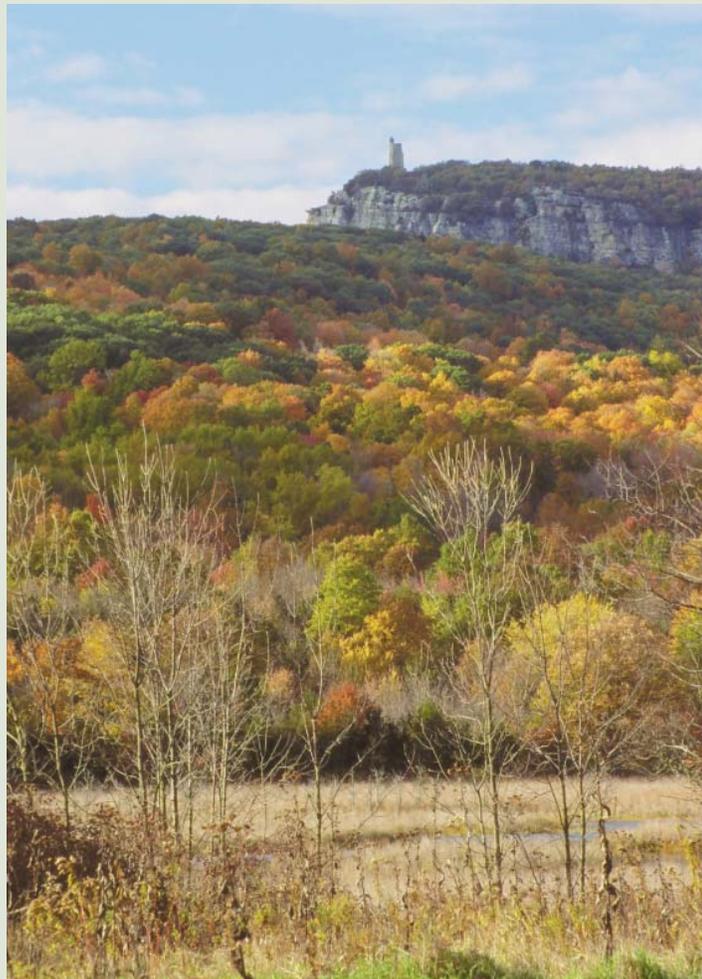
limiting daily visitorship to match the carrying capacity of the ridge.

The scenic quality of the ridge is also a major asset that is treasured by the community. Views to, and from, the ridge are considered to be of equal importance and can be affected by development

and clearing of land. Many of the existing open fields along the valley help to frame the view and create a more dramatic effect; managing these areas and keeping them open (rather than allowing for natural succession) is an option worth exploring.

Conservation Concepts for the Shawangunk Ridge:

- Partner with land-owners and conservation organizations to permanently protect remaining ridge habitat not currently part of the Mohonk Preserve.
- Protect ridge views (to and from the ridge) from the impacts of new development through conservation site planning and design, as well as through design guidelines and other tools that help to reduce visual intrusion and habitat fragmentation.
- Connect existing habitat corridors to adjacent lands that can serve as wildlife habitat.



Skytop tower serves as a central focal point in this fall ridge setting.

Butterville-Canaan Foothills

Woodlands and open lands at the base of the ridge

The Butterville-Canaan Foothills are centered between the Shawangunk Ridge and the Wallkill River, along the scenic, wooded, and picturesque Butterville-Canaan Road and environs. The foothills are characterized by moderately-sloping wooded hillsides that increase gradually from the Wallkill flats up to the “break-in-slope.” This area also includes important water resources, including the Kleine Kill and Humpo Marsh, and numerous smaller wetlands that provide a habitat connection between the Wallkill River and the Shawangunks.

The Butterville-Canaan foothills are perhaps one of the most vulnerable areas within the Town from a development standpoint. Much of the Town’s recent development has been occurring along the foothills as they offer a desirable ridge-side location, exceptional views and attractive, wooded lots. Because the foothills essentially form the base of the ridge, development can have a dramatic effect on scenic views of the Shawangunk Ridge from eastern locations such as the Village and Wallkill River floodplain area.

The Butterville-Canaan foothills are dotted with agricultural lands, with a larger core occurring at the eastern edge of the foothills, closer to the Wallkill River floodplain. Wallkill View Farm, which begins along the edge of the Wallkill River, extends as a scenic landmark into the foothills

area. Many of the farmlands in the foothills have become fallow or are in a stage of old field succession. Agricultural lands are also rapidly being converted to residential development in this area where relatively flat lands with exceptional views are available.

The Butterville-Canaan foothills landscape is especially important to the character of the Town. It frames the transition between the Village and the Ridge and provides the break in the landscape (the open areas) that creates the dramatic village-to-ridge experience. This experience is exemplified by traveling along Route 299 as it exits the Village and continues west past the Wallkill View Farm and open lands, and rises into the Butterville-Canaan foothills to the ridge top. This experience and landscape was identified by the community in the 2003 public input session as the “number one” cherished landscape. Butterville-Canaan Road also offers exceptional scenic views at the base of the ridge.

At the western edge of the Butterville-Canaan foothills, near the break-in-slope that defines the Shawangunk Ridge, a transitional buffer to the sensitive and fragile ridge habitat should be created. This buffer area would allow for much less intensive land uses and development than the eastern areas of the Butterville-Canaan foothills.



This idyllic composition of open lands and traditional rural farmscape exemplifies the character of the Butterville-Canaan foothills.

Some protection of the Butternville-Canaan foothills is already occurring through the efforts of the Mohonk Preserve and the Wallkill Valley Land Trust, who have been working cooperatively with landowners to obtain conservation easements.

New development within the foothills area should be designed with sensitivity to the natural and cultural features of the land, including the gentle to steep sloping hills, scenic viewsheds, farm lands, wetlands, and stream corridors. This can be accomplished by using a “conservation design” approach. In contrast to the conventional subdivision approach where a tract of land is graded and streets and houses are laid out to maximize the lot’s buildable area, conservation design aims to preserve the site’s unique features such as streams, woodlands or farmland hedgerows and cluster homes together in a manner that will preserve the site’s integrity.

In the foothills, designing to protect the views to and from the ridge is especially important. “Tucking” development into existing woodlands (rather than clearing the site of trees) as part of the conservation design process can help to minimize impacts to ridge views. Blending house colors and roof treatment and colors into the landscape can also help to minimize the impacts of development on ridge views. Other techniques, such as the use of shared entry roads and driveways, can help to minimize fragmentation of the sensitive areas along the edges of the ridge. The *Shawangunk Ridge Conservation and Design Guidebook* published by the Catskill Center for Conservation and Development offers some substantial guidance on the conservation design approach, as an immediate resource for the community.

Conservation Concepts for the Butternville-Canaan Foothills:

- Conserve active farms and agricultural heritage in the Butternville-Canaan foothills using donation and purchase of development rights (PDR), conservation easements, and other mechanisms and by providing options for landowners to keep their lands in farming and agriculture (see Section III for more detail).



An aerial view of farms and open lands in the Butternville-Canaan foothills, looking towards the Village.

- “Design with nature” by utilizing custom guidelines on conservation design for new development to maintain open lands and views. A process for conservation design that fits the needs of the Butternville-Canaan foothills area can be developed and integrated into the community’s existing zoning and land-use regulations.
- Develop a transition “buffer” in land use along break-in-slope. This could be accomplished through zoning and other land-use regulations that provide for appropriate intensity and level of development along the fragile habitat of the base of the ridge.

Conservation Analysis: A Four-Step Design Process

This technique for area planning, subdivision planning, and site planning employs a design approach that places primary importance on the resources and natural setting to be conserved as the first step in the design process. Contrary to the typical process, in which lots, homes and roads are laid out and the remaining area (if any) is considered open space or natural lands, **this process begins by identifying the important natural and cultural features for protection.** The process includes several major steps, as outlined below:

1. Create a conservation analysis map (or maps) identifying the site's most important resources and features, such as

important wildlife habitat, streams, wetlands, farms, and historic homes. In addition, a map that indicates how the site relates to major regional features, such as wildlife corridors, greenways, trail linkages, and historic landscapes, for example, should be created (regional context map).

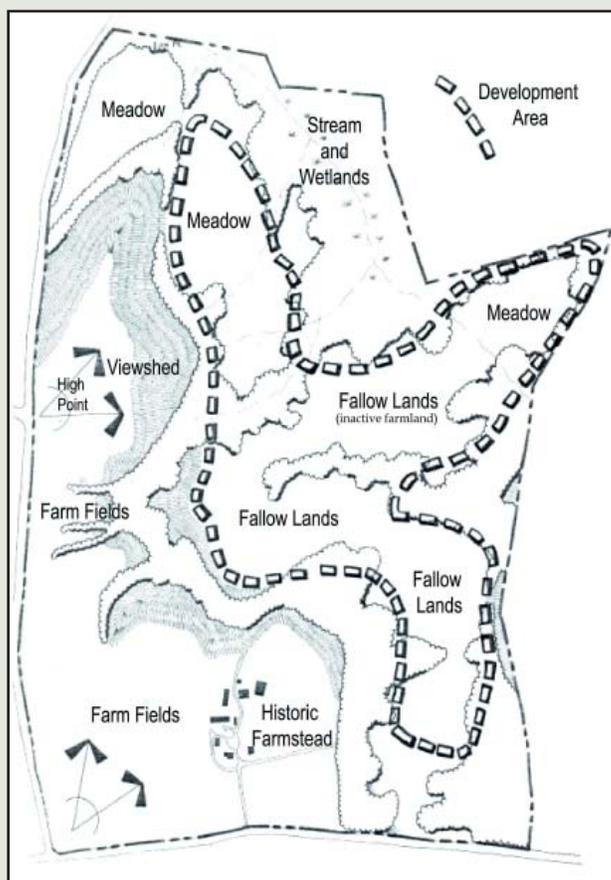
2. Determine the site's conservation and development areas. This

step involves an important judgment process in which a thorough analysis leads to identification of the most important resources for protection – these are the conservation areas. The remaining area is the development area.

3. Identify a proposed layout for development that complements the conservation areas (conservation design). This process should

result in the protection of important open space and landscape character, as well as the creation of functional public open space and attractive residential development that is an asset to the community.

4. Synthesize conservation and development concepts into a draft concept plan including detailed location of trails, preserves, houses, and streets.



This conservation analysis map illustrates the site's most important features (such as farm fields, farmsteads, streams, wetlands, meadows, and important views) and identifies conservation and development areas. This analysis should help to inform development and infrastructure configurations in a manner that respects the most important landscape features.

New Paltz Open Space Plan



Above: This example shows an existing site's primary conservation features (top), a conventional subdivision (middle), which does not take into account these features, and a conservation subdivision (bottom), which is based on the conservation analysis process. In the conservation subdivision example, the homes are clustered on smaller lots and the woodlands, wetlands and associated stream are conserved. Homes are set back from the main roadway to protect the roadside views and the existing hedgerows are extended as screening. Additional amenities such as trails are provided in appropriate locations within the conserved areas.

Wallkill Flats and River Corridor

Farms, floodplain and tributaries in the heart of the valley that serve as a primary wildlife corridor and greenbelt

The Wallkill River and its floodplain traverses the center of the Town and also the western edge of the Village. The river unites the Town and Village and provides a greenway connection north and south through Rosendale and Gardiner and beyond. The predominant existing land use along the Wallkill River is agriculture, with areas of sparse residential development on larger lots that abut the river's edge. However, the river was the first major area of modern-day settlement, as evidenced by the Village of New Paltz. Small rural settlements such as the hamlet of Springtown were focused along the river's edge. The Wallkill River flats were also a summer vacationing destination.

Nearby recreational access along the Wallkill River includes two boat launches in the Village (one on the west side of the river and one on the east side in Sojourner Truth Park) and a boat launch on the west side of the river in the Town of Rosendale.



The Wallkill River offers opportunities for fishing in a serene riverfront setting.

The Wallkill River flows from the New Jersey Highlands to the Hudson River near Kingston, NY. The river begins in Lake Mohawk, a spring-fed lake in northern New Jersey and flows north through Sussex and Passaic Counties in New Jersey and Orange and Ulster Counties in New York. It merges with the Rondout Creek south of Kingston and ultimately enters the Hudson River Estuary. More than two-thirds of the river's 94-mile length occurs in New York State.



The majestic Wallkill River is a defining feature within the Town and Village.

New Paltz Open Space Plan

The Orange County Soil and Water Conservation District is currently in the process of developing the *Wallkill River Watershed Management Plan* through funding from the Hudson River Estuary Program. This plan will provide a detailed analysis of the current “state of the watershed” and its resources and will serve as a source of guidance for local communities in addressing watershed planning issues.

The Wallkill River corridor and its many tributaries and intermittent streams serve as a wildlife pathway, connecting the Wallkill River flats to the foothills, ridge woodlands, and wetlands that provide habitat and refuge for numerous wildlife species. The riparian lands that border the Wallkill River offer critical habitat for aquatic and terrestrial plants and animals. Floodplain forest lands in the northeast portion of the river corridor (approximately 170 acres of forest and associated wetlands) have been identified by the New York State Department of Environmental Conservation (DEC) as Important Habitat - a unique and special habitat that should be protected. Preserving riparian lands also offers

community benefits, as these lands act as a natural filtration system to improve water quality, and reduce flooding and erosion of the riverbanks.

The Wallkill River floodplain is a primary agricultural corridor, providing flat and fertile lands and irrigation water along the river edge for numerous farms. This river farmland core helps to keep lands open and contributes to the community’s economic and scenic base. The area includes the landmark Wallkill View Farm, two community supported agriculture (CSA) operators, (Taliaferro Farms and Huguenot Street Farm) and three organic farms north of the Springtown hamlet. The southwest portion of the river also includes the Ulster County Fairgrounds and the farm fields cultivated by the Cornell University Cooperative Extension Hudson Valley Research Laboratory for important agricultural research.

The Wallkill Valley Rail Trail follows the Wallkill River floodplain for its length in the Town and Village (and beyond) and crosses the river via a former railroad bridge converted into a pedestrian bridge. The rail trail offers exceptional opportu-



An aerial overview of the Wallkill River in northern New Paltz, including the important habitat of the floodplain forest along the eastern bank of the river.

Conservation Concepts for the Wallkill River Flats and River Corridor:

- Conserve river-edge forest habitat, including the unique floodplain forest habitat that extends from the northeast bank of the Wallkill River. This can be accomplished through purchase, conservation easements, and regulatory mechanisms, among other options.
- Expand passive recreation (e.g., kayaking and canoeing) and trail links along the Wallkill River. Trail and access points can be identified and developed as part of a community-wide trail master plan.
- Conserve the floodplain for farming production. The floodplain can be conserved through purchase of development rights (PDR), conservation easements, and by providing options for farmers to keep their lands open.



Open farmlands and woodland patches and tributaries surround the banks of the Wallkill River in the southern portion of New Paltz.

nities for hiking, biking and other recreational activities. The Wallkill River has the potential for additional community recreational and scenic opportunities. Additional access to the river for fishing, kayaking, canoeing and also potentially swimming in some places, should be explored for the future.

Scenic roads in the Wallkill River floodplain vicinity include Route 299, Springtown Road (leading to Rosendale), Route 32 North (leading to Rosendale) and Libertyville Road (leading to Gardiner).

North Woods and Eastern Wetlands

Large natural areas and wildlife corridors (forest, woodlands, streams and wetlands)

The eastern edge of the Town is characterized by a large area of north-south trending streams and wetlands, as well as a relatively intact large cluster of woodlands. The area is primarily residential with larger parcel sizes, except for the long and narrow settlement lots along the Swartekill on the Town's eastern-most border. This area is an important water supply aquifer.

The eastern wetlands and woodlands area includes the hamlets of Plutarch and Ohioville, as well as the highly-visible Elliott farm protected by the Wallkill Valley Land Trust through a conservation easement along North Ohioville Road. It also includes the scenic Ohioville and Plutarch Roads.

Protecting the eastern wetlands and woodlands is a part of the Town's investment in "green infrastructure." Wetlands serve multiple functions including aquifer recharge, pollutant filtering, flood protection, and wildlife habitat. Similarly, woodlands are important wildlife habitat and act as a natural stormwater drainage system. Where possible in this landscape, large unfragmented "patches" of wildlife habitat (woodlands or wetlands) should be protected and linked together to create a "greenbelt" along the eastern edge.

Similar to the Butternut-Canaan foothills, new development in this area should be designed with sensitivity to the natural landscape and features. Conservation design should be employed in the development of new residential subdivisions. In contrast to the Butternut-Canaan foothills, where the most critical design feature is protecting the viewshed and visual and wildlife connectivity of the Shawangunks, the most criti-



Wetlands and woodlands east of I-87 are important components of New Paltz's eastern landscape character, including a portion of the Swartekill wetland complex. View is looking approximately south.

cal design feature in this area is the maintenance of unfragmented woodland and wetland habitat.

Design should incorporate buffers for wetlands, woodlands and streams and the configuration of the subdivision should minimize fragmentation of large patches. This can be accomplished by siting the homes closer to existing development and preserving the woodlands/wetlands as open space. Other tools, such as shared driveways and reduced pavement and other impervious surfaces can help to maintain natural drainage and water quality.

Conservation Concepts for the North Woods and Eastern Wetlands:

- Minimize fragmentation of woodlands and wetlands by protecting large “patches” of habitat. Large patches can be protected through purchase, conservation easement or other mechanism and also through conservation design.
- Create a greenbelt along the Town’s eastern edge, connecting together as many intact woodlands and wetlands as possible.
- Utilize conservation design for new development. Use the Mill Brook Preserve planning process (described on pages 25 and 26) as a model of cooperative planning.
- Conserve scenic views and farmlands.



The Swartekill wetland complex along the Town’s eastern edge provides important water quality benefits to the community.

Orchards, Farms and Ridge-Views

Orchards, farms and ridge-views: critical mass of active farmland and open lands east of the Wallkill River

Open farms and orchards in the southeastern part of the Town, specifically between the Thruway and the Wallkill River, are part of a large “critical mass” of farms and farmlands that extend beyond New Paltz and south into Gardiner. These farms south of the Village provide a dramatic contrast to the dense urban setting and help to preserve the magnificent views west to the Shawangunks.

Two prominent and productive landmark orchards are in this area. Apple Hill Farm owned by the Moriello Family on Route 32 south of the Village provides a green buffer along the southern edge of the Village. Together with Dressel Farm along Route 208 (continuing into Gardiner), these farms present exceptional views of the ridge and opportunities for apple and pumpkin picking against a scenic backdrop. Scenic roadways weave through these open lands, including Route 32 south, Route 208 and Putt Corners Road. The Wallkill Valley Rail Trail runs across the western portion of Dressel Farm.

The value of protecting farms and farmlands is priceless to the community. Farms are a key component of the Town’s economic base. Numerous “cost of community services” studies nationwide have produced similar conclusions that open lands such as farms (and forests) generate more local revenue than they require in services. In contrast, residential lands cost a municipality more to service (schools, roads, and police protection, for example) than the revenue they generate. A study conducted by the American Farmland Trust synthesizes over 15 years of research on the costs of community services as follows: for every dollar of revenue raised, it costs \$0.27 to service commercial and industrial land uses, \$0.36 to service working lands (farms and forests) and other open space, compared to \$1.16 to service residential development. For more information on cost of community services studies and farmland protection, visit the American Farmland Trust website at: <http://www.farmland.org>, (also see text box on page 50).

Farms also help to protect scenic views and play a large role in the Town’s rural character. They provide opportunities for the community to connect with the land and the foods they eat through agritourism, farm markets and pick-



Aerial view of Dressel Farm along Route 208, with the Wallkill Valley Rail Trail in the foreground.

your-own operations. A more recent trend is the emergence of community supported agriculture (CSA), in which residents of the community buy a share of a local farm's production, providing the farmer with a more stable income and share holders with opportunity to experience locally-grown, in-season foods. Two CSA's exist in the Town of New Paltz: Taliaferro Farms along Plains Road on the eastern bank of the Wallkill River and Huguenot Street Farm on Huguenot Street.

Farmland protection is a key component of this plan. In the New Paltz community, an area of approximately 4,000 acres is enrolled in the agricultural districts program (for more information on this program, see page 35 of this report). This represents approximately 18% of the Town and Village land area, and there are additional active farms that are not enrolled in the agricultural district program.

The contribution of farms to the community's open space and rural character network should not be overlooked or taken for granted. It is not always feasible for a landowner to keep farms

“working” in perpetuity and thus we must consider farms to be a finite resource and one worthy of protecting. Compensating the landowner fairly for this protection, and working with landowners to develop creative solutions to keep lands open while still meeting their financial needs is critical in order for this plan to become successful. Numerous options for protection of farms, suited to a landowner's specific needs, are presented in Section III.

If development is to occur on farms, great care should be taken in the design within these open landscapes and along adjacent scenic roadways. Again, the use of conservation design, while not the only solution, can help to reduce the impacts of development on the landscape. With respect to rural character, which is the predominant feature to preserve in the open farms and farmlands area, it is important to design residential development that does not impact scenic rural roadway experience. This can be accomplished by setting homes back from the road and tucking them into a wooded area, or using appropriate street trees or vegetation so that the homes are not highly visible from the roadway.

Conservation Concepts for Orchards, Farms and Ridge-Views:

- Protect and promote active farms as key components of the community's economy, rural character, and scenic quality, and for their open space and tourism value. Farms can be protected through conservation easement and purchase of development rights (PDR), and also through appropriate options and tools for landowners to keep their lands open (see Section III for more detail).
- Adapt regulatory tools to accommodate activities on the farm that support agriculture, such as farm stands, and bed & breakfasts. Ensure that the zoning code provides adequate flexibility for farms to diversify and generate income to support farm operations.
- If development is to occur on farms, seek to minimize impacts through conservation design. Obtain open space and trail amenities as feasible through development.



Active farming at the Wallkill View Farm, in the shadow of the Shawangunk Ridge.

Heart of New Paltz: Greenways and Connections

Connections between major population centers such as the Village center and Town neighborhoods, linking people to the Town's many natural and cultural resources

The “heart of New Paltz” is the Village and the connected residential fabric that surrounds it. It includes the commercial “main street,” the SUNY New Paltz campus, and the Huguenot Historic District. This area is home to a large portion of the community that will eventually benefit from protection of the open lands surrounding the Village.

The proposed Mill Brook Preserve is a current-day model for cooperative planning and open space protection, in which the New Paltz Open Space Committee is working with several landowners and developers to obtain open space protection (woodland protection through the creation of the Mill Brook Preserve) while also meeting the developers’ needs. This type of model could be expanded throughout the community, including in and near the “heart of New Paltz” area.

A primary goal in this “heart of New Paltz” area is to enhance connections between the major population center (the Village) and the surrounding lands. Trail and pedestrian connections between the Village and the Town’s many natural and cultural features should be explored through a separate trail planning process. Ideally, a greenbelt through the Town and Village will connect existing and future open space resources such as the popular Wallkill Valley Rail Trail.

Gateways into the Town and Village are the first identifying features experienced by residents and visitors and help to express the area’s unique charm. Primary gateways, such as the eastern entrance from the Thruway along 299 should be strengthened and enhanced. This can be accomplished through the conservation of distinct and unique lands and features, and can be supported by the use of appropriate signs and other gateway amenities (such as gazebos or landscaping) or something more unique to the Town and Village). Other potential gateway areas include the western gateway (Route 299), the northern gateway (Route 32 North), and the southern gateways (Route 32 South and Route 208 South).



The Village of New Paltz and the surrounding residential fabric, with the Wallkill River in the middleground and the Shawangunk Ridge in the background.

A Model Cooperative Planning Process: Mill Brook Preserve

When four applications for several contiguous developments concurrently came before the Village and Town planning boards, members of the Open Space Committee envisioned the potential for cooperation amongst landowners, the Town, and Village to protect the important natural features, including wetlands surrounding Tributary 13 (historically known as the Mill Brook). A member of the Village planning board translated the idea into a concept plan for a preserve of up to 125 acres, **featuring the Mill Brook and its associated wetlands as the primary natural feature.**

The Open Space Committee quickly adopted the Mill Brook Preserve concept (graphic on following page) as part of its open space planning and conducted meetings with landowners, Village and Town officials to determine whether there was interest and support for the project. The landowners saw the benefits of cooperation and of the concept in its own right - to protect the most important features of the landscape and create development that enhances and respects the surrounding open space. Landowners recognized the financial benefits of the proposed preserve in an area where open space and natural landscapes are highly valued and have begun to market the open space features of their proposed developments as key selling points.

To date, one of the landowners has provided an easement to the Town as part of the development proposal, and three others have indicated intentions to convey land as well. Discussions are continuing with several additional parcel owners to complete the assemblage. This type of cooperative process, between landowners, the Town and Village, and the community, serves as a model for open space planning in the New Paltz community.

Conservation Concepts for the “Heart of New Paltz”:

- Strengthen the Village center as the “heart of the Town” and a place with unique character. Strengthening the Village includes maintaining the current “town-and-village” land-use pattern of focused development in the Village surrounded by a countryside greenbelt, which can be accomplished through cooperative, comprehensive land-use planning.
- Expand connections and joint initiatives between the Village and the Town’s open space and recreational amenities (e.g., Mill Brook Preserve). Connections can be explored and implemented through a comprehensive community-wide trail master plan.
- Protect Town and Village gateways by identifying them within the Town and Village comprehensive plans, implementing design standards, purchasing or protecting key gateway lands, and by developing and implementing a plan for gateway amenities.



A converted rail bridge now serves as a connection between the Walkkill Valley Rail Trail and the Village of New Paltz.

Mill Brook Greenway Preserve Concept



KEY

- Existing and Proposed Areas of Preserved Open Space (dark green)
- Potential Additional Areas of Open Space (light green)
- Proposed Development Areas (pink)
- Potential Future Development Areas (purple)
- Federal Wetlands and Water Courses / Bodies (blue)

Scale 1" = approx. 60 ft.

Village & Town of New Paltz

Scenic Cultural Landscapes

*Rural, traditional and historic character:
views from scenic roads, rural hamlets,
historic cultural landscapes and traditional
village settlement pattern*

From the sweeping views of the ridge, to the majestic beauty of the Wallkill River's wide floodplain, scenic views abound in New Paltz. These scenic landscapes have instilled in many residents an appreciation for the community's open space. They are tangible landmarks within the community's viewshed, such as Skytop Tower and Bonticou Crag, or scenic roads such as Butterville-Canaan Road and Plutarch Road. Without them, the Town would not be the same.

Protecting scenic landscapes is perhaps one of the most important elements of this open space plan; it is also the unifying factor or common ground between all of the various areas within the Town. Each of the character areas contains some element of natural or cultural scenery, whether it is ridge views, open farms and farmlands, historic homes, or natural wetlands. These scenic elements help to engender support and appreciation for the conservation of New Paltz landscapes.

One exceptional and extremely important scenic landscape is the view between the Village and the ridge along Route 299. This is the quintessential New Paltz experience and has been identified by the community as a high priority for protection.

In contrast to the "natural" views (such as views of the ridge or Bonticou

Crag), cultural landscapes are also important to the scenic quality of the Town and Village. Historic districts, hamlets, and other historic settlement patterns often serve as examples of settlement patterns that respect natural landscape features. A detailed field study of some of the major historic landscape resources in the Town and Village is currently underway and being conducted as a separate but complementary planning effort to this open space plan.

Scenic roads throughout the New Paltz community include the following: Libertyville Road, Springtown Road, Butterville-Canaan Road, Route 299, Mountain Rest Road, Route 32 North and Route 32 South, Route 208, Ohioville Road, Plutarch Road, Elliott Lane, Putt Corners Road, Jansen Road, and Plains Road. These roads were identified as scenic through the community visioning process and inventory stages of open space planning. Many of these roads are part of a much larger regional scenic byway system that has been identified in the *Shawangunk Mountains Scenic Byway Corridor Management Plan*. Scenic roads are often the main lens through which we view the landscape and thus it becomes important to preserve views along these roads.



An historic tree-lined gateway and carriage road in the Butterville-Canaan Foothills leads to the Mohonk Mountain House.



The Huguenot Historic District protects the earliest European settlement of New Paltz - a cluster of homes built along the Wallkill River floodplain by French Huguenots.

Conservation Concepts for Scenic Cultural Landscapes:

- Protect the “village-to-ridge” scenic view and gateway (Route 299 and beyond).
- Protect and expand access (visual and/or physical) to scenic vistas and historic and cultural landmarks.
- Maintain and protect scenic roadway corridors throughout the Town.
- Protect the character of historic hamlet and settlement areas through land-use planning and zoning and also by planning for new development that respects traditional settlement patterns. Rural landscape design guidelines and hamlet design guidelines can also help to protect the unique hamlet experience.



Bonticou Crag stands out against the vibrant greenery of the forested ridge.

New Paltz Biodiversity: A Brief Summary

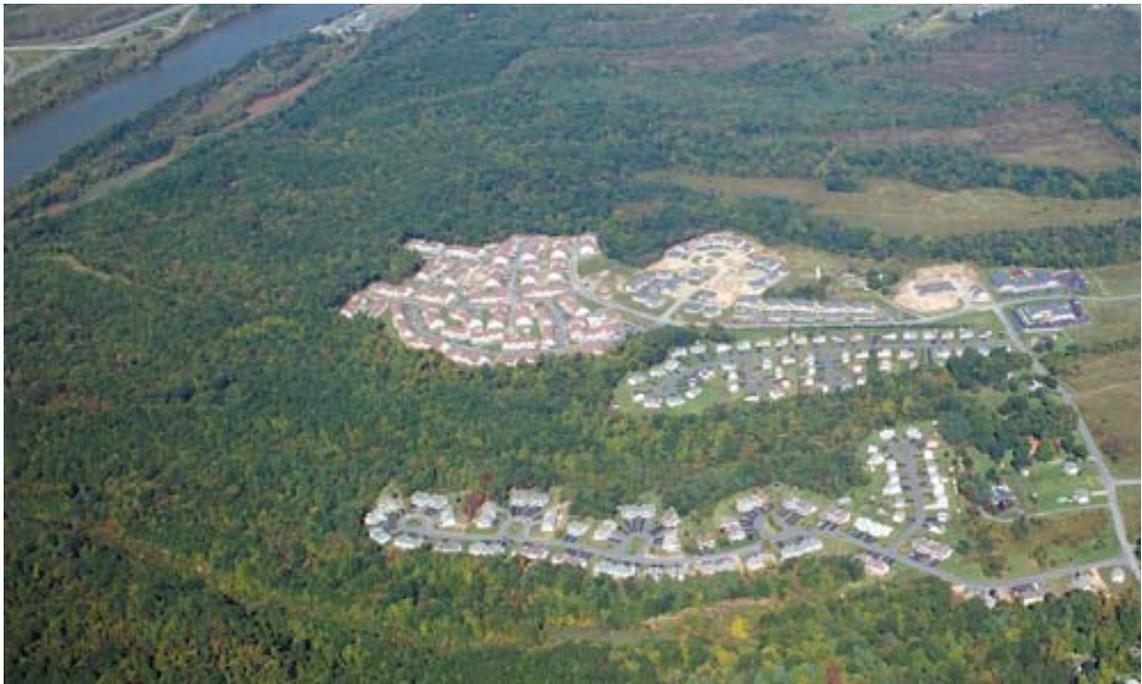
Biodiversity is defined for the purposes of this plan as the biological variety of plant and animal life in all forms, as well as their interactions with the non-living (abiotic) environment. The concept of biodiversity includes ecosystem diversity, species diversity, and genetic diversity, as well as the structure, function and processes within the ecosystem. **Maintaining biodiversity in New Paltz is an important goal for wildlife protection as well as human needs.** For example, biodiversity can be an important element of economic development as is evidenced by the large population sector engaged in birding and other wildlife tourism.

In the past few decades, scientists have helped to paint a picture of the major issues regarding biodiversity. From a wildlife perspective, the most prominent threat to biodiversity is habitat frag-

mentation, in which large patches of landscape habitat are disconnected by roads, houses, and other types of development. Larger patches of habitat (such as forested woodlands, mountain ridges, grasslands, and wetlands) are critical to maintaining biodiversity and protecting wildlife from the effects of human development.

Landscape ecologists have helped to synthesize the broad and detailed scientific research on biodiversity issues into some general principles that can be used in landscape planning and design. This report will focus on two major biodiversity principles:

- Protect large patches of habitat (including the associated buffer distance needed).
- Provide connection between patches through protection of landscape corridors and “stepping stones,” or small patches that are used to connect larger patches.



Habitat fragmentation occurs when large areas of natural habitat, such as these woodlands, are broken up into smaller pieces by development. This image was taken outside of New Paltz.

These principles are helpful in developing a broad understanding, and for designing for open space at the landscape level, yet many planners and designers would like to have more specific guidance, for example on the appropriate size for a habitat patch, or the adequate stream buffer width. A recent report developed by the Environmental Law Institute has taken a first step in addressing these needs by creating general “conservation thresholds” based on a detailed review and summary of the scientific research to date. A summary of the major conservation thresholds is provided in the text box on this page. It should be noted that these figures are generalizations and do not necessarily reflect the needs of wildlife specific to the New Paltz region.

There are currently several efforts using different approaches to understand specific biodiversity needs in the Town and region. Much of this biodiversity research is ongoing, and results are not yet available for this open space plan. It should be noted that a portion of the research is focused on areas west of the Wallkill River and especially on the Shawangunk Ridge, and does not necessarily paint a community-wide picture. Also, as much of the research has a specific

focus, it is not intended to be a community-wide analysis and may be inappropriate at such a scale. A brief summary of these complementary research efforts is provided in the text box on page 32.

Based on the current understanding of biodiversity in the Town, it is apparent that there are several large-scale habitats (as identified by NYS Hudson River Estuary Program, Appendix D) that are indicative of high biodiversity. Protection of the overall integrity of these major resources is a primary goal of this plan and can be achieved through numerous programmatic and regulatory tools. However, there are other smaller-scale habitats, such as old fields, certain types of farmlands, and larger tracts of woodlands within the Town that may be considered important elements of local biodiversity. A detailed biodiversity analysis such as the ongoing research being conducted by the Metropolitan Conservation Alliance (MCA) east of the Wallkill River will help to create a clearer picture of the community’s critical resources. In the meantime, several recommendations are provided as overall guidance in maintaining the community’s biodiversity.

General Land-use Planning Conservation Thresholds

- Protect habitat patches of 55 hectares (138 acres) or greater.
- Preserve 20-60% of the total landscape for wildlife habitat.
- Landscape buffers of 230-300 meters (755-985 feet) are recommended to protect large habitat patches.
- A minimum riparian buffer of 100-meters (328 feet) is recommended.
- Use habitat corridors and stepping stones to reduce fragmentation and increase connectivity.

Adapted from: *Conservation Thresholds for Land Use Planners*, Environmental Law Institute

Note: these thresholds are provided as general guidance until more detailed research is able to provide thresholds specific to New Paltz’s biodiversity needs.

General Recommendations for Protecting Biodiversity in New Paltz

- Consider biodiversity concepts when defining acceptable land-use patterns through comprehensive planning. Use this information to inform any update of zoning and development controls. For example, stream buffers can be adopted to protect riparian areas as wildlife corridors, or zoning techniques and conservation analysis and design can be used to create compact development footprints, well placed to minimize habitat fragmentation.
- Integrate biodiversity goals into the open space conservation program. This can be accomplished by rating parcels for their biodiversity value within the resource criteria.
- Consider the effects of infrastructure development (roads, water, sewer, etc.) on biodiversity. For example, when building new roads, minimize the amount of fragmentation of existing habitat patches and consider wildlife crossings and linkages where necessary.
- Create conservation and development design guidelines for site planning and subdivision planning, to reduce impervious surface, clearing and grading, minimize habitat fragmentation, reduce the building footprint, and promote the use of green building techniques.
- Identify and restore lands that could potentially serve as key wildlife habitat patches, stepping stones, or corridors.



Water resources serve as wildlife habitat and corridors and should be protected as an important element of biodiversity.



Two contrasting examples of settlement: in the left corner, a traditional village hamlet pattern with dense mixed-use development; in the middle conventional development with sparse settlement and large lots, homes and driveways.



Homes such as the ones pictured above maximize the destruction and fragmentation of habitat by using individual, long driveways that extend across the parcel.

Please note that all above photos were taken outside of New Paltz.

Ongoing Biodiversity Efforts in New Paltz

Hudsonia

In 2001, the Wallkill River Task Force completed Hudsonia's habitat mapping training program based on the Biodiversity Assessment Manual for the Hudson River Estuary Corridor, to develop habitat maps using aerial photography, maps and field observations. The results of this training program were maps of habitats of ecological significance for two separate areas: the east side of the Wallkill River corridor from the northern boundary of the Village to the Town's northern boundary, and the Humpokill (Kleinkill) corridor and associated wetlands from Mountain Rest Road to Cragwood Road.

Metropolitan Conservation Alliance

From 2003-2005, the Metropolitan Conservation Alliance (MCA), a program of the Wildlife Conservation Society based at the Bronx Zoo, worked in the region to identify important biodiversity areas. Field studies, conducted throughout the Town and region, used a focal species approach, which concentrates on individual species or species assemblages that are either "development-sensitive" or "development-associated." Development-sensitive species are typically habitat specialists, meaning that they require a specific habitat type for breeding, mating, etc. and thus are extremely sensitive to development. Development-associated species are often habitat generalists that do not require specific habitats and often thrive in areas that are disturbed by development (such as edges). Striking an appropriate balance between these two categories is the goal of the focal species approach.

Green Assets

Green Assets is a project of the Shawangunk Ridge Biodiversity Partnership, a consortium of 10 environmental groups that has been studying the ecology of the ridge to provide guidance on conservation and land-use decisions from a regional perspective. The Green Assets maps provide data on landscape-level structural ecosystems that are useful in making land-use decisions at a local level. The Green Assets program recently completed maps of the natural communities of New Paltz from the west side of the Wallkill River to the ridge.

Hudson River Estuary Program

In addition to the above described research efforts in the Town and region, the Hudson River Estuary Program of the New York State Natural Heritage Program also provides information and guidance to communities on biodiversity topics. Based upon existing data compiled through the NYS DEC, the USGS, the New York State Reptile and Amphibian Atlas, and the New York State Natural Heritage Program, the Hudson River Estuary Program has identified four major important habitats in the Town of New Paltz. These habitats include: the Wallkill River and associated riparian areas, the Shawangunk Ridge wetlands, the Black Creek Swartekill wetlands, and the Shawangunk Ridge. A copy of a memo dated April 22, 2005 is provided in Appendix D and provides a summary of Important Habitats in New Paltz as defined by the NYS DEC Hudson River Estuary Program.

Mohonk Preserve

The Mohonk Preserve operates a biological field research center, known as the Daniel Smiley Research Center. Research at the Daniel Smiley Research Center aims to "document and explain long-term environmental change on the ridge." The center engages both long-term research studies (such as monitoring changes in amphibian breeding and hemlock parasite infections) as well as providing an environment (and an extensive collection of field data) for focused studies by visiting researchers.