

Management Actions - Scenic

Promote the importance of the preservation of the intrinsic qualities that are visible from the Scenic Byway and that create its scenic character. Protect the priority views along the Scenic Byway and throughout the Scenic Byway Corridor. Refer to the *Viewshed Analysis* and *Wayfinding* figures.

- a. Continue to promote the viewshed analysis as a valuable tool to the Town of Durham, Greene County, state and federal agencies, and private landowners. Encourage its broad distribution and use in land protection and land use planning.
- b. Assist private property owners and efforts of local, state, and national conservation organizations as they identify the most significant lands for their conservation value and pursue appropriate long-term arrangements to ensure their protection.
- c. Advocate the protection of the foreground views through land use regulations and incentives.
- d. Advocate the implementation of regulations that protect against development along ridgelines.

Natural Qualities

The Durham Valley's natural resources were inventoried and mapped to identify the extent of forested lands, riparian areas, potential wetlands, and other important natural resources that contribute to the character of the Scenic Byway. A number of sources were consulted in the inventory preparation, including the Department of Environmental Conservation, Greene County Soil and Water Conservation District, and the Catskill Center for Conservation and Development. This section provides a summary description of those natural resources (i.e., geology, streams and wetlands, forest lands, and wildlife) that characterize the Scenic Byway Corridor.

Geology

The Durham Valley was part of a shallow sea that filled with clay and silt washing off the high mountains to the east 360 to 400 million years ago. Layers of sandstone were uplifted high above sea level. The Catskill Mountains are primarily the products of stream erosion with the waterways eroding deep valleys into the ancient plateau.

The majority of the surficial geology of the Durham Valley was determined during the last 1.6 million years. Four ice ages inundated this area, most recently the Wisconsin advance. The Wisconsin glaciers finished retreating from the Durham Valley only about 14,000 years ago. The majority of the Durham Valley is composed of glacial till – material that is unstratified, unsorted, and is made up of a wide range of sizes. Glacial till generally acts as an aquifer, holding large amounts of ground water. The surrounding sandstone and conglomerate mountaintops were scoured and scraped by glaciers moving around and over their summits, leaving virtually no loose material.



Streams and Wetlands

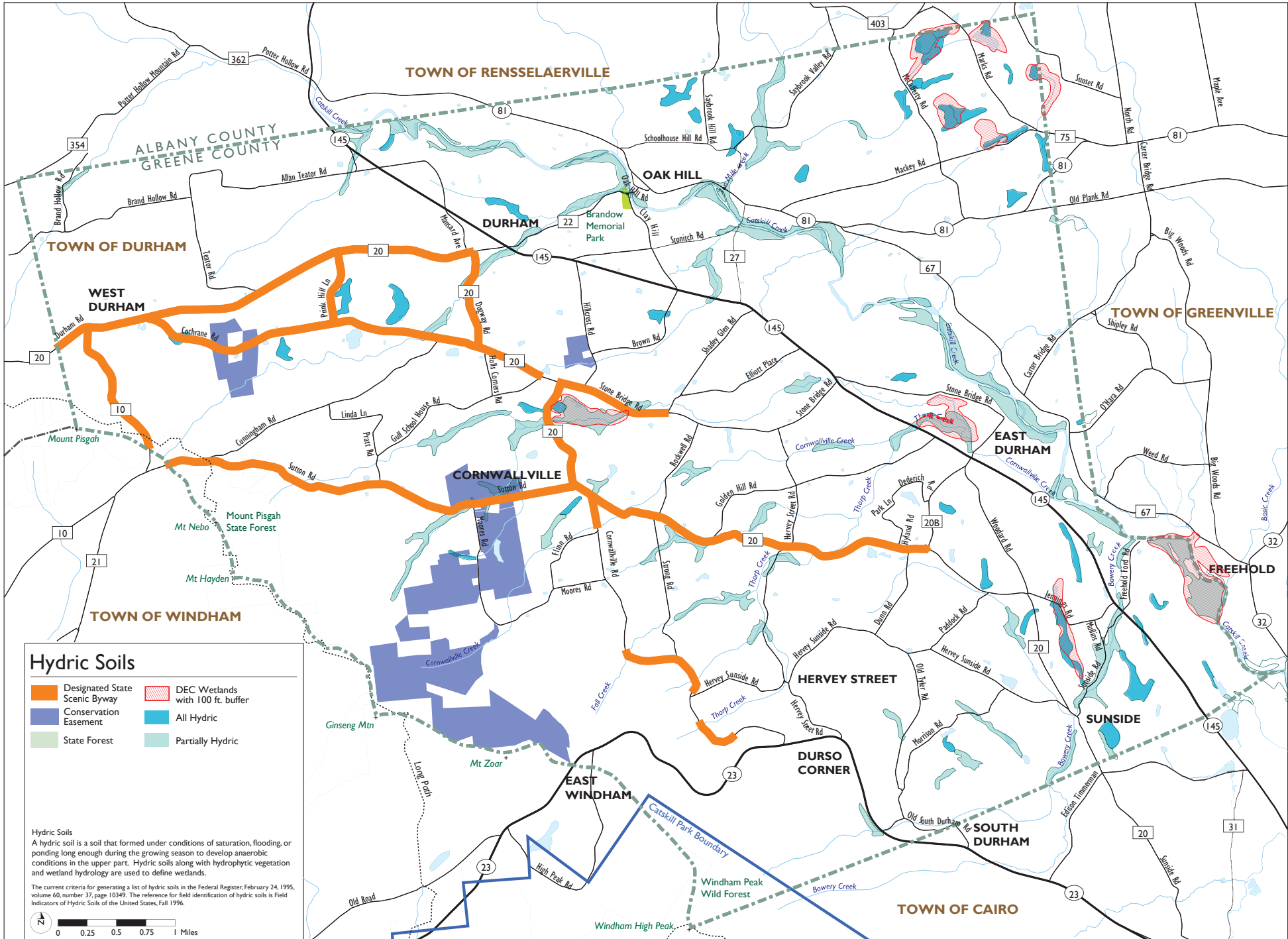
Catskill Creek, one of 65 tributaries to the Hudson River entering the Hudson River Estuary south of the Troy Dam, is the Durham Valley's principal



waterway. The coldwater creek with whitewater areas (relatively uncommon in the Hudson Valley region) descends about 600 feet over a course of about 11 miles through the Durham Valley. Several important tributaries to Catskill Creek traverse the Scenic Byway Corridor. These include Thorp Creek, Cornwallville Creek, Fall Creek, Bowery Creek, Tenmile Creek, Durham Creek, and Squirmer Valley Creek. These streams were an important stimulus to the Durham Valley's early settlement in the 18th century and formed the basis of a history of timber harvesting, milling, and industry.

About 1,160 acres of wetlands have been identified in the Durham Valley. Hydric soils, along with hydrophytic vegetation and wetland hydrology, are used to define wetlands. Those over 12.4 acres are regulated by the Department of Environmental Conservation. The Hydric Soil figure shows that wetlands are fairly evenly distributed along streams throughout the Durham Valley.

In total, the Durham Valley contributes 33,000 acres and a little more than 100 miles of classified stream to the Hudson River watershed. These headwater streams form the interface between wetlands, ground water, and the land surface; are vital to the area's aquatic biodiversity and ecological function; and play a critical role in maintaining the health and condition of the downstream Hudson River Estuary.





Forest Lands

Active agriculture is still present in parts of the Durham Valley, but most historical fields are now in mid- to late stages of succession of a closed-canopy forest. Although some remnant old-growth forest may be present on the steep ridge that forms the western boundary of the Scenic Byway Corridor, most forest cover is second and third growth. The *Forested Areas* figure shows the extent of this cover in the Durham Valley.

Forests in the Durham Valley are dominated by mixed oaks at elevations below 1,600 feet, with northern red oak (*Quercus rubra*), chestnut oak (*Quercus prinus*), and red maple (*Acer rubrum*) frequently dominating. Eastern hemlock (*Tsuga canadensis*) can still be found along streams and on some north-facing slopes, despite extensive harvest of this species to provide bark for a vigorous tanning industry during the early part of the 19th century. On the west side of the Scenic Byway Corridor, mid-elevation forests (1,600 to 3,300 feet) are dominated by sugar maple (*Acer saccharum*), American beech (*Fagus grandifolia*), and yellow birch (*Betula alleghaniensis*). While the forest types described here are typical, other mixtures of deciduous tree species are not uncommon.



Wildlife

The extensive northern hardwood forests of the Durham Valley provide habitat for a variety of wildlife species. White-tailed deer are common in the Durham Valley, so much so that their excessive browsing in some places may have a negative impact on forest regeneration. The area is part of major core habitat for some regionally rare large mammal species, including black bear and bobcat. The Department of Environmental Conservation lists the cougar as extirpated from New York, but some residents report seeing them in the Durham Valley. Beaver occur within the numerous streams and coyotes are often heard. Avian species include Cooper's hawk, northern harrier, common raven, eastern bluebird, golden-winged warbler, and vesper sparrow. A study conducted by Hudsonia in 1990 documented 7 butterfly species, and 14 other species (including fish, turtles, salamanders, and birds) as regionally rare or of heritage designation.

Issues and Opportunities - Natural

Few incentives or regulatory controls are available to preserve the Durham Valley's scenic, natural, agricultural, or historic resources. The limited number of planning tools offers few options for landowners or the community to protect lands that provide the Durham Valley with its rural character.

- Private property owners are looking for tools that will assist them in protecting their lands, while maintaining their property rights and ability to generate income.
- There is a need for land use policy that promotes creative and progressive development that maintains open lands and respects natural landscapes while still offering economic benefits to landowners.
- In response to these issues, the community recently completed the Town of Durham Comprehensive Plan (2008) to help set direction

for the Town of Durham. Members of the Scenic Byway Coordinating Committee actively participated in this process, advocating goals and objectives to balance growth and development with the preservation of the Durham Valley's rural character and local quality of life—key elements of its heritage.

- Development approaches that will protect natural resources is consistent with the survey for the 2008 Comprehensive Plan in which 80 percent of respondents indicated it was important or very important for the Town of Durham to review the impact of new development on the environmental and natural resources.

Management Actions - Natural

Support and advocate responsible development and sustainable land use through the municipal planning processes.

- a. Promote the adoption of the Corridor Management Plan by the Town of Durham. Advocate its use as a planning tool to guide policies and regulations and to identify important resources.
- b. Actively assist the Town of Durham, in an advisory role, in reviewing proposed development for consistency with the Corridor Management Plan.
- c. Promote the Corridor Management Plan so that the Town of Durham, Greene County, and New York State can use it in developing policy and identifying resources.
- d. Support and advocate policies of the 2008 Comprehensive Plan that protect important resources.

Work with partners to promote land conservation through conservation easements and other tools.

- a. Partner with local, state-wide, and national conservation organizations actively working in