

## CHAPTER 2: RESOURCE INVENTORY

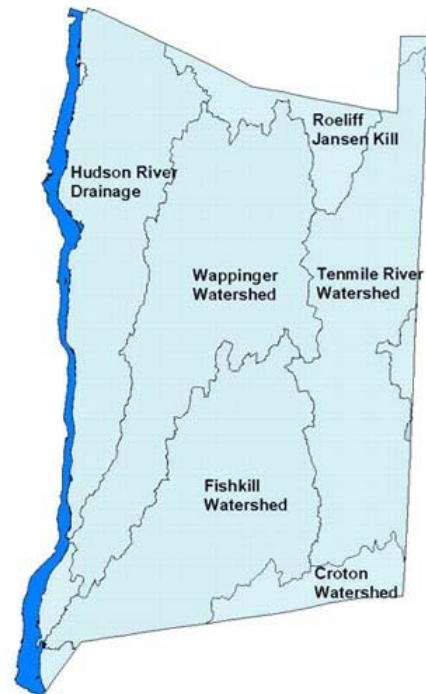
### Introduction

This chapter provides an overview of LaGrange’s existing open space resources. It briefly describes the water resources, ecological resources including wildlife habitats and species, working landscapes, and cultural and recreational resources. Each section of this chapter corresponds with a resource map located in Appendix B in order to orient the reader to the location and distribution of the resources. (Note: The Town of LaGrange 2005 Comprehensive Plan includes additional information on the town including land use patterns, etc.)

### Water Resources

Water resources discussed in this chapter are part of a hydrological system. The components of that system depend on each other for correct functioning, and since they do not prescribe to political boundaries, they extend beyond the borders of LaGrange. The water quality in the streams and aquifers depend on the wetlands for filtration, and the floodplains provide space for overflow until proper filtration can occur. By understanding how the hydrological system works and where the main components exist, it becomes possible to maintain high water quality through responsible land use management and pollution prevention. The **Water Resources Map** in Appendix B shows the locations of important water resources in LaGrange.

The two main watersheds in the town are the Wappinger Watershed, which includes the Wappinger Creek and its tributaries, and the Fishkill Watershed which includes Sprout Creek and its tributaries. Both of these watersheds drain directly into the Hudson River.



The Wappinger and Fishkill are the two main watersheds in the Town of LaGrange. Both watersheds drain into the Hudson River.  
Source: Dutchess County EMC

### Rivers and Streams

The two main waterways in LaGrange are the Wappinger and Sprout Creeks. Wappinger Creek forms the border between LaGrange and the Town of Poughkeepsie, and represents a recreation opportunity for the town in the form of multi-purpose greenway for hiking, biking, and cross country skiing, as well as water recreation such as kayaking and fishing. By preserving lands along the Wappinger Creek, the town would also be protecting the water quality and fisheries habitat of the creek which eventually flows into the Hudson River. Sprout Creek is one of the main contributors to the Fishkill Watershed. One of its main tributaries, Jackson Creek, joins Sprout Creek just south of the LaGrange border in East Fishkill. The area near the Noxon hamlet forming the confluence of these two waterways is environmentally important due to the system of wetlands and floodplains contributing to a major aquifer recharge area.



The Wappinger Creek is an ecological and recreational asset in LaGrange and the region.

### Floodplains

Floodplains occur along rivers and streams and other low lying areas where flooding occurs. Flooding is a natural process which contributes to sustainable land fertility and fish and wildlife habitat. The most notable area of floodplain occurs south of Noxon Road between Hillside Lake Road and Robinson Lane. Approximately 437 acres of floodplain occurs here within LaGrange near where Jackson Creek flows into Sprout Creek. Wappinger Creek also has significant floodplains occurring along its length through the town.

### Aquifers

In 1992, Dutchess County contracted with Horsely, Witten, and Hegemann Inc. to conduct a Water Supply Protection Plan. Part of that process entailed delineating aquifer protection areas, or land areas that contribute water to the aquifers. The resulting map (Water Resources Map) shows three classifications of those areas. Zone 1, Primary Recharge Areas, includes those areas with the most permeable layer of soils and bedrock over the aquifer, meaning the water and any contaminants in it flow the most directly and most rapidly into the aquifer. Zone II, Secondary Recharge Areas, include less permeable deposits, and therefore the water has somewhat better filtration and more time before reaching the aquifer. Zone III, Tertiary Recharge Areas, are those areas that contribute to a stream and subsequently to the aquifer through infiltration of wetlands.

What does this mean for open space planning? It means that the land within those areas has an important role in maintaining water quality. The amount of development occurring in these areas should be carefully planned, and as much of the natural

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vegetation as possible should be retained, especially since the town's population obtains its water from wells that tap the groundwater system.

### Wetlands

Wetlands provide filtration important for water quality as well as wildlife habitat. There are a total of 2,398 acres of mapped wetlands in the town, identified and regulated by the New York State Department of Environmental Conservation (DEC) and the National Wetland Inventory (NWI)\*. In addition, Hudsonia Ltd, a non-profit research institute for conservation science, identified important kettle shrub pools and other wetland and stream habitats along Sprout Creek, providing a more detailed layer of information for that area of the town. \*(Note: The NWI maps are indicators of wetlands that may be subject to federal regulation. Determination of federally protected wetlands is typically done only as part of a proposed development application and included as a wetland delineation study and survey.)

In LaGrange, there are several areas where wetlands interconnect and provide extensive networks of habitat and natural areas. One of these exists along the west side of Route 82 between Moores Mill and Billings for an almost continuous stretch of two miles. Along the central spine of the town there is a string of wetlands that runs in a north-south direction almost continuously, from the northern border to the southern, ending in an area near the confluence of Jackson and Sprout Creeks that is roughly 164 acres of wetlands and floodplains. The stretch of wetlands described above including the Overlook Preserve area to Rombout Road is seen as important by the U.S. Fish and Wildlife Service (USFWS) and is described further in the following section.

## Ecological Resources

### Endangered and Threatened Species in LaGrange

The importance of many of the wetlands and surrounding uplands in LaGrange is highlighted by the U.S. Fish and Wildlife Service's (USFWS) study of significant habitat in the New York Bight watershed. The USFWS has identified an area in LaGrange as part of the Dutchess County Wetlands Complex. (See the **Ecological Resources Map** in



Blanding's Turtle is on the New York State Threatened Species list.  
Source: New York State National Heritage Program

Appendix B for approximate boundaries). The study identifies this as an area where significant populations or habitat of a select group of species occurs, and gives particular importance to the existence of large habitat complexes with connectivity between habitat types. It is supported by the USFWS that

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the habitat and connectivity forming its network or system should be given high priority for conservation, and this should be taken into consideration when planning and funding open space conservation in the Town of LaGrange.

Within the area described above, as well as in other parts of the town, the New York State Natural Heritage Program has identified the locations of endangered and threatened plant and animal species. The most notable of those include the Blanding's turtle and Indiana brown bat. The Blanding's turtle is recognized as threatened by New York State, and the Dutchess Wetland Complex harbors the only known population in New York other than the Town of Wilton in Saratoga County and along the St. Lawrence River. The Indiana brown bat is listed as endangered on both the state and federal lists. Its required habitat consists of both the caves in which it hibernates and trees for birthing and rearing. While its numbers appear to be stable, there are very few caves which meet the requirements of this rare bat, and the loss of one due to development could be a devastating blow to the species. While the locations of these species are not indicated on any of the maps for the protection of the bat, they have been considered and included in the priority rating. They should be further considered in any site-specific development or planning activities in the town.

### **Other Wildlife and Wildlife Habitat**

There are currently about 13,000 acres of habitat land cover types in LaGrange which includes bogs and shrub wetlands, forest brushland, forest land, and wooded wetland. Approximately 7% (900 acres) was lost between 1998 and 2004 primarily due to new residential development. Maintaining large patches of contiguous forest is important for many types of wildlife. As these patches become smaller and/or farther apart, their ability to sustain wildlife decreases.

The Ralph T. Waterman Bird Club has identified several public areas in LaGrange which are exceptionally good for bird watching. They occur in Freedom Park, James Baird State Park, and two locations in the Taconic-Hereford Multiple Use Area. This designation reinforces the importance of the town's open space for wildlife habitat.

Between 2003 and 2005, Hudsonia Ltd. undertook an effort to map ecologically significant habitats along the Fishkill and Sprout Creek corridors. As a result the Town of LaGrange has at its disposal detailed information on the location of valuable wildlife habitat that many communities do not have. This information is particularly



Forest and wetland habitat patches in LaGrange with minimal fragmentation. Large, connected patches are necessary to maintaining wildlife viability.

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pertinent to open space planning since it depicts the approximate location of important small scale habitats such as kettle shrub pools, calcareous wet meadows, and intermittent woodland pools along Sprout Creek which are integral to the survival of species such as the Blanding's turtle.

### Working Landscapes

Working landscapes serve an important function. They include land which provides a harvested product such as livestock, timber, or crops produced by productive farmland. In addition to the products, they may also serve an important educational function, as does Sprout Creek Farm in LaGrange which produces dairy products and offers educational opportunities to the community through youth programs. Harder to measure is the scenic value that the open fields, barns, orchards, and grazing livestock offer the community. This value is a large attractor for new residents.

One issue affecting the viability of these productive farms is the ability to generate enough revenue through farm product sales to pay for taxes and other farm expenses. The agricultural district law provides some relief to landowners by providing real property tax abatements to those that are located within an agricultural district area or own a qualified farm and choose to enroll in the program. The **Working Landscapes Map** in Appendix B shows the location of these agricultural districts. This incentive helps to keep farms financially viable within the areas best suited to farming.



Farms in LaGrange are valued for the economic, agricultural, and scenic benefits they provide to the community.

The Working Landscapes Map also shows the Prime Farmland Soils and Soils of Statewide Significance as defined by the Soil Survey Geographic (SSURGO) database for Dutchess County. Originated by the U.S. Department of Agriculture, the location of these soils indicates areas where the soil is exceptionally good for crop production. Paradoxically, those soils which are good for crop production are also excellent locations for constructing houses. That, accompanied by the fact that farmland by its nature is usually cleared of trees, makes it ideal land for development. In addition, the challenges that farmers face in maintaining their livelihood through farming, creates a situation

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where the open scenic farmland becomes developed with housing and commercial developments.

In the Town of LaGrange, 1,909 acres of agricultural land, or 33%, has been converted to another land use type or abandoned between 1998 and 2004. As of the writing of this plan, the town has a total of 3,340 acres categorized as working landscape, including 11.4 acres under the Forest Tax Law (480A). This law provides incentive to landowners to sustainably harvest the timber on their property. Currently, in order to receive a tax incentive the tract of land must be at least 50 acres in size, and a management plan developed by a qualified forester must be implemented by the landowner. The 11.4 acres currently under this law in LaGrange is adjacent to over 100 acres of forest land owned by the same person. With approximately 7,900 acres of forest lands, this tool still has much potential within the town.

## Cultural and Recreational Resources

The **Recreational Opportunities and Cultural Landscapes Map** in Appendix B illustrates many of LaGrange's unique historic features, as well as opportunities for trail connections within the town. These cultural and recreational resources are discussed further in the following sections.

### Historic Resources

When considering open space conservation, it is important to recognize the history and culture of a place. One of the main objectives of an open space plan is to help a community maintain the existing character that long-term residents know as home, and new residents are attracted to. The character of a place is shaped by its history of land use and settlement. Unfortunately, the national trend has been towards commercial and residential development that robs communities of their individuality due to building and design patterns that persist regardless of geographic location. In the town's 2005 comprehensive plan, several buildings and other features have been identified as being historically significant. These resources should be considered as valuable to maintaining the character of the town, and thus incorporated into planning for open space.



Barns are an important part of LaGrange's working landscape history.

The settlement patterns in the Town of LaGrange have historically been influenced by two main forces: the topography and transportation networks such as the Taconic State Parkway. The topography of the town, with the steep slopes of the Taconic Ridge, kept most of the farm settlements of the 18<sup>th</sup> century on the flatter lands mostly west of the Taconic State Parkway and south of Route 55. With a long history as a farming community, LaGrange's character depends greatly on the farm lands and the architecture of the settlements that grew up as a result of the farming life such as barns, farmhouses, mills, schoolhouses, and churches. The accompanying

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landscape features include stone walls and open fields for growing crops and grazing livestock. Many of the historic buildings are located in the hamlet centers such as Freedom Plains, Moores Mill, and Lagrangeville.

The second major influence on settlement patterns was the building of the Taconic State Parkway in the 1930s. Designed and built as a park-like drive through the scenic Taconic Ridge, it acted as a conduit which allowed easy access to the town from points south, particularly New York City. The close proximity to Poughkeepsie has also encouraged the suburban development that has been characteristic for LaGrange. The good rich soils and flat ground was ideal for building homes, thus, the areas around Poughkeepsie (the west and south parts of town) have suburbanized the fastest. The historic Sleigh house was preserved by a developer willing to work with the town to preserve it and some surrounding acreage, while the Chorney Farmhouse built in 1830, unfortunately did not have the same good fortune. Partnerships between developers and the town are key to preserving the unique historic and natural character of the town.

### **Trails and Trail Opportunities**

Providing recreation opportunities within a community goes hand-in-hand with conserving open space. The opportunity for people to enjoy the outdoors and get close to nature strengthens the desire to preserve it. By providing public areas for hiking, fishing, kayaking, or cross-country skiing, the community learns to enjoy natural resources and thereby becomes more likely to advocate for their conservation.

The 2005 Town of LaGrange Comprehensive Plan presents conceptual trail opportunities that seek to create connections between existing and proposed trails and public open spaces. Some of these conceptual trails include a continuation of the trail already created for the Wappinger Creek Greenway Trail; a trail connecting James Baird State Park with the Taconic-Hereford Multiple Use Area; and the Taconic-Hereford Multiple Use Area with Freedom Park. The Dutchess Rail Trail through the Town of LaGrange is currently in the design phase, and the comprehensive plan suggests several alternatives for linking it to other trails and destinations. In order to make this comprehensive trail system a reality it would have to be planned in conjunction with open space conservation since a trail requires that land is owned by a public entity or an easement is held on private property.

Trails already existing in LaGrange include the Wappinger Creek Greenway Trail, the Red Wing Nature Trails which are privately owned, and those trails that are within existing parks such as Stringham and James Baird State Parks, and the Taconic-Hereford Multiple Use Area. The Dutchess Rail Trail will be extended through the south west corner of LaGrange.

## **Conclusion**

This chapter has introduced many of LaGrange's open space resources. The associated maps illustrate their patterns throughout the town. The resources introduced in this chapter form the basis for the identification of priorities in the chapter that follows (Chapter 3). Ultimately, the plan aims to achieve conservation of the function of these open space resources, whether they are natural, agricultural, or recreational resources.