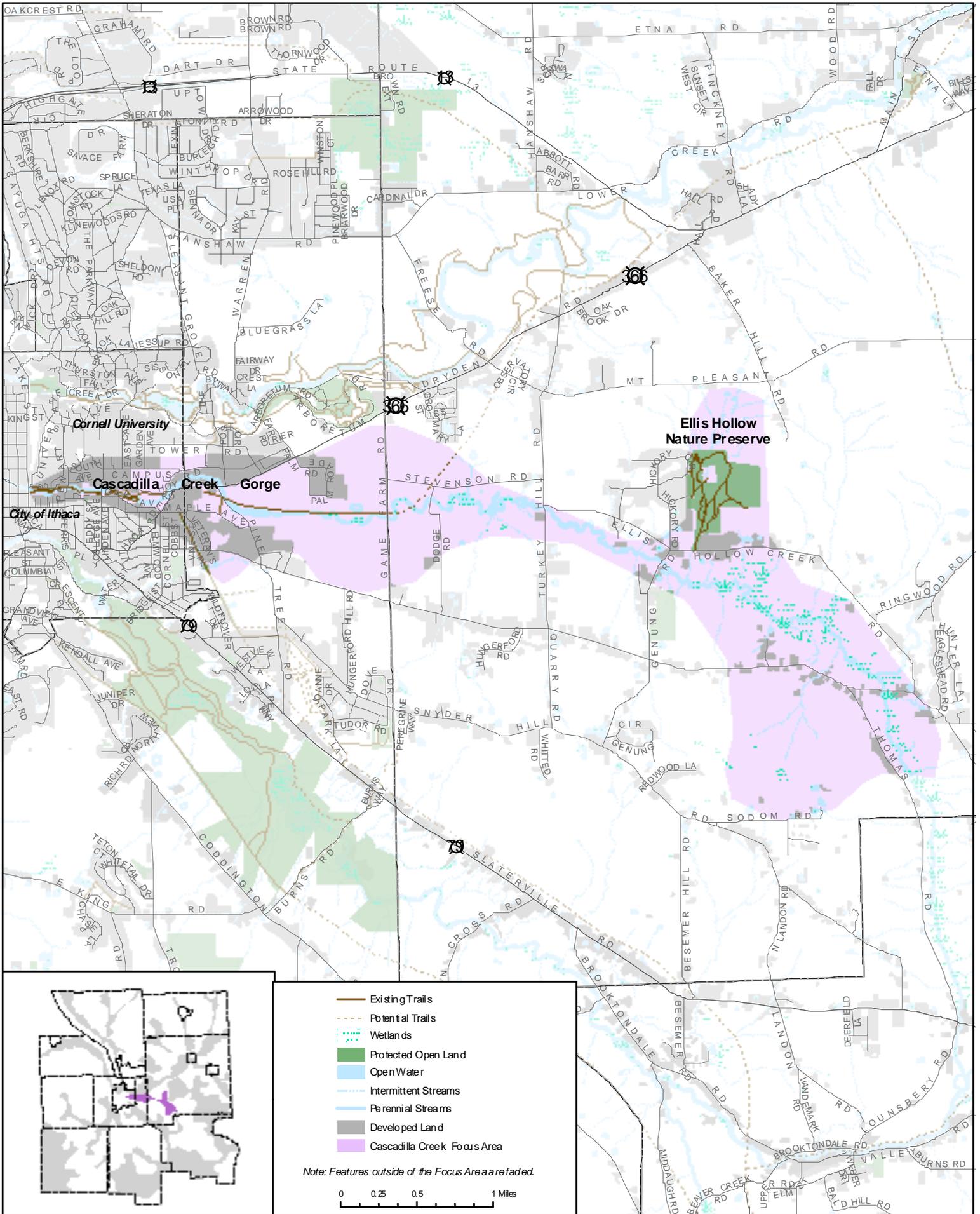


Cascadilla Creek





Description of Focus Area

The Cascadilla Creek Focus Area extends from the City of Ithaca at the Cascadilla Creek Gorge, through the southern portion of Cornell campus, and to the Cascadilla Creek headwaters area at Thomas Road in the Town of Dryden. Its western and eastern sections have very different characteristics and benefits that they provide, though they are tied together by Cascadilla Creek. The western half is characterized by the beautiful gorge and gorge trail, Cornell agricultural fields, and scattered wetlands. The eastern portion includes forestlands and a large wetland complex in the headwaters area.

Major Benefits

The primary benefits that Cascadilla Creek Focus Area provides are education and research opportunities for Cornell students and researchers, as well as members of the local community. Two exceptional recreational facilities, the Cascadilla Creek gorge trail and the East Hill Recreation Way, provide attractive settings for outdoor recreation. The beautiful Cascadilla Creek gorge trail is used by thousands of people a year, from commuters going to work or school, to downtown workers needing lunchtime exercise or solitude, to tourists visiting the community while the East Hill Recreation Way offers a more pastoral experience.

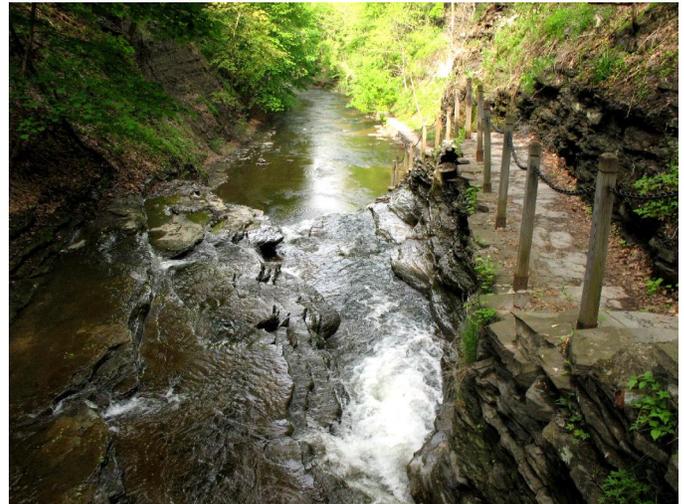
The Focus Area also supports diverse habitats and a multitude of birds and water-oriented species. Other secondary but important benefits include forestry and agro-forestry in the eastern portion of the Focus Area, and scenic areas throughout.

Education and Research

Cornell University-owned lands are a defining feature of this Focus Area. In addition, the Finger Lakes Land Trust owns the 111-acre Ellis Hollow Nature Preserve, which provides important educational opportunities for the general public. In many cases, these lands are managed for specific purposes to support educational or research objectives and, consequently, are particularly vulnerable to factors that might compromise their ecological integrity.

Outdoor Recreation

The Cascadilla Creek Focus Area offers a variety of recreational opportunities, including walking, hiking, and bird watching. The primary recreational feature is the Cascadilla Creek Gorge Trail, which offers a peaceful natural experience in the heart of the City of Ithaca and interpretive information developed by Cornell University. The other major recreation opportunities are the East Hill Recreation Way and the 111-acre Ellis Hollow Nature Preserve, owned by the Finger Lakes Land Trust. The network of trails there provides visitors access to excellent bird-watching opportunities, steep-sided glens, and abundant wildflowers in the spring. An inactive railroad bed provides a possible route for a future trail that could connect East Hill Recreation Way with Monkey Run to the north.



The Cascadilla Creek Gorge Trail offers a peaceful natural experience in the heart of Ithaca.

Critical Habitat and Biodiversity

Due to the differences in landscape between the western and eastern portions of the Focus Area, it supports diverse habitat and a rich variety of species. The western portion provides critical habitat for agricultural grassland birds and mammals, and wetlands birds. The eastern portion includes forestlands and a large wetland complex adjacent to the stream corridor, which provides suitable habitat for riparian birds and wetland amphibians. Suitable habitat for vernal pool salamanders is also found in this area.

Protection and Management Issues

Education and Research

- n School groups, as well as conservation volunteers and members of the public, frequently use publicly owned natural areas as outdoor classrooms. Additional access to lands that represent a broad range of natural environments would enhance learning opportunities and facilitate greater use of nature as an educational resource.
- n Public use of education and research lands is usually restricted in some way, in some cases because unauthorized visitors to these properties may inadvertently trample sensitive species used for research purposes or interfere with specialized management practices in use. Where restricted, these lands should not be visited without permission from the owner or manager of the property.
- n Some education and research lands are generally open to the public for personal enjoyment and relaxation. For these areas, staying on the trail is important, especially where off-trail use may cause damage to the site or trampling of sensitive species. Certain sites are very sensitive, and may not be appropriate for large groups or children.
- n The spread of invasive species, herbicides, pesticides and fertilizers from adjacent lands can compromise the integrity of the ecological, plant and animal communities being studied.
- n Overgrazing by whitetail deer negatively impacts the quality and regeneration of ecological, plant and animal communities being studied.

Outdoor Recreation

- n Scenic views and tranquility are important components of the outdoor experience, and are threatened in some areas by human development and incompatible land uses.
- n When trails are not properly maintained, they are less inviting for people to use. Well-maintained trails that are clearly marked not only provide for a better recreational experience, but also encourage people to stay on the

trail, thereby limiting the impact of recreational use on sensitive areas and adjacent private property. When designing new trail routes consideration should be given to potential impacts on fragile plants and animals in the area.

- n Generating awareness of available recreational opportunities can facilitate greater public enjoyment and appreciation of public resources and natural amenities. Education of the public about the nature and purpose of particular trails is also necessary to protect the amenities and designated use of the trail (be it a footpath, horse trail, or mechanized use trail) and to ensure that trail users have the experience they anticipate.
- n The Finger Lakes Land Trust has identified roadside parking as an important issue for the management of the Ellis Hollow Nature Preserve.

Critical Habitat and Biodiversity

- n Although specific habitat size requirements vary by habitat type and from species to species, contiguous open space of at least 135 acres is generally needed to support diversity and abundance in plant and animal communities, and to enhance species survival by providing habitat for larger populations of animals and allowing for species movement and migration. Many species; however, are more sensitive to habitat size and generally require a much larger contiguous area of at least >6,000 acres for suitable habitat.
- n Wildlife corridors promote genetic diversity among species and help counter the negative effects of habitat fragmentation by connecting otherwise isolated patches of suitable habitat.
- n The introduction of non-native species, pesticides, herbicides, and fertilizer can inhibit growth of native plants critical to biodiversity. The spread of Asiatic Bittersweet is of concern in this area, particularly near Ellis Hollow.

- n Several grasslands species are threatened in the County, and require specific land management practices to provide high-quality habitat.
- n There is not enough protected or actively managed grassland habitat in the County. Patches of at least 150 acres in size (or smaller patches located in close proximity) are necessary to support viable grassland species.
- n Some timber harvesting practices can adversely impact forest habitat for particular species (for example, by reducing canopy coverage and forest litter, damaging understory vegetation, and increasing erosion on steep hillsides and along creeks). Vernal pools in forests are particularly sensitive to intensive timber harvesting, while some forest species, such as the Canada Warbler, benefit from modest timber harvesting. Timber harvesting practices should include considerations for plant and animal species and water quality.
- n Vernal pools, found in forests and other landscapes, provide critical habitat for species of greatest conservation need, such as the Jefferson Salamander. A vernal pool is a depression in the ground that periodically fills with rainwater, snowmelt or a rising water table. This unique habitat is particularly sensitive to alterations or destruction resulting from development.
- n Species that live in and around stream corridors and floodplains require clean water to thrive. Poorly managed riparian areas, and riparian areas that are cleared for development, negatively impact water quality and reduce the viability of these habitat areas. This is of particular concern in the more developed areas in the western portion of the Focus Area, where frequent foot traffic along the Cascadilla Creek Gorge Trail, the location of buildings and parking lots close to the stream, and direct stormwater discharges in the lower reaches of Cascadilla Creek, result in litter and pollutants in the stream. Development near the large wetland complex in the eastern portion is also of concern.
- n Illegal collection of seeds, plants, and animals can have a negative impact on plant and animal populations that are critical to biodiversity in this region.
- n Vernal pool species are vulnerable to road mortality during migrations to and from breeding sites.
- n Species found at the waters edge or near frequently used trails are sensitive to disturbance by high-intensity uses and by people going off-trail.
- n Wetlands and ponds are sometimes filled or degraded, which has a negative impact on the ability of those systems to support wetland and pond species. Large wetlands (>5 acres) provide critical habitat, and smaller wetlands serve as “stepping stones” to provide habitat connections. Wetlands and pond areas that are isolated and small in size cannot support certain wetland and pond species of greatest conservation need. Many wetland bird communities depend on their local habitat, as well as the wetlands within a two-mile radius.
- n Some pond species, such as snapping turtles, are vulnerable to high mortality on roads during the nesting season.
- n Overgrazing by whitetail deer can inhibit native plant growth, forest diversity, and forest regeneration.
- n Development along Thomas Road, in the headwaters of Cascadilla Creek, has increased impervious surface and encroached on key habitat areas. Additional development could potentially undermine the important habitat and water quality benefits provided by the Focus Area.



The wetlands along Thomas Road, in the headwaters of Cascadilla Creek are vulnerable to impacts from increasing development

Priority Actions for Cascadilla Creek

The Natural Features Focus Area Project has identified 35 priority action items to be initiated over the next five years. The action items have been established to bolster and coordinate the region's many existing conservation efforts. They are not intended to replace or replicate those efforts. The action items reflect the broad range of unique uses in the identified Focus Areas. Below is a list of actions that are particularly relevant to the Cascadilla Creek Focus Area. For a complete list of actions and designation of principal agencies that will lead implementation efforts please see the *Implementation of Priority Actions* section of the complete county-wide plan.

Invasive Species and Native Plants

- è Inventory and identify high priority areas for the control of invasive species.
- è Establish a coordinated approach for distributing invasive species information to landowners throughout identified high priority areas.
- è Develop and distribute a list of popular landscaping plants and appropriate native species substitutions.
- è Conduct a comprehensive "natural lawns and gardens" campaign to limit the use of pesticides, herbicides, and fertilizer, and increase the use of native plants in landscaping.
- è Develop a policy for using native plants for all county maintenance activities and on all county properties, and work with local municipalities to institute a similar policy.
- è Provide a wide selection of native plants as part of annual plant sale, and eliminate all invasive species from the sale.

Outdoor Recreation

- è Provide emergency responders with better trail maps to improve incident response time.
- è Create and distribute a guidebook for the county's recreational amenities that highlights trails, swimming areas, and bird watching opportunities.

Critical Habitat and Biodiversity

- è Continue to conserve and enhance the natural areas along Cascadilla Creek Gorge, including the appropriate recommendations in the University's Comprehensive Master Plan.

- è Work with municipalities to protect wetlands and vernal pools smaller than 12.4 acres in size and not regulated by the NYS Department of Environmental Conservation.
- è Map small wetlands and vernal pools using data on Hydrologically Sensitive Areas and provide information to landowners and municipalities about these locations.

Rural Landowner Outreach and Education

- è Enhance existing rural landowner education efforts with an emphasis on sustainable forestry practices, impacts of ATV use, invasive species, wetlands management, grassland habitat, and targeted outreach to new rural landowners.
- è Identify and coordinate the dissemination of information about grants available to private landowners for habitat management and enhancement.

Technical Assistance for Municipalities

- è Provide technical assistance to municipalities working on projects that implement the recommendations of the plan.
- è Provide training and information to municipalities on the full-range of conservation tools available, the Plan and the Natural Resources Inventory, flood plain management strategies, and vernal pool and small wetland habitat conservation.

Coordination

- È Convene a group of partners (Tompkins County Conservation Partners) involved in local conservation efforts twice a year. Meetings will facilitate regular information sharing as well as coordinated educational efforts such as periodic field trips for municipal officials to key sites in the Focus Areas.

Land Protection in Priority Areas

- È Protect priority protection areas through partnerships with area agencies and municipalities by purchasing land and acquiring conservation easements.
- È Educate landowners about tax incentives available for conservation efforts through various formats including town/village newsletters with special emphasis on landowners within the open space system.
- È Develop or identify a model conservation zoning ordinance for use in key portions of the Focus Areas.
- È Engage key land protection stakeholders to assess the financial resources available for land conservation and work to establish additional funding as needed.