Regional Stewardship

The Cornell campus includes a diversity of urban, suburban, rural and natural settings, and its image is experienced through all of them. There are many facets to Cornell's symbiotic relationship with its surroundings – physical, ecological, social, cultural, economic and academic. A regional view of campus planning and development is needed to ensure this complex relationship continues to benefit the university, its home communities and the natural environment. The campus master plan recognizes that the university's stewardship role extends well beyond the limits of campus and will only grow as Cornell strives for greater sustainability. This chapter sets out broad objectives and strategies to guide stewardship actions.



Cascadilla Gorge



Seneca Place, Downtown Ithaca



Tompkins County countryside

major roads

Cornell country campus

Cornell town campus

Cornell and county natural areas

countryside line

01 Core Campus
02 West Campus
03 North Campus
04 South Campus
05 Cornell Business and Technology Park

4.3

Manage the rural land base

Cornell's extended campus in Tompkins County is located largely on rural land, much of it used and managed by the College of Agriculture and Life Sciences and the College of Veterinary Medicine. These lands are not only critical to carrying out the university's land grant mission in perpetuity but also are an invaluable environmental asset and open space resource for the larger community. With the potential for suburban residential expansion in surrounding municipalities, it becomes vitally important for the university to develop a watershed-based land stewardship and management strategy for its larger land base.

Cornell's countryside be characterized primarily by animal and plant facilities for teaching and research, athletic and recreational facilities, and natural and agrarian landscapes. By accommodating nearly all of its foreseeable growth within existing developed areas, the most valuable teaching and research fields will be protected, and plant and animal researchers will have convenient access to research plots, greenhouses and barns.

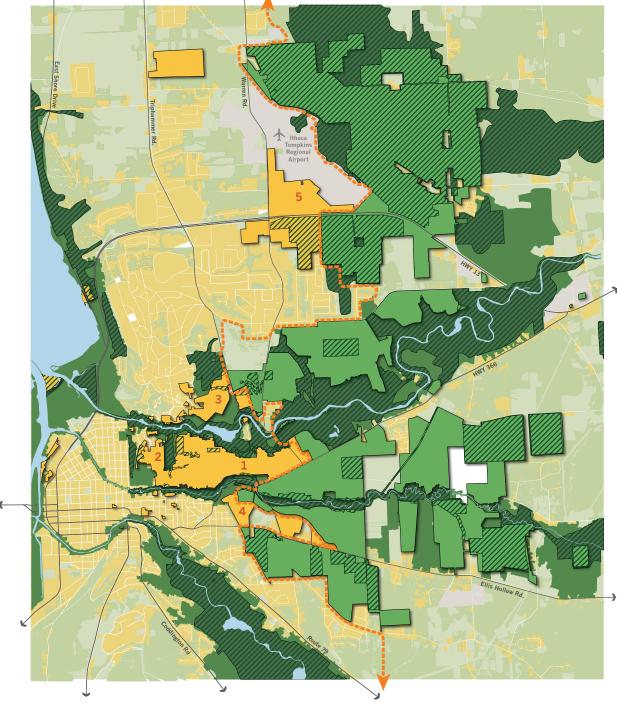


fig 05 - Cornell and County Natural Areas: Cornell's extensive rural land base includes a variety of natural areas

Cornell's research fields and natural areas are its outdoor classrooms and labs, as valuable to the academic mission as its built spaces.

The land stewardship and management plan will also entail the following:

- Understanding, defining and monitoring the forested lands owned by Cornell around the airport. Most of these lands have been identified as Cornell and County Natural Areas and need to be protected. Appropriate teaching and research activities should be encouraged, and public access monitored and controlled.
- Consolidating research uses, animal housing and farm services where practical for greater land and resource efficiencies. There are opportunities to establish more permanent, defined precincts for research and agricultural uses. Cornell's rural holdings along Stevenson Road, east of Game Farm Road, could be reinforced as a farm services hub. The Game Farm Road Complex, south of McGowan Woods, can accommodate

- additional animal and other CALS research facilities that need to be close but not on Core Campus.
- Developing and adhering to a land use pattern that clearly identifies how Cornell's rural functions should be organized over the long-term and which uses are appropriate in each of the defined areas east of the countryside line.
- Identifying and implementing guidelines for minimizing and mitigating the environmental impacts of agricultural and other rural uses. In keeping with the land-grant mission, Cornell should adopt a watershed-based land management strategy to minimize impacts from intensive research and agricultural uses. A strategy of this type would refine and promote best practices in nutrient management, integrated pest management, riparian corridor protection, and zero-runoff farming techniques. The guidelines should be developed in partnerships

- with local farmers and regional agencies to help ensure protection of the larger regional ecosystem.
- Committing to implement stormwater management best practices, not just as required by regulation on a projectby-project basis, but in a long-term, comprehensive, and planned fashion. This will involve delineating the campus into drainage areas based on existing surface conditions (e.g., topography and degree of impervious cover).
- Identifying and pursuing projects to implement stormwater management strategies in drainage areas that have existing, untreated development. The goal is to mitigate the university's legacy stormwater impacts and reduce its environmental footprint. At a minimum, this would mean preventing increases in the volume, rate, and/or pollutant load of stormwater runoff. Optimally, the goal would be to pursue opportunities to move portions of campus closer to their pre-development conditions in terms of stormwater run-off.

major roads

Cornell and county natural areas

Cornell active research lands

Cornell town campus

countryside line

01 Airport Ponds and Wetlands
02 Sapsucker Woods
03 Research fields
04 Robert Trent Jones Golf Course
05 Equine Research Park
06 Dilmun Hill
07 The Orchards
08 McGowan Woods
09 Game Farm Rd Complex
10 Turkey Hill
11 Ellis Hollow Athletics Complex
12 Cornell Park
13 Pine Tree Athletics Complex
14 Baker Institute for Animal Health

Much of Cornell's land contains unique and important natural features that require careful management. Cornell's responsibility as steward of its campus extends well beyond its academic facilities, infrastructure and research fields to include these areas. The Fall Creek and Cascadilla Creek subwatersheds are subject to environmental impacts from many landowners in the region, including Cornell.

As part of the land stewardship and management plan, there will be opportunities to more beneficially align university uses with significant natural features and to provide increased protection for vulnerable sections of the gorges and creeks.

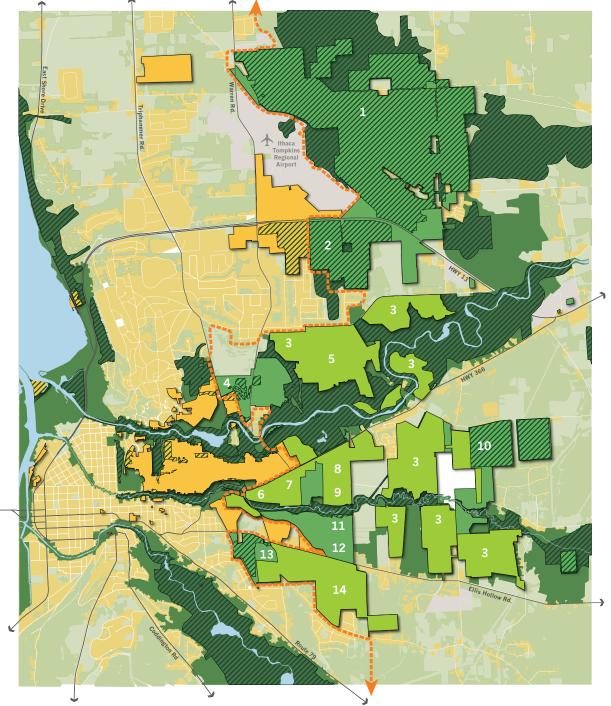
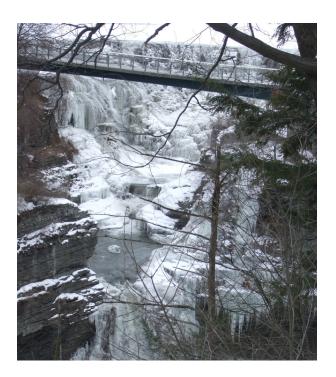


fig 06 - The country campus includes lands dedicated to research, teaching, athletics, natural features and farm services

4.4

Protect and enhance the gorges and creek systems



As the Cornell campus has evolved, the Fall Creek and Cascadilla Creek gorges have lost none of their dramatic effect and they continue to fundamentally define the shape, image and experience of the campus. Today Cornell owns extensive and environmentally significant land along the creeks, most of which is managed by Cornell Plantations as Cornell and County Natural Areas. The natural processes, development and activities of the university have a major influence on conditions in the two corridors. As legacies to protect and enhance for future generations, the gorges and creeks are unique landscapes requiring as much attention and care as any other part of the campus.

Cornell has already shown itself to be a leader in stormwater management, taking steps to implement high standards and best practices that are taught in its own classrooms. The land stewardship and management plan should go further toward protecting the important role of the creeks, valleys and gorges. It should set out policies and guidelines aimed at minimizing impacts to the creek systems, enhancing their ecological function and reversing degradation. Over time, natural habitats should be restored where possible and natural linkages between the creeks and other natural features re–established.

A stream buffer program is needed to protect the environment of the gorges and valleys. This will involve limiting development to trails in the gorges, and roads, trails and other essential infrastructure in the valleys. New buildings in sensitive areas of the valleys should only be allowed where there is a compelling academic rationale and no viable alternative location. In such cases they should be designed to blend with the natural setting and have no significant adverse environmental impact. At the top of valleys and gorges, buildings should be set back from the edge and their height limited to allow safe pedestrian access along the edge and views up from the bottom of the gorges unobstructed by the building.

gorge and valley open space network

Cornell and county natural

areas within the gorge and
valley open space network

Key strategies and initiatives

- Implement a robust stream buffer program modeled after the Center for Watershed Protection and Stormwater Center.
- 2. Design stormwater management systems in a longterm comprehensive fashion by delineating the campus into drainage areas, not on a project-by-project basis.
- Collect and reuse stormwater on campus (e.g. golf course and Plantations irrigation, cooling water) where infiltration is difficult due to soil type and space limitations.
- 4. Implement stormwater management strategies to mitigate legacy stormwater impacts, bringing campus runoff closer to pre-development conditions. Examples include adding stormwater controls such as curb cuts to existing parking lots and identifying and mitigating large-volume stormwater confluences to reduce flows from upstream.
- 5. Include stormwater management in landscape features.
- 6. Require development to comply with best practices in stormwater management.

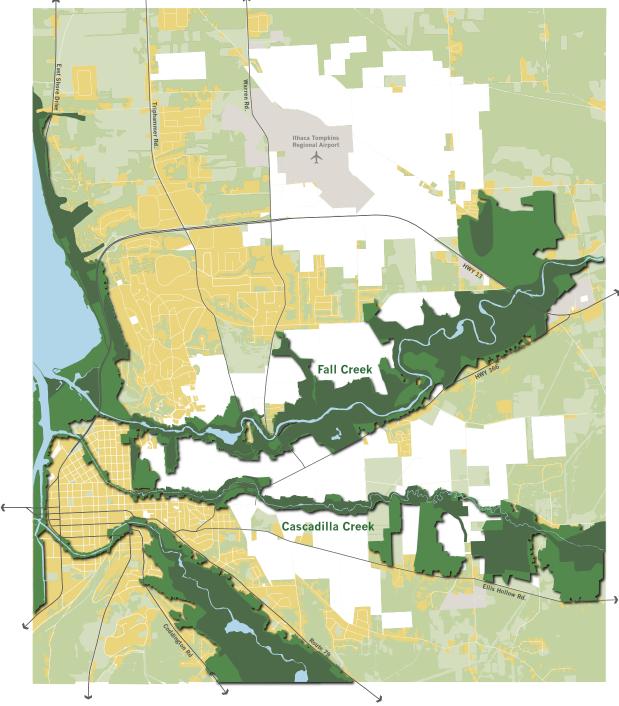


fig 07 - The gorge and valley open space network: the plan expands the gorge and valley boundaries beyond the defined natural areas.



House in Bryant Park



Collegetown

4.5

Respect and enhance surrounding communities

Cornell is inextricably linked with its home communities and the vitality and success of each are interdependent. The university is Tompkins County's largest employer, with over 13,000 employees, and contributes over a billion and a half dollars to the local economy annually. The urbanized areas immediately adjacent to the Cornell campus comprise "zones of mutual interest" and are connected to strong residential neighborhoods. Here, where the boundaries between town and gown are not always distinct, the impacts Cornell needs to concern itself with are physical, social and economic. Working together, the university and its home communities can ensure these areas remain attractive and healthy.

Much of Cornell's campus is bordered by long-established residential neighborhoods, some on the National Register of Historic Places. All development at the edges will be compatible in scale, character and land use with its adjacent communities. New residential development that

may occur in North Campus and West Campus will be achieved through redevelopment of obsolete housing or sensitive infill projects that respect the existing scale and character of development. In South Campus, new development will be focused in the East Hill Plaza area, which will continue to be entirely surrounded by major greens spaces. A shared goal of the campus master plan, the Transportation Impact Mitigation Strategies (TIMS) that are the outcome of the Transportation-related Generic Environmental Impact Statement (t-GEIS), and other sustainability initiatives, is the reduction of overall singleoccupant vehicle travel to and from the campus through surrounding communities. The transportation strategies in the campus master plan coordinate closely with the TIMS to enhance alternative modes such as Park and Ride, transit, and walking and biking to campus.

Downtown Ithaca is a characteristically vibrant university-town center, with a diverse mix of shops, restaurants and cultural facilities; but constantly it competes with suburban retail and entertainment destinations. In Downtown Ithaca, a greater Cornell presence would have a strong impact on the retail environment and could reinforce programmatic and physical connections to the campus. Cornell's partnership in the successful Seneca Place development should be the beginning of an ongoing strategy to locate appropriate university uses and programs Downtown.

Collegetown is where the city meets the campus in highly visible ways and is vital to the Cornell experience. It is heavily populated with students and is a center for dining, nightlife and convenience retail. As Cornell's urban edge, Collegetown has improved in recent decades but has not realized its potential to be a great neighborhood and thriving year—round commercial node. The Collegetown Vision Statement, released in April 2007, and the Collegetown Urban Plan and Design Guidelines to follow, should stimulate and guide Cornell actions toward the shared goals of year-round economic and cultural vitality and better housing.

An integral part of both the campus and the surrounding community, the East Hill Plaza area has the potential to become something unique—a village containing administrative and academic support uses, neighborhood stores and services with apartments above, and other housing geared to graduate students, staff and young faculty. Adjacent to the village, the future Cornell Park will contain active and passive recreation areas accessible to the broader community. An essential part of the university's stewardship role is to maintain and create open spaces, both in the heart of campus and at its edges, that are an asset for the greater Ithaca region. Cornell's strategies for enhancing its presence in Downtown, Collegetown and East Hill Village are further described in Sections 4.18 and 4.19.



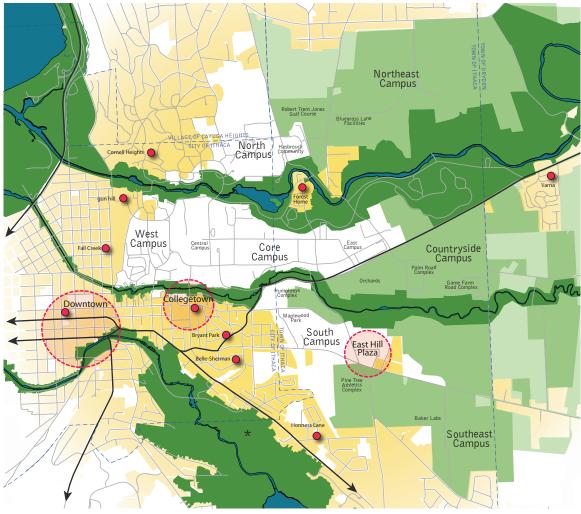


fig 08 - Zones of mutual interest and neighborhoods adjacent to campus

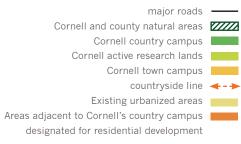
Although not part of the Main Campus and therefore not a focus of the campus master plan, Cornell's Business and Technology Park, adjacent to the airport, is an important asset to both the university and the greater Ithaca region. As the long-term plan for the Park is updated and implemented, it should have regard for the principles, objectives and guidelines of the campus master plan, particularly those applying to land use, environmental stewardship and movement.



Cornell Business and Technology Park



Cornell has a stake in how the Ithaca region develops



16

Monitor and influence regional development patterns

Development surrounds much of Cornell's lands and significantly more development is planned. Since much of Cornell's land is programmed for academic and support uses and will remain so, this large area of agrarian and wooded landscape will remain rural. The challenge will be to ensure that future development beyond these lands complements the rural character of the eastern portions of campus and, more importantly, preserves their longterm suitability for research and teaching uses. Cornell will participate in municipal initiatives to align land use objectives and help ensure suburban development does not threaten the quality of the university's lands and the environmental quality of the region. Ongoing participation by Cornell in sub-watershed planning initiatives will also be critical to managing impacts from both development and agricultural uses. Cornell should assist in managing recreational uses on and around its rural lands so as not to compromise environmental qualities and Cornell's research functions.

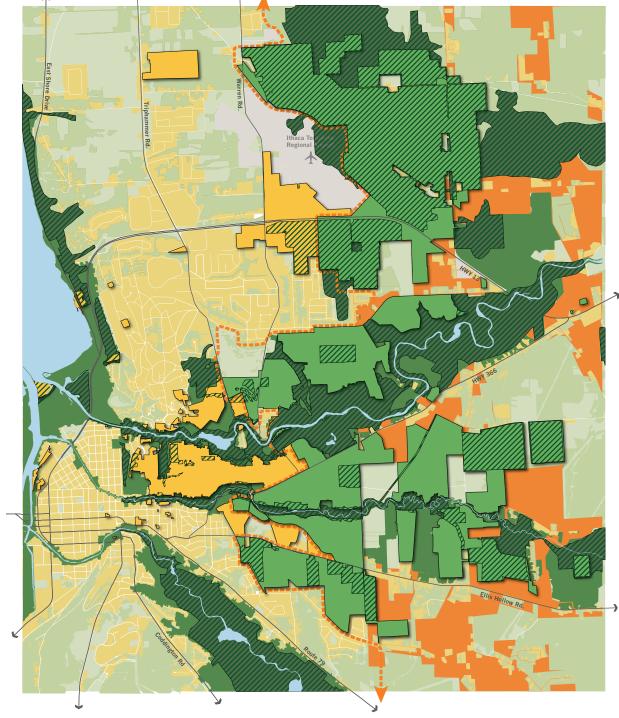


fig 09 - Areas around Cornell's country campus zoned for residential development