

## **RECOMMENDATIONS TO ADDRESS GORGE SAFETY**

December 2011

### **I. ADDRESS EXISTING RISKS**

#### **A. Complete Safety and Infrastructure Projects**

The proposed projects for the capital plan are consistent with the recommendations of the Fall Creek Gorge Management Plan, and include design as well as implementation needs. A key consideration is the concurrence of actions to enhance safety and better enable enforcement at areas known to be unsafe, along with providing safer recreational alternatives that allow a positive experience of the gorges, both on and off-campus. Inasmuch as the primary intended use of the gorges is recreational, specifically hiking, these recommendations focus on the safety of the trails.

##### **1. Support safer trail and gorge use through access control and enforcement.**

- Repair, add, or upgrade fences and railings surrounding the gorge to provide for user safety and delineation of public spaces from restricted use areas.
- Support “restricted area - no trespassing” enforcement through additional maps, signage, and physical delineation. Trespassing enforcement can be implemented immediately without judicial changes. Sign messaging should be site specific and welcoming, while clearly outlining restrictions and enforcement.
- Install gates to allow for physical closure and enforcement when necessary for public safety (e.g. flooding, University Closure). (The locations for the recommended public and restricted areas, trails, fences, railings, and gates are provided on the accompanying Fall Creek Gorge Safety Recommendations Map.)

##### **2. Address life/safety issues on gorge trails.**

- Stabilize and repair failing trails.
- Enhance safety lighting so that upper trails are lit after dark – post appropriate signage to clarify that unlit trails are closed after dusk.
- Abate hazardous trees and stabilize slopes.
- Install additional interpretive and safety signage.

##### **3. Enhance and maintain public spaces and safer destinations.**

- Augment specific areas of Fall Creek Gorge to support safe and responsible use. These “destinations,” in priority order, are noted on the accompanying Proposed Fall Creek Gorge Safety Recommendations Map:
  - o The creek side area south of Risley Hall (26)
  - o Two overlook locations adjacent to University Avenue (24, 25)
  - o The stone staircase landing under the pedestrian suspension bridge (22)

#### **4. Complete the Cascadilla Gorge Trail Reconstruction Project and reopen the gorge trail.**

The Cascadilla Gorge Trail has been closed since December 2008 to address significant life safety issues on and around the trail. As a consequence, closure of this gorge trail has reduced by 50% the number of gorge trails and appropriate gorge-related recreational use available to users near and on campus. While the lower one-half of the trail was reopened in October 2010, significant work remains to reopen the trail fully. Presently, \$1.2M in capital funds has been authorized. An additional \$200k is approved in the FY 2012 capital plan, but has not been authorized because of the lack of ongoing maintenance funding having been identified. If maintenance funding is identified this year, it still is possible to reopen the Cascadilla Gorge Trail by June 2012.

#### **B. Maintain the Gorge Areas: Funding and Oversight**

Funding for the maintenance of the gorges should be the ongoing responsibility of the university. As the stewards for the campus' gorges, Facilities Services and Cornell Plantations should oversee the effort needed for maintenance. Maintenance of the gorges both reduces capital expenditure needs long term and is a life safety priority. It is important that the source of funding be clarified and maintained. Maintenance for Cascadilla Gorge is estimated at approximately \$200K annually. Maintenance for the Fall Creek Gorge is estimated at \$150K annually.

#### **C. Enhance Communication, Outreach and Education Efforts**

Under the guidance of University Communications, improve student awareness of gorge safety.

1. Create a Gorge Stewards Program. These students who will be trained in gorge safety will be dispatched to the gorges to increase student understanding of safe enjoyment of the gorges. Gorge Stewards will not serve in an enforcement capacity – their role is to increase understanding of the safety issues related to gorge use. Peggy Beach, Director of Campus Information and Visitor Services, will oversee these students. Peggy will be responsible for creating a budget to support this effort.
2. Create a learning opportunity that is provided to all incoming students after they have taken the swim test or completed a Basic Swimming course. This opportunity may include showing a safety video (see 3), and/or providing an opportunity to experience the water impact in the gorges through a simulation experience.
3. Create a 3-5 minute video on gorge safety. Include this video on [newstudents.cornell.edu](http://newstudents.cornell.edu) and show the video loop at the required swim test.
4. Create a trail map that graphically communicates rules and outlines trails and safety hazards.
5. Resume printing and distribution of Gorge Safety brochure to all students and distribute early in fall semester, and again for Summer Session.
6. Provide opportunities (e.g. New Student programs, Greek life, community forums) for key persons (e.g., Plantations, CU police, Friends of the Gorge) to present gorge safety messages to students and the community.
7. Require Residence Advisors, Orientation leaders, Greek leaders, Co-op leaders, Off-Campus Housing staff and tour guides to be trained in gorge safety messages and require that they discuss such information at first/initial meetings.
8. Create pre-prepared messages that dangerous conditions exist; send such message via email and other safety announcements during Excess Rain/Flood Warning periods.

9. Adapt current (Plantations') gorge safety PowerPoint for web distribution.

10. Create one page message/PowerPoint slide and ask professors to display before/during class.

#### **D. Enforce Gorge Safety through Campus Code Amendment**

1. Add a provision to the Campus Code to permit the university to address violations of gorge safety measures. It will be important that this language be written clearly to prohibit unsafe use of the gorges, without having the unintended consequence of prohibiting activities that are safe and otherwise permitted, such as fishing or kayaking. The committee charged to implement these recommendations should begin working with the Codes and Judicial Committee immediately to draft this language. The Enforcement Working Group recommended language for such a code change and we encourage those who advance this recommendation to consider this amended draft (amendment noted in bold) as a starting point:

"Except as expressly authorized [it is a violation of the code] to enter any of the waters of Fall Creek, Cascadilla Creek, or Beebe Lake that pass through the Cornell campus for any **prohibited** purpose, including wading, swimming, bathing, or gorge jumping."

Once the change to the Judicial Code is complete, an "educational amnesty" program for first time violations should be established for those who are cited for this code violation.

#### **E. Continue to Research, Study and Provide for Community Participation**

Several issues require further research, study and working collaboratively with the City of Ithaca and neighboring community members. These activities are proposed for both the near and long term.

- It is necessary to have accurate physical information about geotechnical conditions and risk assessment along the gorge slopes. The mapping and risk assessment of the gorge slopes is crucial to determining the slopes and infrastructure most at risk and the most appropriate interventions for safety. It also has maintenance implications and can allow us to be proactive. This research should be undertaken in the near term.
- A section of Fall Creek Drive owned by the City of Ithaca is perilously close to a very steep gorge edge and was the location of a recent fatal accident. There are additional issues of gorge stability and historic resources in this section, as well as implications for traffic flow and management, should the road be affected by any future instability or interventions. Both immediate measures to promote protection and enhance connectivity for pedestrians as well as longer term coordination with the City of Ithaca on geotechnical and traffic studies will need to be considered in addressing this section of the gorge edge.

#### **F. Improve University Data and Analysis**

The university should undertake a serious review of what is known about a wide range of gorge incidents, including but not limited to fatalities and physical injuries. There should be cooperation with the City of Ithaca Fire and Police Departments to obtain and integrate their data. Adequate resources need to be provided so that this information is organized and maintained in the most effective manner. This data will allow us to allocate and prioritize our resources and efforts for the greatest effectiveness.

## **G. Implement and Provide Ongoing Stewardship**

There is a need to have an ongoing committee, with appropriate university authority and access, to give gorge safety consistent focus and attention.

- Create and charge an ongoing committee to oversee gorge safety. Include students, staff and faculty on the committee and provide proper coordination with city police and fire departments, Tompkins County Visitor Center, and Ithaca College. Embed ongoing oversight of this committee with the Executive Committee for Campus Health and Safety. Have this committee present its needs and progress on an annual basis to the Risk Management Council, in preparation for capital budget planning.
- Select and charge committee by late winter. Their first responsibility will be to oversee implementation of accepted recommendations. Committee membership should include:
  - Plantations leadership
  - Cornell University Police representative
  - Environmental Health & Safety representative
  - Student Services representative
  - University Communications representative
  - Community Relations representative
  - Facilities Services representative
  - Budget and Planning representative
  - Faculty member knowledgeable in communications and/or Natural Resources
  - Undergraduate and graduate/professional student representatives

## **II. MITIGATE RISKS**

### **A. Refocus and expand appropriate recreational opportunities**

- Conduct a redevelopment design for the area spanning 626 Thurston to Japes Lodge to Beebe Beach, with the ultimate goal of identifying funding for future capital projects to support increased recreational use of this area. This project would involve redevelopment of Japes Lodge to provide supporting infrastructure to promote appropriate recreational uses in this area, consequently drawing use away from more dangerous areas of Fall Creek Gorge. Estimated immediate term costs to implement these projects are approximately \$290K for FY12 and \$335K for FY13. Recognizing that Beebe Lake and the gorges are beloved by many alumni, we recommend working with the Division of Alumni Affairs and Development to determine possible fund-raising opportunities.
- Provide regular, convenient, and inexpensive van or bus transport from May through September each year, to where gorge or natural area swimming is legal. Transport could also include Cass Park or Cayuga Lake swimming areas. Consider subsidizing lifeguards in May and September.

- Allow Cornell Outdoor Education, in consultation with Plantations, to continue to operate their Tyrolean Traverse at Hemlock Gorge and other appropriate areas along Fall or Cascadilla creeks. Install blue light safety phone at Hemlock Gorge and other regular locations used for this activity. Cost to university is limited to the installation and maintenance of blue light phones.

### **B. Enhance Communication, Outreach and Education Efforts**

Under the guidance of University Communications:

- Promote alternative locations to enjoy the outdoors so that messages about what not to do are attached to information about fun alternatives.
- Work with the Cornell Daily Sun to update activities listed in the 'Big Red Ambition: 161 Things Every Cornellian Should Do' that pertain to gorge safety.

### **III. CONSIDER WHEN POSSIBLE, FINANCIALLY**

- Divert gorge use and appreciation to the much safer area of Flat Rock. Provide bike racks, benches, picnic tables and improve trails.
- Create an overlook above the former Hydraulics Lab site (27).
- Establish Gorge Safety Week each semester

#### **Gorge Safety Steering Committee Members**

Susan Murphy, VP Student and Academic Services  
 Mary Opperman, VP Human Resources  
 Tommy Bruce, VP University Communications  
 James Mingle, University Counsel  
 Elmira Mangum, VP Planning and Budget  
 Marianne Krasny, Prof. Natural Resources  
 Don Rakow, Director, Cornell Plantations  
 Kyu Whang, VP Facilities Services  
 John Siliciano, Sr. Vice Provost for Academic Affairs

#### **Gorge Safety Working Group Members**

##### **Gorge Safety and Stewardship Working Group**

Todd Bittner, Natural Areas Director, Cornell Plantations, Chair  
 Mina Amundsen, University Planner, Facilities Services  
 Anisha Chopra '13, Student Representative, Architecture, Art and Planning  
 John Forester, Professor, City and Regional Planning  
 Dan Maas, Emergency Manager, Environmental Health and Safety  
 Craig McAllister, Director, Risk Management  
 Dan McClure, Construction Manager, Construction Management  
 Sarah Schoenberg '11, Alumna, Agriculture and Life Sciences  
 John Vollrath '14, Student Representative, Engineering

##### **Education, Communication and Outreach Working Group**

Peggy Beach, Director, Campus Relations, Chair  
 Katherina Balram '13, Student Representative, Student Assembly, Industrial and Labor Relations  
 Alex Bores '13, Undergraduate Student-Elected Trustee, Industrial and Labor Relations  
 Joe Burke, Director, Residential Programs  
 Bruce Lewenstein, Professor, Communication and Science and Technology Studies

Katherine McComas, Associate Professor, Communication  
Laura Rickard, MS '08, Graduate Student Representative, Communication  
Rebecca Sharma '13, Student Representative, Friends of the Gorge, Human Ecology  
Sonja Skelly, Director of Education, Cornell Plantations  
Gary Stewart, Director, Community Relations  
Nancy Wells, Associate Professor, Design and Environmental Analysis

**Enforcement Working Group**

David Honan, Deputy Chief, Cornell University Police, Chair  
Dara Brown '13, Student Representative, Arts and Sciences  
Joseph Canzano, Sergeant, Cornell University Police  
Brian Chabot, Professor, Ecology and Evolutionary Biology  
Mary Beth Grant, Judicial Administrator  
Nelson Roth, Deputy University Counsel  
Ben Wegener '12, Student Representative, Industrial and Labor Relations

**Recreation and Alternatives Working Group**

Todd Miner, Executive Director, Cornell Outdoor Education, Chair  
David Cutter, Landscape Architect, University Planning Office  
Abby Eller, Director, Summer Sessions  
Darrick Evensen, MS '10, Graduate Student-Elected Trustee, Natural Resources  
Catherine Holmes, Associate Dean, Dean of Students Office  
Meredith Kueny '12, Student Representative, Friends of the Gorge, Agriculture and Life Sciences  
Joe Lalley, Director, Facilities Operations  
Hong-Yueh (Peter) Lo '11, Graduate Student Representative, Cornell Outing Club, Engineering  
Ashley Pinkney '14, Student Representative, Student Assembly, Agriculture and Life Sciences  
Richard Stedman, Professor, Natural Resources