## U.S. Environmental Protection Agency 2012 Campus RainWorks Challenge Winner

## Illinois Institute of Technology, 1st Prize, Small Institution

The Illinois Institute of Technology, located in Chicago, Illinois, was awarded first prize among small institutions in EPA's first-ever Campus RainWorks Challenge competition. The competition was created by EPA to inspire the next generation of landscape architects, planners, and engineers to develop innovative green infrastructure systems that mitigate the impacts of urban stormwater while supporting vibrant and sustainable communities.

The goals of the team's design plan were:

- To reduce the campus' impact on the municipal combined sewer system,
- To reduce campus dependence on potable water from Lake Michigan,
- To demonstrate how an urban area can develop stormwater strategies that mimic function ecosystems, and
- To create an ongoing stormwater management design and research site for the campus and the city at large.

The team's design plan centers on the redevelopment of a 1,200-foot long section of Dearborn Street on campus. The plan calls for redeveloping the Dearborn site, which currently serves as a service lane for emergency and event set-up vehicles, into a pedestrian thoroughfare connecting a series of green spaces. The plan incorporates a number of green infrastructure design elements, including the creation of three water gardens to capture and slow stormwater runoff, underground cisterns to hold captured stormwater for irrigation and non-potable reuse, replacing impervious pavement with permeable pavement, and retrofits to academic buildings in the project area to direct storm-related water into the treatment area. The team estimates that through collection, infiltration, and storage, stormwater runoff will be reduced from the site by 70 – 80 percent. In addition, it is anticipated that the design plan, once implemented, will reduce the campus' landscape water requirement by three million gallons annually.

To help educate the campus and surrounding community about stormwater management and the Dearborn project area, a system of small informational "water walls" are planned to exhibit information obtained through testing and monitoring the stormwater management system.