

Ottawa River Restoration Project

At the University of Toledo

Pre-project Fact Sheet

May 2012

The President's Commission on the River at the University of Toledo is undertaking a habitat restoration project for the 3,700 feet of the Ottawa River on the main campus. The overall intent of the project is to enhance the natural habitat within the Ottawa River on the main campus and contribute to overall improvement efforts underway along the river within our community.

Restoration efforts are aimed to enhance current stream and stream bank conditions and stabilization efforts while addressing the critical issue of aquatic habitat loss that have been identified as significant environmental concerns for the river on the UT main campus. The approach is to use innovative techniques for this urban stream ecosystem that also have potential for application at other sites in Toledo and in other similar streams in Ohio.

The project concept design calls for the installation of the following in-stream restoration elements, riffles and hydraulic cover stones, LUNKERS for fish habitat, locked logs and aquatic plantings, and cutbanks all making use of natural materials (stones, logs and others).

Stream restoration will incorporate some grade work in areas adjacent to in-stream structures to restore a more natural stream channel and bank and to avoid erosion while maintaining flood control.

The stream channel will be restored to incorporate stream function and design principles including riffle and pool structures, low flow concentration and erosion control features as needed. Bank shape and stability will be assessed and addressed as in-stream elements are constructed. Bioengineering techniques will be utilized to protect infrastructure as this is a very urban and visible area. Additional work will focus on stream and slope vegetation and replanting of native plants.

This project will serve as a demonstration of the possibilities available for restoration in a very altered and modified urban river system.

Several restoration elements will be constructed on-site starting in August 2012, the remaining elements and completion of the full restoration of the in-stream and banks in August 2013.

For more information on the project contact Dr. Patrick Lawrence, Chair, UT Presidents Commission on the River at patrick.lawrence@utoledo.edu or visit www.utoledo.edu/commissions/river.



Ottawa River Restoration Project

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Phase I Fact Sheet

October 2012

The President's Commission on the River at the University of Toledo is undertaking a habitat restoration project for the 3,700 feet of the Ottawa River on the main campus. The overall intent of the project is to enhance the natural habitat within the Ottawa River on the main campus and contribute to overall improvement efforts underway along the river within our community.

During the initial development of the concept plans it was realized that the proposed in-stream restoration elements could have the potential of raising water levels upstream of the project area, which is not permitted by the Federal Emergency Management Agency (FEMA). As a result the final design included the removal all in-stream structures from Reach 1 (furthest upstream), reduction in the total number of structures, changes in the size and materials of structures, and construction of a cutbank in Reach 1.

The 900 foot cutbank feature became Phase I of this project. It is along the north side of Reach 1 (adjacent to the Law School parking lot) and is intended to increase the potential flood capacity within the channel in the case of a 100 year flood event. Although the cutbank was not initially planned, it will have a great benefit to the Ottawa River by reconnecting this incised river system with a constructed section of floodplain bench planted with appropriate wetland and riparian species designed to increase shade, cover, add carbon material to the stream, improve aquatic & riparian habitat, & provide travel corridors for native animals, resting areas for migratory birds, and increase food sources etc.

The cutbank starts from the existing river edge and consists of a flat terrace and a 3:1 slope up to a location 10 feet from the parking lot curb. Approximately 4,700 cubic yards of fill, including construction debris placed there in the late 1950s, was removed along with 123 trees (most of which were invasive species that had displaced native trees). Improvements to two storm water drains and outfalls at the site were also completed.

Construction of Phase I was conducted in July and August 2012 with grass seeding and replanting in August and September 2012. The seeding consisted of a tall fescue grass mix intended for minimal cutting and maintenance. It will be allowed to grow up to 18-24 inches in height for a natural habitat. A variety of over 300 native trees, shrubs and other plants have been planted at the site. Future plans call for a river walking path and benches at the site. Phase II of this project is expected to be constructed in late summer 2013. For more information contact Dr. Patrick Lawrence, UT Presidents Commission on the River at patrick.lawrence@utoledo.edu or www.utoledo.edu/commissions/river.

