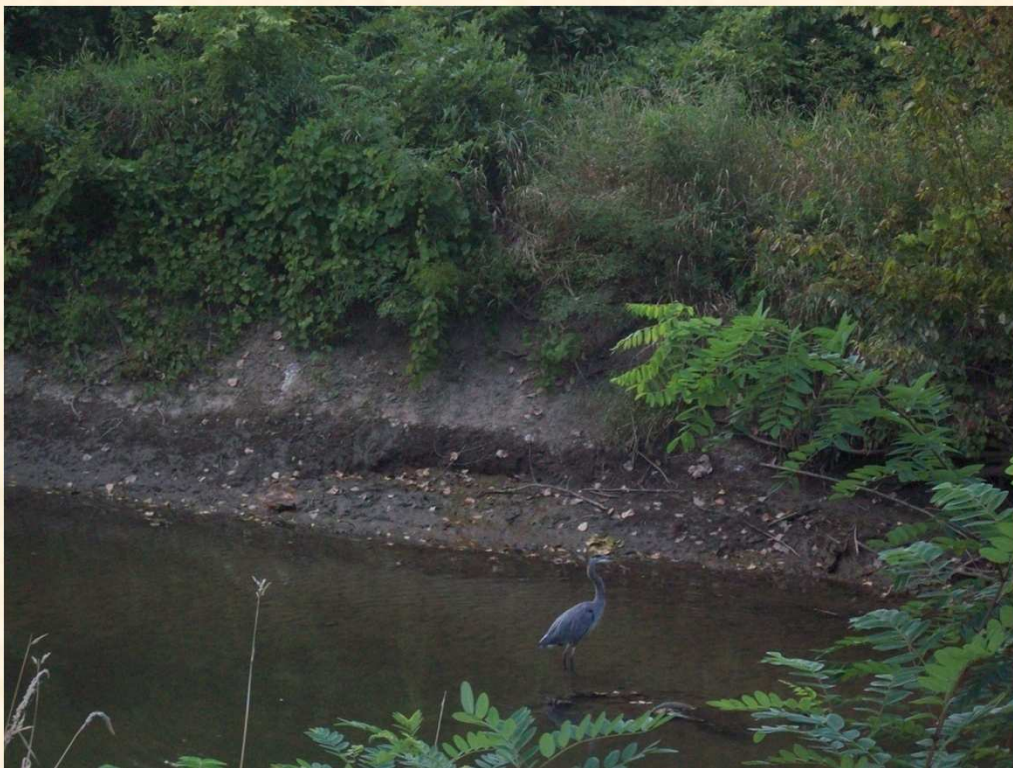




2011 Annual Report President's Commission on the River



(photograph by Kevin Czajkowski)

***Prepared by
Dr. Patrick L. Lawrence, Chair
President's Commission on the River***

patrick.lawrence@utoledo.edu

December 2011

Introduction



“As we focus our resources on projects that enhance our learning environment, the Ottawa River leaps to mind as a primary opportunity to blend research, recreation and campus beauty in a way that will benefit students, faculty, staff and the community at large for years to come.”

President Lloyd Jacobs (December 2006)

President Jacob’s comments succinctly speak to the vision and commitment of The President’s Commission on the River. The Commission’s overall mission is to improve the environmental, beautification, public access, student engagement, community outreach and educational aspects of the Ottawa River on The University of Toledo’s main campus.

The President’s Commission was originally formed in March, 2005, by then UT President, Daniel Johnson, with the first report of the Commission presented to UT President Lloyd Jacobs on December 15, 2006. An initial study of the river in July, 1982, set the tone for the work of the Commission. The 1982 report stated that the river and adjacent campus areas are *“truly ‘diamonds in the rough’ just waiting to be discovered.”* The Commission embraced the report’s observation that *“the Ottawa River can truly have a front door atmosphere, which will become a major and unifying element not found on many universities in this country.”*

Perhaps the concluding statement in the 2006 Commission report to President Jacobs summarizes it best:

“By investing in this potential treasure of a natural resource, UT could create a campus showpiece that would attract new students, increase the satisfaction of current students, faculty and staff, enhance the many educational opportunities of the river and further solidify the UT Main Campus as one of the most vibrant and beautiful areas in the region.”

This past year represented another successful year in the ongoing efforts of the Commission with major strides in all aspects of this mission and we can report that our work, in cooperation with the many UT and community partners and funders, is resulting in advancements and improvements to our river. Of special note are the projects addressing improved river aquatic habitat, storm water issues, overlooks, beautification, student engagement, public education and community involvement.

At the conclusion of 2011, the Commission wishes to also acknowledge the five year anniversary of its existence by highlighting the following major accomplishments and achievements that occurred during that period:

- The completion of several river overlooks, most notably at the Student River Plaza, Savage Arena and David Root Bridge;
- The installation of three rain gardens to demonstrate efforts for storm water management;
- The establishment of efforts for improved education and public awareness regarding the Ottawa River on main campus, through the annual *Celebrate Our River* events and other outreach and media activities;
- The undertaking of the EC₃ (*Enhancing Environmental Education and Career*) project for river habitat restoration;
- The continuation of fund raising efforts and grants awarded resulting in an approximate total of \$441,000 in support of projects and activities;
- The increased use of the river for teaching and research by UT students and faculty ranging from biodiversity monitoring and engineering senior design projects, to explorations in art, and
- The Commission's involvement in various community initiatives regarding the Ottawa River, including the annual Clean Your Streams event.

This annual report provides a series of “snapshots” of the accomplishments of the past year by the Commission. It remains the mission of the Commission to improve the Ottawa River on the main campus of the University of Toledo through beautification, environmental restoration, education, research, public access, and community involvement. The ongoing activities and projects undertaken by the Commission and its partners represent the continued efforts to strive towards these improvements in order to take pride in the “river that runs through” our campus and cooperate with our local community in addressing the concerns facing the Ottawa River. On behalf of the Commission, it is my privilege to present this annual report of our work.

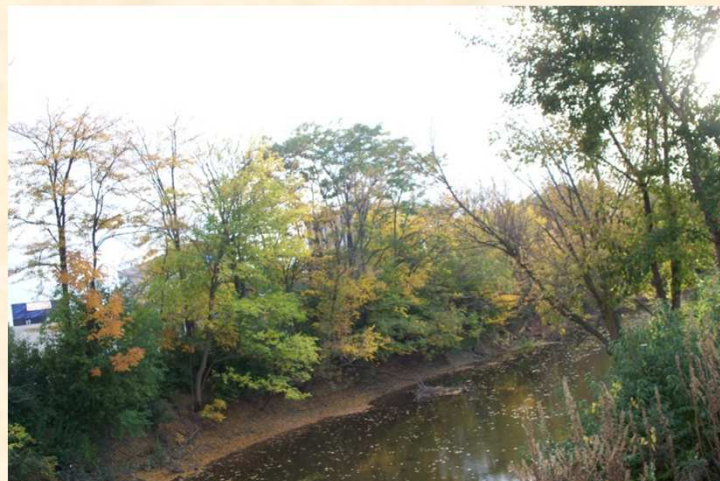
Respectfully submitted,

Dr. Patrick L. Lawrence
Chair, Presidents Commission on the River

January 2012

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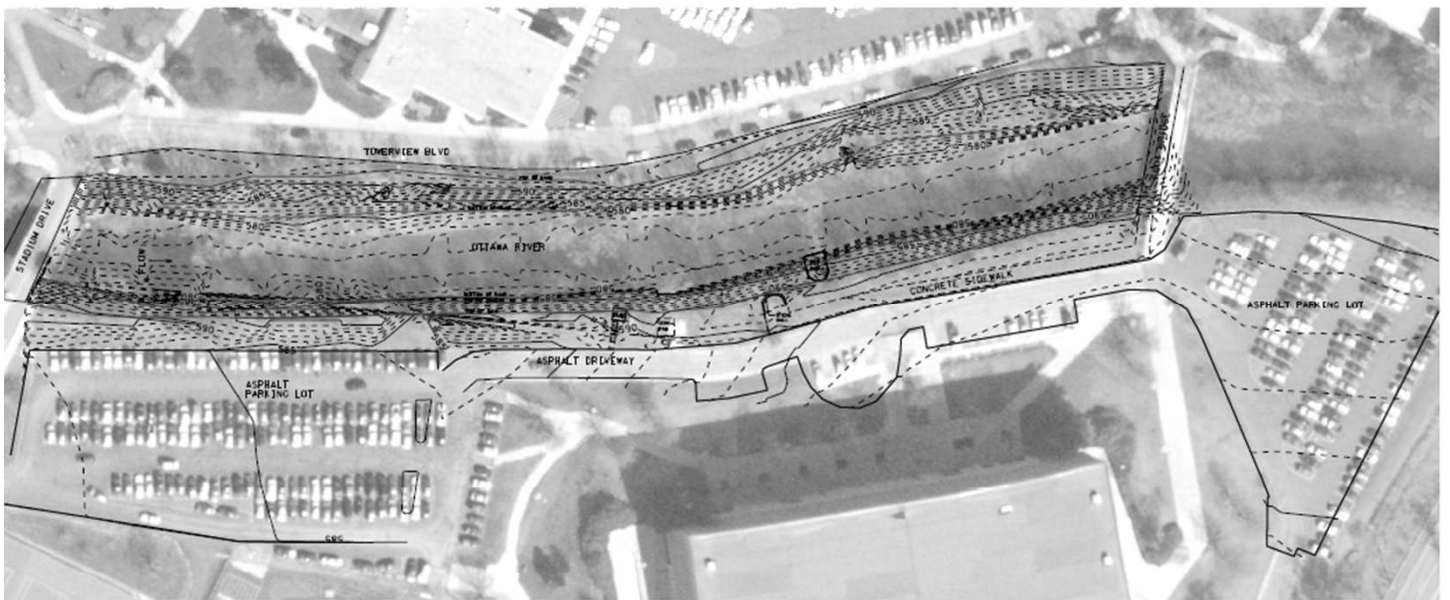
River Restoration Project (EC3) Year 2: Design

In March 2011 the US Army Corp of Engineers (Buffalo District) completed draft design concepts for river restoration of the 900 feet of the Ottawa River between the David Root Bridge and the east parking garage walking bridge.

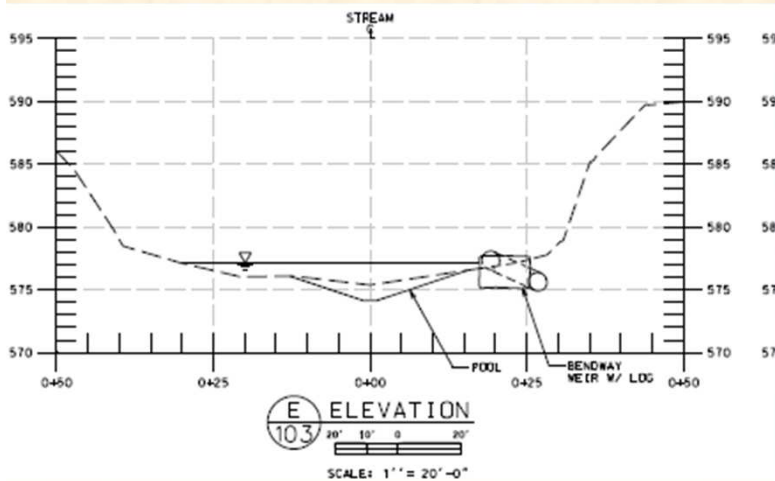
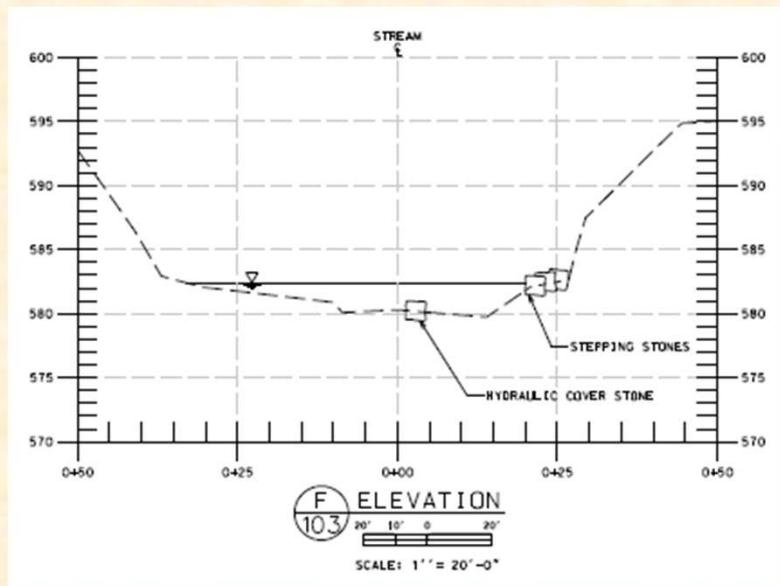
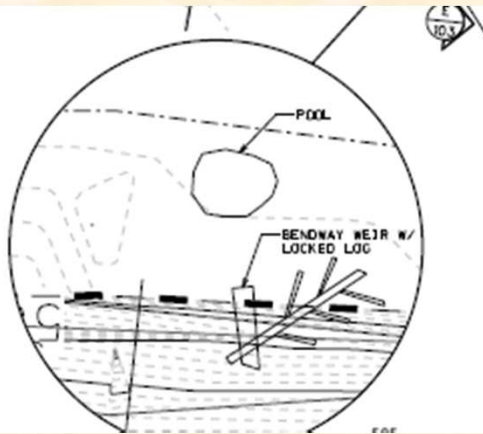
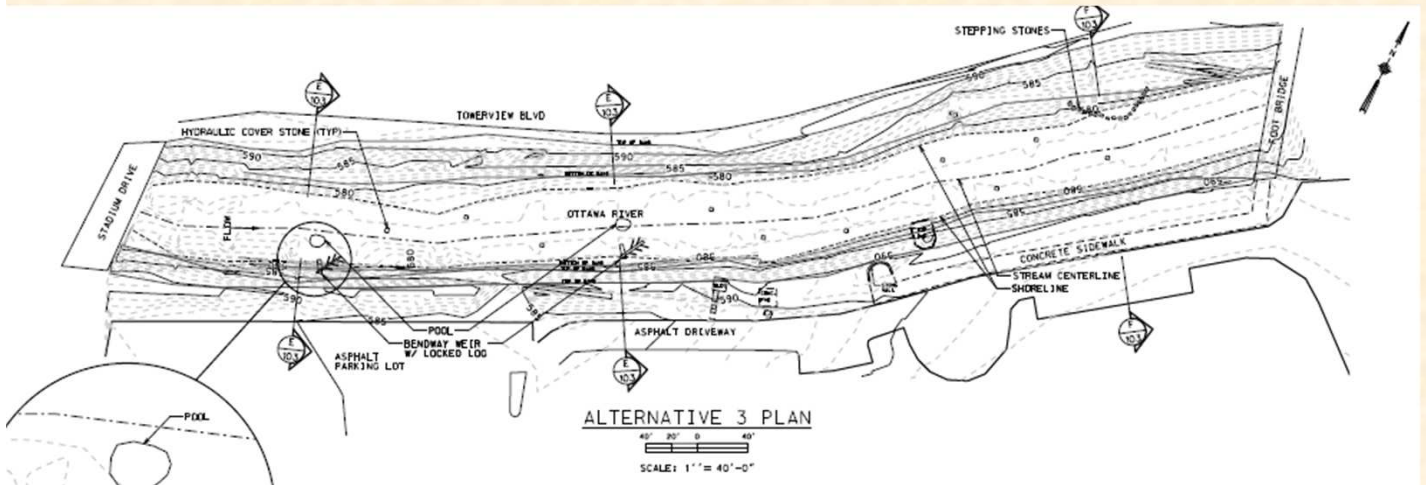
- The objective of the river restoration, and proposed in-stream features is to improve aquatic conditions and habitat.
- Selected river bank and storm water improvements may also be possible.
- Public access via overlooks and walking trails will be incorporated where appropriate and possible.
- Education and public awareness will be pursued through online videos, workshops, handouts, signage and an information kiosk.
- Initial estimated construction costs for this portion of the project are \$60,000.
- With availability of additional funding support for the construction, the project was extended to cover the entire length of the Ottawa River on main campus (an additional 3,800 feet) and pursue further design and funding support during 2011.



Field Survey



Preliminary Design Concepts



- Funding support for Year 2 of the EC₃ Project was provided by the Stranahan Foundation

River Restoration Project (EC3) Year 3: Planning

During 2011 two major external grants were awarded towards the design and construction phase of this project:

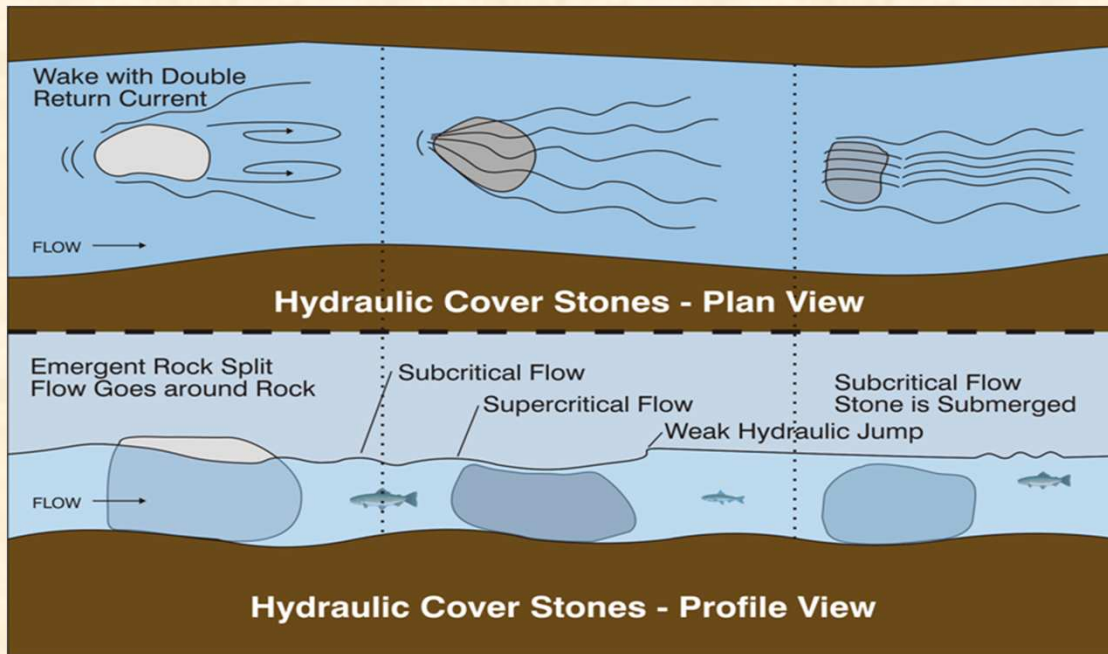
Ohio EPA 319 grant: \$235,000

US Fish & Wildlife Service: \$114,132.

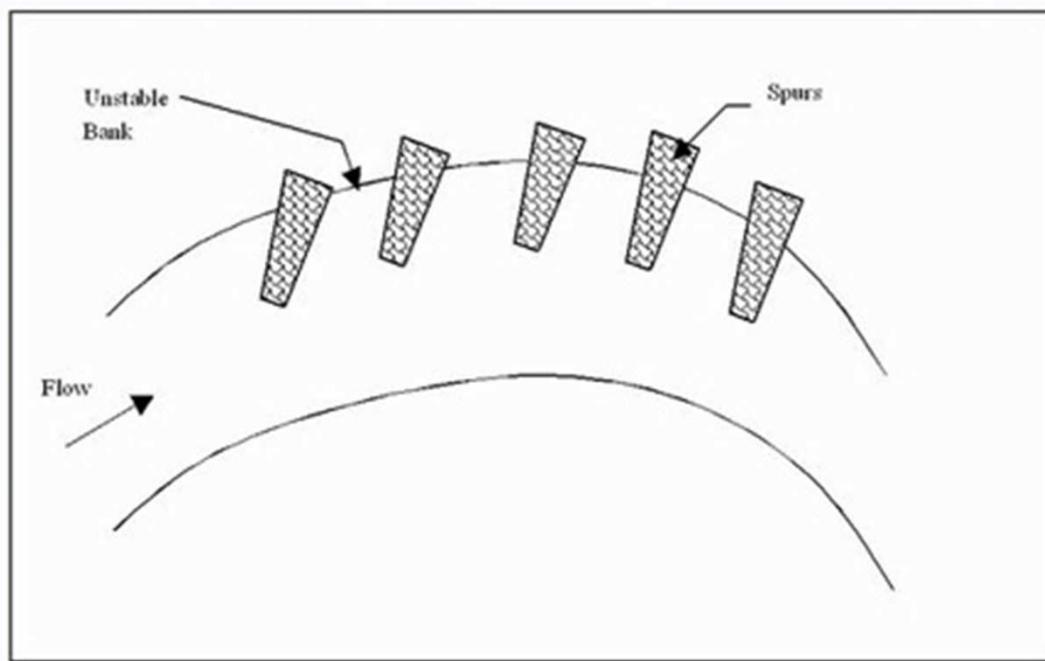
The Commission has entered into a second cooperative agreement with the US Army Corp of Engineers (Buffalo District) to complete the necessary background data collection, analysis, and draft concept designs for the river restoration project now intended to involve the entire length of 4,700 feet of the Ottawa River on main campus.

- Draft concept plans will be completed and presented a public workshop in February 2012 with planned construction and installation of in-stream features during August 2012.
- The following pages illustrate some of the possible proposed river restoration features to be added to the river.

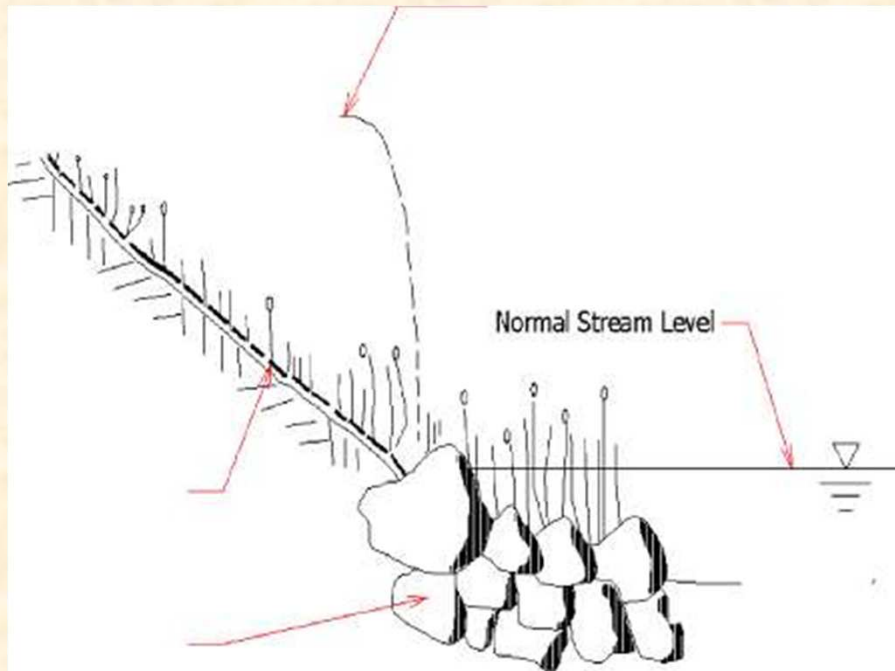
Hydraulic Cover Stones



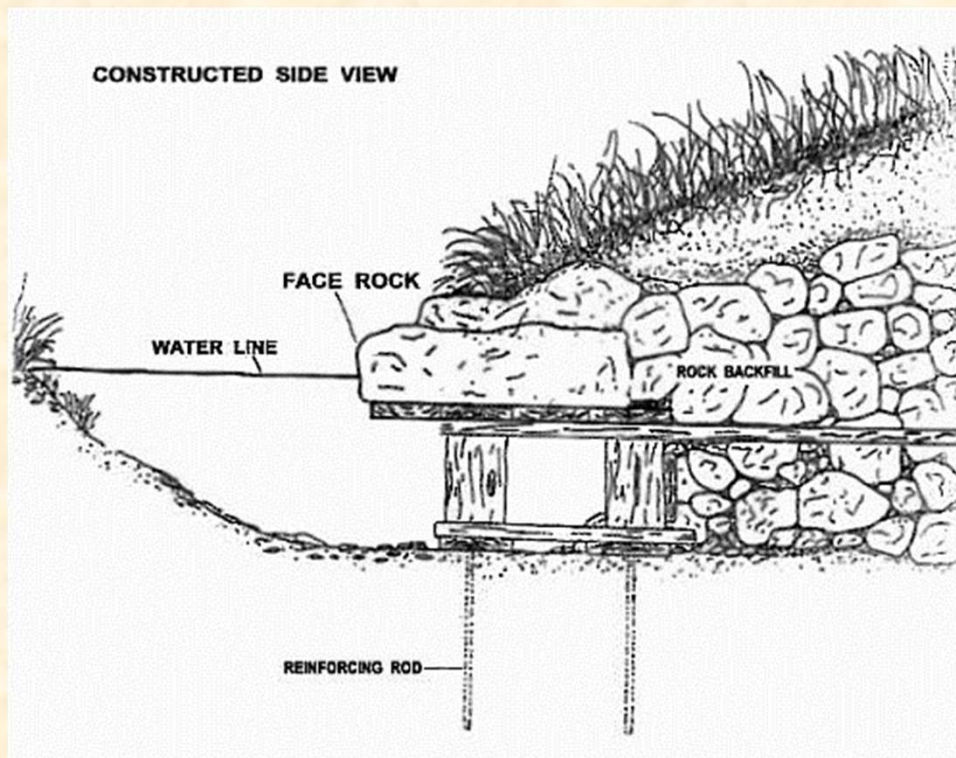
Bendway Weirs



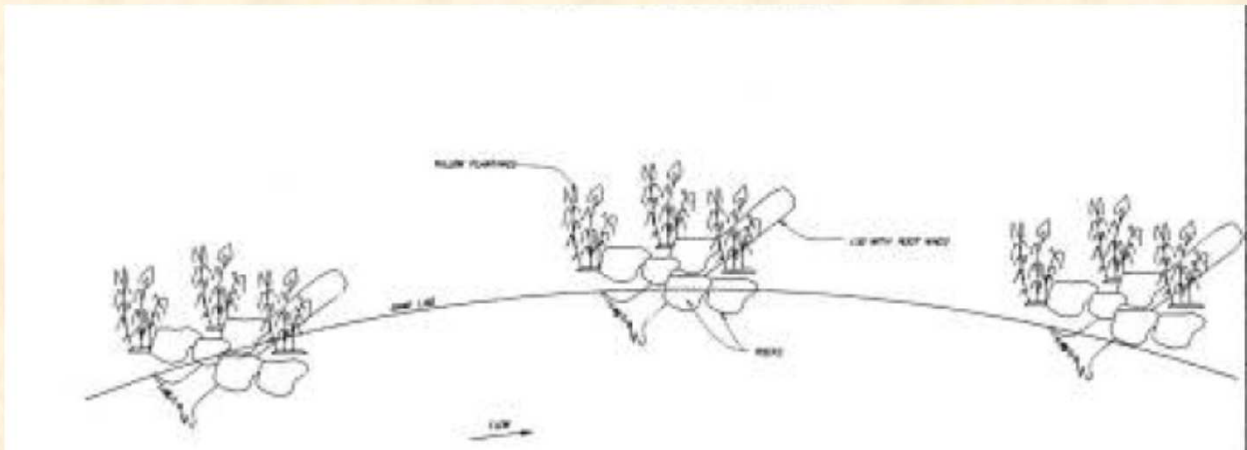
Longitudinal Stone Toe Protection



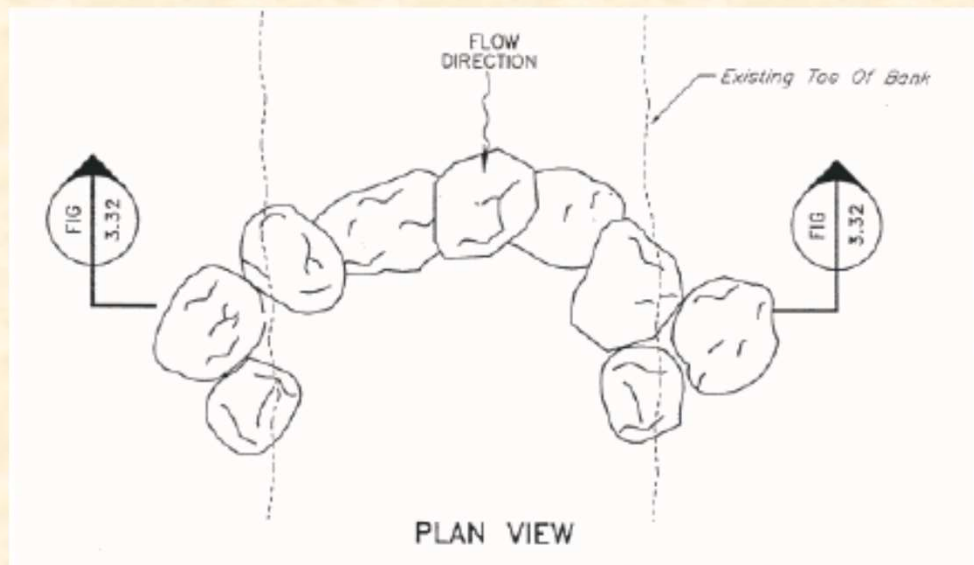
Lunker



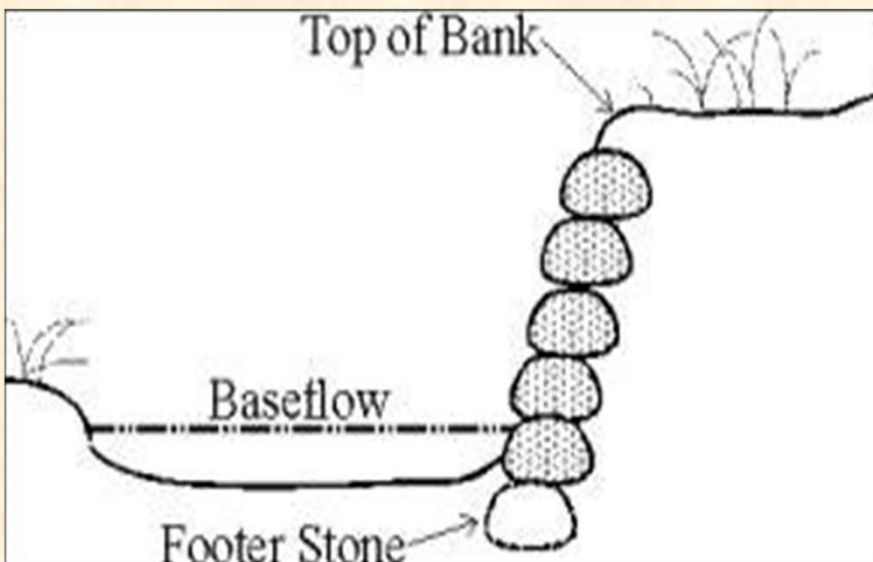
Locked Logs



Smiles and Frowns



Structural Transitioning Stones



Bank and River Test Plantings

In order to determine potential plants to be used to restore vegetation along the river edge and base of banks, a series of test plantings of various species were installed during the summer of 2011 at a river site adjacent to the David Root Bridge.

- Over ten species (live stakes and plants) were planted including Button Bush, Dogwood, Sycamore, Pin Oak, and Wild Rye.
- Sites will be monitored during 2012 to determine success rate and assist in recommendations for future plantings along the river on campus.
- Work was completed by Matt Horvat (TMACOG) and Tim Walters (EnviroScience) with funding support from the Ohio EPA 319 project grant.



Contact Advisory Posting Revised!

In March 2011, the Ohio Department of Health – under the advisement of the Ohio Environmental Protection Agency – announced that the “no contact” advisory for the Ottawa River within the City of Toledo was lifted from above River Mile 8.6, which includes UT.



- However, the “yellow” contact warning signs will remain as the fish consumption advisory remains in effect.
- Ohio EPA conducted sampling during the summer of 2011, including river sediments and the collection of fish tissue samples for further analysis of contaminants.
- Pending results of these studies, ODH and OEPA will consider complete removal of the contact advisory and the signs.



Design Concepts for a new Library Bridge



During the 2011 Spring term two teams of students from the Civil Engineering Senior Design class completed projects to prepare alternative design concepts for a replacement of the existing library bridge.

- The alternatives included a “traditional” style and a “modern” style with engineering designs and cost estimates provided.
- The Commission continues to advocate for the consideration of replacements for this bridge to improve site aesthetics and address long term maintenance concerns.
- Concept drawings of the two alternatives follow on the next pages of this report.

Design Concept#1 Classical (“traditional style”) Bridge

Classical Bridge

Overall with this final design the bridge increased in width by 10ft. With the increased width it creates 18 ft of walking space for pedestrians. The orientation of the bridge was not considered for this design but could be implemented as shown by the Signature Bridge.



	Polymer Concrete	Traditional Concrete
Bridge	\$ 432,700.00	\$ 400,700.00
Foundation	\$ 160,540.00	\$ 160,540.00
Total	\$ 593,240.00	\$ 561,240.00

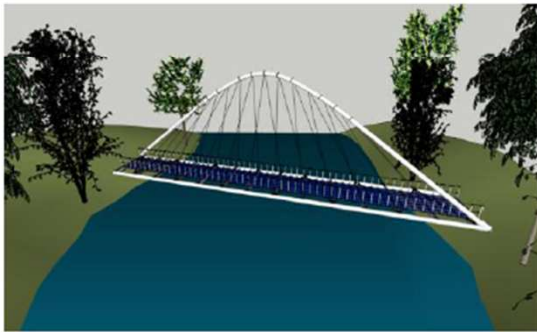
- Is intended to mimic the Gothic Architecture style and materials of the Centennial Mall buildings.
- Cost estimates given for two types of materials for the bridge surface.
- Wider walking surface to be ADA compatible.
- Bridge could also be re-orientated to align entering walkway coming in from south and directed more towards Carlson Library entry.

Design Concept#2

Signature (“modern style”) Bridge

Signature Bridge

The signature bridge was able to meet the determined constraints given by the client. The bridge does not restrict the flow of the river, it increases the width of the bridge to allow a greater traffic flow, and it was oriented 20° to allow for a more direct path into the Carlson Library. The price on this bridge does exceed the ideal budget, but with the proper fund raising and donors, it is very feasible to construct.



	Glass Deck	Concrete Deck
Steel Cost	\$450,000.00	\$450,000.00
Decking Cost	\$180,000.00	\$0.00
Foundation	\$160,540.00	\$160,540.00
Miscellaneous	\$25,000.00	\$25,000.00
Total	\$815,540.00	\$635,540.00

- Design is modeled after concept of the new I280 bridge in Toledo.
- Cost estimates given for two types of materials for the bridge surface.
- Wider walking surface to be ADA compatible.
- Bridge could also be re-orientated to align entering walkway coming in from south and directed more towards Carlson Library entry.

Stormwater Project



During the 2011 Fall term two teams of students from the Civil Engineering Senior Design class completed projects to study stormwater management issues of the Ottawa River on main campus and prepare alternative design concepts to address these issues.

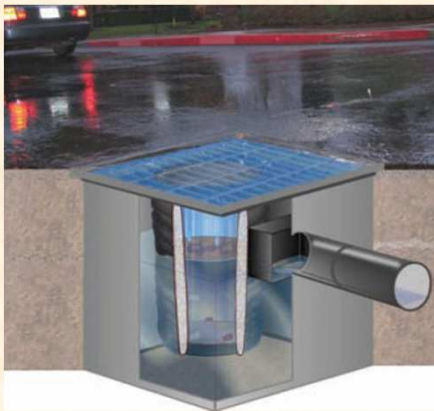
- The students identified the location of numerous stormwater outfalls along the river and conducted initial water sampling and dye testing at several selected sites.
- More detailed studies and concept plans to address stormwater were undertaken at two sites
- Initial concept designs and recommendations are presented in the next pages of this report
- Appreciation is extended to UT Facilities and UT Safety and Health for their assistance with this project

Ottawa River Stormwater West Project

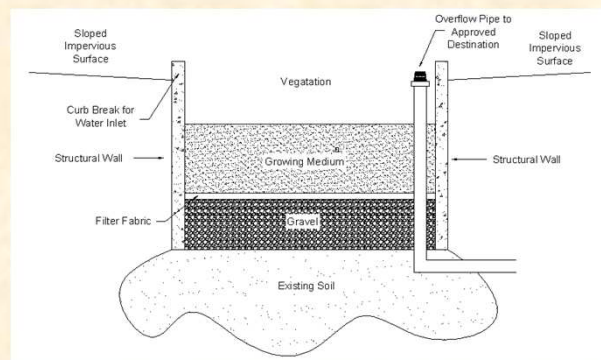
This team of students focused on stormwater issues along the river from the Carlson Library west to the Law School

- Focus was on the continuous discharge at an outfall located next to the CPA bridge and addressing runoff from adjacent building and parking lots
- Recommendations and proposed concept plans are illustrated below

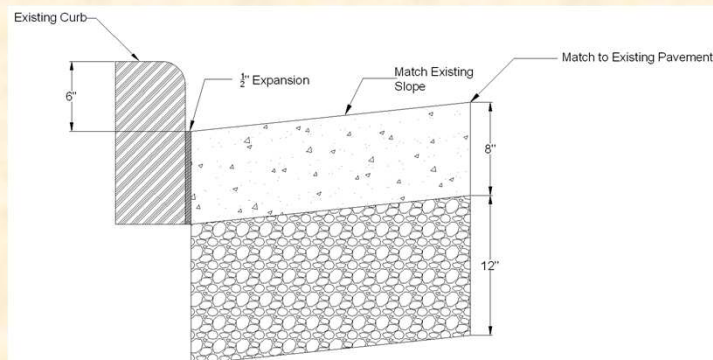
Catch Basin Filter



Infiltration Planter



Porous Concrete Gutter Lane



Parking Lot Infiltration Planter

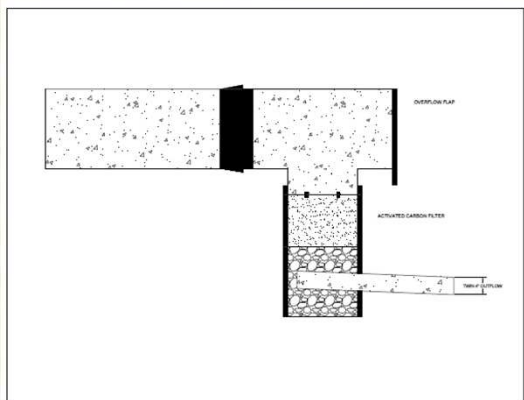


Ottawa River Stormwater East Project

The second team of students aimed to address concerns identified from the David Root traffic bridge east to the East Parking garage bridge

- Of interest in this area were three stormwater outfalls located along the north bank of the river in this area with the potential for contaminant and bacteria and with an aim to address discharge treatment options
- Sampling revealed high levels of conductivity and the presence of nutrients, coliform and chlorine (one location) – further monitoring and assessment is required; concepts presented include:

Activated Carbon Filter on Stormwater Outfall



Wetland Biofilter



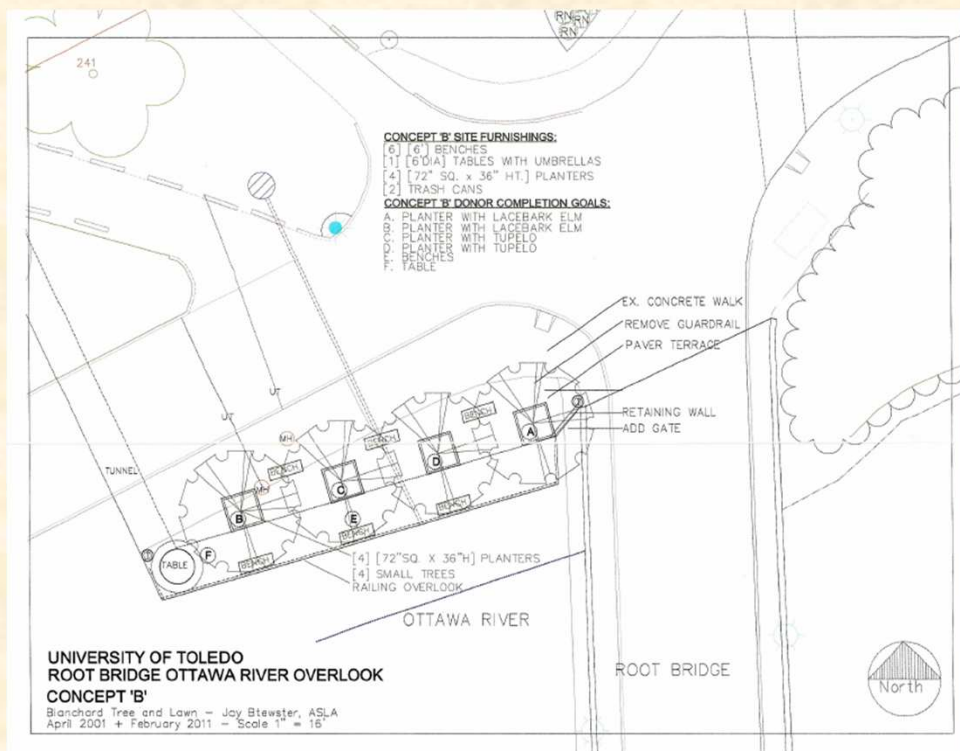
Permeable Pavement (Centennial Mall)



David Root Bridge Overlook Project

Planning and funding continues to complete this overlook site. Two new benches donated by the 50th reunion classes of alumni from 1959 and 1960 were added.

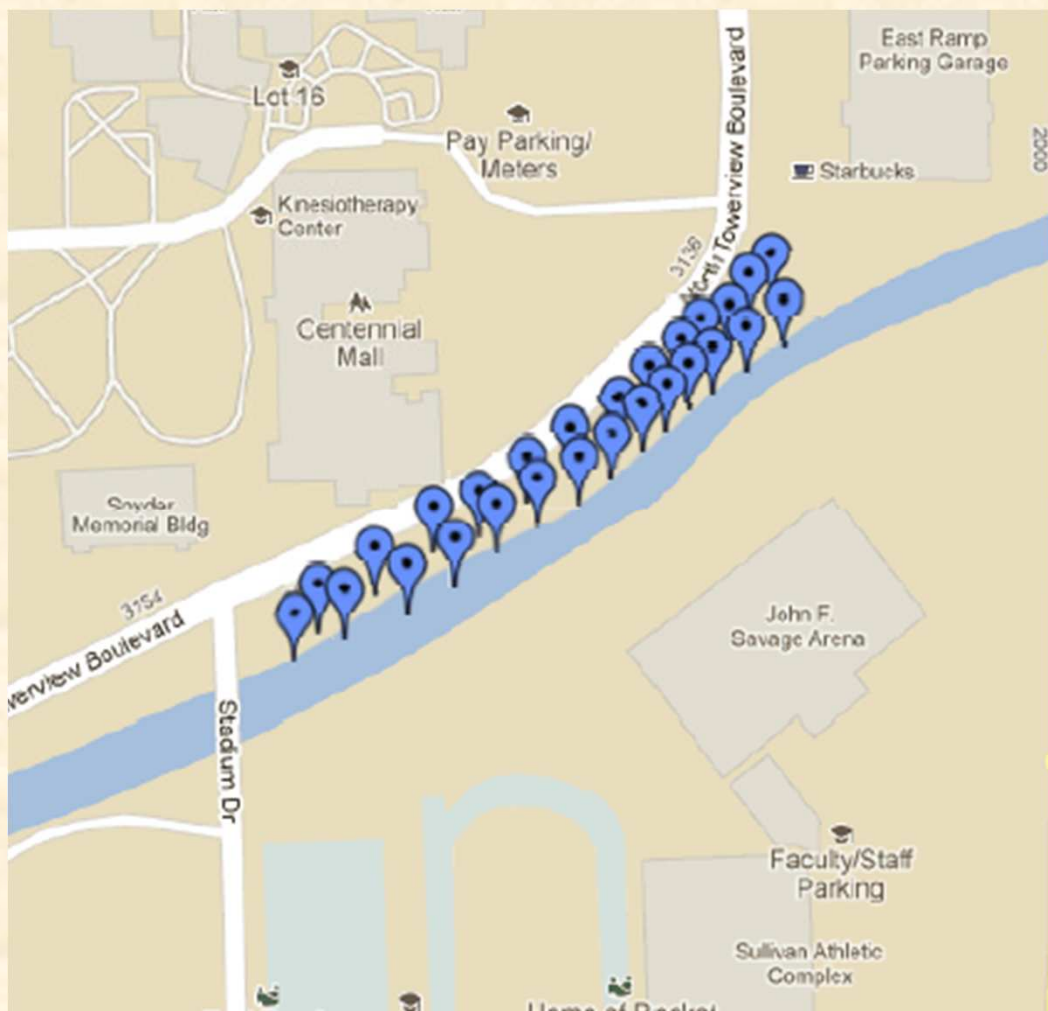
- In October 2011, the Commission with assistance of the UT Campus Environs and Beautification Committee and UT Grounds purchased and installed one planter and tree (Chinese Elm) at this site .
- Further design work is underway.



Riverbank Erosion Monitoring

In the fall of 2011 students from TECHS program installed a series of erosion pins along the banks of the river from the David Root Bridge to the East Parking Garage walking bridge

- The aim of this project is to monitor potential bank erosion during 2011 to 2012 in order to better inform the Commission as to the rate of erosion and potential actions to address

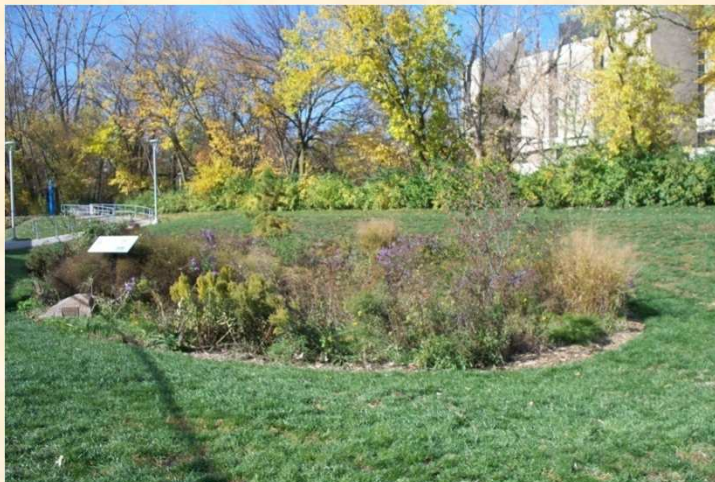


Celebrate Our River Week:

Sept 14th – 17th

Again this year the Commission hosted events and activities that focused on the Ottawa River and the work of the Commission.

- This year the week included:
 - A poster board display in the Carlson Library
 - Improvements to two Rain Garden sites
 - And UT involvement in the 15th Annual Clean Your Streams community event.
- Appreciation is given to the various members of the Commission and others from the UT Community for their assistance with these events.



15th Annual Clean Your Streams event September 17th

201 UT and community volunteers participated in the annual CYS event in 2011, working at five sites:

- Main Campus
 - Health Sciences Campus
 - Scott Park Campus
 - Village of Ottawa Hills
 - River east of main campus
-
- Over 100 large bags of trash weighing more than 1,500 pounds were collected and removed
 - Most common items included spark plugs (100s at one site!), plastic bags, food wrappers, plastic and glass bottles, cups and plates; peculiar items: foam sword, chemistry textbook, door knob, traffic barrel,
 - Appreciation is extended to the Office of the President for their continued support of this event as a community partner



Ottawa River Monitoring and Data Collection by Ohio EPA

During the summer of 2011 the Ohio EPA completed sampling for several environmental monitoring and assessment projects along the Ottawa River, with collections from numerous sites, including main campus

- Examples of data and samples collected included sediments, water, fish, and macroinvertebrates
- Subsequent analysis and reports to be completed will focus on water quality, presence of any contaminants, aquatic habitat conditions and fish populations (reports to be released in 2012 and 2013)
- The data analysis and monitoring will provide comprehensive assessments of the water quality and aquatic habitat necessary to direct future restoration efforts, to address non-point source pollutants, and determine the status of the current fish consumption advisory posted for the Ottawa River in the City of Toledo (including on UT main campus)



River reaches high water level

From November 29-30, 2011 (following 3 inches of rain in the preceding days) the water level of the Ottawa River on main campus reached a peak height of 13.24 – the 5th highest on record since 1978.

- Minor river flooding was observed along the north bank between CPA and the Carlson Library and the south bank in the area of the “flats”
- Parking lot 10 and adjacent roadways also experienced flooding as the storm water drains and pumps were insufficient to remove water from these areas
- The flooding in the parking lot and roads illustrate the ongoing challenges with storm water management and need to consider long term solutions



Financial Report (FY 2011)

- EC³ river restoration project funding 2011/2012)
 - OEPA 319 program grant = \$235,000
 - USFWS GLRI grant = \$114,132

- Stranahan Foundation grant for EC³ : Year 2
 - Carryover/Income (FY 2011)= \$31,555.27
 - Expenses (FY 2011) = \$31,506.51*
 - Balance (as of 06/30/2011) = \$48.76

- Friends of the River Fund (Fund Raising Account)
 - FY10 balance forward (cash)= \$5,757.70
 - Income (gifts) = \$2,760.02
 - Income (pledges) = \$3,400.00
 - TOTAL INCOME (cash) = \$8,517.72
 - Expenses (FY 2011) = \$6,284.95**
 - Balance (as of 06/30/2011) = \$5,632.77
 - Cash on Hand (06/30/2011) = \$2,232.77

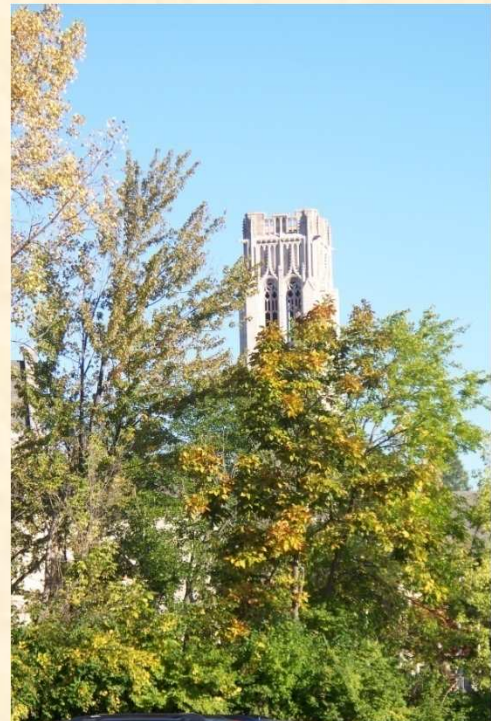
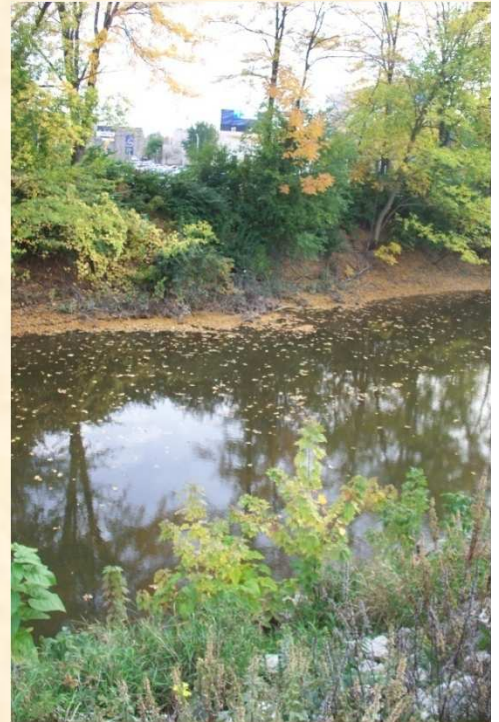
Unless noted all values refer to FY 2011: July 1, 2010 to June 30, 2011

* EC3 expenses include \$30,000 payment to ACOE for river restoration concept plans, phase I; plus supplies, workshops, and staff support

** Fund expenses included two new benches for David Root Bridge Overlook (donations from the 50th reunion alumni classes of 1959 and 1960) and replacement of a damaged sign in the student river plaza

Education & Media

- News articles on the work of the Commission appeared in the UT News and Independent Collegian
- Work of the Commission was highlighted in various University classes
- The Commission hosted a one day workshop on Ottawa River Habitat Restoration in March 2011
- Proposals for the River Restoration Project were the focus of a workshop in March 2011 and a display in the Carlson Library during Celebrate Our River week
- The activities and work of the Commission were presented at community meetings, including the Maumee RAP Summit



The Year Ahead: 2012

- Completion of the EC₃ River Restoration Project with the construction of the in-stream restoration elements in August 2012
- Concept designs prepared for potential storm water mitigation projects at two outfalls into the Ottawa River on the UT main campus
- Continued advocating for the removal of the remaining fish consumption advisory for the middle and upper reaches of the Ottawa River (including on main campus) leading to the removal of the advisory signs – pending supporting data from Ohio EPA and decision by local Health Department
- Ongoing interest and engagement with future green space planning for the area from the Field House to the river between Carlson Library and Wolf Hall (including the proposal ARS building)
- Promote opportunities to expand the Student River Plaza and secure funding support for its completion
- Further efforts at public awareness and education, especially targeting students and the UT community in regards to the importance of the Ottawa River to our campus

Commission Members (2011)

- Dr. Patrick Lawrence, UT (chair)
- Mike Cassidy, Community
- Doug Collins, UT
- Don Curtis, UT
- Dick Eastop, UT
- Kurt Erichsen, TMACOG
- Dr. Hans Gottgens, UT
- Dr. Steve LeBlanc, UT
- Chuck Lehnert, UT
- Dick Meyers, Toledo Design Center
- Dr. Carol Stepien, UT
- Arjun Sabharwal, UT Library
- Jay Brewster, Blanchard Tree and Lawn
- Katie Swartz, American Rivers



Acknowledgements

- The Commission would like to recognize the following individuals and groups for their assistance and in support of our projects and activities during 2011:
 - President's Office, University of Toledo
 - Chuck Lehnert, Vice President Administration
 - Vern Snyder, Vice President Institutional Advancement
 - Doug Collins, Manager, Parking and Grounds
 - UT Facilities & Construction; UT Grounds
 - UT Safety and Health
 - UT Foundation and Institutional Advancement
 - UT Department of Geography & Planning
 - UT Department of Environmental Sciences
 - UT Library
 - UT Honors College
 - Dr. Cyndee Gruden, Civil Engineering
 - Dr. Douglas Nims, Civil Engineering
 - Senior design class students, UT Civil Engineering program
 - Stranahan Foundation
 - Toledo Rain Garden Initiative
 - American Rivers
 - Dr. Jimmie Edwards
 - Todd Crail
 - UT Campus Environs & Beautification Committee
 - Blanchard Tree and Lawn
 - Ohio EPA
 - US Fish and Wildlife Service
 - US Army Corps of Engineers
 - TMACOG
 - EnviroScience
 - Partners for Clean Streams Inc. and Maumee RAP
 - Tim Bollin and students from the Toledo Public Schools TECHS program, UT Scott Park Campus
 - With funding support provided by:
 - Ohio EPA 319 grant program
 - US Fish & Wildlife Service
 - Stranahan Foundation
 - US Army Corps of Engineers
 - UT Foundation Friends of the River
 - UT Presidents Office

To learn more about the Commission and our activities:
www.utoledo.edu/commissions/river/

