



*Friends
of the
Platte River, Inc.*

Winter

2009/2010

A group that exists to serve as a forum to address issues affecting the Platte/Little Platte River watershed and to seek impartial solutions that restore, enhance, and protect this valuable resource

Next Board Meeting

Sat. March 20, 2010

9:00 am

Location to be announced

***Lower Platte River Sediment
Study Complete***

In fall 2008 UW-Madison graduate students—Benjamin Lee, Cory Anderson, Megan Corrado and Hoi Lai Tseung—taking a course in *Sediment Processes and Engineering in Natural Channels* under the direction of Professor John Hoopes undertook the problem of understanding the sedimentation in the Lower Platte River (LPR) and developing solutions to restore a stable channel in the lower Platte. This fall they completed their report with a historical account of the cause of excess sedimentation, an analysis of present sedimentation and flow rates and recommendations for establishing a stable channel in the lower Platte River. Important features of the LPR have been identified and used to propose a stable channel from the Hwy 61/35 Bridge to the Mississippi River:

- Instability in the Lower Platte River (LPR) was the result of a base level change introduced by Lock and Dam 11 in 1937;

- Low velocities in and excessive sediment supply to the LPR continue to cause sediment deposition and channel alteration principally downstream of the Banfield Bridge and probably upstream, though vertical accretion was not apparent in the field inspection;



Lower Platte River, looking upstream from BNSF Bridge at Junction with Mississippi River

- The channel width through the LPR appears relatively stable upstream of the Banfield Bridge and unstable downstream of the bridge, although the original LPR thalweg is evident downstream;
- The channel between the Banfield Bridge and the Hwy 61/35 Bridge cut itself off after the opening of Lock and Dam 11 to increase the bed

slope and transport the sediment supplied to it;

- The slope of the LPR is about 0.000306;
- The low flow channel width at the Hwy 61/35 Bridge was 110 ft and 210 ft at the Banfield Bridge;
- The measured flow rate on November 15, 2008 was similar to the value obtained by scaling the flow at the Rockville gauge to the LPR by the ratio of drainage areas;
- The 100-year flood discharge is approximately 36,500 cfs;
- Suspended sediment is the dominant mode of transport, and medium silt is the median grain size;
- A yearly sediment supply of 80,759 tons is expected at the Rockville flow gauge, and a yearly supply of 196,211 tons is predicted to the LPR by scaling of drainage areas;
- The dominant discharge is approximately 5,500 cfs;
- A bankfull depth and width of approximately 7 ft and 140 ft, respectively, are expected for a stable channel cross section.

These data will be used to explore methods of attaining a stable channel (through methods such as parallel embankment or porous sediment fence) Many thanks go to the students for all their hard work.

UWP Students work on Canoe Trail

Ben Heidemann (student ambassador for the Friends of the Platte River) and other students from the America Society of Civil Engineers (ASCE) on the UW-Platteville campus continue to assist with development of the Platte River Canoe Trail. Efforts this semester have been on designing improvements to a canoe launch site on the Platte River at Ellenboro. ASCE assistance resulted in the planning for the removal of a large log jam on the river. Due to their efforts and funding from partnership with

UW Extension, the log jam was removed this summer, which has opened the majority of the river from Ellenboro to the Mississippi River for canoe/kayak use.

Project RED and Japanese Hops

In August 2009 the Friends of the Platte River sponsored a Project RED (Riverine Early Detectors) training through River Alliance of Wisconsin. Participants learned to identify and catalog aquatic invasive species in the watershed. Through the training, Japanese Hops (*Humulus japonicus*) was discovered in many locations throughout the watershed.



Japanese Hops in bloom

Japanese Hops, native to Japan and eastern China, was introduced to the United States as an ornamental garden plant and is now found as an invasive species in many regions of the United States, including southern and western counties in Wisconsin. They reproduce by wind and water dispersed seeds. They form dense stands in floodplains and along stream banks and lakeshores but can also be found near roadsides and urban lots. Japanese Hops is a fast-growing, herbaceous annual vine. Its leaves are simple, opposite, and palmately divided into 5 lobes. Flowers are greenish and bloom in mid to late summer. Female plants contain oval seeds that remain viable in the soil for three years. Stems can be 8-35 feet in length

and are covered with rough hairs. The plant can form a dense, almost solid, stand that outcompetes native vegetation and can displace native riverbank and flood plain vegetation, leading to bank destabilization and increased sedimentation in the streams of the watershed. While the plant has been evidenced in the Platte River watershed for a number of years little has been done to prevent its spread. The Friends are currently pursuing funding avenues to address this infestation.

Welcome: Mark Sethne

Welcome to new board member Mark Sethne—a long time river advocate and member of the River Alliance of Wisconsin and Friends of the Lower Wisconsin.



Mark with Laura MacFarland at project RED training

Mark is employed by UW-Platteville with a Master of Science in geography. He is an avid canoeist. We welcome Mark!

Welcome: Becky Trewartha

Welcome to new staff member Becky Trewartha. Becky is a local student currently attending UW-Platteville and majoring in geography with an environmental science minor. She will help with planning, research

and fundraising programs. Her interests lie in researching Japanese Hops in the watershed and kayaking. Welcome Becky!

Wanted: Your Stories

Everyone who lives near or has enjoyed the waters of the Platte River watershed for its beauty and recreation has a story to tell. We would love to read your story or hear about your ideas and inspirations in a future issue of the Friends of the Platte River, Inc. newsletter. Please contact us if you have something you'd like to share.

Join

Your investment in the Friends of the Platte River, Inc. allows you the right to help determine actions for the group, receive newsletters, updates, and invitations to educational events.

Your membership supports the very important mission of the group and insures that we will be able to continue applying for and receiving funding to work toward continued improvements in the watershed.

Thank You!

Membership Form

Sign up for:

- Student _____ \$10.00
- Individual _____ \$20.00
- Family _____ \$35.00
- Municipality _____ \$50.00
- Organization/Business _____ \$50.00
- Add'l donation _____

Total _____

Name _____

Address _____

Phone _____

Email _____

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