



BWSR Snapshots

August 2012

Targeting riparian buffers through Clean Water and Outdoor Heritage Funds

By Jen Maleitzke, Communications Director

Like many landowners in Minnesota, David and Jeanette Stottrup (Litchfield) are contemplating what to do with their expiring Conservation Reserve Program (CRP) acres. The Stottrups have 162 acres currently enrolled in the program, all of which will expire in the next five years.

David Stottrup, a retired teacher, said the program has been great for his family—it allowed them to farm on a small scale while holding jobs in town.

“I grew up on a small low-tech farm in Pine County. The headwaters for Little Sand Creek began in the woods on our land at a spring, which came bubbling up out of the ground between three giant Norway Pines. Since then I’ve always had affection for little crick and ponds in the woods,” Stottrup said.



Jeanette and David Stottrup, Litchfield, Minn., recently enrolled 43 acres of their land into the RIM Riparian Buffer Easement program.

Located next to a wildlife management area, near multiple waterfowl production areas and public waterways, the Stottrups plan to enroll 43 acres of their expiring CRP land in the Reinvest in Minnesota (RIM) Riparian Buffer Easement program.

Stottrup says knowing that his land along Battle Creek will permanently remain a sanctuary for trees, native

grasses and wildlife long after he’s gone gives him great joy.

Over the last 25 years, the United States Department of Agriculture’s CRP has been the largest and most significant private lands conservation program in Minnesota history. An entire generation of Minnesotans have benefitted from improved water quality and enhanced wildlife habitat.

However, nearly 823,000 acres (60 percent) of Minnesota conservation lands enrolled in CRP will expire in the next five years – a land area equivalent to Anoka, Hennepin and Ramsey counties combined.

As an option for farmers to continue land conservation with expiring CRP acres, staff members at the Minnesota Board of Water and Soil Resources (BWSR) are working with local soil and water conservation districts (SWCDs) to offer the RIM Riparian Buffer Easement program.

Expiring CRP acreage	
Year	Acres
2012	292,429
2013	130,246
2014	207,841
2015	101,634
2016	90,803
Total	822,953

The only program funded through both Outdoor Heritage and Clean Water Funds (from the Clean Water, Land and Legacy Amendment), there is more than \$10 million is available for RIM Riparian Buffer Easements, beginning July 19.

“The RIM Riparian Buffer Easement program offers another option for landowners to target conservation practices and serves as an investment for the long term health of their farm,” said LeAnn Buck, Executive Director of the Minnesota Association of Soil and Water Conservation Districts. “By enrolling in the program, landowners are compensated to provide plant diversity and wildlife habitat and to keep valuable soil in place.” Both water quality and wildlife habitat enjoy benefits of riparian easements. Water quality is protected as buffers filter snowmelt and rainfall runoff, reducing soil erosion. Additionally, native vegetation captures sediment,

nutrients and pesticide residue, reducing nitrogen and phosphorus loading.

Wildlife species require food, water, and cover. Well managed riparian buffers generally support larger populations of wildlife because the buffer provides many habitat requirements.

Joe Duggan, a long-time conservationist and the vice president of Pheasants Forever, said, “We know that native grasses established in riparian buffer areas provide quality bird nesting habitat and also important winter survival cover for pheasants and other species when the snow arrives.”

BWSR’s five-year goal is to enroll 80,000 acres statewide of the most vulnerable riparian buffers and wetlands into permanent protection.

John Jaschke, BWSR Executive Director, said “Native plant buffer zones are imperative to protect wildlife habitat areas and to achieve clean water. This program offers the opportunity to get buffers on the ground in the many places where they are needed.”

Interested landowners should contact their local SWCD for more information about the program, or visit www.bwsr.state.mn.us.

Conservation progress reporting made easier By Jen Maleitzke, Communications Director

Dating back as early as 1986, the Board of Water & Soil Resources (BWSR) has required reports from local units of government that indicate progress made in protecting the state’s resources. Throughout the years, the method to complete this reporting has changed, first from paper reports (1986-1996), to floppy disk submission (1997-2002) and finally to the online eLINK database (2003-2012).

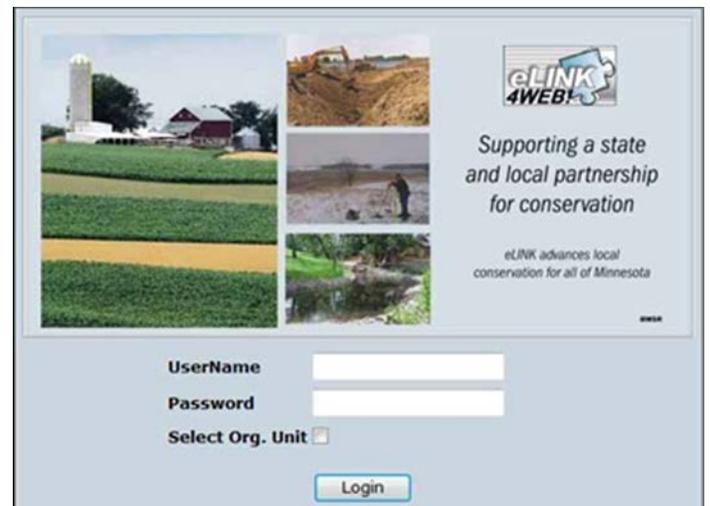
Based on feedback and assistance from local government partners, BWSR is now leading development of a new web-based system to track statewide conservation projects and activities, meant to improve efficiency, support partnerships, increase transparency for general public access and to provide for technology upgrades.

Melissa Lewis, BWSR project team lead, is working with contractor TetraTech to design the new database. According to Lewis, the new database will be much more user-friendly and allow for greater access to data by partners and members of the public.

“We want the new database to be easy to use and to provide the data that we know is in demand – data that shows results from implementation of conservation practices on the ground,” Lewis said. “We are working hard to listen to our stakeholders and other users of the current eLINK system to ensure we make the appropriate upgrades.”

With funding provided by the Clean Water Fund (from the Clean Water, Land and Legacy Amendment), the new system will integrate and streamline current grant processes such as applications, work plans, and reports; reducing data entry and bringing efficiencies to state and local governments. Improved speed and system response will provide data and results back more quickly to local government.

The new system will also provide public access to summarized grant and project information, and take advantage of the feature provided by the Legislative Coordinating Commission (LCC) Minnesota Legacy website which allows upload of data about legacy-funded projects.



The current eLINK system is an online database, accessible on BWSR’s website.

Finally, the new system will include technology upgrades for speed and data entry, be accessible from multiple browsers, use the latest mapping technology, and will incorporate features such as password resets and messaging; all while ensuring the latest appropriate security protocols are followed.

Lewis said the goal of the new system follows the spirit of reporting requirements of the past – to tell the story of conservation successes across Minnesota. The new eLINK is expected to debut in April 2013. For more information about this project, contact Melissa Lewis at 651-297-4735 or Melissa.K.Lewis@state.mn.us.

Reinvest in Minnesota (RIM) Shallow Lake Shoreland Protection: Wild Rice Lakes (Phase I & II)

By Dan Steward (Board Conservationist) and Seth Weeks (GIS Specialist)

The RIM Shallow Lake Shoreland effort to protect wild rice lakes began in 2012 when the Lessard-Sams Outdoor Heritage Council (L-SOHC) provided funding to wild rice lake shoreline landowners through permanent shoreland conservation easements and, where needed, fee-title acquisition.

“Phase I” of this project protected more than 1,230 acres of wild rice lake shoreland habitat on 17 important shallow wild rice lakes in eight north central counties

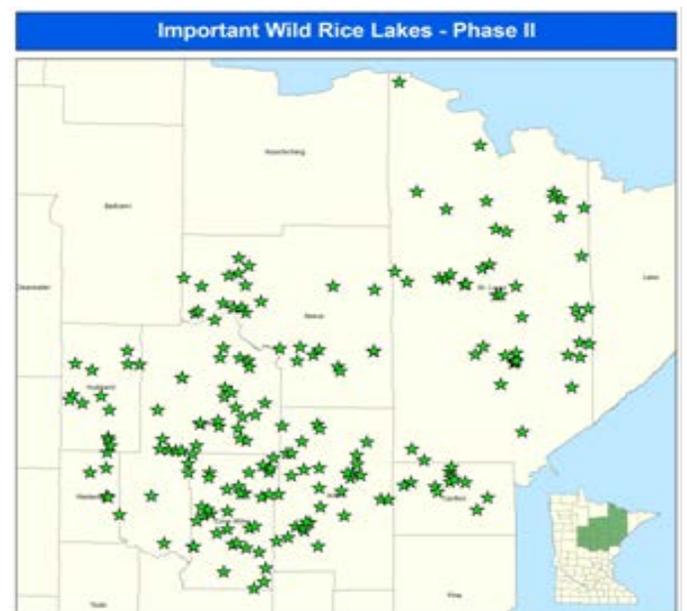
The L-SOHC has identified wild rice protection as a top priority for the Northern Forest Planning Section, and a Phase II proposal is currently being reviewed by the council. Partners include Ducks Unlimited, DNR’s Wildlife, SWCDs and private landowners. The goal is protection of existing habitat, and little (if any) restoration work is required.

Three Distinct Features

1. Permanent protection via Reinvest in Minnesota (RIM) easements acquired by BWSR.
2. Permanent protection via Ducks Unlimited easements for landowners interested in working with an NGO rather than working with a government agency.
3. Permanent protection via fee-title acquisition through the Minnesota DNR.

Phase I Outcomes

- Protection of 10 miles (1,200 acres+) of shoreland.
- Waterfowl disturbance kept to a minimum.
- Forestlands protected from development and fragmentation.
- Improved aquatic habitat indicators.
- Increased availability and improved condition of riparian forests and other habitat corridors.



Project Partners:



LCCMR LiDAR Module Training a Success **By Karen Bonde, Senior Engineering Technician**

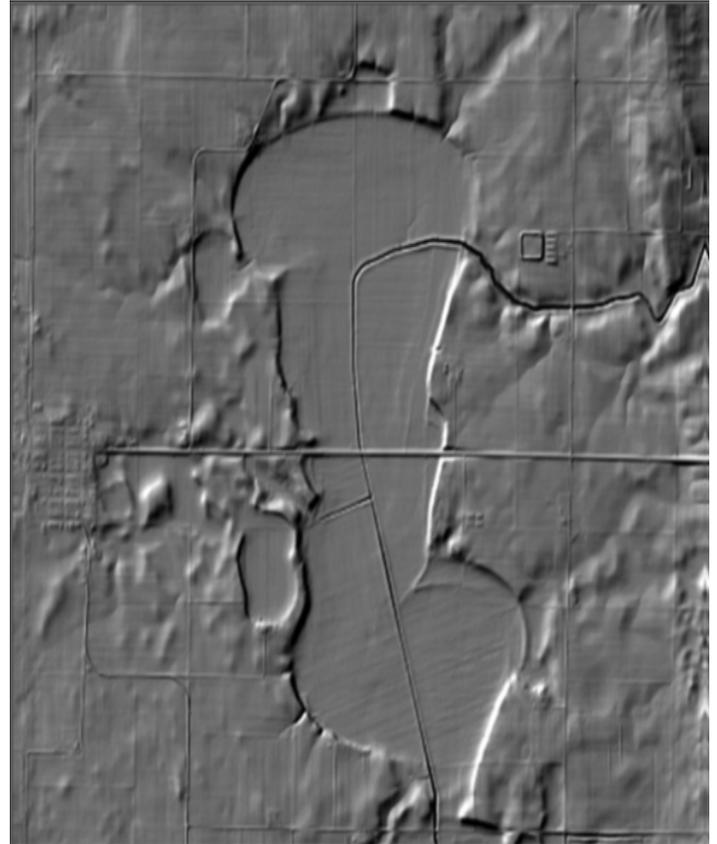
In 2010, the University of Minnesota submitted a proposal to the Legislative-Citizen Commission on Minnesota Resources (LCCMR) to provide training for GIS and CAD users in conservation and natural resource fields on the use of Light Detection and Ranging (LiDAR) digital elevation data for managing, planning and engineering proposes.

With the completion of high resolution LiDAR flights across Minnesota, the need to utilize and analyze this data correctly and efficiently was the foundation for the proposal. Over a two year period (2011-2013), the University of Minnesota Water Resources Center developed six different training modules using LiDAR data. These training modules included basic LiDAR data management, terrain analysis, engineering, hydrologic applications, wetland mapping, and forestry and ecological applications.

Workshop developers and instructors were from the University of Minnesota, MN Department of Natural Resources, MN Board of Water and Soil Resources, and USDA-Natural Resources Conservation Service. The training modules were completed in January 2012 and are being taught in several locations around Minnesota throughout this year. So far attendance has been well received and survey results from the training modules have remained positive.

On behalf of BWSR, I was asked to provide technical assistance in developing a training module for LiDAR data and its application to engineering. I, along with Lea Holter from NRCS, offered support to Ann Johnson, an instructor in the Civil Engineering Department at the University of Minnesota, who would administer the training. Our goal for this module was to provide AutoCAD users, specifically Civil 3D users, with the knowledge to use LiDAR data in survey, digital terrain creation, watershed analysis, preliminary planning and design.

To date, two full-day training sessions on the engineering module have been given, one at the University of Minnesota and one at Minnesota State University, Mankato. The class covered the different types of LiDAR data available and how to best utilize that data within Civil 3D. In addition, the class was shown a variety of web sites and ftp sites where the LiDAR data can be accessed. Attendees of this training module included many staff from our conservation partnership agencies such as DNR, NRCS, BWSR, SWCDs and SWCD TSAs.



Hillshade imagery was developed from LiDAR data for use in conservation applications.

Training workshops are scheduled to be completed at the end of 2012 with a transition to web based training in 2013. The MnGeo website will be the permanent home for downloading LiDAR data and will also provide online technical information. New natural resource applications of LiDAR data will continue to be developed within the agencies and guides to their use will be posted as they become available.
