

Heron Lake Watershed District Wins Environmental Initiative Award

The Environmental Initiative Awards annually honor innovative projects that have achieved extraordinary environmental results by harnessing the power of partnership. From large statewide efforts to small-scale locally based projects, many of Minnesota's most innovative environmental efforts have succeeded as a result of collaboration. Environmental Initiative established the Environmental Initiative Awards in 1994 to honor these partnerships, inspire other organizations to create similar projects, and encourage collaborative approaches to environmental problem solving.

Awards nominations were accepted for three weeks beginning in early February. The Heron Lake Watershed District (HLWD) submitted an application entitled *A Grassroots Effort to Bring Back the Fulda Lakes*. Finalists were chosen by a team of judges, all experts in their environmental fields, hailing from a diversity of backgrounds and sectors. The HLWD was notified that they were a finalist in early April.



The annual Environmental Initiative Awards Dinner was held at the Nicollet Island Pavilion on Thursday, May 24, 2012. Fifteen finalist projects, three in each of the five award categories, were honored. The Environmental Initiative presented five outstanding environmental projects with awards at the Environmental Initiative Awards dinner. The HLWD was the award winner in the *Natural Resources Protection and Restoration* category. There were over 340 people in attendance at the event.

Following is a summary of the information that was submitted to the Environmental Initiative in the award application: This grassroots endeavor started

on behalf of Fulda townspeople noticing the degradation of their two beautiful natural resources the First and Second Fulda Lakes, located within city limits. Their main interests were water quality improvements and getting the lakes back to a natural, unpolluted state.

Strong partnerships were formed throughout the years that the project developed. Partners include the HLWD, Department of Natural Resources (DNR), US Fish and Wildlife Service, Fulda Fish and Game Club, Murray County, Bondin Township, Heritage Society, City of Fulda, Minnesota Pollution Control Agency, and many watershed landowners. Because of these collaborative efforts, the grassroots ideas turned to reality. The HLWD was able to apply for funds based on the needs described by local landowners. Their participation was a key factor in project initiation.



HLWD staff attended Heritage Society, Fulda City Council, and Fulda Game and Fish Club meetings to provide information and get input for project direction. Newsletters were distributed and workshops were held regarding the importance of urban best management practices.

Landowners in the drainage area upstream of the lake system were involved in a project to improve JD #13. As a result of the improvement process, filter strips were installed along the entire system, open tile intakes were replaced with rock inlets, and a wetland restoration was completed at the outlet.



The DNR released a series of newspaper articles regarding the history of the Fulda Lakes', lake reclamation projects, and the proposed efforts to improve the lake system. A public meeting was held to discuss repair of the outlet dam and possible drawdown measures. Murray County did extensive work with lakeshore landowners to obtain unanimous support for the temporary drawdown. The DNR and Murray County implemented in-lake management that included replacing the fixed-crest dam with a variable-crest structure, manipulating water levels, fish eradication, and fish stocking.

HLWD staff provided first-hand information about the EPA 319 grant program requirements through direct mailing, one newsletter, a kickoff meeting, and reports to the general public and local officials. These efforts proved successful in that there were a total of 5,828.46 acres enrolled in conservation tillage practices. From 2008-2011 there was a 73 percent increase in the amount of acres enrolled into the program. Three shoreline restoration projects were completed. Projects ranged from a simple filter strip to a complex restoration that involved a complete bank stabilization using bioengineering practices. By completing several restorations, it was hoped that every landowner on the Fulda Lakes' would see first-hand some type of restoration that could be implemented on their property.



Water quality improved greatly as a result of the drawdown, fish kill and reclamation projects, and education. When the water quality monitoring data from 1997-2002 is compared to the 2010 data:

First Fulda Lake	Second Fulda Lake
Total suspended solids (TSS) decreased by 72 percent	TSS decreased by 72 percent
Turbidity decreased by 51 percent	Turbidity decreased by 73 percent
Chlorophyll A decreased by 62 percent	Chlorophyll A decreased by 70 percent
Ortho phosphorus (OP) decreased by 70 percent	OP decreased by 80 percent
Total phosphorus (TP) decreased by 45 percent	TP decreased by 56 percent

Fulda Lakes' have a maximum depth of seven feet. Since 2008, water clarity readings from both lakes have been documented to the bottom of the lake throughout the year.



Stormwater from the east side of the City of Fulda dumped directly into the lake. There was a considerable amount of shoreline eroding below the outlet structure. In the summer of 2011, the outlet structure was removed, the water was allowed to drop into a man-hole, and then outlet level across rip rap. After taking the force out of the water it travels across a zero-grade vegetated swale for treatment. Following treatment, water is allowed to enter the lake over an area protected by rock to prevent erosion.

In 2011, the HLWD applied and received funding for a phosphorus reduction initiative in the City of Fulda. With these funds, the HLWD hopes to instill a sense of personal responsibility for the two lakes by

engaging students from

St. Paul's Lutheran School, 4-H members from the Bondin-Belfast and Seward Trail Blazers Clubs, Master Gardeners, landscapers, and the general public in the awareness of effect of water pollution to the Fulda Lakes. This will be done through classroom presentations, hands-on installation of five rain gardens, and a tour of the rain gardens at the end of the grant period. Work began on this effort in early 2012.



Because of all the project partners working together, the Fulda Lakes' are seeing improvement. Partnerships are essential in utilizing the best resources available and maximizing the cost effectiveness of any project or education event. We are extremely thankful to all of our partners for helping to make the implementation, education, drawdown, and reclamation projects possible.