



## RED LAKE WATERSHED DISTRICT'S GRAND MARAIS CREEK FLOOD DAMAGE REDUCTION PROJECT (PROJECT 60) BRANDT AND EUCLID EAST IMPOUNDMENTS

### CLEAN WATER INITIATIVE DEMONSTRATION PROJECTS

In summer 2003, Governor Pawlenty announced his vision for a Clean Water Initiative. Part of the initiative was the selection of demonstration projects from four general areas that represent some of the state's most unique and important water challenges. One area, the Red River Valley, was selected because it faces challenges with flood damage reduction. Projects were selected using criteria based on value, measurable results within three years, local support, alignment of local and state priorities, transferability, and scale.

This project is one of two identified in the Red River Valley. The Grand Marais Creek Flood Reduction Project, which is located within the boundaries of the Red Lake Watershed District, builds off the flood damage efforts that are an outgrowth of a mediation agreement reached between the state and local governments in the Red River Valley. Selection of this project acknowledges that the Pawlenty administration has placed a priority on flood damage reduction efforts. The project won't involve the state forcing or directing new regulations or efforts on locals. Instead, the state will work in concert with local governments and private partners.

### PROJECT DESCRIPTION

The impoundments purpose are to independently provide a 20% reduction in 10-year peak flows in the Grand Marais Creek County Ditch 2 subwatershed; provide a 10-year level of summer flood protection in the Grand Marais Creek County Ditch 2 subwatershed in combination (Brandt and Euclid East Impoundment) with ditch improvements and natural resource enhancements. The project is also intended to reduce contributions to peak flows on the Red River as part of an overall Red River Basin effort to cumulatively reduce flood flows and flood stages along the Red River by implementing acceptable and feasible flood damage reduction measures, including impoundments.

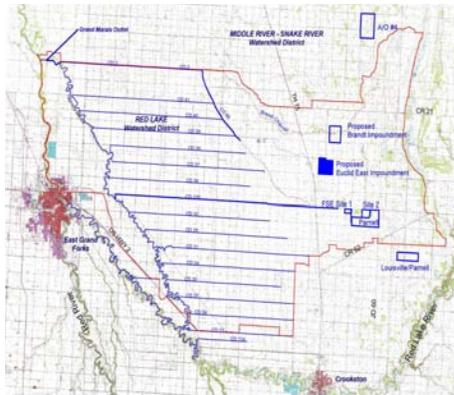


Figure 1 - Nearby Impoundments  
■ Grand Marais Sub-Watershed  
■ Proposed Project Location  
— Area Ditch Systems  
□ Other Local Storage Projects



Impoundment Outlet, With Erosion Control



Typical Borrow Operations with Backhoes Loading Off-Road Trucks

Figure 1 depicts several existing and proposed impoundments near the Brandt and Euclid East Impoundments, including Parnell, Louisville-Parnell, Angus-Oslo 4, and Flood Storage Easement Sites 1 and 2. These impoundments cumulatively provide 15,000 acre-feet of floodwater storage from

100 square miles within and adjacent to the Grand Marais Creek subwatershed. Given the proximity of these existing and proposed projects, it is estimated that the flood damage reduction value of all of these projects should cumulatively reduce the flow of the Red River of the North near the confluence with the Grand Marais Creek approximately 3%, for an event approaching a 5-year frequency (31,000 cfs) on the Red River. These projects all provide essential local flood damage reduction solutions that cumulatively provide mainstem benefits when coordinated on a basin level.

### PROJECT CONSTRUCTION - 2006

According to Dave Zavoral with RJ Zavoral and Sons from East Grand Forks, "This project was very exciting for us to work on. With the dry weather conditions and the amount of equipment we had on site, we were able to virtually watch the levee raise everyday. Whenever you have a site that is designed to retain water it always makes a contractor nervous, but we felt when we bid the project that if we had a good window of working days we could put enough equipment on site to finish the project. Our window of no appreciable rain lasted 2 ½ months. That allowed us to finish Euclid East ahead of schedule and start the Brandt project with enough time to get it 90% complete. The Red Lake Watershed District and HDR worked very close with our day to day operations, inspecting and discussing methods. They also shared information that allowed us to use our GPS dozer on both projects. This type of equipment produces extremely accurate ditches, slopes and levee heights. Running a GPS equipped piece of equipment is very productive for us because it eliminates errors and correction time, while delivering a beautiful product. These projects have been a success for us. It is not very often we can release 19 earth movers loose on one project. During these times we were moving 25,000 yards of dirt in a day on one project. In the spring, when these impoundments

are holding millions of gallons of water, we will be extremely proud of our work.”

The overall cost of both the Brandt and Euclid East Impoundments will be approximately \$5.7 million. These costs include administration, engineering, land acquisition, construction, and environmental mitigation.

**SUMMARY**

The Grand Marais Flood Damage Reduction Project is comprised of several components, including:

- Brandt Impoundment
- Euclid East Impoundment
- Grand Marais Outlet Restoration
- Upland Watershed Treatment
- Ditch Improvements
- Protection of the City of Euclid and other rural properties
- Improvement of water quality

Overall, this project is intended to cumulatively enhance the natural eco-system of this heavily altered environment. The cumulative impacts caused by the implementation of the entire project are expected to be a net gain in overall resource values. In fact, no net negative consequences have been suggested or identified by the Project Team or regulatory agencies. Secondary impacts resulting from the project are unknown and are expected to be negligible. The Brandt and Euclid East Impoundments are an integral part of the overall project. In addition, its independent utility of each impoundment is known and the specific impacts of the project are self-mitigating.

**MIDDLE-SNAKE-TAMARAC RIVERS WD**

The Middle-Snake-Tamarac Rivers WD reported on the Agassiz Valley Water Resource Management (Helgeland Site) project. The District Court’s Notice of Entry of Judgment with regard to the non-appealing landowners for the project has been received. With this action and the agreement with the last appealing landowner, the District has purchased all remaining lands required for the project.

The necessary requirements for permitting have begun with construction anticipated to begin early in 2007.

**RED LAKE WD**

The Red Lake WD reported on Ditch No. 11, Project No. 166. The final hearing for the petition to improve 6 ¼ miles of Polk County Ditch No. 40 was held on July 20, 2006 at the Northland Community College of East Grand Forks, MN. The District is presently awaiting the 30-day appeal period and has also advertised for bids on the project. Bids will be opened at the October 12, 2006 regularly scheduled board meeting.

The Board of Managers have approved the final plans and specifications for the construction of the new office building and have instructed the architect to proceed with advertising for bids. Bids for the new office building will also be opened at the October 12, 2006 regularly scheduled board meeting.

**WILD RICE WD**

The Wild Rice WD reported on the South Branch Storage project. The District has continued with its investigation of the off-channel alternative site selection by completing soil borings on site no. 3, which was deemed the most preferable alternative by landowners who have attended informational meetings. The report from Midwest Testing will be presented at the regular board meeting scheduled for October 11, 2006 and should assist the board in their selection of a preferred off-channel alignment. The preliminary survey of the tributary site vicinity (road, culverts, etc.) has been completed.

The geotechnical investigations of the upper tributary sites are currently taking place in order to determine the suitability for potential dike construction.

Informational packets for affected landowners have been mailed. Such mailings will be updated on an as needed basis.



**RRWMB MEETING HIGHLIGHTS**

At it’s regularly scheduled September meeting, the RRWMB:

- Received a report from Dan Thul, Red River Coordinator.
- Received an update on activities of the Red River Basin Commission from Dan Wilkens-Chairman.
- Received a report from Naomi Erickson, Administrator.
- Discussed the status of the Hay Creek project of the Roseau River WD with Rob Sando-Administrator.

CHANGE SERVICE REQUESTED

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c/o RRWMB

**NEWS & VIEWS**

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Your comments and contributions are always welcome. If you are receiving this newsletter and are not currently a member of a governing unit in the Red River Basin, please notify us and provide the name of the appropriate person to be added to our mailing list. News & Views, c/o RRWMB, P.O. Box 763, Detroit Lakes,

