

FINAL REPORT

Date of Report: June 29, 2001
Date of Workprogram Approval: June 23, 1999
LCMR Completion Date: June 30, 2001

LCMR Workprogram Update Report

I. PROJECT TITLE

U28 Chisago Lakes Outlet Channel Project

Project Manager: Mic Dahlberg
Affiliation: Chisago County Public Works Director
Mailing Address: Chisago County Public Works
313 N. Main St. Room 400
Center City, MN 55012-9663

Telephone Number: 651-213-0708
Fax Number: 651-213-0772

Total Biennial Project Budget:

LCMR	\$ 40,000	LCMR Match	\$ 50,000.00
LCMR Amount Spent	0	LCMR Match Amount Spent	\$ 30,405.99
LCMR Balance	\$ 40,000	LCMR Match Balance	\$ 19,594.01

A. Legal Citation: ML 1999, Chap. 231, Sec. 16, Subd. 8(f).

U28 Chisago Lakes Outlet Channel Project

\$40,000 is from the future resources fund to the commissioner of natural resources for an agreement with Chisago County to complete the final construction phase of the outlet channel at Chisago Lakes. This appropriation must be matched by at least \$50,000 of nonstate money.

B. Status of Match Requirement:

The Chisago Lakes Lake Improvement District has committed \$50,000 of cash and in kind services to the project during the period of 10/98 through 6/01. These costs include construction and administration costs to manage the project. The entire lake outlet system resulted in \$2M to design, permit, and construct. This money was paid by the local citizens and the MN Department of Natural Resources. Currently the Chisago Lakes Lake Improvement District has expended \$30,400 to redesign the channel for environmental improvements.

II. PROJECT SUMMARY AND RESULTS

The project will complete the final phase of the project known as the Chisago Lakes Emergency Outlet System. The first part of the Chisago Lakes Emergency Outlet System was constructing a series of outlets, which were completed in the mid 1980's. The construction projects were sponsored by the Chisago Lakes Lake Improvement District (LLID) and carried out by the Chisago County Public Works Department. The outlet system project received funding from the MN DNR and permits from the MN DNR and the Corps of Engineers (COE). The last phase of the project involved construction of a channel and installation of miscellaneous culverts from roughly Swamp Lake to the Ivywood Trail crossing. Under a separate permit, culverts were installed under Ivywood Trail for the purposes of discharging excess flow from the Chisago Chain of Lakes into the Carlos Avery Wildlife Management Area.

In 1991 the Chisago County Public Works Department received permits to construct the channel from both the MN DNR and the COE. However, due to environmental issues the channel was never constructed.

Completing the Chisago Chain of Lakes Outlet System will provide an adequate outlet for the lakes. Significant residential damages around the lake shores have occurred during high lake water levels in 1995 and again in 1996. Estimated damages for 1995 high water levels on the lakes exceed \$1.4M. This area was included in a Presidential Flood Disaster Declaration due to severe storms and flooding in June, 1996. This project will help to alleviate these flooding problems.

A meeting was held with the Corps of Engineers, DNR, BWSR, WCA LGU, County, and Carlos Avery WMA on May 4, 2001. The meeting was called to try and resolve permitting issues and get a decision from the Corps of Engineers. The Corps requested clarification on the Presidential Executive Order 13112 Invasive Species from the DNR. Once the Corps has the decision paper from the DNR it will make a decision on the permit request for the project. Therefore the status of the U28 project is that the permit has yet to be received and no construction has taken place.

III. PROGRESS SUMMARY

Work completed to date on the Chisago Chain of Lakes Outlet System includes the following:

- Project workplan completed
- Wetland delineation
- Survey of wetland delineation and easement boundaries
- Contour map of site completed with wetland delineation and easement boundaries included
- Wetland delineation report completed
- Meeting with the Corps of Engineers, DNR, and Carlos Avery Wildlife Management Area to discuss project

- Completion of Joint Notification to Corps of Engineers requesting permit to complete project
- Numerous clarification letters to Corps subsequent to submittal of Joint Notification and meetings with Corps, County, and LID to discuss project
- Investigation of potential wetland mitigation sites
- Request for clarification from the DNR on status of exotic species transfer

IV. OUTLINE OF PROJECT RESULTS

PHASE 1 – OUTLET CONSTRUCTION

- This portion of the project will be completed in 1999 under a Department of Natural Resources Flood Damage Mitigation Grant of \$30,000. The finances are as follows:
 LCMR Budget: \$0 DNR Match: \$30,000
 LCMR Balance: \$0 DNR Match Balance: \$30,000
 Completion Date: July 1999

PHASE 2 – CHANNEL CONSTRUCTION

- Result 1 – Restore Wetland Hydrology and Reduce Hardwood Forest Impacts – Excavation of the outlet channel will reduce bounce within the wetland area and stabilize non-storm water surface elevations. Careful grading of spoil will reduce impacts to the forested areas.

LCMR Budget:	\$33,867	LCMR Match:	\$11,674.99
LCMR Balance:	\$33,867	LCMR Match Balance:	\$11,325.01

Completion Date: Unknown

- Result 2 – Restore Wetland Areas – Reseeding with wetland seed mixes will restore the disturbed wetland areas.

LCMR Budget:	\$4,323	LCMR Match:	\$8,269
LCMR Balance:	\$4,323	LCMR Match Balance:	\$8,269

Completion Date: Unknown

- Result 3 – Operate Responsibly – Engineering documents and construction support will be provided. Permitting requirements will be addressed. Also an operation and maintenance plan for the overflow weir will be created to protect the wetland and forest areas.

LCMR Budget:	\$1,810	LCMR Match:	\$18,731
LCMR Balance:	\$1,810	LCMR Match Balance:	\$0

Completion Date: Unknown

V. DISSEMINATION

The engineering report, construction plans and specifications will be located in the Chisago County Department of Public Works office and at the project site.

VI. CONTEXT

- A. Significance: The project will complete the Chisago Lakes Emergency Outlet System. This project was begun after a period of lake flooding in the mid 1980's and was modified as a result of management outcomes associated with flooding in the mid 1990's. This project will alleviate flooding problems on the Chisago Chain of Lakes by providing an adequate outlet without unduly disturbing adjacent wetland and forested areas.
- B. Time: The project will begin after July 1, 1999 and was projected to be completed by June 30, 2001. Permits have yet to be received, thus project completion date is unknown.
- C. Budget Context:
 - 1. No previous LCMR budget history.
 - 2. DNR Flood Damage Mitigation Grant applied for and a grant of \$30,000 has been received for Phase 1 of this project.
 - 3. In-kind contributions and funding:
 - a. Chisago County Public Works Department: \$22,500 for design and construction administration.
 - b. Chisago LLID: \$57,500 for cash for construction costs.
- D. Budget: (LCMR funds)

PHASE 2 – CHANNEL CONSTRUCTION

Result 1 – Restore Wetland Hydrology and Reduce Hardwood Forest Impacts

Personnel:	\$0
Equipment Use:	\$0
Acquisition:	\$0
Development: Excavation and Grading	\$33,867
Other:	\$0
TOTAL:	\$33,867

Result 2 – Restore Wetland Areas

Personnel:	\$0
Equipment:	\$0
Acquisition: Seeding	\$393
Development: Grading and Restoration	\$3,930

Other:	<u>\$0</u>
TOTAL:	\$4,323

Result 3 – Operate Responsibly	
Personnel: Engineering Consultation	\$1,810
Equipment:	\$0
Acquisition:	\$0
Development:	\$0
Other:	<u>\$0</u>
TOTAL:	\$1,810

E. Budget Details

See Attachment A.

VII. COOPERATION

No LCMR project dollars have been received to date by the following personnel:

- A. Chisago County Public Works Department – labor and equipment:
 - 1. Mic Dahlberg, Public Works Director.
- B. Lake Improvement District – coordination of projects:
 - 1. John Nieber, chairperson.
- C. HDR Engineering, Inc., Minneapolis MN – Bob Beduhn for ongoing studies.
 - 1. Technical support
 - 2. Data reduction
 - 3. Data analysis
 - 4. Reporting

VIII. LOCATION

The Chisago Chain of Lakes are located within the southern third of Chisago County, Minnesota. The work will take place within section 35 of Lent Township, which is northwest of the Chain of Lakes.

IX. REPORTING REQUIREMENTS

Periodic workprogram progress reports will be submitted not later than December and May of each year. A final workprogram report and associated products will be submitted by June 30, 2001, or by the completion date as set in the appropriation.

y:\01proj\08385005.164\Lcmr\LCMRWplaUpdate6-30.doc

Attachment A

Budget Details (LCMR funds)

Budget Item	Result 1	Result 2	Result 3	Row Total
	Restore Wetland Hydrology and Reduce Hardwood Forest Impacts	Restore Wetland Areas	Operate Responsibly	
Capital Improvements				
- Construction Contractor				
- Excavation and Grading	\$33,867	\$3,930		\$37,797
- Seed Mix		\$393		\$393
Permitting				
- Engineering Consultation			\$1,810	\$1,810
Column Total	\$33,867	\$4,323	\$1,810	\$40,000