



# Board of County Commissioners Agenda Request

**4D**  
Agenda Item #

**Requested Meeting Date:** 10-12-21

**Title of Item:** Mississippi River Diversion Channel Repair Report

<input type="checkbox"/> REGULAR AGENDA	<b>Action Requested:</b>	<input type="checkbox"/> Direction Requested
<input type="checkbox"/> CONSENT AGENDA	<input type="checkbox"/> Approve/Deny Motion	<input type="checkbox"/> Discussion Item
<input checked="" type="checkbox"/> INFORMATION ONLY	<input type="checkbox"/> Adopt Resolution (attach draft)	<input type="checkbox"/> Hold Public Hearing*
<i>*provide copy of hearing notice that was published</i>		

<b>Submitted by:</b> John Welle	<b>Department:</b> Highway
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<b>Presenter (Name and Title):</b> NA - Information Only	<b>Estimated Time Needed:</b> NA
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**Summary of Issue:**  
Attached is a Mississippi River Diversion Channel Repair Report for work that was performed this past July, 2021 to repair deteriorated concrete on the inlet of the Mississippi River Diversion Channel.

With this work completed, I have been trying to schedule an inspection of the diversion channel with the Army Corps of Engineers so they can update their unsatisfactory condition rating of the channel.

**Alternatives, Options, Effects on Others/Comments:**

**Recommended Action/Motion:**  
Information Only

**Financial Impact:**

Is there a cost associated with this request?  Yes  No

What is the total cost, with tax and shipping? \$

Is this budgeted?  Yes  No *Please Explain:*

## Mississippi River Diversion Channel Inlet Grouted Riprap Repair

### Narrative of Work Completed:

On Monday, July 12, 2021, Aitkin County Highway Maintenance Workers and Jensen Concrete Pumping Services placed approximately 32 cubic yards of concrete utilizing a concrete pump, 2" hose, and sprayer nozzle. All areas of the original footprint of grouted riprap that were cracked or otherwise deteriorated were repaired as shown on the attached photographs. Prior to placement of the concrete, displaced rocks that had accumulated in the pool area upstream of the downstream grouted riprap weir were used to fill in void areas. All areas were pressure washed prior to concrete placement to maximize adhesion to the rocks. Concrete placed in the cracks adjacent to the sheet pile weir was manually struck off at the top of sheet pile elevation to maintain the existing invert elevation of the sheet pile weir.

The total cost of the repair was \$16,070.05 itemized as follows:

Concrete Pumping Services:	\$1,960.00
32 C.Y concrete:	\$5,289.60
Equipment Rental:	\$729.25
County Owned Equipment:	\$4,743.00
County Supplied Labor:	\$3,348.20

## Downstream Riprap Weir

Before:



After:

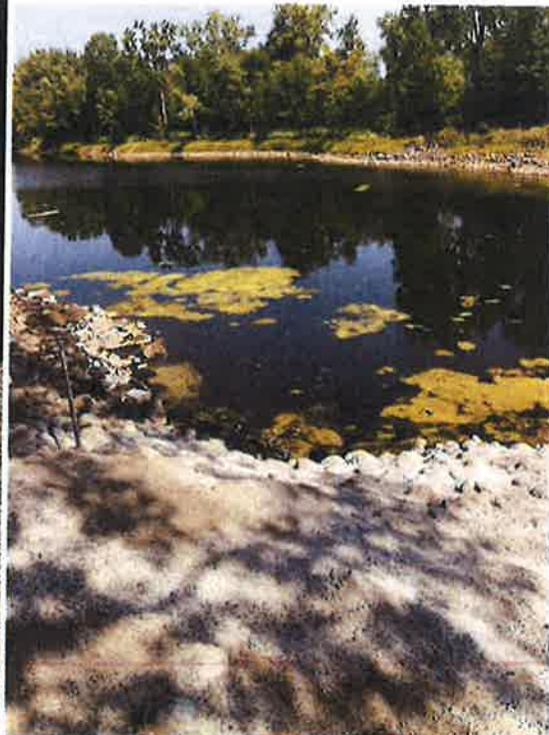


## Southwest Corner of Spillway

Before:



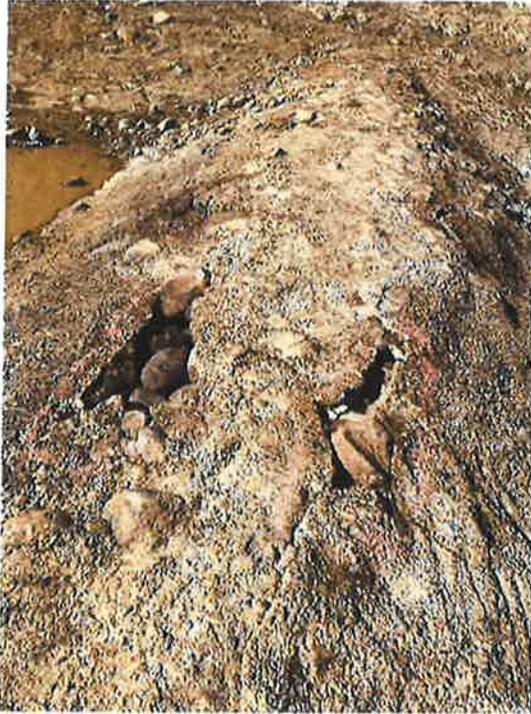
After:



### Downstream Riprap Weir Looking South

Before:

After:



### Downstream Riprap Weir Looking North

Before:

After:



## Northwest Corner of Spillway

Before:

After:



## North Slope of Spillway

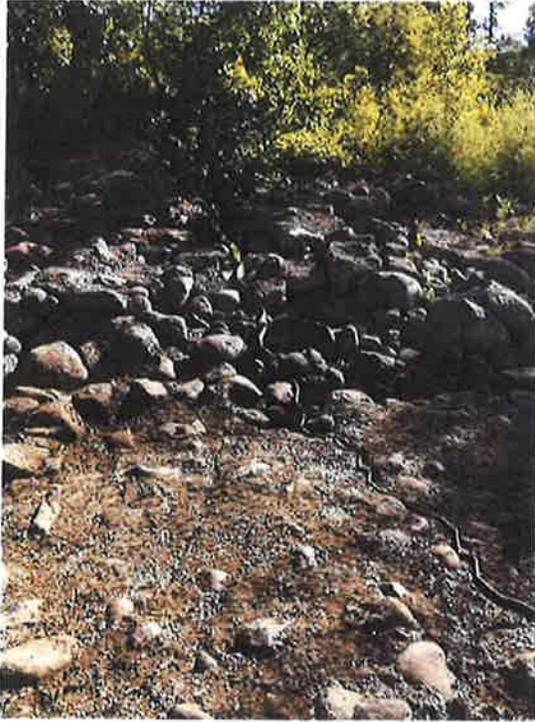
Before:

After:



### Northeast Corner of Spillway

Before:

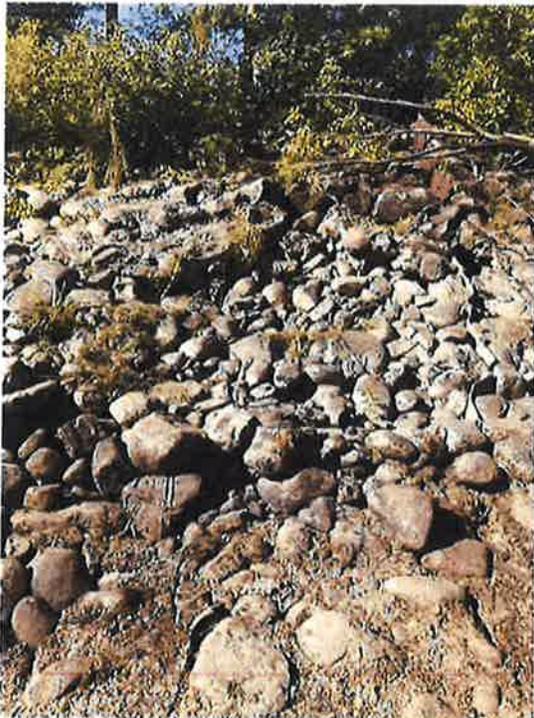


After:



### Southeast Corner of Spillway

Before:



After:



## Additional Photographs

View of East End of Spillway:



View of West End of Spillway:



North Slope of Spillway:



South Slope of Spillway:



## Additional Photographs

Sheet Pile Weir Looking North:



Sheet Pile Weir Looking South:



Upstream end of Spillway:



Flood Dike Restoration:

