



Project Update

April 13, 2023

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Sunrise River Hwy 61 Wetland Enhancement Project Diversion Wier 03-28-23



Introduction

- These slides are intended as an informational update of progress on the many projects underway throughout the District.
- Similar information will also be presented in this month's Administrator's report.
- If there are any questions regarding this update, please reach out directly to the Administrator and/or staff in advance of the board meeting.

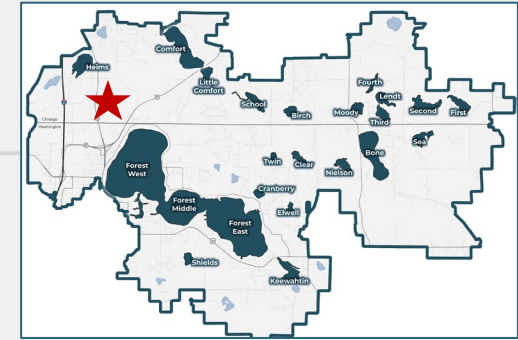


Mature Burr Oak (*Quercus macrocarpa*) near Bone Lake



Sunrise River HWY-61 Wetland Enhancement

Formerly known as the "Tax Forfeit Project"



**A Chisago County
Petition Project**

Project:

Wetland enhancement – hydrology restoration and treatment of ditch flow from the Heims Lake / Hwy 35 subwatershed area

Project Phase 4: Implementation

Benefit:

~89 lbs/yr phosphorus and 51,740 lbs/yr TSS load reductions at the Sunrise River

~65 lbs/yr and 18,600 lbs/yr TSS reductions at Comfort Lake

+ wildlife habitat and ecological benefits

Lifetime cost per pound phosphorus reduction:

\$618/lb.TP/yr

Status:

Construction began 01-30-23. The Winter phase of the project – excavation and weir construction – was completed on 3-09-23.

The northern ditch connection, revegetation, and full site restoration will be completed this spring.



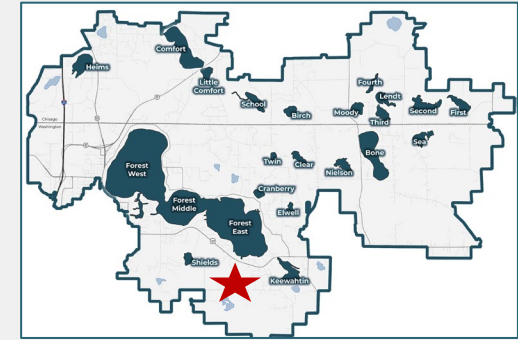
Excavated wetland filling with spring melt 03-28-23



Site Restoration mulching in progress, 03-28-23.



County Road-50 Iron Enhanced Sand Filter (CR50 IESF)



Project:

Iron Enhanced Sand Filter in the Washington Judicial Ditch 6 Subwatershed of Forest Lake

Project Phase 4:

Implementation

Benefit:

Est. 97 lbs/yr phosphorus load reduction

Lifetime cost per pound phosphorus reduction:

~\$514/lb.TP/yr

Status:

Fall implementation completed on Nov 17. Several valves were installed mid-February. Pump installation and electrical connections will occur this spring with the project coming online in May.



Completed Iron Sand Filter Basins



Ditch intake pool



Moody Lake Capstone Projects

Project:

several small wetland enhancements, legacy load removal, and agriculture best management practice (BMP)

Project Phase 3: Design

Benefit: 62lbs/yr phosphorus reduction

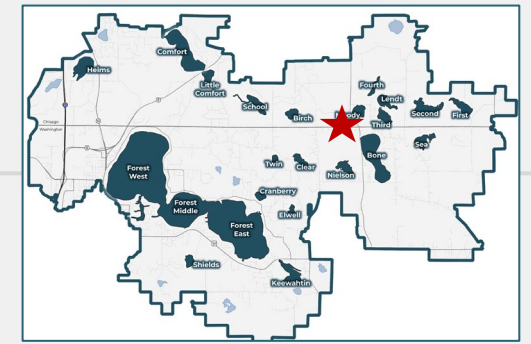
Lifetime cost per pound phosphorus reduction:

\$400/lbs.TP/yr

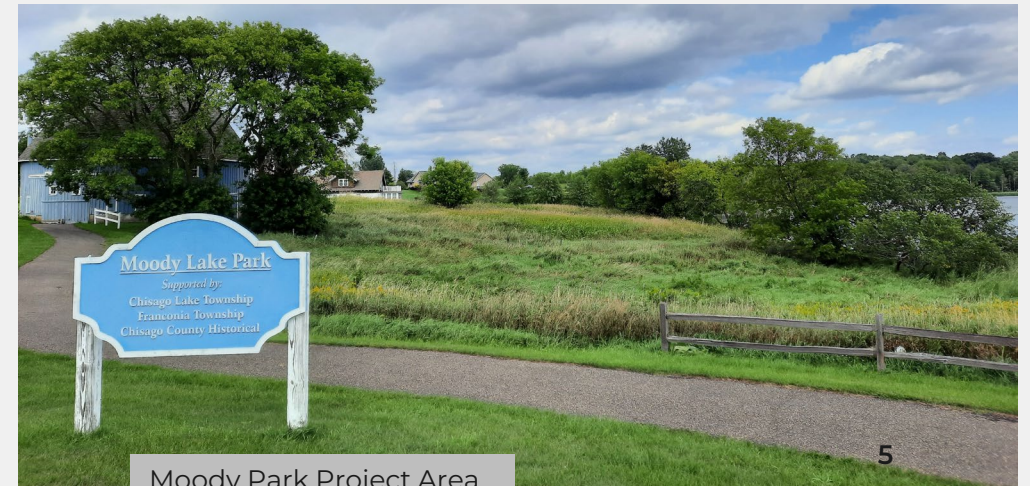
Status:

The project was ordered at the 03-09-23 board meeting and is now in the Design Phase (3).

Permission from Chisago Lake Township to implement projects at Moody Park and the Moody Round Barn has been acquired. Continued outreach with Landowners and mortgage companies on the other project properties.



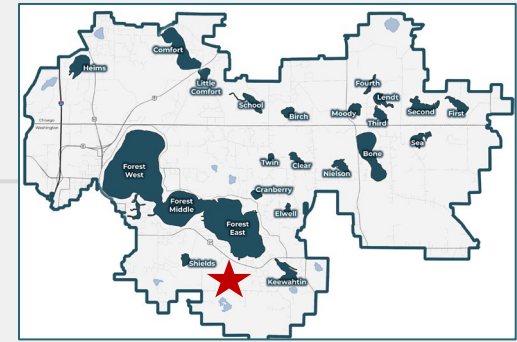
Legacy Load Removal Area



Moody Park Project Area



WJD6 Western Tributary Wetland Enhancement



Project:

Wetland enhancement / connectivity, hydrology restoration

Project Phase 2:

Feasibility

Benefit:

~20 lbs/yr phosphorus reduction

Lifetime cost per pound phosphorus reduction:

\$1,043

Status:

Continued landowner outreach. Coordination with mortgage company regarding project easement. The project was ordered at the 02-23-23 Board meeting.

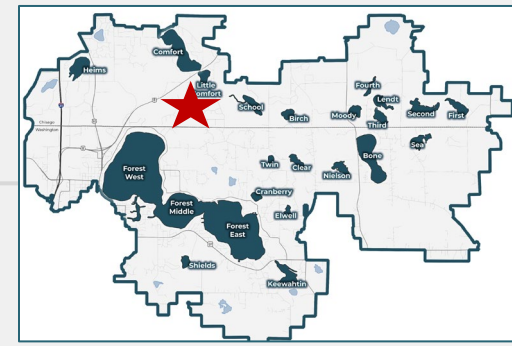


Project rendering



Little Comfort Lake Subwatershed Enhancement

“East Wetland Gravel Pit” Project



Project:

Wetland enhancement / infiltration basin

Project Phase 2:

Feasibility

Benefit:

+80 lbs/yr phosphorus reduction

Lifetime cost per pound phosphorus reduction:

TBD

Status:

Continued outreach with landowner regarding this parcel, the adjacent parcel, project access, and related project elements. ESA review completed Dec 2022. EOR working on preliminary design and the feasibility report. Discussion with the landowner on March 20th regarding property acquisition.



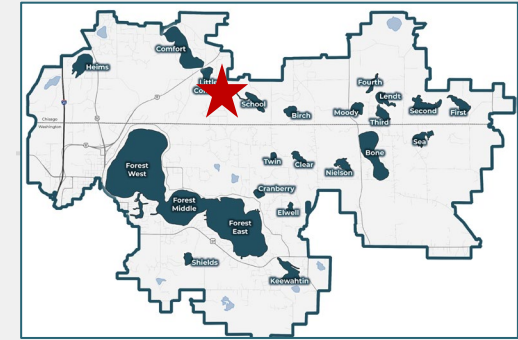
Images from the gravel pit





Little Comfort Lake Subwatershed Enhancement

“School/Little Comfort Channel” Project



Project:

Stream and Wetland enhancement – hydrology restoration

Project Phase 2:

Feasibility

Benefit:

~60 lbs/yr phosphorus reduction, nitrogen reductions, wildlife habitat and ecological benefits

Lifetime cost per pound phosphorus reduction:

\$TBD

Status:

Inter –Fluve assessment report received 9-28-22. No restoration actions identified. Additional investigation by EOR and Staff to occur this spring.



Inter-Fluve Survey



Drone Imagery