

JD2 AND MILLER BAY PROJECT TEAM & JD2 SEND PONDS

WORKSHOP MEETING NOTES

10/17/2023 | 3:00 to 5:30 pm

Sauk River Watershed District Office

Attendees

JD2 PT In person: Randy Neumann, Paul Hartmann, Ken Rutten, Janice Hauri, Susan Capitola, Drew Kessler, Bret Zimmerman, Bruce Magnus, Dave Zerr, Deja Anton, Joe Guyette

Virtual: Adam Hjelm, John Maille

Board Workshop in Person: Randy Neumann, Paul Hartmann, Ken Rutten, Janice Hauri, Susan Capitola, Drew Kessler, Bret Zimmerman, Bruce Magnus, Dave Zerr, Deja Anton, Joe Guyette, Bill Becker, Russel Miller, Eugene Mensen, Scott Klatt, Donovan McKigney

Crooked Lake Preliminary Project Concepts

- Steve and Brett provided an overview of the wetland enhancement projects in the Crooked Lake Basin on SRWD's easements.
- Changes to the designs include the addition of operable structures, possibly using stop logs, to maximize habitat benefits by holding a pool through migratory bird season, until approximately early June. A pool could also be held during fall migration, if precipitation allows.
- The initial concept was to construct a berm outside of the right road away, on SRWD's easement. We are now exploring using clay to buttress the road to prevent seepage and damage to the road bed. Bret and Steve have met with the County Engineer who approved this activity, with the condition the Road Authority retains their ability to maintain (mow) the right of way. A written agreement will be needed if this goes to plan.
 - This new concept will have a more natural aesthetic (blend into the landscape), increase potential for integration into larger scale restorations/enhancements, and increase habitat acreage.
- Steve will be meeting with Outdoor Heritage Council Staff to determine funding eligibility for work in a Road ROW. Statutory language suggests this activity is eligible under the LSOHF program.
- USDA-NRCS Staff from the Fergus Falls office have expressed interest in partnering to implement a larger enhancement spanning between their easement north of CR 73 and the SRWD's easement south of CR73 along Branch 6 of JD2.
 - This would double the size and effectiveness of the previously proposed concept on site 3 (branch 6 of JD2), the furthest east site.
- NRCS would additionally fund any work occurring within their easement, and thus would be responsible for funding the outlet structure, while the SRWD's Outdoor Heritage Funding would be used for activities within the right of way. The SRWD has

reached out to the landowner to coordinate a meeting. At this time, the SRWD have not heard back from landowner. SRWD plans to make a second attempt to contact them, approximately 2 weeks after the first attempt.

Update on Restoration/LSHOC Efforts

- The Phase 5 application to the LSOHC has been submitted and the Outdoor Heritage Council has made their preliminary recommended funding allocations, with the SRWD receiving just under \$1.2 million for Restoration and Enhancement (R&E) projects in the Osakis area, in addition to stream restoration proposal elsewhere in the Sauk River Watershed. This funding allocation will likely not support both of these projects. However, funding from previous appropriations (Phase 3 & 4) from the State of MN's Outdoor Heritage Fund is available until 2026-2027 for R&E projects above and beyond the engineer's estimates for the 3 currently planned wetland enhancements.

Update on JD2 Alternatives Analysis Funding

- The agreements with the USACE for the Planning Assistance to States grant are signed and in place and a "kick off meeting" was recently held. Lake modeling efforts have begun, with SRWD supplying monitoring records to use as inputs into the model.
- The SRWD has applied for the MPCA Small Communities Planning Grant for Stormwater, Wastewater, and Community Resilience. We will receive notice of award during the middle of November.
- The SRWD will also propose to the CWMP Implementation Team for additional Watershed Based Implementation Funds (WBIF) to be used as match if the MPCA grant is not awarded, or to support future PAS/Alternatives Analysis activities.
- USGS has been minimally active. The SRWD will have Houston Engineering Inc. draft an estimate to supplant the core sampling and bathymetric surveying originally scoped for the USGS. The group discussed how core sampling work must fit into the overall scope of the PAS/Alt. Analysis, and not be a stand-alone effort/study.

Osakis Lake Outlet Updates

- The Osakis Lake Association (OLA) shared a progress update on the modification/re-design of the low-head dam at the outlet of Lake Osakis. The OLA has contracted an engineering firm to conduct a feasibility study, which is expected to be complete by the spring of 2024.

Next Steps

- Next meeting is tentatively scheduled for August 21st, 2023 at 9:00am at the Sauk River Watershed District office.

Board Workshop- JD2 Sediment Ponds 4:30-5:30 pm

- Drew Kessler of Houston Engineering Inc. provided a general overview of sediment basins, explaining their primary purpose to trap runoff to allow soil particles to drop out, and secondary purposes including flow attenuation, runoff volume reduction, and pollutant loading reductions, and more. Additionally, HEI discussed situations including construction sites, ag fields, rivers/streams/ditches where they are commonly located, as well as a local example where a group of landowners petitioned a local government to perform a dredging project -- Locke Lake in New Brighton (Rice Creek Watershed).
- Galen Gruber, Ditch and Permit Manager of the SRWD, presented on the history and current status on the JD2 sediment ponds.
 - This presentation covered the history of water resource management actions in the Crooked Lake Watershed, with the Construction of Todd/Douglas County Jurisdictional Ditch 2 (JD2) in 1909, draining Crooked Lake.

1986	SRWD established
1989	SRWD begins monitoring “Curtis Creek” aka JD2
1989-1993	Diagnostic study of L. Osakis watershed. Identifies JD2 as major contributor of phosphorus loading
2001 06.05	SRWD adopts preliminary resolution directing engineer to prepare preliminary report to address feasibility and estimated costs of a sediment pond project.
2001 07.07	Preliminary Engineer’s Report – Widseth Smith Nolting Project feasible and would provide benefit Estimated construction cost: \$200,000
2001 07.12	SRWD adopts resolution officially establishing the “JD2 Sedimentation Pond Project” – Project number 2001-01
2002 06.10	Engineer Report and Design – Widseth Smith Nolting Estimated cost: \$267,030
2002 06.20	SRWD Board adopts resolution directing construction of the project. Determines benefit of project \$1,170,000 Benefitting properties determined: 1 st and 2 nd tier properties around L. Osakis and within the City of Osakis

- As-built, this project was designed/estimated to remove 859 tons of sediment annually = annual reduction of 3.5 tons of phosphorus, reduce average total P by 40% , reduce average chlorophyll-a concentrations by 49%, improve average water transparency by 1.8ft, and improve Carlson Trophic State Index from 59 (MPCA average value) to 49.
- The Group discussed challenges faced during construction with heavy precipitation, with nearly 10+ inches of rainfall in late June-early July of 2003, and what impacts were witnessed in Miller’s Bay of Lake Osakis.
- Galen of SRWD detailed this history of flooding events recorded in the Crooked Lake basin along JD2, with notable events in 1997, 2001, 2022, and 2023.
- The group discussed future management actions, and how wetland enhancements/storage projects will improve the current condition.
- Galen Present the monitoring and performance records kept by the SRWD.
- In 2021 and 2023, the SRWD surveys the sediment in the larger basin, in order to understand the sediment volume accumulation in relation to time.
- In total, the sediment ponds have prevented 19,706 cubic yards of sediment from entering Lake Osakis.
 - The group discussed how only a percentage of the water, variable with main channel flow rates, actually is treated by the sediment ponds.
 - Comments from the group expressing this particular project is not the “silver bullet” to problems in lake Osakis, stemming from the Crooked Lake Basin and JD2. Comments regarding how the remainder of the landscape around Lake Osakis contribute to problems.
- Galen presented on the 2009 maintenance/cleanout of the sed ponds.
- Recently completed survey indicates 8,000 cubic yards of sediment have accumulated since the 2019 cleanout. Per the Operation and Maintenance Plan, these basins are most effective when cleaned out at 25-30% of the total capacity. The survey results suggest the smaller primary basin should be clean out every 1-2 years, when 350 cu yds of material accumulate, and the larger secondary pond should be cleaned out approximately every 8 years, when 14,000 cubic yards accumulate.
- No maintenance actions are needed at this time.

