



642 Lincoln Road
Sauk Centre MN 56378
Phone: (320)-352-2231
Fax: (320)-352-6455
Web: www.srwdmn.org

JD2 AND MILLER BAY PROJECT TEAM MEETING NOTES

09/15/2025 | 9:00 to noon

SRWD Office 642 Lincoln Rd Sauk Centre Mn 56378

Attendees

In person: Steve Zeece III (SRWD Staff), Jon Roeschlein (SRWD Staff), Randy Neumann (Todd County Commissioner), Ken Rutten (Douglas SWCD Supervisor), Bruce Magnus (OLA President), Dave Meyer (OLA Guest), Niel Meierhofer (OLA Guest), Drew Kessler (Houston Engineering Consultant/Contractor), Dave Zerr (SRWD Board Manager), Abi Parker (SRWD Staff), Tim Greene (OLA Guest), Paul Hartmann (SRWD Board Manager).

Online: Susan Capitola (Landowner), Garret Munson (Moore Engineering), Adam Heathcote (St Croix Watershed Research Station Presenter), Jim Noren (USACE), Peter Allen (USACE), Emily Siira (MN DNR Hydrologist)

Sediment Coring Analysis Presentation- Adam Heathcote, Director of the Science Museum of MN's St Croix Watershed Research Station joined the meeting virtually to present on the results of the sediment core sampling that was completed on behalf of the Osakis Lake Association as part of the overall Alternatives Analysis study.

- Sediment cores up to 2 meters were gathered from Miller Bay, center of Osakis, Faille Outlet, and Faille Backwater.
- Analyzed for radio isotope lead-210, which has a half-life of 22 years for dating. Heathcote informed this is the best method for dating materials between 10-200 years old.

BOARD OF MANAGERS

Bill Becker, David Zerr,, Paul Hartmann, Kevin Lahr, Donovan McKigney, Scott Klatt, Michael Proell, Eugene Mensen, and Russel Miller

STAFF

Melissa Roelike, Jon Roeschlein, , Scott Wittkop, Kory Klebe, Steve Zeece III, Abigail Parker Allison Schugel

"Water Quality Is Our Concern"



Summary of Conclusions: Lake Osakis

- Central Osakis site has been slowly increasing in sedimentation since Euro-American settlement (pre-1900). After 1970 that sediment has been increasingly made of carbonates and organic material, indication more in-lake productivity (algae and aquatic plants)
- Miller Bay has been increasing more rapidly since 1900, and especially since ~1975. Sediment is increasingly inorganic, meaning it is derived from the watershed rather than in-lake sources. Carbonates and organics also increase, indicating some productivity, however correlation of carbonates with inorganics in Miller Bay could also point to chemical weathering from the watershed.

Summary of Conclusions: Faille Lake

- East arm of Faille Lake was completely dry in the late 1930s due to drought conditions across Minnesota, this led to a dense sediment layer of predominantly sand.
- Unable to date core from Faille Outlet, however we can interpolate from that event to recent times to estimate average accumulation rates. Faille Backwater site was also dry, but we were able to penetrate back far enough to date
- Faille backwater has highest sed. rate in study, but outlet rate also high and like Miller Bay.
- Both Faille sites receiving primarily sediments from the watershed, with some increasing in-lake production seen in the Faille Backwater core (algae and plants) after 1940

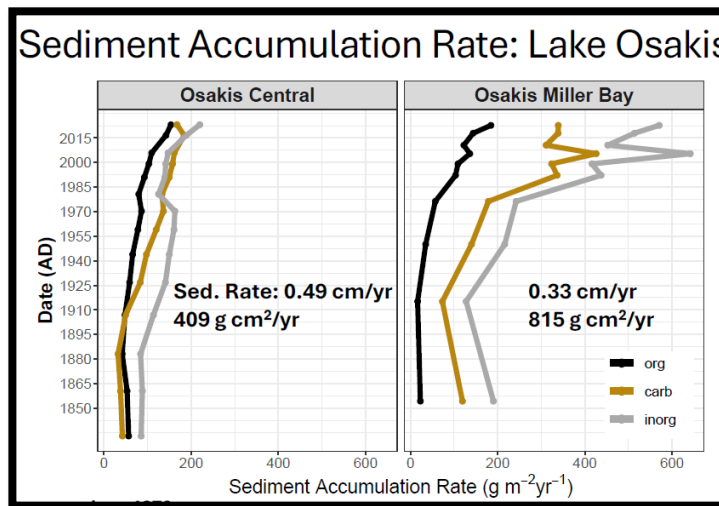
Q&A:

Project Team members inquired around the sedimentation spike (graph on next page) identified in the early 2000's and the relationship to the following events;

1. The establishment of JD2 in the ~1905.
2. The construction of SRWD's sediment ponds in ~2004.
3. The cleanout of JD2 out in the early 2000's.
4. The 4.5 rain event from the time period of the cleanout and sed. Pond construction
5. The heavy rain event in ~2018 during the repair/reconstruction of the SRWD Sed ponds

Roeschlein informed the SRWD via Moore Engineering’s Garret Munson will be conducting an efficacy analysis on the sed ponds and cautioned the information from this presentation is not suitable for determining the sed ponds degree of functionality.

Heathcote stated paleolimnological evidence shows the current status/condition of the lake, but does not provide any insight into hypothetical conditions (i.e., if the sed ponds were nonexistent).



The group additionally discussed:

1. The loss of acres of pencil reeds/ hardstem bullrush in Millers bay.
2. The potential for peat-soils around JD2 and the sed ponds to be contributing organic material into miller Bay
3. If the sed ponds would be installed or recommended based on today’s engineering practices/ standards.
4. The status of the next sed-pond cleanout- SRWD Engineer will conduct survey this winter to determine if sed ponds have met capacity and need to be cleaned. SRWD will additionally explore alternative cleanout methods- particularly hydraulic dredging. Roeschlein advised the decision will ultimately be based on total cost.
5. The pollution reduction effects of the Clean Water Act in the 1970’s which required raw sewage be treated prior to discharging into surface waters.
6. How poor water quality is often an effect of localized sources (i.e., city stormwater pollution likely does not reach the northeast section of the lake).

BOARD OF MANAGERS

Bill Becker, David Zerr,, Paul Hartmann, Kevin Lahr, Donovan McKigney, Scott Klatt, Michael Proell, Eugene Mensen, and Russel Miller

STAFF

Melissa Roelike, Jon Roeschlein, , Scott Wittkop, Kory Klebe, Steve Zeece III, Abigail Parker Allison Schugel

“Water Quality Is Our Concern”

7. A public wastewater collections system around the lake and plant improvements.

Heathcote is in the process of finalizing a report.

USACE Alternatives Analysis Updates

Jim Noren, USACE Staff reported the CE-QUAL-W2 model is calibrated to a fairly good degree.

Model is setup to simulate:

- Transport and fate of nutrients
- Algal growth
- Dissolved oxygen
- Water temperature
- Suspended sediment

Osakis Outlet Updates:

- Osakis Lake Association OLA have completed their feasibility study and will be applying for a MNDNR Conservation Partners Legacy (CPL) grant. This funding is derived from state sales tax, and is the same source used by the SRWD for the constructed rapids at the outlet of Little Birch Lake. This program has a 10% non-state local match requirement.
 - The goals of the project are mutual, where high waters would drain quicker and water would be better maintained during drought conditions. In other words, the proposed structure will assist with flattening the curve of rapidly fluctuating waterlevels.
- Dam ownership would be maintained by the Douglas & Todd Co Judicial Ditch 2 Drainage Authority.
- OLA met with the Area Hydrologist roughly 6 months ago. OLA is working to update engineering plans before meeting again with the Area Hydrologist to discuss permit-ability. Area hydro did not have any comments at this meeting regarding permit-ability of the project.

Open Discussion:

A realtor's perspective: What is the monetary value of Lake Osakis? If the value of properties around the lake is \$300 million, with an additional \$200 million in value from the public water, approximately 20-30% of the total cost is allocated for maintenance over a lifespan of 50 years. Based on this estimate, around \$150 million over 50 years (or \$3 million per year) would be needed to maintain the water quality in Lake Osakis.

Todd County Commissioner, Randy Neumann reported that JD2 Ditch inspector has resigned and they are advertising the open position.

Discussion about the SRWD's Outdoor Heritage funded projects- SRWD explored the possibilities to include easement lands adjacent to the SRWD's Crooked Lake easement in an effort increase scale and



642 Lincoln Road
Sauk Centre MN 56378
Phone: (320)-352-2231
Fax: (320)-352-6455
Web: www.srwdmn.org

benefits of the project. Issues were encountered related to previous habitat projects and proximity of the pool to buildings/structures.

Closeout and Next Meeting Dates:

The next meetings are scheduled for 10/20, 11/17, & 12/15.

BOARD OF MANAGERS

Bill Becker, David Zerr,, Paul Hartmann, Kevin Lahr, Donovan McKigney, Scott Klatt, Michael Proell, Eugene Mensen, and Russel Miller

STAFF

Melissa Roelike, Jon Roeschlein, , Scott Wittkop, Kory Klebe, Steve Zeece III, Abigail Parker Allison Schugel

“Water Quality Is Our Concern”

