

Devils Lake Outlet Management Advisory Committee Meeting Minutes

Tuesday, May 7, 2025: 1:00 P.M.

In Person/Virtual Meeting

Committee Members Present:

Reice Haase, Director, ND Dept. of Water Resources (DWR)

Jeff Frith, Devils Lake Basin Joint Water Resource Board

Lee Gessner, Ramsey County

Nicole Armstrong, Manitoba, Canada (*Virtual*)

Tammy Kuk, Benson County

Committee Members Absent:

Representative Dennis Johnson, ND House of Representatives

Senator Terry Wanzek, ND State Senate

Ben Varnson, Nelson County

Bruce Grubb, City of Fargo

Cindy Schwehr, Barnes County

Dick Johnson, City of Devils Lake

Gwen Crawford, City of Valley City

Joel Anderson, Towner County

Katrina Kessler, MN Representative

Kenneth Vein, City of Grand Forks

Lonna Jackson-Street, Spirit Lake Nation

Tim Meyer, City of Lisbon

Others Present:

Alexis Faber, Investigations Section Manager, DWR

Amanda Lee, Grand Forks Service Hydrologist, National Weather Service (NWS) (*Virtual*)

Ben Gehrig, Natural Resources Scientific Programmer, DWR

Elliot Brown, Manitoba, Canada (*Virtual*)

John Paczkowski, State Engineer, DWR (*Virtual*)

Kathy Frelich, ND House of Representatives, District 15 Devils Lake

Marty Haroldson, Water Quality Division Director, ND Dept. of Environmental Quality (DEQ)

Tate Libunao, Senior Limnologist, DEQ

Travis Thyberg, Project Support Assistant, DWR

Sindhuja S.Pillai-Grinolds, Water Development Division Director, DWR

Yaping Chi, Water Resources Engineer, DWR

Approximately 37 people attended the meeting both in person and virtual, including approximately 15 public attendees.

A PowerPoint titled “Devils Lake Outlets Management Advisory Committee update” was presented, which included legislative update, Devils Lake basin (Basin) overview, NWS situational update, 2024 water quality review, 2024 Devils Lake operational summary, Devils Lake outlets engineering service, and 2025 outlets operations outlook.

Introduction

DWR Director, Reice Haase, called the meeting to order at 1:01pm. Director Haase requested that all committee members present to introduce themselves. Director Haase proceeded to the opening statements, which was followed by legislative updates.

Legislative Update

Director Haase discussed Senate Bill 2308, stating the bill took a comprehensive look into the boards and committees with appointees. This bill eliminated 23 of the 154 active boards and committees, including DLOMAC. DWR remains committed to public engagement and will continue to host annual public meetings to solicit feedback and share updates with stakeholders.

Director Haase informed participants that there were some changes to the cash management strategy and budget for DWR and the State Water Commission. For the 2025-2027 biennium, \$615.2 million has been allocated for state water projects. These funds originate from the state’s oil and gas extraction tax revenue, out of which \$1 million was designated to the Devil’s Lake outlets capital assets. A discretionary fund allocation in the amount of \$10 million was also included in the DWR’s budget.

Representative Kathy Frelich added that House Concurrent Resolution 3018 was passed. Director Haase elaborated that it directs the legislature to study inundated lands, specifically the taxation of inundated lands, including those related to Devils Lake.

Basin Overview

Director Haase provided a brief overview of the Basin. The record elevation of Devils Lake is 1454.3 feet, which was reached in 2011, while the current elevation is 1449.7 feet. Higher elevations persisted during wet cycles. The DWR operates two Devils Lake outlets to help reduce the water level in Devils Lake. The West End Outlet (West Outlet) was completed in 2005 with a discharge capacity of 100 cubic feet per second (cfs), which was increased to 250 cfs in 2010 following an expansion project. The East End Outlet (East Outlet) was constructed in 2012 with a discharge capacity of 350 cfs in response to the continued rise in lake levels, to provide additional relief and help mitigate the flood risk.

NWS Situational Update

Amanda Lee, Grand Forks Service Hydrologist for the NWS, presented an update on climatological and weather forecast.

In the fall (September through November) of 2024, the Basin experienced above normal temperature (3-4 degrees higher) and mostly below average precipitation, followed by a

wetter than normal November. However, overall conditions still averaged dryer than normal. Winter (December 2024 through February 2025) precipitation was below normal across much of the state, including most of the Basin. Temperatures were near normal on the east side of the state but below normal overall. Spring (March through May) 2025 temperatures were above normal, with precipitation varying between below and above normal across the state.

The drought monitor for May 2025 showed that drought free conditions prevailed in the Basin. Forecasts projected very limited to no precipitation throughout the Basin in the near future and the forecast for summer indicated hot and dry conditions for much of the summer.

The NWS presentation showed that the lake level remained almost the same when comparing November 2023 and November 2024. As of May 6, 2025, the lake level increased slightly due to the recent precipitation.

The monthly exceedance outlooks developed by NWS were based on Devils Lake Outlets operations at a daily average of 350 cfs from May 15, 2025, through October 30, 2025. Ms. Lee noted that future exceedance probability estimates can be adjusted based on the anticipated pumping operations, the committee recommendations, actual precipitation, and other operational factors. The latest exceedance probability outlook, issued in April 2025, estimated a 50% chance that the Devils Lake elevation would not exceed 1450.0 feet.

2024 Water Quality Review

Tate Libunao, Senior Limnologist for DEQ, presented information about the history of Devils Lake water quality and an overview of water quality conditions during the 2024 outlet operating season. Water quality was monitored at 20 sampling sites, spanning from Devils Lake to downstream in the Sheyenne River and Red River. At these monitoring locations, there are water quality objectives that are guided by the state's water quality standards. Mr. Libunao also explained that the differing sulfate level requirements along the Sheyenne and Red Rivers are mainly due to the differing water use within those reaches and associated requirements to meet Environmental Protection Agency standards. He illustrated the sulfate concentration non-exceedance thresholds vary by stream classification. The following thresholds for the different classes of stream were noted. 750 milligrams per liter (mg/L) in the upper Sheyenne River (Class III), 450 mg/L in the lower Sheyenne River downstream of Baldhill Dam (Class II), and 250 mg/L as it reaches the Red River (Class I).

Mr. Libunao explained that DEQ's watershed management program includes routine, year-round ambient monitoring of Devils Lake, including in-lake sampling through the ice. Parameters such as sulfate, total dissolved solids (TDS), dissolved oxygen, and temperature are regularly measured. DEQ has sulfate data at Cooperstown and Lake Ashtabula dating back to 1995, providing long-term context.

Mr. Libunao noted that sulfate concentrations have generally followed a spatial trend where they gradually increase from the West Outlet to the East Outlet. Water quality analysis showed a decrease in sulfate level across Devils Lake since 1995, due in part to dilution from rising lake levels and the operation of the outlets. The analysis suggests the outlet operations have helped maintain lower sulfate concentrations in Devils Lake, despite expected increases from nonpoint sources during wet years as the lake rose and collected more runoff from the surrounding basin.

It was noted that the sulfate concentrations at Cooperstown, located along the upper Sheyenne River, in 2024 did not exceed 750 mg/l; however, some samples in the lower Sheyenne River exceeded 450 mg/l. While the Red River samples exceeded the 250 mg/L standard at times, Mr. Libunao noted that correlating those exceedances directly to Devils Lake outlets operations would require more detailed study due to other non-point sources and contributing watershed factors. It was also noted that this would be an intensive and expensive undertaking by DEQ, but there are studies pending that could address some of these concerns related to non-point source inputs.

2024 Operational Summary

Yaping Chi, Devils Lake Engineer from DWR, presented the 2024 Devils Lake operational summary. Ms. Chi presented the water balance information using annual averages for Devils Lake, which covers the period since 2010. In 2024, the lake received slightly more total input (precipitation and inflows into the lake) than output (evaporation and outlets discharge), so the lake level rose slightly in 2024. Ms. Chi noted that, overall, for the past 15 years there has been slightly more output than input, resulting in a decline of the lake level since 2011. The lake was at 1449.7 feet on May 6, 2025, which is down approximately 5 feet since its peak in 2011.

During the 2024 outlets operation season, a total of 113,000 acre-feet of water was discharged from Devils Lake, contributing to a cumulative discharge volume of over 1.5 million acre-feet since 2007. Ms. Chi clarified that there was a test run in 2005 when the West Outlet construction was completed, but 2007 was when outlet operations fully commenced.

In 2024, the West Outlet was started on May 6th and ended on October 22nd, with a total operation duration of 166 days. The East Outlet was started on May 14th and ended on October 18th with a total operation duration of 126 days. During the operation season, the outlets discharge was adjusted due to downstream water quantity and quality constraints, as well as necessary maintenance at the outlets. Without the discharge from the Devils Lake outlets, it was estimated that the 2024 peak lake level would have been 0.7 feet higher than the recorded elevation in 2024.

Update on Devils Lake Outlets Engineering Service

In April 2024, BW/AECOM was retained to provide engineering services as requested by DWR for maintaining the continued operations of the Devils Lake West Outlet and East Outlet. The contract remains in effect until March 1, 2029.

Ms. Chi presented the completed projects, as well as on-going projects at both outlets. The completed projects include: preventative maintenance of switchgears and onsite inspection of all pumps and motors at both outlets; West Outlet Capital Improvement Plan that prioritizes future projects; a bypass pipe and new flow meters replacement at the West Outlet; Josephine Motor #4 reconditioning at the West Outlet; and permanent backfill after the transmission line repair at the East Outlet. Ms. Chi highlighted that current ongoing projects are focused on addressing the switchgear preventative maintenance findings, establishing a recurring maintenance schedule for all motors and pumps, resolving the Josephine Tank overflow issue at the West Outlet, improving the Round Lake pump priming system, and removing sedimentation at the East End pump #1 intake.

Outlook for 2025 Outlet Operations

Ms. Chi stated the plan for 2025 is to continue to operate both outlets as much as conditions allow. This aligns with the resolutions of support received by DWR from both the Devils Lake Basin Joint Water Resource Board and the Ramsey County Water Resource District, urging full-capacity operation throughout the 2025 season.

The West End outlet operation began with 175 cfs on May 5th. The East End operations will begin as soon as downstream conditions allow. The outlets will be shut down in the fall when overnight temperature approach freezing to prevent infrastructure damage from ice or freezing conditions. Ms. Chi specified that if the weather conditions remain dry and follow trends similar to 2021, operations may need to be reduced earlier in the 2025 season to ensure compliance with water quality standards.

Status by Committee Members

Jeff Frith reiterated that Devils Lake Basin Joint Water Resource Board passed resolution of support to operate both East and West outlets at full capacity for the entire 2025 operational season. This resolution has been submitted to DWR and the Governor's Office.

Lee Gessner from Ramsey County Water Resource District also stated that the Ramsey County Water Board and the Ramsey County Commission also passed similar resolutions to operate the outlets at their full capacity. Mr. Gessner noted that he understood the water quality constraints but feels strongly that people in the Basin who lost land are overlooked and deserve consideration equal to that given to downstream communities. Other members in the audience agreed.

Representative Kathy Frelich reiterated reference to the Resolution 3018 and explained it had been amended in committee to specifically address some of the concerns related to Devils Lake. She expressed hope that the resolution will be picked up as a study to provide another

opportunity to educate the legislature on the Devils Lake situation and ongoing needs in the Basin.

Other Comments

During Director Haase's Basin overview, a public participant asked whether outlet operations affect the "wet cycle" designation. Ms. Chi explained that while the outlets do help bring the water level down, the wet cycle designation remains valid. Mr. Frith added that the wet cycle designation is primarily driven by regional weather patterns and when precipitation increases across the Basin, Devils Lake levels rise.

Garland Hoistad (Churches Ferry, ND) expressed concern that people upstream and downstream of Devils Lake were being protected, but the Basin itself was neglected. He also questioned the natural flow from Tolna Coulee, which is not controlled by the Devils Lake outlets operations. Ms. Chi noted that the various studies show that 1458 feet is estimated to be the natural outlet elevation of the Basin.

Karen Hausman (Churches Ferry, ND) introduced herself as a property owner and descendent of homesteaders of this area since before statehood. Ms. Hausman thanked the committee for the opportunity to hear the public's comments. She expressed appreciation for the preventative maintenance of the pumps and motors. She asked about the status of the Round Lake low water analysis that was mentioned at the 2024 DLOMAC meeting. Ms. Chi responded that DWR had conducted a survey in 2024 and have initiated a task order with the engineer for this project. Ms. Hausman emphasized that the private properties impacted by high water continue to need more attention.

Meeting adjourned at 2:43pm.