



---

## WATER TOPICS OVERVIEW COMMITTEE

Tuesday, March 5, 2024  
Room 327B, State Capitol  
Bismarck, North Dakota

Senator Ronald Sorvaag, Chairman, called the meeting to order at 9:01 a.m.

**Members present:** Senators Ronald Sorvaag, Michael Dwyer, David Hogue, Larry Luick, Jeffery J. Magrum, Jim P. Roers; Representatives Mike Beltz, Jared Hagert, Jorin Johnson, Donald W. Longmuir, Bob Martinson, Jon O. Nelson, Anna S. Novak, Jeremy Olson, Matthew Ruby, Steve Swiontek

**Member absent:** Representative Todd Porter

**Others present:** Andrea Travnicek, Department of Water Resources; Xinhua Jia, Syeed Md Iskander, Jiale Xu, Trung Le, Christina Hargiss, North Dakota State University; Karl Rockeman, Emily Joynt, Department of Environment Quality

See [Appendix A](#) for additional persons present.

**It was moved by Representative Olson, seconded by Representative Swiontek, and carried on a voice vote that the minutes of the December 11, 2023, meeting be approved as distributed.**

Mr. Aaron Carranza, Director, Regulatory Division, Department of Water Resources, provided an overview ([Appendix B](#)) of the division. He noted:

- The division regulates sovereign lands, dam safety, national flood insurance, engineering and permitting, and risk map management.
- The major functions and responsibilities of the division include general water management, flood control, permit applications, water resource district appeals, dam inspections, floodplain and sovereign land management, the National Flood Insurance Program, the Silver Jackets program, and risk mapping through the North Dakota Risk Assessment MapService.

Mr. Andrew Nygren, Director, Water Appropriation Division, Department of Water Resources, provided an overview ([Appendix C](#)) of the division. He noted:

- The major functions of the division include water resource management, protecting established water rights, and administering and enforcing the state's water laws and policies.
- The division is responsible for administering water permits and applications, maintaining water permit records, monitoring beneficial use permits through annual water use reports, and assisting municipalities and public entities in developing solutions to water supply issues.
- In 2023, the division measured over 4,000 ground water and surface water sites and issued 596 temporary water permits.

Dr. Andrea Travnicek, Director, Department of Water Resources, provided testimony ([Appendix D](#)) regarding managed aquifer recharge (MAR) and recovery. She noted:

- MAR involves capturing excess or abundant surface water and storing the captured water in an aquifer for later use.
- The department conducted a statewide assessment of MAR to develop recommendations for MAR potential in the state.

Mr. Chris Kadrmaz, Director, Administrative Services Division, Department of Water Resources, provided a financial update ([Appendix E](#)) regarding the department. He summarized current revenue and appropriations relating to water resource projects for the 2023-25 biennium.

Dr. Xinhua Jia, Director, North Dakota Water Resources Research Institute, North Dakota State University, provided an overview ([Appendix F](#)) of the North Dakota Water Resources Research Institute (NDWRRI) and her research relating to smart water management. She noted:

- NDWRRI was founded in 1965 and is administered through the United States Geological Survey.
- NDWRRI is researching agricultural processes, hydrology, water quality, basin issues, energy development, and wetland ecosystems.
- Smart water management uses automated technologies and remote access to provide efficient water management with lower labor costs and flexible irrigation scheduling.

Dr. Syeed Md Iskander, Assistant Professor, Civil, Construction and Environmental Engineering, North Dakota State University, provided testimony ([Appendix F](#)) regarding his research relating to per- and polyfluoroalkyl substances in yard waste compost in the city of Fargo.

Dr. Jiale Xu, Assistant Professor, Civil, Construction and Environmental Engineering, North Dakota State University, provided testimony ([Appendix F](#)) regarding novel electrochemical technologies for industrial wastewater treatment.

Dr. Trung Le, Assistant Professor, Civil, Construction and Environmental Engineering, North Dakota State University, provided testimony ([Appendix F](#)) regarding his research relating to river flow dynamics in ice-covered conditions.

Dr. Christina Hargiss, Director, School of Natural Resource Sciences, North Dakota State University, provided testimony ([Appendix F](#)) regarding her research and studies relating to North Dakota water use, storm water, and harmful algal blooms.

Mr. Karl Rockeman, Director, Division of Water Quality, and Ms. Emily Joynt, Environmental Scientist, Department of Environmental Quality, provided an overview ([Appendix G](#)) of the Vision 2 North Dakota Total Maximum Daily Load (TMDL) Prioritization Strategy.

Mr. Rockeman noted:

- A TMDL is a federal requirement of the Clean Water Act for waters that do not meet water quality standards for public use.
- The TMDL Vision 2 strategy is a long-term workplan used by the Department of Environmental Quality to establish prioritization of waters and pollutants.
- A TMDL details the maximum amount of pollutant a waterbody can support while ensuring water quality standards are maintained.

Ms. Joynt noted:

- Each state is required to develop and submit a TMDL prioritization strategy to the United States Environmental Protection Agency every 10 years.
- The department is requesting participation through public comments and surveys.

Mr. Austin Gunderson, Counsel, Legislative Council, presented memorandums entitled [Joint Water Resource Boards and Senate Bill No. 2372 \(2023\)](#) and [Sargent County Water Resource District v. Beck, et al. - Impact on Drainage Maintenance Projects](#).

Mr. Roger Zetocha, Board Member, Sargent County Water Resource Board, provided public comments relating to drain safety.

No further business appearing, Chairman Sorvaag adjourned the meeting at 2:51 p.m.

---

Austin Gunderson  
Counsel

ATTACH:7