

Bad River Antidegradation Policy & Project Pollutants Affecting Tribal Water Quality

Mashkiiziibii Natural Resources Department Presentation #3 for the Hearing with the US Army Corps of Engineers May 13-14, 2025 – St. Paul, MN



Topics

- Lowering of Water Quality
- OTRWs, ORWs & ERWs Affected by the Project
- Project Pollutants that Will Affect Tribal Water Quality & Violates the Band's Antidegradation Provisions



Lowering of Water Quality Defined (E.3.i.)

The projected or observed diminished chemical, biological, or physical integrity of Reservation surface waters, including changes to water flow or water level; or new or increased loading of any pollutant from any regulated existing or new facility, either point source or nonpoint source, for which there is a control document or reviewable action, as a result of any activity.







OTRWs, ORWs, & ERWs Affected by the Project



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OTRWs, ORWs, & ERWs Affected by Project

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- **Outstanding Tribal Resource Waters (OTRWs)**
 - Bad River
 - Potato River
 - Beartrap Creek where manoomin grows
 - Kakagon and Bad River Sloughs wetland complex



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- **Outstanding Resource Waters (ORWs)**
 - Vaughn Creek
 - Tyler Forks, Brunsweiler, Marengo, & White Rivers
 - Beartrap Creek

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Exceptional Resource Waters (ERWs)

- Billy, Trout Brook, & Silver Creeks
- Riparian wetlands
- Other hydrologically connected surface waters (tributaries, oxbows, springs)

Proposed Project Will Increase Loads of BCCs into the Band's ORWs and OTRWs

Mercury pollution will increase in tribal waters due to the proposed project, and tribal waters already exceed the Band's mercury criteria.





Proposed Project Will Increase Loads of BCCs into the Band's ORWs and OTRWs

PFAS contamination will increase in Tribal waters due to the proposed project, and some samples indicate PFAS levels already exceed state and federal standards.

This is a concern for all hydrologically connected tribal waters, especially ORWs and OTRWs.



Bad River Band Will Affect Analysis Letter, Map 4, pg. 18.

Example 1: Beartrap Creek (ORW, OTRW)

- Already has water quality impairments including:
 - o Excess sediments and nutrients
 - o Low dissolved oxygen levels
 - Inadequate road crossings affecting water quality, flows, and aquatic life
 - Uses are not currently fully supported including:
 - Cultural, aquatic life, cool water fishery, wild rice (OTRW)



Photo of Beartrap Creek at County Road A from MNRD, 2011.

Example 1: Beartrap Creek (ORW, OTRW)

- Project will exacerbate current water quality impairments by:
 - $\circ\,$ Increasing erosion and sedimentation
 - Altering hydrology and causing flashier flows, incisions to worsen, and other water quality affects
 - Adding/mobilizing pollutants including mercury, PFAS, non-local beings





Photo of Beartrap Creek at Proposed Line 5 Reroute Crossing; MNRD Staff, 2023.

Photo of Beartrap Creek culvert at Hegstrom Rd; MNRD Staff, 2023.

Example 2: Marengo and Brunsweiler Rivers (ORWs)

- Already have water quality impairments including:
 - Excess sediments and nutrients
 - O Unstable hydrologic conditions
 - Loss and fragmentation of aquatic habitat
- Uses are not currently fully supported

Photo of Marengo River at Government Road from MNRD Staff, 2012.

Photo of Marengo River at Government Road after a storm event in August 2014.

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Examples 2-3: Marengo and Brunsweiler Rivers (ORWs) and their tributaries (ERWs)



Example 3: Marengo River Tributaries (ERWs)





Source: WWE

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Examples 3-4: Marengo River Tributaries (ERWs) - Silver Creek, Billy Creeks, Trout Brook, "Unnamed" - & Potato River Tributary, Vaughn Creek (ORW)



Source: WWE

Example 5: Tyler Forks River (ORW)

- Good to Excellent conditions:
 - Only known water quality impairment is due to mercury
 - Cultural, aquatic life, cold-water fishery, and other uses currently supported



Example 5: Tyler Forks River (ORW)

- Project will cause or contribute to water quality impairments including:
 - o Altering hydrology in many ways
 - Moderate likelihood of artesian pressure potential
 - Landscape conversion
 - o HDD IR will exceed turbidity criteria
 - Adding/mobilizing pollutants and transporting through groundwater to other surface waters



Map 8. Hydrography of the Tyler Forks and Feldcher Creek area using 1:1000 scale NWI data.

Example 6: Riparian Wetlands (ERWs) to Tyler Forks River (ORW)



Photo looking south across the sedge meadow that evolved due to an old beaver impoundment along one of the outlets connecting the larger forested wetland complex with Tyler Forks River. Wetland is circled in orange on map.

Photo looking across a different sedge meadow along another of the outlets connecting the larger forested wetland complex with Tyler Forks River. Wetland is circled in yellow on map.





Map of the wetlands from the National Wetland Inventory (NWI) and how they connect throughout the Tyler Forks watershed to some of the areas impacted by the project. Yellow & orange circles indicate wetlands from photos.

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Proposed Project Will Lower Water Quality in Tribal Waters Below Minimum Levels Required to Fully Support Existing and Designated Uses Example 7: Riparian Wetlands

and Oxbows (ERWs)



Hanson Swamp (riparian wetland to White River)



Alex Pond (oxbow on Bad River)



Proposed Project Will Result in New or Increased Discharges and Alterations of Background Conditions in OTRWs

The Project will result new or increased discharges and alterations of background conditions in OTRWs including, but not limited to:

"Nearly all of the discharged bentonite eventually settled within the model domain (the Bad River) regardless of river flow rate. The greatest deposition occurred near the release location, as well as toward the center of the river channel..."

Source: RPS Report (Executive Summary, p. viii)



Bad River, Mellen, WI – site of Inadvertent Release incident during HDD, DOT project, 16 May 2023.

Proposed Project Lowering of Tribal Water Quality is More Than "Short Term, Temporary"

Table 2.0-1: Construction Schedule

Task Name

Project will affect OTRWs for a longer duration than 6 months and a longer duration than necessary.

Construction ROW Staking TBD TBD 15 weeks Start ROW Clearing TBD TBD 10 weeks 10 weeks Utility Sweeps TBD TBD Access Grading and Site Preparation TBD TBD 13 weeks Rock Blasting TBD TBD 11 weeks 17 weeks Begin Horizontal Directional Drill Crossing TBD TBD Mainline ROW Grading TBD TBD 7 weeks Hauling and Stringing Pipe 7 weeks TBD TBD Facilities Field Work TBD TBD 10 weeks 7 weeks Pipe Bending TBD TBD Welding of Pipe TBD 7 weeks TBD Pipe Coating TBD TBD 7 weeks 7 weeks Ditching TBD TBD Lowering In of Pipe TBD TBD 7 weeks Backfill Ditch TBD TBD 7 weeks TBD TBD **ROW** Restoration 20 weeks Hydrotesting of Pipe TBD TBD 2 weeks Commissioning and Tie-in TBD TBD 4 weeks In-Service Date TBD TBD -

Start Date

End Date

Duration

Source: Applicant's Environmental Construction Plan, October 2024

Example 8: Potato River (OTRW)





Example 8: Potato River (OTRW)



Example 9: Bad River (OTRW)



Photo of spawning Bad River Name' (Lake Sturgeon) at the lower Bad River falls from MNRD, 2010.



Photo of the Bad River at the Elm Hoist Bridge from MNRD, 2014.

Examples 9-10: Bad River & Kakagon-Bad River Sloughs (OTRWs)





Map 2. Distance in river miles between the proposed reroute and the Bad River Reservation. Map also illustrates waters designated as Outstanding and Exceptional Resources (ORW, ERW) by the Bad River Band and State of Wisconsin.

Example 10: Kakagon and Bad River Sloughs wetland complex and Beartrap Creek where manoomin habitat (OTRWs)

"EPA believes that the Kakagon-Bad River Sloughs and the Bad River are especially vulnerable to adverse impacts from the proposed project because several waters with a nexus to this watershed are already impaired and/or are susceptible to receiving high loads of sediment."



Arieal photo of Kakagon River and Bad River north of US Hwy 2 during a storm event in May 2013.

Source: EPA, March 16, 2022

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