

Tongue River Water Quality: Northern Cheyenne Tribe and Montana DEQ

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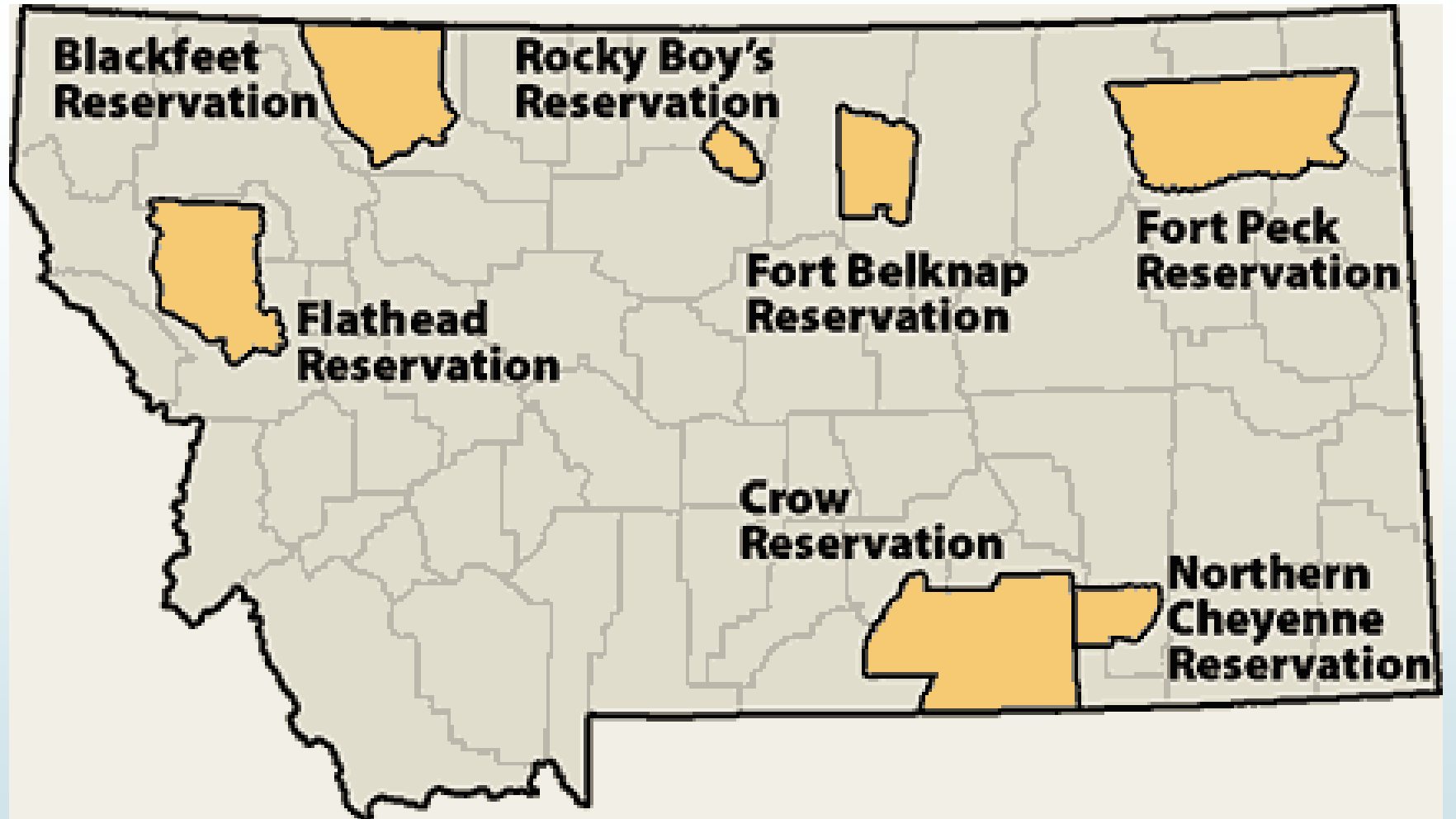
A decorative graphic on the left side of the slide. It features a dark blue vertical bar on the far left. A black arrow points to the right from the top of this bar. Below the arrow, several thin, curved lines in shades of blue and grey sweep upwards and to the right, creating a sense of movement and design.

Presentation Overview

- ▶ Two ongoing projects in the same watershed to develop iron and salinity (electrical conductivity) TMDLs
- ▶ Shared jurisdiction
- ▶ Requires satisfaction of both state and tribal water quality standards, and therefore protection of both state and tribal beneficial uses of the water
- ▶ Challenges encountered, coordination efforts, and recommendations



Where We're Working



Reservations in Montana

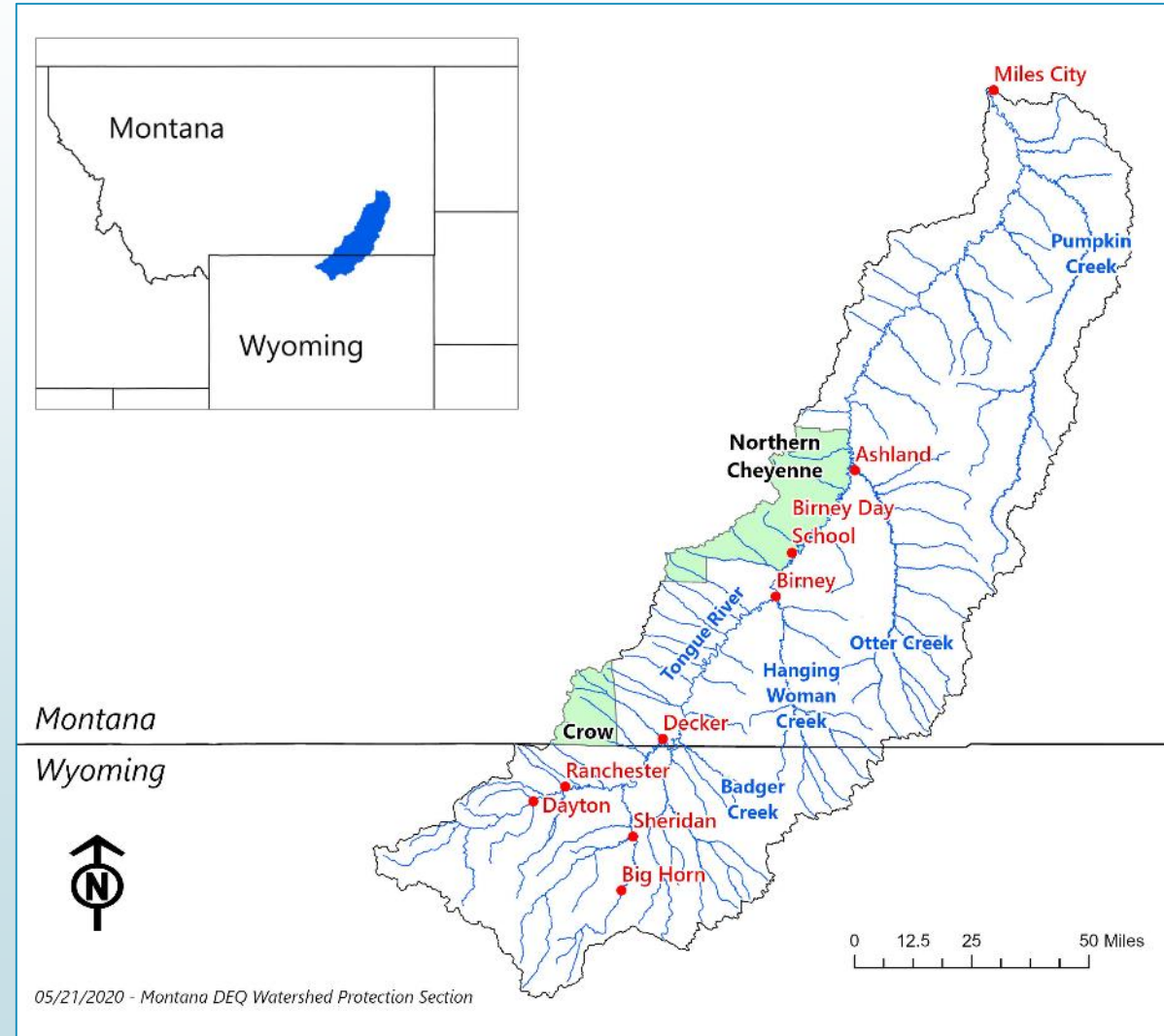
Tongue River Watershed

Originates in the state of Wyoming and ends at the confluence with the Yellowstone River in Montana

Flows approximately 286 miles within a 5,400 square mile watershed (3.56 million acres)

Tongue River has a shared boundary between the state of Montana and Northern Cheyenne Tribal Lands

Projects include a salinity TMDL for the Tongue River within Montana and an iron TMDL for Otter Creek, a 108 mile tributary to the Tongue River



Otter Creek, Tributary to the Tongue River



Otter Creek Iron TMDL

- ▶ Joins the Tongue River within the area of shared jurisdiction
- ▶ Must take downstream Tribal beneficial uses into account
- ▶ Includes beneficial uses of the Tongue River for cultural purposes





Overall Project Goal:

Protect water quality beneficial uses for both the State and the Tribe

A Defining Moment



- ▶ Had reviewed and addressed the Tribe's iron water quality standard for aquatic life in the Tongue River
- ▶ The Tribe also has a human health standard for iron to protect cultural beneficial uses and this was overlooked
- ▶ Downstream tribal uses were not adequately addressed in the draft Otter Creek iron TMDL
- ▶ TMDL had to be revised
- ▶ Oversight not to do additional outreach to the Tribe



Expanded Project Goals:

- *Protect water quality beneficial uses for both the State and the Tribe*
- *Improve coordination and communication with the Tribe*

Tongue River Salinity TMDL



Tongue River Salinity TMDL (Electrical Conductivity)

- ▶ Impaired segment is downstream of the Reservation, but the TMDL takes all upstream sources into account
- ▶ Includes potential sources from the Reservation; therefore, close coordination with the Northern Cheyenne Tribe is important
- ▶ EC TMDL will consider future tribal land uses with a possible load allocation for future salinity inputs from irrigated agriculture on the Reservation
- ▶ Includes a model scenario to evaluate affects of increased acres of irrigated land



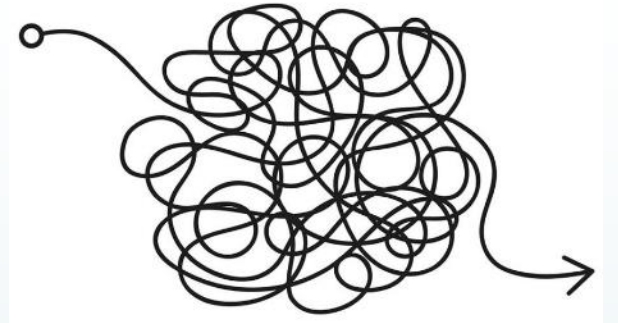


Renewed Coordination Approach

- ▶ Agreement for regular project updates
- ▶ Discussion of initiating a Memorandum of Understanding
- ▶ More thorough reviews of draft TMDL development methodology are occurring
- ▶ Taking the Tribe's long term land management plans into account
- ▶ Finding shared interests in protecting water quality
 - ▶ Includes negotiations for the state to lease a portion of the Tribe's water rights to provide more instream flow to the Tongue River to support aquatic life and reduce salinity concentrations during critical periods when water quality standards are not being met

Summary of Challenges

- ▶ Differing water quality beneficial uses
- ▶ Differing water quality standards
- ▶ Not a lot of experience setting allocations to protect downstream uses
- ▶ Communication approaches



Lessons Learned



- ▶ Importance of active outreach and collaboration
- ▶ Recognizing sovereignty and having in-person meetings separate from stakeholder meetings
- ▶ Approach projects based on common ground and work together to meet each other's needs
- ▶ Keep in mind differing beneficial uses that include cultural uses

Recommendations

- ▶ Take a tribal relations training, if offered in your state
- ▶ Call on the expertise of your organization's cultural resource / tribal outreach specialist
- ▶ Learn about the Tribe (naming conventions, operations, customs)
- ▶ Actively seek out collaboration opportunities and be flexible

Important Notes:

- Government organization varies among Tribes
- Tribal culture is not ubiquitous



Questions?



Tongue River

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