

NorthWestern[®] Energy

Delivering a Bright Future

Thompson Falls Hydroelectric Relicensing Stakeholder Workshop

December 4, 2018

AGENDA

1. Introductions
2. Safety Moment
3. Purpose of the Workshop
4. Relicensing 101 Refresher
5. Overview of the Baseline Environmental Document (BED)
6. Breakout Sessions



Project History

Date	Event
1912 – 1916	Project construction
1975	Original FERC license expired
1979	Current FERC license issued
1990	Major license amendment authorizing construction of new powerhouse
1995	New powerhouse construction completed
2009	License amendment authorizing construction of fish ladder
2011	Fish ladder starts operation
December 31, 2025	Current license expiration date



Integrated Licensing Process (ILP)

- Default process
- Predictable scheduling in pre-filing and post-filing stages
- FERC study plan determination



Pre-Filing Steps



NOTE: These dates are approximate and reflect required timeframes and MG's optimism

Post-Filing Steps

License Application

Dec 31, 2023

FERC Review &
Public Comment

Jan 2024 - June 2024

FERC Env. Document
& Public Comment

June 2024 - July 2025

FERC Decision
(License Order)

October 2025

- Baseline Environmental Document developed to summarize existing information about the Thompson Falls Hydroelectric Project
- Significant information developed through the collaborative efforts of NorthWestern Energy, resources agencies, public, and other stakeholders at Thompson Falls
- Voluntarily prepared by NorthWestern Energy to help prepare for the upcoming FERC relicensing of Thompson Falls
- BED is precursor to the Pre-Application Document (PAD)
 - PAD is a FERC-required report
 - PAD will be filed July 2020



Why was the BED prepared?

- Describe the Thompson Falls Project
- Summarize existing, available information on the Project
- Request that stakeholders share any additional reports, data, or information that would help inform the Thompson Falls relicensing
- Provide a basis for the FERC-required Pre-application Document



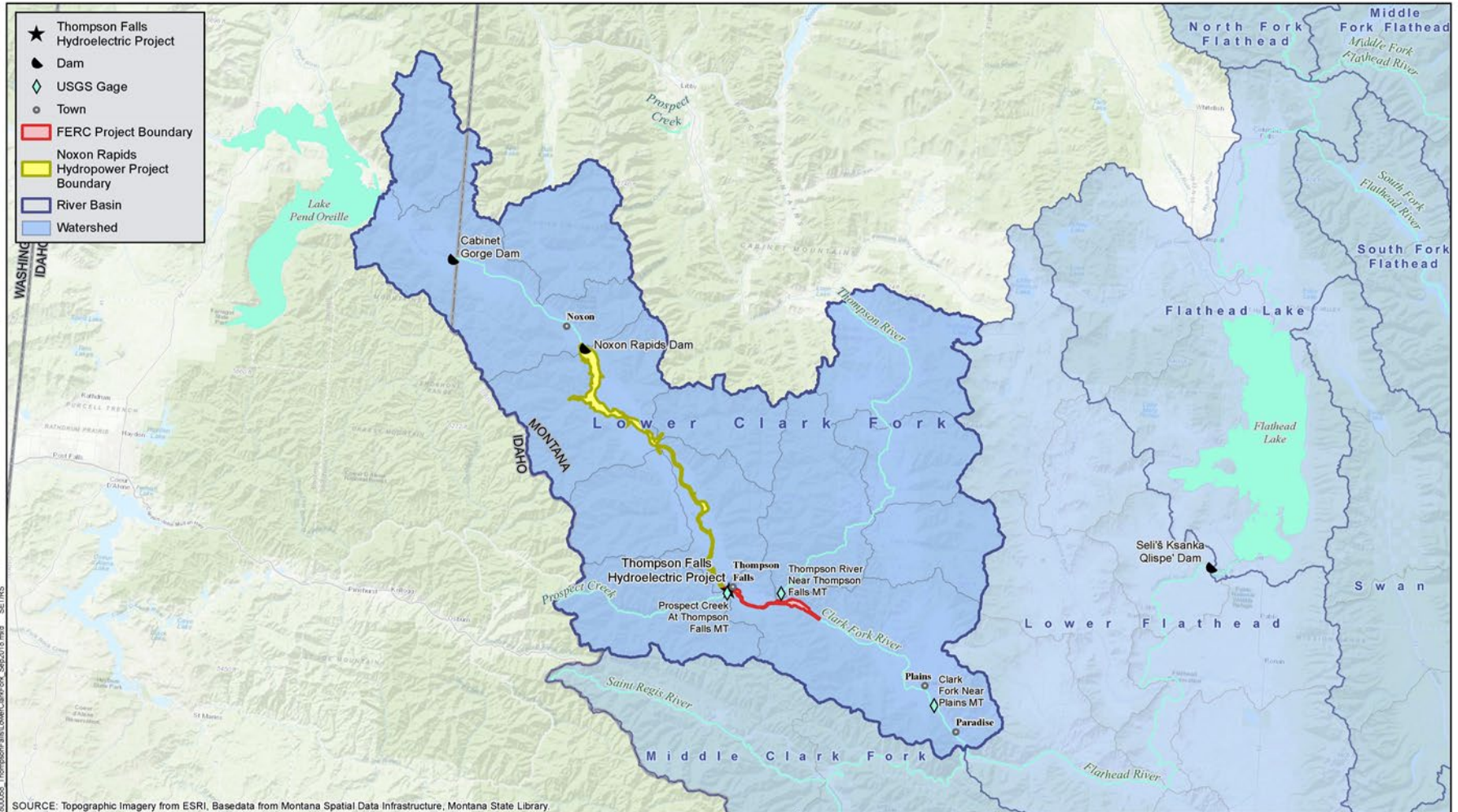
How was the BED prepared?

- Authors are NorthWestern staff supported by a consultant team of technical specialists
- Reviewed information in NorthWestern files
- Collected information publicly available on the web
- Outreach to Indian Tribes, resource agencies and others

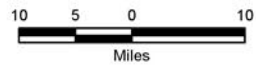


What Information Is In the BED?

Project Description



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Thompson Falls Hydroelectric Project #1869
Baseline Environmental Document
Sanders County, Montana



LOWER CLARK FORK RIVER WATERSHED

SEPTEMBER 2018

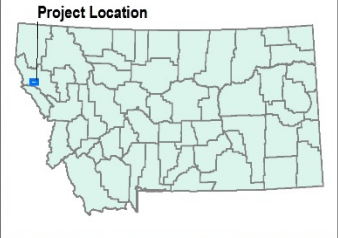
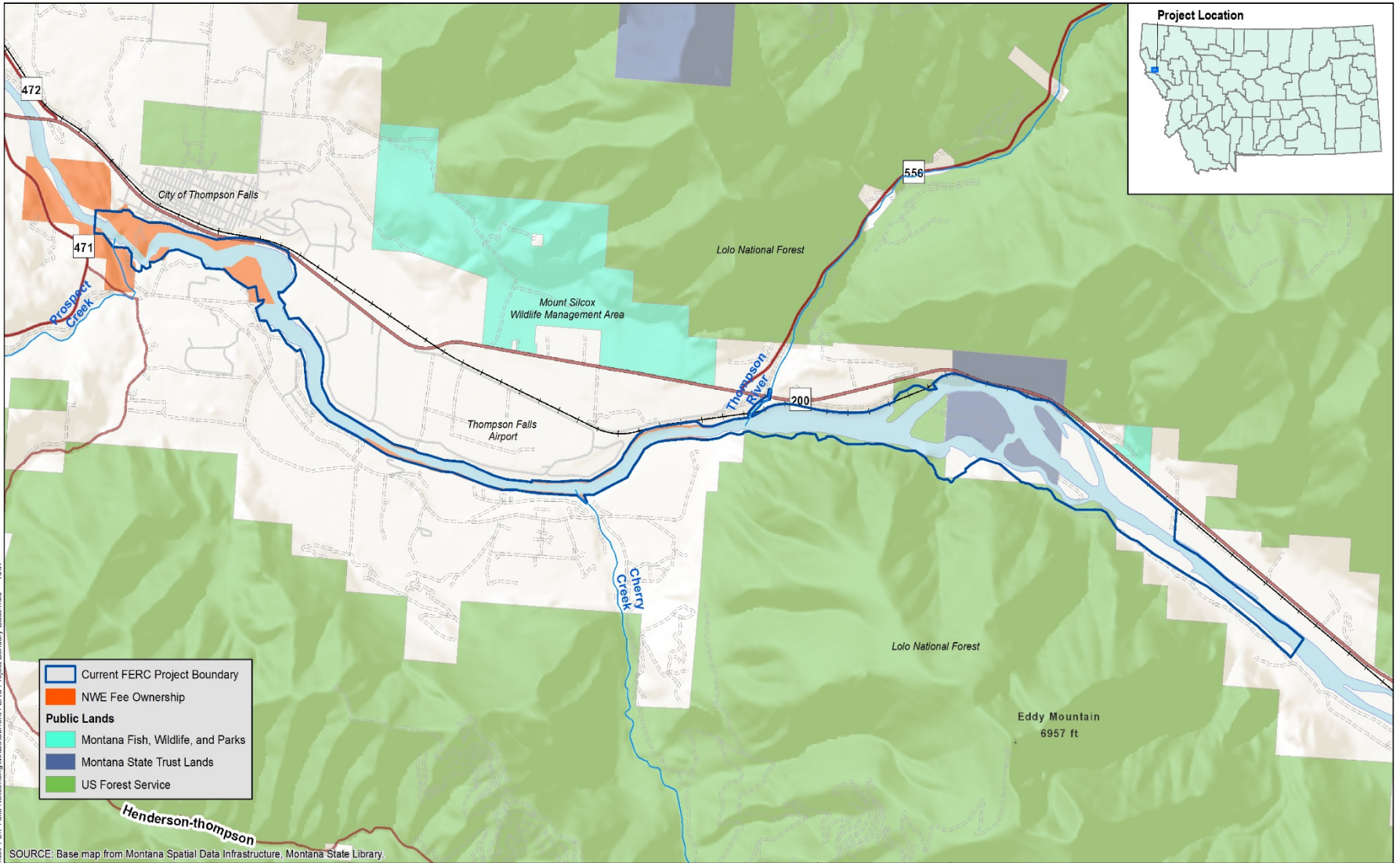


- Total installed capacity 92.6 MW
 - Average generation 58 MW
 - Power for 35,000 – 40,000 households
- Full powerhouse flow ~23,000 cfs
- Reservoir ~12 miles in length, ~1,446 surface acres
- Active Storage in Reservoir ~15,000 acre-feet
 - For comparison, Flathead Lake is 1,200,000 acre-feet



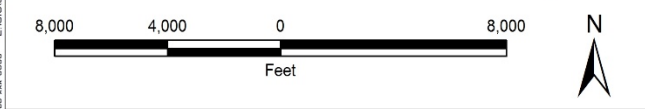
Aerial View of Thompson Falls Hydroelectric Project





- Current FERC Project Boundary
- NWE Fee Ownership
- Public Lands**
- Montana Fish, Wildlife, and Parks
- Montana State Trust Lands
- US Forest Service

SOURCE: Base map from Montana Spatial Data Infrastructure, Montana State Library.



Thompson Falls Hydroelectric Project #1869
 Baseline Environmental Document
 Sanders County, MT



PROJECT BOUNDARY AND LAND OWNERSHIP

SEPTEMBER, 2018

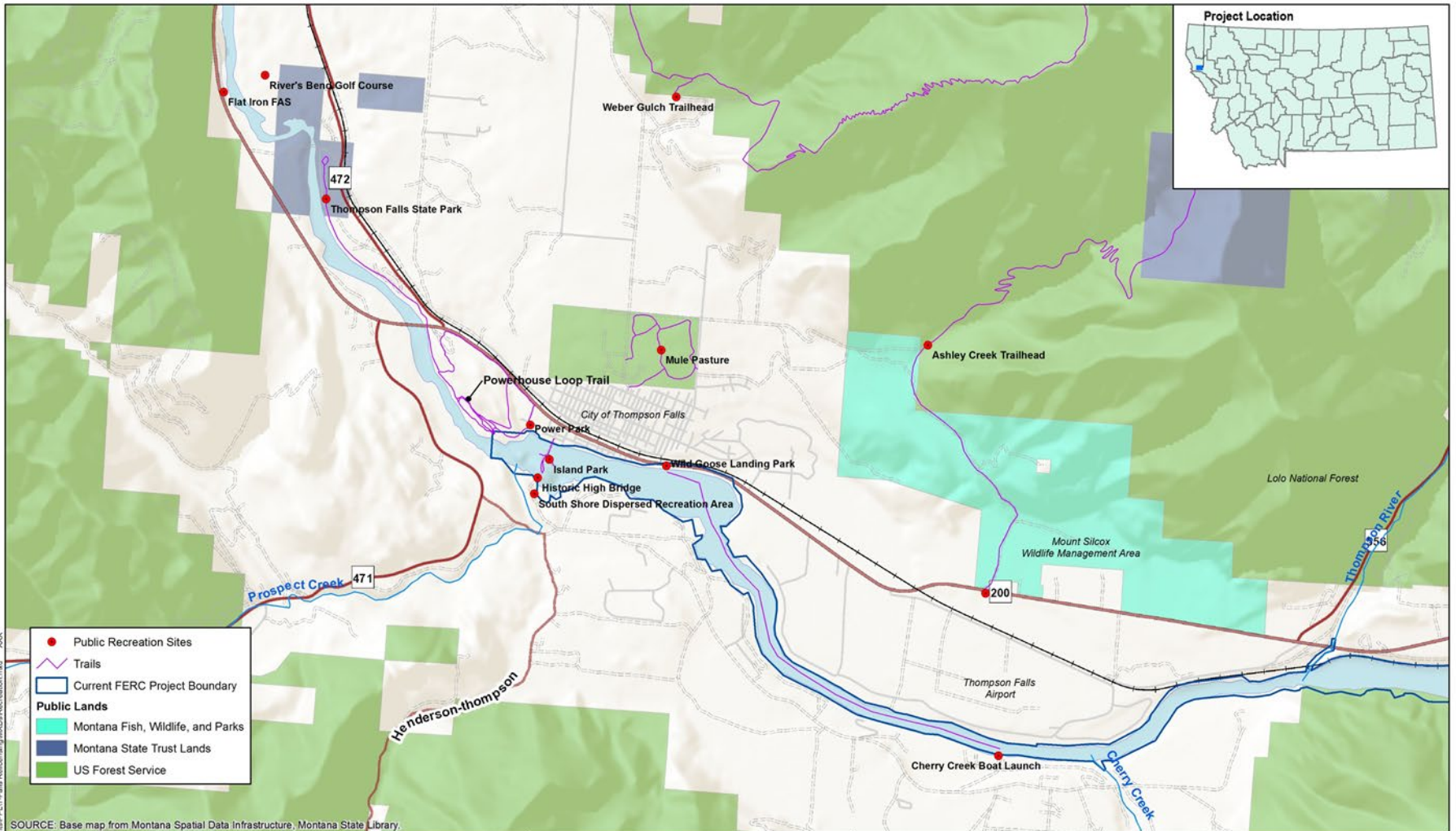
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- Project operated to provide baseload and flexible generation, within the requirements of the FERC license
- Typically operated to maximize generation across all units with available flows
- When total flow exceeds powerhouse capacity, spillway panels and radial gates used to pass excess flow
 - Main Channel Dam is opened first
 - If flow exceeds 70,000 cfs, Dry Channel Spillway used to pass flow

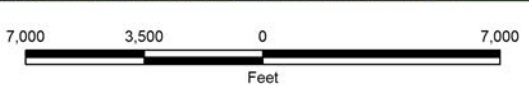


- Fisheries
 - Funds to purchase water rights from Painted Rocks Reservoir for instream flows in the Bitterroot River
 - Establish Technical Advisory Committee
 - Annual funding of Adaptive Management Funding Account
 - Construction and operation of fish ladder
- Recreational Improvements
 - Interpretive information and park upgrades
 - Improvements to parking areas, trails, benches, boat launches, dock, park
- Cultural Resource Protection
 - Rehabilitate historic High Bridge
 - Historic American Engineering Record documentation
 - Cultural resources inventories
- Studies and monitoring of multiple resources



- Public Recreation Sites
- Trails
- Current FERC Project Boundary
- Public Lands**
- Montana Fish, Wildlife, and Parks
- Montana State Trust Lands
- US Forest Service

SOURCE: Base map from Montana Spatial Data Infrastructure, Montana State Library.



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RECREATION SITES

SEPTEMBER 2018

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- Geology, Topography, Soils
- Water Resources, Quality and Quantity
- Fisheries and Aquatic Resources
- Wildlife and Botanical Resources
- Threatened, Endangered, Proposed, Candidate and Sensitive Species, and Species of Concern
- Floodplains, Wetlands, Riparian, Littoral Habitat
- Recreation and Land Use
- Aesthetic Resources
- Cultural Resources
- Tribal Resources
- Socio-economic Resources



What Comes Next?



Pre-Application Document (PAD) and Notice of Intent

- NorthWestern is required to file a PAD and the Notice of Intent between 5 and 5.5 years before license expiration
 - July 2020 is target date
- After the PAD is filed, there will be scoping meetings and a site visit
- A Study Plan is developed and implemented
- NorthWestern's license application is due no later than December 31, 2023



How will the PAD be different from the BED?

The PAD will include:

- Additional information gathered... from you!
- Additional information gathered by NorthWestern over the next 12-18 months
- A process plan and schedule
- Additional detail on project operations, focus on last 5 years
- Preliminary issues and studies list for each resource area
- Documentation of consultation with stakeholders



**Please provide additional information to NorthWestern Energy by
February 22, 2019.**

Send to:

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NorthWestern's Commitment

Balance generation of clean, renewable hydropower with conservation of public resources

