

NorthWestern Energy Thompson Falls Hydroelectric Project (No. 1869)
Annual Thompson Falls Technical Advisory Committee Meeting
Missoula, Montana (MFWP Office)
December 9, 2019

10:10 Welcome

The Thompson Falls TAC Meeting was held at the Montana Fish, Wildlife and Parks office in Missoula. Jon Hanson, NorthWestern Energy, facilitated the meeting. A list of attendees provided at the end of the meeting summary.

1. Introductions

2. Safety Moment

3. Thompson Falls TAC Business

- We have a quorum present with a voting member present from FWP, CSKT, FWS, and NorthWestern Energy.
- **Memorandum of Understanding (MOU) – (NorthWestern – Jon)**
 - Expires end of December 2020
 - Voting Members: NorthWestern, FWS, FWP, CSKT
 - NorthWestern proposes to extend through the term of the license (December 2025). Not proposing any changes. NorthWestern will work on updating the MOU this summer and fall, so it is in place by the end of year (2020).
- **Reservoir Operations Testing – October 2019 (NorthWestern – Jon)**
 - 2-day test period (October 7-9, 2019)
 - First test, drawdown of 4 ft (within term of existing license) and then refilled reservoir. Second day, drawdown 2 ft and then refilled reservoir. Test set up to evaluate potential impacts of drawdown, both environmental and generation. Public meeting held on October 15, 2019 focused on relicensing process and discussed the operations test. However, review and analysis of the results of the test were still pending. NorthWestern committed to another public meeting in the spring 2020 to discuss operations of the reservoir.
 - Question from Craig Barfoot (CSKT): How far upriver did the stage changes impact the river? Jon H. – We observed changes upstream of Thompson River. MG – Our goal during relicensing is to refine the operations and understand the impacts.
 - Craig – Did you observe any stranding? Jon – yes, we did. Stranding of multiple species, in proportion of what is there. We also looked at ladder operations as the reservoir level dropped. Once we drop the reservoir to a certain level there is little or no water in entrance.
 - Kevin A. (FWS) – Any salvages during test? Jon, Andy, Jordan – we did that a little bit, but there was a lot of area in the shallow shoal areas (lots of macrophytes). Many fish 4-inches or less. In the lower reservoir, we saw warm water species. No stranding of salmonids was observed.
 - Next Public Meeting will be on March 11, 2019 (Wednesday) at 6pm at the Thompson Falls Community Center.

○ **Comprehensive Report, Process, Schedule**

- FERC Order issued October 7, 2019 – approval to modify schedule of Comprehensive Report and Scientific Review Panel. Comprehensive Report covers ladder results from 2011 through July 1, 2019 with final submittal to the Commission by December 31, 2019. Schedule was moved up 1 year (from 2020 to 2019) to better align with relicensing activities. Comprehensive Report was provided to TAC for comment. Currently working on incorporating comments. No annual report (2019) to FERC. NorthWestern plans to prepare a summary memo on similar schedule as a typical Annual Report. 2020 Annual Report will resume typical filing and approval requirements with FWS and FERC (through term of existing license). Scientific Review Panel will review Comprehensive Report and annual reports in early 2020. Providing recommendations to FWS by April 1, 2020 and filed with FERC by this date.
- Ladd Knotek (FWP) – Asked if agencies will receive draft prior final submittal. Will it include information upstream of Thompson River? Jon – No, agencies will not receive final prior to filing to the Commission. There is limited data for areas upstream. Andy – The focus of the document with regards to compliance requirements with the BiOP and FERC Order was bull trout. Ladd – maps in the report ended at the Thompson River... would like to see more area addressed. Andy – we anticipate looking at the larger area during the relicensing and the Comprehensive Report was more focused on bull trout passage and data are limited.
- Comprehensive report overview and summary of findings providing in PowerPoint presentation.
- Jon – Will contact individuals if there are comments that are not incorporated into the final report.
- Ladd – Who is on the Scientific Review Panel?
 - Jon – David Schmetterling (FWP), Brett Towler FWS fish passage engineer from east coast, and possibly Doug Peterson. There is a white paper that outlines the side boards for the scientific panel. Panel does not include biologists involved with the project. There will be a series of meetings with biologists involved with the Project to share information. Foresee 3 meetings with panel. TAC members not on the panel in order to establish an independent and external review of the Project with focus on fish ladder per Biological Opinion and FERC Order. Recommendations will go to FWS. FWS will take recommendations into consideration for development of the new BiOP for the new license.
- Ladd – concern that the focus of the comprehensive report is narrowed to bull trout and ladder... relicensing needs to be a broader conversation of geographic area and species.

- MG (NorthWestern): Opportunity for comment and involvement during relicensing. Key condition regarding scope during relicensing is that topics/concerns have to demonstrate a nexus to the Project operationally or physically. The goal of the new schedule is to better inform Relicensing studies. NOI and PAD will be filed July 1, 2020. FERC will host a scoping meeting in the Fall 2020 to discuss larger scope of the Project and potential studies, concerns, etc.

4. 2019 Water Quality and TDG Monitoring and Results (NorthWestern -Jordan)

- NorthWestern completed water quality, macroinvertebrates, chlorophyll, and temperature monitoring in 2019.
- Water quality sampling included 5 sample periods to cover different flow regimes (April, June, July, 2x October - during operational testing and after operating testing). No real changes during October tests.
 - Sample locations: upstream of islands, mouth of Thompson River, walking bridge upstream of Dam, Birdland Bay Bridge – start of Noxon pool
- Nutrients – low (no nutrient standards at the site), but if compare to Flathead or other areas, levels below those standards. Same for chlorophyll.
- Metals – below standards with exception of Pb at Birdland Bay Bridge during April and July samples only, but not in June or October. Jordan – We guess is it is from Prospect Creek (result of mining). We did additional testing around the area and received non-detects. Most recent water quality data in DEQ database from Prospect is from about 20 years ago. Brita – had stream restoration project in Prospect Creek drainage (in Crow Ck) in July 2019. Jordan – NorthWestern plans on additional sampling.
- Temperature – loggers at all water quality sites. Max temps low 70s (73 °F). Temperature variation is minimal from upstream to Birdland Bay Bridge. Low residence time in reservoir.
- Thompson River peak 65 °F in 2019.
- Macroinvertebrates – sample locations included one site above reservoir (islands area) and one site downstream by the powerhouse. Limited sites to sample. Last time sampled was in 2001. Comparing 2011 to 2019, results show stable to slightly improving. Difficult to assess trends over 18 years. More sediment tolerant species now.
- Questions – Don Skaar (FWP)– Did you do any dioxin sampling? Jordan – no. DEQ may be sampling upstream near Smurfit Stone area on CFR. Keenan (DEQ) – Will check on what sampling is being done in the area by DEQ.
 - Mike Hensler (DEQ)– What are the next steps for future macroinvertebrate data collection? Jordan – currently the objective was to establish a baseline. Potential for future sampling.

5. 2019 Baseline Fisheries Data Collection, Ladder Operations and Fish Passage Results

- Refer to PowerPoint presentation for details.

6. 2020 Ladder Operations

▪ Temperature and Protocol

- No tagging for salmonids above 20 °C. Bull trout still plan to tag and anesthetize but the call can be made at the ladder by the ladder operators depending on condition of the fish at that time.
- Daily checks (including weekend) at the ladder when temps > 23 °C.

▪ Species to Pass

- WE, LT, EB, EBxBULL not pass (added SMB permanently to no pass list)
- FWP request no upstream passage for SMB (one caudal punch for SMB).
 - Mike Hensler (FWP) - Passing SMB is not consistent with management strategy for western district. Strategy for SMB is suppression which is consistent with CSKT management strategy in the lower Flathead River. FWP continues to manage for a smallmouth recreational fishery downstream of Thompson Falls Dam (in Noxon). FWP goal is to be consistent with management strategies. NorthWestern will caudal punch each SMB and release them back downstream.

▪ Continue to Operate in Orifice Mode

7. CFD Modeling Update

- Based on results of the hydraulics study (completed by GEI in 2018), NorthWestern is looking into CFD modeling to potentially evaluate and assess potential changes to the ladder to optimize hydraulics (issues identified in the middle pools) with a holistic approach. Modeling would assess impacts to the entire ladder with any proposed modifications.
- Estimate for modeling exercise is about \$30,000. NorthWestern is waiting for a refined modeling estimate and additional information regarding the confidence of the model. NorthWestern is continuing to look into modeling as a good approach. Will keep the TAC updated as any new developments arise.

8. 2019 Project Progress Reports

- **West Fork Fishtrap Creek Road Realignment \$30,627.15**
 - Brita (LCFWG)– proposed last year based on estimates from USFS (2018). After going out to BID, estimates came out higher. Looking to delay project until 2020 in order to leverage additional funds and additional projects in the drainage.
- **Crow Creek Restoration Design, Ryan Kreiner \$30,000**
 - Brita – Majority of the Project complete between July 15 and mid-August 2019. Came back in October to finish up revegetation effort.
- **Rattlesnake Dam Removal, Phase 1, Rob Roberts, Trout Unlimited (TU) \$50,000**

- Paul Parson - 23 contractors showed up for a mandatory pre-bid site visit last week. Should have competitive bids. Bids due in 2 weeks. Select contractor by January 16, 2020. Award by February 2020. Move equipment by late spring 2020.
- Ladd – What was the total amount of leveraged with the \$50,000 funds approved by this TAC. Paul – Rob was able to raise about \$1 million.

○ **Thompson River Coordinator**

- Brita – Coordinator for the last 4 years. Refer to PowerPoint presentation for details. Establishing relationships with stakeholders and developing partnerships for future projects and leveraging funds for larger projects.
 -) Example: Awarded \$100,000 Cooperative Watershed Management Grant through BOR
- Ladd mentioned it may be time to coordinate a tour for TAC members of the middle Clark Fork River and lower Clark Fork River. TAC funded projects include Fish Creek, Cedar Creek, Thompson River, and Crow Creek... Jon and Ladd will coordinate review of projects. Brita is also available to show projects in the Thompson River drainage. Jon will look into 2020 site review. Andy recommended a cross section of projects.

○ **Emergency Funding**

- No emergency funding was utilized in 2019.

9. Review End-Of-Year 2019 Budget and Reserve Account

2019 Reserve balance	\$126,047
CY2020 Contribution	\$100,000
Total funds available	\$226,047

Fund capped at \$250,000

-) Review of guidance provided in the Proposal Form. Guidance is attached to the Proposal Form. Guidelines: 1) Project has to target existing, known population of migratory or resident Bull Trout. 2) Overall value related to bull trout, 3) look at funding match, 4) partners for the proposed project, 5) and location-based priority with 4 different geographic tiers.
-) Ladd – Does the group want to discuss wording as it would pertain to Projects in the lower Bitterroot River drainage with a recent TMDL ... Lolo Creek has a bull trout population and likely to see projects coming out. Jon – we can discuss moving forward, but as a TAC purposely did not put major restrictions on the tiering system based on group discussions for the last two years.

10. 2020 TAC Proposals for Funding

Agency/Entity	Project Proposal 2019	TAC Funding Requested	Total Project Costs	TAC Vote
FWP	01—2020 Thompson River Property Acquisition	\$100,000	\$295,000	Yes – unanimous
LCFWG/TU	02-2020 Fishtrap Creek Habitat Enhancement	\$16,000	\$32,444	Yes – unanimous
NorthWestern	03-2020 Emergency Fund (Prospect Creek PIT, Bull Trout Genetics, etc).	\$10,000	\$10,000	Yes – unanimous
TOTAL Requests		\$126,000		
TOTAL Approved		\$126,000		

Mike Hensler (FWP) – 01-2020 Thompson River Property Acquisition

-) Property: Two 20-acre parcels
-) NorthWestern’s comment: Recommend appropriate management of land use and people access. Historically a lot of trespassing, fire camps, etc.

Brita Olson (LCFWG/TU) 02-2020 Fishtrap Creek Habitat Enhancement

-) Add wood and complexity using a cable logging system to pull trees into an over simplified section of Fishtrap Creek.
-) Possible to pair with WFK Fishtrap Creek Road Alignment for some mobilization cost savings.

Jon – Proposals total \$126,000. Jon (NorthWestern) makes a motion to pass all three projects as shown in the PowerPoint (table above in meeting summary). Kevin (FWS) seconds (FWS) motion. Voting: Unanimous Yes – NorthWestern, FWS (Kevin), FWP (Don), and CSKT (Craig).

01-2020 and 02-2020 and 03-2020 Projects approved by the TAC.

11. 2020 Activities

-) Baseline electrofishing again in 2020 (alternating years)
 - o Spring Electrofishing – Thompson Reservoir (Upper and Lower)
 - o Fall Gillnetting – Thompson Reservoir (annual activity)
 - o Fall Electrofishing – Above Islands and Paradise to Plains
-) Gillnet will be an annual activity (per decision in 2016 TAC Meeting)

12. Next Meeting

) Public Meeting, March 11, 2019 6-8 PM, Thompson Falls Community Center

13. Adjourn 2:00 PM

December 9, 2019 Meeting Attendees:

Name	Affiliation	Email
Andy Welch	NWE	andrew.welch@northwestern.com
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