# NorthWestern Energy Thompson Falls Upstream Fish Passage Project Technical Advisory Committee Meeting

Montana Fish Wildlife and Parks 3201 Spurgin Road, Missoula, Montana 59804 December 4, 2014

NorthWestern Energy held the Thompson Falls Technical Advisory Committee (TAC) meeting on December 4, 2014 at Montana Fish, Wildlife and Parks Missoula office. The meeting started at 10:00am and was adjourned at 2:30pm. A list of attendees, including contact information, is provided at the end of the meeting summary.

### **Introductions**

• Transition from PPL Montana to NorthWestern Energy

#### **2014 Activities**

- Publications/Topics of Interest Please send any ideas to Brent/Ginger/Kristi
- Fisheries Baseline Studies (Brent)
  - o Refer to PowerPoint for summary of fisheries data collected in 2014
    - Spring Electrofishing Thompson Falls Reservoir
    - Fall Electrofishing Above the Islands and Paradise to Plains
    - Fall Gillnetting Thompson Falls Reservoir
- Upstream Fish Passage Summary March 27 October 21, 2014 (Brent)
  - o Refer to PowerPoint for summary of 2014 season.
- Water Quality TDG and GBT Monitoring (Andy and Ginger)
  - o Refer to PowerPoint for summary of TDG and GBT monitoring in 2014
- 2014 TAC Funded Activities
  - o Fish Creek Acquisition (Ladd Knotek)
    - ✓ Proposal submitted in August 2014 for acquisition of property in Fish Creek drainage, request funding from TAC for \$120,000.
    - ✓ TAC Approved \$120,000.
    - ✓ Check being issued by NorthWestern Energy December 2014
  - o Thompson River Tributary Work (Brent)
    - ✓ Murr Creek, Mudd Creek, Alder Creek (only Murr sampled)\
      - No Bull Trout in Murr Ck. Only brook trout in lower section. No fish detected in upper section.
      - MFWP will review information and provide recommendation if any additional electrofishing surveys are recommended for the drainage. MFWP/NorthWestern will review size of bull trout sampled in Big Rock Creek to determine likely presence of migratory life history in tributary
  - o Spatially Explicit Decision Support Modeling in support of Strategic Prioritization of Native Trout Restoration in the Lower Clark Fork River (Wade)

A Bayesian model was developed for bull trout using known parameters for the Lower Clark Fork local populations. It is still being evaluated, but has been tested and it is anticipated to be useful going forward in determining what the important habitat and population elements are that interact on bull trout populations. There is a report currently in preparation by Doug Peterson and the results will be shared as soon as the report is complete.

#### Avista Studies

✓ HDX remote reader in lower Prospect Creek (2014)

The HDX PIT tag array in lower Prospect Creek was operational through mid-May when both the upper and lower antenna broke. This array was reinstalled on August 27 and was operational the rest of the season. Five fish were detected on this array following reinstallation in late August. Two of these fish were adult bull trout that had been captured in the Prospect Creek weir in previous years. The third fish was an adult bull trout that was captured downstream of Cabinet Gorge Dam in 2011 and was radio tagged and released in Noxon Reservoir to evaluate the Thompson Falls fish ladder trap. This fish was radio tracked in Noxon Reservoir through 2011. It was not detected again until its recapture during electrofishing efforts (by PPLM) below Thompson Falls Dam on May 28, 2014. The final detection of this fish was on September 18, 2014 on the lower Prospect Creek array antenna. The last two fish detected on the array were bull trout tagged by personnel from PPLM. Both were captured in the Thompson Falls fish ladder in 2013 and were transported upstream prior to their detection on the lower Prospect Creek array in 2014.

### ✓ Bull trout sex identification marker

The Abernathy Fish Technology Center has acquired the sequence for this marker and is planning on incorporating this marker into their normal rapid response bull trout analysis starting in 2015.

### o Avista Bull Trout Transport 2014 above Cabinet Gorge Dam

A total of 75 adult bull trout were captured downstream of Cabinet Gorge Dam in 2014 (a new record). Sixty-three of these fish assigned to Montana and were transported upstream. Of the 63 adult bull trout that were transported upstream, 25 were transported to and released into Cabinet Gorge Reservoir or associated tributaries and 26 were transported and released into Noxon Reservoir or associated tributaries, while the remaining 12 genetically assigned to and were transported by MFWP to tributaries upstream of Thompson Falls Dam [Thompson River drainage (10), St. Regis (1), and Clark Fork River near Paradise (1)].

MFWP commented that 3 additional bull trout captured below CGD (and genetically assigned to R4) were previously captured as juveniles and juvenile location overrides genetically so those three fish were moved to EF Bull River versus R4.

- o MSU Graduate Study Thompson River (Jeff Glaid)
  - Sampled for bull trout in West Fork Thompson River between October 3 and 17, 2014
  - 29 bull trout received both acoustic and PIT tags (FDX and HDX)
  - 25 bull trout received FDX and HDX tags by MFWP
  - 4 of 29 bull trout moved out of the Thompson River but none moved into the Reservoir
  - 1 of the 24 MFWP PIT tags moved out of the West Fork Thompson River and into the Reservoir in 16 days (but no acoustic tag)
- o Bull trout genetics 2014 (Fish Creek, NF and SF Jocko River) referenced in DeHaan et al. 2014

#### **Scheduled Activities for 2015**

- Fisheries Baseline Studies
  - o Spring Electrofishing
    - Upper and Lower Reservoir
    - Potential electrofishing below Thompson Falls Dam
      - No electrofishing below dam in 2015.
  - o Fall Electrofishing
    - Above Islands
  - o Fall Gillnetting Reservoir
- MSU Graduate Study Thompson River
- SMB Floy tag in 2015
  - Plan is to continue to pass SMB over Thompson Falls Dam in 2015
  - Plan is to insert Floy tags in SMB in 2015 over 275mm size with goal of trying to find out where fish are going. NorthWestern Energy will review existing data on size of SMB that were implanted with Floy tags and recaptures to determine if there may be any benefit to tagging smaller sized fish in order to monitor movement of sub-adult as well as adult fish.

## 2015 Proposals for TAC Funding

- 2015 Proposals
  - Beartrap Creek Culvert USFS has identified this as a potential project for the future and will look for internal funding
  - o Land Acquisition in Fish Creek Ladd Knotek and Pelah Hoyt
    - Request for TAC Funding: \$40,000
    - Property cost is \$1.4 million (FWP secured \$1,050,000)
    - Area is designated critical bull trout habitat
    - Purchase agreement in hand with land owner hopefully to complete transaction before the new legislative session
    - TAC Vote: Unanimous Yes
    - Funds need by middle of 2015 (likely earliest)
    - Pelah Hoyt (Five Valley Land Trust) will coordinate with NorthWestern Energy regarding payment details
  - o Genetics additional bull trout baseline data analysis \$3,000 (MFWP-Ladd Knotek)
    - Little Joe Creek (both forks) samples have been collected and are ready for analysis
    - Samples costs approximately \$60/fish to analyze
    - Request to analyze 50 samples
    - TAC Vote Yes unanimous
- Fidelity Account Update
  - o Balance \$180,000 December 2014 (maximum allowed in account \$250,000)
  - o \$120,000 Fish Creek land acquisition approved in 2014 (to be paid)
  - o NorthWestern Energy contribute \$100,000 January 1, 2015
  - o \$160,000 balance as of January 1, 2015
  - o \$50,000 out in 2015 for MSU graduate study
  - o \$10,000 misc. in 2015 for MSU study
  - o Available balance for new 2015 projects: \$100,000
    - FWS, CSKT, FWP, NorthWestern Energy Voted Unanimously to Allocate \$40,000 to Fish Creek Acquisition (Rehbein property)

- FWS, CSKT, FWP, NorthWestern Energy Voted Unanimously to Allocate \$3,000 to Bull Trout Genetics Baseline (Little Joe Creek)
- o Approximate Balance: \$57,000

## **Volitional Fish Passage at Thompson Falls Dam**

When will the upstream fish passage at Thompson Falls Dam transition to volitional passage? Discussions indicate agreement that volitional passage is the ultimate goal. There is little concern regarding passage of lake trout. There is still concern regarding passage of walleye. Discussions identified a need to continue collecting fish data at the ladder, start testing if fish will move through the "tunnel" to exit pool 48 and enter the reservoir, and start planning for how/when volitional fish passage will be implemented. Fish passage in 2015 will continue to implement the same protocols as in 2011 through 2014.

## **Changing the channel downstream of Thompson Falls Dam**

Introduced idea during meeting, but no plan or proposal for any action.

## Avista Fish Ladder(s)

The fish handling and holding facility (\$2.2 million) located at the Cabinet Gorge Fish hatchery in Idaho will be completed by the end of the year. This facility will be used to sort and hold fish captured at the Cabinet Gorge Fish passage facility once it is constructed and operational. An amendment to the Clark Fork River Settlement Agreement concerning the construction and operation of the passage facility has been developed and was approved by MFWP, IDFG and Avista in August of this year. Avista is currently waiting on comments from the USFWS. Once all parties agree to the amendment, Avista can begin the permitting process and start construction of the fish passage facility soon after. For more technical information interested parties should attend one of Avista's technical meetings where these projects/activities are discussed in detail.

## **2014 Annual Report Schedule**

- Draft Report to TAC for Review Friday, February 13, 2015
- Comments from TAC Due March 13, 2015
- Finalize Report, Submit to FWS for Signature Approval March 23-27, 2015
- E-File with FERC March 30-31, 2015

## **Scheduling 2015 TAC Meeting(s)**

December 2015 (TBD)

## **Attendees to the December 4, 2014 Annual Thompson Falls TAC Meeting**

Name	Affiliation	Email	Phone
Andy Welch	Northwestern Energy	andrew.welch@northwestern.com	406-444-8115
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Jeff Glaid	MSU- MTCFRM	Jeffrey.glaid@msu.montana.edu	412-720-7813
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Jon Jourdonnais	Northwestern Energy	jon.jourdonnais@northwestern.com	406-490-1802
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