

**Mystic Hydroelectric Project – Aquatic Resources
Technical Advisory Committee Meeting
MFWP Office - Bozeman, Montana
January 26, 2016 (10am-2pm)**

Attendees:

Name	Affiliation	E-mail	Phone
Jon Jourdonnais (via phone)	NorthWestern Energy	Jon.Jourdonnais@northwestern.com	406-490-1802
Brent Mabbott	NorthWestern Energy	Brent.Mabbott@northwestern.com	406-490-1801
Andy Welch	NorthWestern Energy	Andrew.Welch@northwestern.com	406-444-8115
Jason Rhoten	MFWP	jrhoten@mt.gov	406-698-1905
Clint Sestrich	Forest Service	csestrich@fs.fed.us	406-823-6067
Ken Frazer	MFWP	kfrazer@mt.gov	406-247-2961
Ken Coffin	Forest Service	kcoffin@fs.fed.us	406-446-4529
Jason Garber	MDEQ	jgarber2@mt.gov	406-444-2734
Kristi Webb	New Wave Environmental Consulting	kwebb@nw-enviro.com	406-239-4484

Introductions

Jason Garber is the new MDEQ CWA Section 401 Coordinator and will be a new contact regarding 401 certifications.

Ken Coffin is the new Beartooth District Ranger in Red Lodge.

Meeting Overview

Review the fisheries and water quality data collection in 2015.

Discuss schedule for deliverables to the TAC and FERC in 2016.

Discuss proposed revisions to the 6-year (2016-2021) Fisheries Monitoring Plan

2015 Mystic Lake Sampling

Gillnetting and Angling Efforts

Total of 6 nets deployed in upper lake and a total of 6 nets deployed in lower lake.

Size distribution of rainbow trout in 2015 appears larger compared to past years.

Angling efforts – 86 fish. CPUE 4.6 fish/hr.

Gillnet and angling data from Mystic show size distribution of rainbow trout has increased since 2009. The frequency distribution graphs indicate slow growth and it's likely that the same age class has increased in size from 2009 to 2015.

In 2015, one Utah chub was recorded during gillnetting. In 2014, FWP set five nets and captured two Utah chub in Mystic Lake. In 2012, five Utah chub were captured gillnetting in Mystic Lake. The size of all Utah chub captured between 2012 and 2015 ranged between 145 mm and 170 mm (about 5.7-6.7 inches). FWP is not one-hundred percent convinced fish is Utah chub and maybe lake chub. TAC proposed continuing to collect Utah chub specimens during future Mystic Lake gillnetting activities (next sampling scheduled for 2018) and potentially evaluate genetics. Brent may try to sample for Utah chub in 2016.

2015 Redd Survey

FWP completed one spring survey on May 11 resulting in 1 redd and completed one survey on October 27 resulting in 3 redds.

NorthWestern completed one survey on November 5 resulting in 15 redds.

2015 Fisheries Reporting Requirements

Annual Fisheries Report – only to TAC

6-Year Fisheries Summary – submit to TAC for agency approval and signature (MDEQ, FWP, USFS) and to FERC.

In 2016, NorthWestern will prepare the 6-year (2010-2015) Fisheries Monitoring Report for TAC review and approval (and agency signature) and FERC filing. The report will summarize all work completed in compliance with the 2010-2015 Fisheries Monitoring Plan.

In 2016, NorthWestern will revise the 6-year (2016-2021) Fisheries Monitoring Plan per discussions during this meeting and submit to the TAC for review and approval (and agency signature) and FERC filing.

Both reports will be submitted to the agencies as a package for review, approval, and signature prior to filing to FERC. These reports must be submitted to FERC by the end of May 2016.

Proposed Review Schedule

- April 1 - Both documents (2010-2015 Fisheries Report and 6-Year Fisheries Monitoring Plan for 2016-2021) will be submitted to the TAC
 - Agencies will have 30-days for review and comment
- May 1-8 - NorthWestern will incorporate comments and finalize the report in May
- May 9-20 (2-weeks) – NorthWestern will coordinate with USFS, MDEQ, FWP for signature*
- May 23 - E-file package to FERC

*Agency signatory is from whomever the agency designates/delegates for signature. Need signatures from FWP, FS, DEQ

Proposed Revisions to the 6-Year (2016-2021) Fisheries Monitoring Plan

**Mystic License
 Proposed Fisheries Monitoring
 6-Year (2016-2021) Schedule**

Year	Sampling Effort						
	A	B	C	D	E	F	G
2016			✗	X	✗	✗	X
2017		X	X			X	
2018	X		✗			✗	X
2019			X	X	✗	X	
2020		X	✗			✗	✗
2021	X					X	

A= Mystic Lake monitoring

Maintain 3-year cycle of monitoring in the lake

B= West Rosebud Creek between the dam and powerhouse

Maintain the 3-year cycle of monitoring in the upper bypass channel

C= West Rosebud and Emerald lakes fish monitoring

Modify monitoring in West Rosebud Lake and Emerald Lake to every 3rd year, starting in 2017 and again in 2019.

D= West Rosebud Creek below Emerald Lake electrofishing

Maintain the 3-year cycle of monitoring WRC below Emerald Lake

~~E= West Rosebud Creek habitat monitoring~~

Remove habitat monitoring from the new 6-year sampling plan.

Macroinvertebrates sampled at Allen Grade and Pine Grove CG will continue under the Water Quality Plan in 2018 (thus macroinvertebrate sampling will be removed from the new Fisheries Plan)

F= West Rosebud Creek redd counts

Fall redd counts will continue every other year, starting in 2017.

Spring redd counts will be discontinued.

G= Water Temperature monitoring

Continue monitoring April 1 – October 1 (as access permits) in the four site locations in 2016 and 2018, then the water temperature monitoring will incorporate into the Water Quality Plan for any future monitoring.

2015 Water Quality Sampling

Water quality data is collected in compliance with the 10-year (2010-2019) Water Quality Plan. Years scheduled for water data collection include 2010, 2012, 2015, and 2018. A report summarizing results from the 2015 data collection will be made available to the TAC, but there is no FERC filing requirement until the completion of the 10-year monitoring period (2019).

Data collection in Mystic Lake included water chemistry and biological samples for phytoplankton and zooplankton. Data collection in West Rosebud Creek was completed at 3 sites

(Above Powerhouse, Below Powerhouse, and below West Rosebud Re-Regulation Dam) testing water chemistry, chlorophyll a, and periphyton. Macroinvertebrate samples were taken at the 3 sites plus Allen Grade bridge and Pine Grove Campground.

Analysis of the macroinvertebrate samples is ongoing. Approximately 95% non-detects for water quality parameters.

NorthWestern presented depth profiles for Mystic Lake from 2010, 2012, and 2015 (sampled in early August each year) showing temperature, dissolved oxygen, specific conductivity, pH, and secchi depth. Not much difference in profiles over the years. The system is completely oxygenated through the water column. Data show the system is clean, clear, and cold.

2016 Water Quality Reporting Requirements

Data collected in Mystic Lake and West Rosebud Lake in 2015 and will be summarized in a report scheduled to be submitted to the TAC (no FERC submittal requirement) by December 31, 2016.

Mystic Lake Website

All items filed with the Commission are archived on the Mystic Lake Project website. If you have any issues or questions about a document, please contact Kristi Webb at kwebb@nw-enviro.com.

Project Website www.mysticlakeproject.com

Whitewater Recreation Flows

In 2015 there were 3 whitewater days (non-consecutive) and total of 16 boaters.

A new 10-year Whitewater Flow Plan for 2015-2024 was filed with the Commission on October 27, 2014 and is available on the project website:

http://www.mysticlakeproject.com/pdf_2014/Mystic-Whitewater-Flow-Plan-2014.pdf

Signage – Invasive Species and Safety Issues

Jeff Gildehaus with USFS is the primary contact for coordinating needs for new signage or updates in order to maintain consistency. Ken Coffin/Clint Sestrich will coordinate with Jeff Gildehaus regarding discussion for signs to address safety concerns (e.g., vehicles driving on WRL in the winter) and aquatic invasive species. Whitewater boaters and other recreationists are potential vectors for introduction of invasive species without public outreach/education.

2016 Funding

\$25,000 annual funding – non-FERC agreement, funds in support of work in Project area.

\$22,000 - NWE setting up contract with MFWP and USFS for \$11,000 each for 2016 funding.

\$3,000 remaining and allocated to the following:

\$800-\$900 to purchase a Coleman Crawdad for shocking McKay Section in West Rosebud Creek. Approved last year for purchase, but unavailable when looked for

product. FWP will look into purchase earlier in this year and coordinate with Brent for purchase.

\$997 per lithium battery for back electroshocker and charger - request from USFS (Clint Sestrich), use by crew is not often in Project area.

\$300-400 per camera to put latitude, longitude (metadata) on photo. Always know where photograph was taken. Two cameras (USFS, FWP)

NorthWestern approved purchase of 2 lithium batteries (one FWP, one FS), 2 chargers (one FWP, one FS), and boat (FWP) in 2016. Following the purchase of these items, NorthWestern will evaluate remaining budget to determine if enough funding is available for the purchase of two cameras (one FWP, one FS).

2016 Activities

- West Rosebud Creek below Emerald Lake electrofishing – May 2016
- Water Temperature monitoring (4 sites) – April 1 through October 1
- 6-Year (2016-2021) Fisheries Plan – April 1 to TAC
- 6-Year (2010-2015) Fisheries Summary – April 1 to TAC
- 2016 Water Quality Monitoring Plan (to TAC by December 31, 2016)