

Mystic Hydroelectric Project (FERC #2301)
Fisheries, Aquatic Habitat and Water Quality Technical Advisory Committee Meeting
Montana Fish, Wildlife and Parks Office - Bozeman, Montana
February 7, 2017

Location: MFWP Library, Bozeman

Meeting Start Time: 10:15AM

Agenda:

1) Introductions

2) 2016 Monitoring Activities

2016 Mystic Fisheries Monitoring Results and Reporting

Results from 2016 monitoring activities will be summarized in an annual report. The 2016 Mystic Lake Fisheries Monitoring Report will be distributed to the Mystic TAC. The 2016 annual report will not be filed with the Commission. Annual reports will be submitted to the TAC and posted on the project website. The 6-year (2016-2021) monitoring report will be filed with the Commission by December 31, 2022.

a. West Rosebud Creek below Emerald Lake electrofishing (Jason Rhoten, FWP) Mackay Section – in 2014 switched sampling period from Fall sampling to Spring sampling. The most recent sampling was completed in May 2016 resulting in a population estimate of 309 brown trout per mile. When evaluating just 8-inch or greater fish (Age 2+), the population estimate was approximately 222 brown trout per mile

Spring population estimates from 2016 are similar to 2014, but lower than Fall estimates in 2010. In 1998, the last spring population estimate on file was over 300 fish per mile. The average size of fish is going up each sampling year from 2010 to 2016. With larger fish, the carrying capacity may be lower. FWP is monitoring this trend and may go out in the Fall (2017) to see if the population estimate is similar to the last Fall sample event in 2010. There were some discussions if flushing flows from whitewater recreation (plan implemented in 2010) and potential impacts to habitat conditions subsequently brown trout populations.

b. Water Temperature monitoring (Andy Welch)
In 2016, Andy deployed 5 temperature loggers, including one in the upper bypass, one above the powerhouse, two below the powerhouse and one below West Rosebud Lake. These gathered data from April into November.

Two loggers in the below powerhouse section (BPH) to compare the historic location to a proposed new site. NorthWestern is proposing a new site due to safety issues and concerns with accessing the historic BPH site. The historic location is at the bridge and the proposed new site is located about 200 yards downstream of the bridge (near Andy Kukes old house). The issue that the historic BPH Bridge site is that access to the site requires the load to be taken of the plant generators. Prior to accessing the site, Andy has to coordinate with the operators in order to avoid a plant trip, which would results in A LOT of water being immediately released to the old BPH site. The second site (BPH-Andy) is below some pretty violent cascades in the bottom of a big pool, but does not have the same safety issues. The temperature difference between these 2 sites appeared minimal.

Welch proposed to no longer use the historic BPH location and change it to the BPH-Andy site to address safety concerns. TAC (FWP and USFS) agreed to change site. Next monitoring is scheduled for 2018 and the site locations will be updated in the water quality monitoring report. The goals and purpose of water temperature monitoring will be evaluated during the development of the next 10-year water quality monitoring plan.

c. Update on Chub identification (not Utah Chub)

Previously, the chub sampled from Mystic Lake during gillnetting efforts in 2012 were identified as Utah chub. Specimens were reevaluated in 2016 by Travis Lohrenz, FWP. Travis works with Utah chub present in Hebgen Lake. Travis concluded the specimen was not a Utah chub but rather a Lake Chub (native species to MT). Travis's conclusion was primarily based on characteristics of the mouth. Other differences were also discussed during the meeting. Pelvic fins on the Lake chub is further forward than on the Utah chub. The mouths are different. Lake Chub has a barbel, but difficult to find. Brent has observed these fish in the shallow areas near the lake house at the dam for years over that last several years... It sounds like these fish have been present in Mystic Lake and in 2012 some were finally large enough to be caught in gillnets.

The 2016 annual report will include a brief section on Chub and include the revised identification of the species. This information will also be included in the next 6-year report that will be submitted to FERC in 2022.

Brent is going to get photos of Utah chub from spring sampling in Hebgen and have Lake Chub photos available on site for reference while sampling at Mystic.

3) Custer-Gallatin National Forest and Stillwater Valley Watershed Group Stream Assessment on East and West Rosebud creeks, Little Rocky Creek and Fishtail Creek (Clint Sestrich, USFS)

Lindsay Clark, SVWG coordinator, approached Clint Sestrich a few years ago about extending a stream assessment of East and West Rosebud and Fishtail Creeks (conducted by Warren Kellogg) upstream onto National Forest System Lands. The intent of the assessment is to identify and prioritize restoration needs and opportunities. Clint Sestrich and Andy Efta, CGNF east side hydrologist have collected assessment data and photos on West Rosebud, Little Rocky, and East Fishtail Creeks (in 2016). USFS still has some field work to do, but thought the group might be interested in our findings and presented a power point during the meeting.

NorthWestern also has riparian reports from 2005 (pre-licensing) and 2009 that are available on the Project website.

4) 2015 Water Quality Monitoring

- a. 2015 monitoring results summarized and submitted to TAC on October 25, 2016

(no FERC submittal) Report available on project website: <http://mysticlakeproject.com/>

Next sampling event scheduled for 2018. The results from 2018 will be compared to previous years to develop a 10-year (2010-2019) comprehensive report for TAC review and approval and submittal to FERC in 2019.

- b. 10-year (2010-2019) comprehensive report to TAC and FERC by December 31, 2019

5) Invasive Aquatic Mussels (Andy Welch)

Andy is on the Montana invasive species advisory council (MISAC). Invasive mussels were detected in MT in fall of 2016. An incident command team (ICT) was established to respond to the detection. The ICT developed a framework to respond to the infestation. Implementation of this framework has transitioned to FWP management. The implementation strategy includes prevention, control, and education efforts including updating monitoring protocols and increase capacity; double number of watercraft inspection stations and increase hours stations are open. There will be decontamination stations, including two at Canyon Ferry and two stations at Tiber Reservoir. The long range (next 2 years) plan is estimated to cost 10.5 million for the enhancement of existing programs and new programs. Some administrative rules to be set up to address mandatory decontamination. FWP is waiting for approval of funding requests.

Clint Sestrich recommended some type of announcement or link on the Mystic whitewater website (managed through NorthWestern) to help educate public on invasive mussels, cleaning methods, etc. Brent will look into options for incorporating either a message or link to the website to keep boaters/public aware of cleaning protocols and threats of invasive mussels.

6) Whitewater Recreation Update

Number of boating days – There were no water releases in 2016 for kayaking. However, there was an individual that went out and filled out a kayak survey card for July 9th.

Whitewater recreation website: <http://www.mysticlakeproject.com/whitewater-group.htm>

Whitewater Flow Enhancement Plan: http://www.mysticlakeproject.com/pdf_2014/PROTOCOL-for-WRC-Whitewater-Flow-Enhancement-2014-NWE.pdf

7) 2016 Funding (\$25,000) – 2016 funding used for the purchase of a boat and batteries.

- a. \$11,000 USFS
- b. \$11,000 FWP
- c. \$3,000 Equipment

8) 2017 Monitoring Activities (2016-2021 Fisheries Monitoring Plan)

- a. West Rosebud Creek between the dam and powerhouse (Electrofishing)
 - i. September 2017 – two sections (upper and lower)
- b. West Rosebud and Emerald lakes fish monitoring (gillnet) – May 2017
- c. West Rosebud Creek Fall redd counts (no more spring counts) - Fall 2017

2016-2021 Fisheries Monitoring Plan – Approved by FERC in a letter dated, June 17, 2016. The following outlines the schedule for continuation of fisheries monitoring activities between 2016 and 2021.

Year	A	B	C	D	E	F
2016				X		X
2017		X	X		X	
2018	X					X
2019				X	X	
2020		X	X			

2021	X				X
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- A = Mystic Lake monitoring
- B = West Rosebud Creek between the dam and powerhouse
- C = West Rosebud and Emerald lakes fish monitoring
- D = West Rosebud Creek below Emerald Lake electrofishing
- E = West Rosebud Creek fall redd counts
- F = Water temperature monitoring

Next submittal to FERC is the 6-year (2016-2021) report due to FERC by December 31, 2022.

9) 2017 Funding

- a. \$11,000 USFS (need service agreement)
- b. \$11,000 FWP (contract is done)
- c. \$3,000 Equipment (let Brent know if needed... Jason – potentially need new gill nets and will email Brent needs)

Brent requested USFS and FWP provide summary of how funding is being spent (2016) and track in 2017.

Meeting notes and reports are posted and available on the Project website (<http://www.mysticlakeproject.com/index.htm>).

Meeting Adjourn: 11:45am

MEETING ATTENDEES:

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