

Mystic Hydroelectric Project (FERC #2301)

Fisheries, Aquatic Habitat and Water Quality Technical Advisory Committee Meeting

MFWP Office- Billings, Montana

January 7th, 2020

Meeting start time: 10:00 AM

Attendees

Bryan Giordano, FWP

Ben Bailey, FWP

Clint Sestrich, CGNF

Andy Welch, NWE

Jordan Tollefson, NWE

Jon Hanson, NWE

Mary Gail Sullivan, NWE (via phone)

Introductions

Bryan is new FWP management biologist that covers Mystic project area. Bryan started in position this last fall.

2019 Monitoring

- **Electrofishing:**
Spring mark recapture estimate was completed on the Pine Grove section. Have data from spring season in 1998, 2014, 2016, and 2019. Went to spring sampling to get a better estimate for brown trout. 2019 results show 296 LL per mile greater than five inches. Estimate is within range and stable from '14 and '16 estimate but lower than 1998.
- **Redd Counts:**
Redd count was completed on Nov. 7th and is the second lowest on record. River was completely frozen shortly before survey occurred and water temperature was 2.1^o C the day of survey. Typically water temperature is closer to 5^o C when counts are completed. Ben will send Jon fish monitoring results and separate brook vs. brown trout redds.
- **West Rosebud Habitat Survey:**
USFS did a habitat survey in W. Rosebud creek on the USFS lands to identify if spawning and rearing habitat is limited and identify opportunities for habitat enhancement. 10 reaches were delineated based on gradient and channel type through mapping and a R1/R4 habitat inventory was completed. Results showed limited spawning gravel, pools, and large wood. Pools more frequent in side channels, but are small and only 1,156 yd² (34 yd x 34 yd) of spawning gravel surveyed. Some potential for addition of LWD in Reaches 2, 6, 7 for habitat enhancement, beaver dam analogs may be appropriate to

enhance some off channel habitats. Additional work in 2020 will include completing assessment in reaches 3, 4, & 10 and electrofishing side channels and connected springs vs mainstem pools. FWP will look for a habitat survey that was completed in 2006 for comparison.

- **2019 Creel Survey Results:**
Recreation survey planned for 2019 and additional information on fishing added onto this survey. Questions included where did you fish, how long did you fish for, how many fish caught and released, and how many fish harvested. Most fishing pressure was on W. Rosebud Lake, Mystic Lake, and Island Lake. Survey showed 504.75 hours of fishing, 578 fish caught and released, and 132 kept.
- **Water Quality:**
The 20-year water quality plan was submitted to FERC in 2019.

2016-2021 Fisheries Monitoring Plan

Year	A	B	C	D	E	F
2016				X		X
2017		X	X			
2018	X				X	X
2019				X	X	
2020		X	X			
2021	X				X	

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

2019 Funding Recap

- \$11,000 USFS used for habitat monitoring and fisheries work
- \$12,500 FWP used for redd counts and electrofishing required work
- \$1,500 for field equipment purchased by NWE for FWP and USFS. Ben talked about finding a new gill net supplier that was in country and easier to pay.

2020 Approved Funding

- \$11,000 to USFS complete habitat survey, electrofishing side channels, spring redd counts on spawning areas.
- \$12,500 for FWP, W. Rosebud upstream of powerhouse and W. Rosebud and Emerald Lakes gill netting.
- \$1,500 retained for field equipment needs.

Other Topics

- Riparian survey was completed along W. Rosebud Creek by Power Engineers. This is a 4e condition within the FERC license. Minimal changes since previous survey in 2009.
- Mystic Lake hiking trail reroute is partly completed. This work is re-routing the current trail that goes through the Mystic powerhouse area around the compound. USFS trail crew is doing the work and it is expected to be completed by this summer.
- Chicken Creek crossing is being replaced in either 2020 or 2021, depending on contractor schedule that will be doing the work.
- The Mystic 50kV line is nearing the end of its lifespan and NWE is working with the USFS on rebuilding this line. The B-line will be replaced with similar poles in place and will stay within the existing 100' right of way, it will take approximately 6-8 weeks in July/August of 2021. Working with the USFS on the environmental review now and NWE has completed a baseline environmental document. Part of the project is within the FERC boundary.