

**Mystic Hydroelectric Project – Aquatic Resources
Technical Advisory Committee Meeting
Bozeman, Montana
January 27, 2015**

ATTENDEES:

Name	Affiliation	E-mail	Phone
Jon Jourdonnais	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	MT FWP	Jason.Rhoten@mt.gov	406-328-6160
Clint Sestrich	Forest Service	csestrich@fs.fed.us	406-823-6067
Ken Frazer	MT FWP	kfrazer@mt.gov	406-247-2961
Ginger Gillin	GEI Consultants, Inc	ggillin@geiconsultants.com	503-342-3777
Melissa Schaar	DEQ	mschaar@mt.gov	406-444-5226

Miscellaneous News

Upcoming Repair Work at Mystic Dam

In April 2015, NorthWestern Energy (NWE) will work on sealing up Mystic Lake Dam with grout on the upstream side. There will still be ice on Mystic Lake when this work is being done, but have to do work when pool is fully drawn down.

Current Flow Conditions

Currently NWE is pulsing but the re-reg dam on West Rosebud Lake smooths out the flow so that there are no large fluctuations downstream in West Rosebud Creek. NWE is trying to hold flows at 43 cfs as long as the water supply holds out to protect brown trout redds. Federal Energy Regulatory Commission (FERC) requires 20 cfs, but they are releasing more water than required in order to protect fish.

Fish Data – West Rosebud Creek

Jason gave a report on electrofishing conducted in 2014 in the West Rosebud Creek Mackey Section. In the future, MFWP wants to do this sampling in the spring in order to get estimate of brown trout.

Scale analysis of fish in fall show that there are brown trout migrants from Stillwater River entering West Rosebud Creek. The goal of the sampling is to estimate the population of resident brown trout, so for that reason, spring sampling would be preferred.

There are too few rainbow trout to allow for an estimate of rainbow population size, so there is no real value in fall sampling. The TAC agrees to change to regular spring sampling.

The TAC also agrees to keep West Rosebud Creek MacKay Section on an every 3-year schedule, so the next sampling will be in 2016.

Jason could not present population estimates because the MFWP computer program isn't working.

The length-frequency histogram in 2014 is really different from 2010 data, but 2010 data was collected in the fall, so young fish may have migrated, thus changing the abundance of smaller fish.

Fall and spring redd data collected in 2014. Brent saw more fall redds than MFWP is reporting, but he thinks they were brook trout redds. MFWP did not count brook trout redds, only brown trout redds.

Mystic Lake Sampling

Clint keyed out the two chub they captured in Mystic Lake and concluded they were Lake Chub. He sent them to Bob Bramlett and he keyed them out to Utah Chub probably.

This coming year is the Mystic Lake monitoring year so they will try to catch more.

NWE will take a dissecting microscope up to Mystic Lake so that they can look at the fish while they are still fresh. The barbel is the key diagnostic characteristic, but it can be hard to see that feature in fish that have been preserved.

Sampling in West Rosebud and Emerald Lakes

Gill net sampling was done just a few days after rainbow trout hatchery stocking but only MFWP caught a few stocked rainbow trout in the gill nets. Rainbow trout were stocked in Emerald Lake at the same time as West Rosebud Lake.

October 2013 MFWP stocked 1,000 cutthroat trout in the West Rosebud Lake, they caught two in the following year in the gillnetting.

There was discussion about ice fishing in West Rosebud Lake when the Project is pulsing. Do fluctuating flows mean that the ice is not stable? Because of fluctuating pool elevations? The water levels only fluctuate a few inches – not feet. There are signs warning recreationists posted around the lake.

Note – FERC hasn't confirmed their agreement with the proposal to go to a 10-year reporting plan.

West Rosebud Creek Bypass Reach Sampling

Bypass – the Upper Reach is the section we referred to as the middle section during the licensing work. So we need to be sure to compare back to earlier data correctly.

Question – Do we have GPS locations for section boundaries? From licensing work?

Jason will send Ginger report and raw data. MFWP wants all data entered into Godzilla.

Whitewater Flows

NWE has tightened up whitewater protocol, so they are not providing boating flow during periods when boaters are not showing up. NWE only releases the flows a few days a year. The flows have a detrimental impact on anglers, but it is the balance that NWE must maintain between different resource uses.

2015 Funding

NWE contract with MFWP and USFS is for \$11,000 each.

Discussion on buying new engine for the boat at Mystic Lake. Decision to purchase this, NWE will buy this out of their admin budget. Will cost about \$4,000.

Need to re-up the subscription to the SPOT for this year.

Purchase a Crawdad for shocking McKay Section? Sometimes use that for shocking West Rosebud. Yes – and misc. equipment.

Discussion on buying hiking boots for field staff. NWE policy is to keep to the policy of agency.

2015 Activities

Gillnetting and water quality sampling at Mystic Lake will be done the second week in August.

Redd counts spring and fall.

Water quality sampling scheduled this year. April, July, October. Biological samples will be taken in October.