NorthWestern Energy Madison Technical Advisory Meeting Bozeman, MFWP Office December 3, 2019

MadTAC Business

• Recognize a quorum with voting representatives from MFWP, USFS, USFWS, and NorthWestern Energy.

Staff Changes: NWE- Brent retired in March and replaced by Jon Hanson. FWP- Recently hired Matt Jaeger as a Hydropower/Native species coordinator. Matt will be primary FWP biologist working with MadTAC and will be located in Dillon. BDNF- Darin Watschke is on a 4 month detail to AK, Andrew Morin is fish biologist filling in behind him. Darin expected to be back in spring. In general lots of staff turnover and new players in the Madison drainage. Will take some time to get familiar with area, issues, and project development.

2019 Public Meetings: NWE held a public meeting in W. Yellowstone during the spring and presented an update on TAC funded projects and water quality data from 2018. An additional meeting was held in Ennis focused on an update of the Madison plant work, and TAC projects. Both meeting were well attended.

Madison Dam Leakage Test: Every 5 years as part of FERC safety requirements leakage through Madison Dam is tested. Work conducted 11 September and minimum flow through Bypass channel was 106 cfs. Reach was walked by NWE and USFS staff to make observations on potential impacts. Some stranding of fish (4" or less typically) was confined to wider shallow floodplain areas in the reach.

Madison Plant Upgrade Work: Work began this fall to replace generators and turbines. There will be no generation and all water will be in the bypass channel for approximately a year. Access road will remain open for public traffic during the project, but there will be some short term closures when moving large equipment in and out.

Cultural Resource Management Requirements: Jon reviewed cultural management requirements and reported that projects needing cultural review can be completed by the entity proposing the project with documentation provided to NWE before ground breaking activities. Also NWE has a contractor that can complete the work, if this route is taken projects should anticipate these costs (~\$2,000-\$3,500) and these funds would be dedicated specifically towards the CRM inventory.

Water Quality Monitoring

Jordan gave an update on water quality monitoring activities which included invertebrate sampling, water temperature monitoring, sediment cores and Hebgen toxic algae monitoring. Nothing out of the ordinary for 2019, final results and write-ups are still pending.

Review of 2019 Projects

- **001-19. FWP Operations and Personnel.** Travis Lohrenz (FWP) reviewed annual monitoring activities. Gillnetting surveys in Hebgen and Madison Reservoirs, electrofishing, tributary monitoring, redd counts, and core samples. Travis H. gave a more detailed update on Madison River fish population estimates from 2019.
- **002-19.** Ennis Office Rent. Rent was paid and lease agreement increased by \$1200 this year.
- **005-19. Emergency Fund**. \$1200 for excess Ennis rent costs, \$740 for extra rock for S. Meadow project, and \$1397 for construction cameras for project monitoring.
- **006-19. Habitat Project Assistance.** Allen McNeal used for S. Meadow Creek implementation, and for evaluations/technical assistance for English George Creek and Hot Springs Creek.
- **008-19. BDNF Seasonal.** Tributary sampling, physical monitoring, outreach, project implementation.
- **009-19. CGNF Seasonals.** Tributary sampling, physical monitoring, outreach, project implementation.
- **010-19. Tepee Creek Barrier.** Barrier blasting and construction completed this summer. Additional fish sampling planned to determine effectiveness in coming years.
- **011-19. Private Ponds.** Contract with Ruby Valley CD was set-up. They are pursuing GIS evaluation of ponds in Madison Valley.
- **013-19. Wall Creek Barrier.** Pursuing additional funds through Future Fisheries, WNTI, and 2020 MadTAC proposal.
- **014-19. MWF Temperature Study.** Thesis write-up ongoing. Field work is completed.
- **015-19. Lower Jack Creek Restoration.** Restoration construction and willow planting completed late fall by TU and Madison CD.
- **016-19.** Three Dollar Bridge. Access trails constructed, exclosure fencing and planting work is completed.
- **017.19. South Meadow Creek Restoration.** Installation of instream structures and removal of streamside berms were completed in early winter, weather forced work stoppage and some minor work scheduled to be done in 2020.
- **012.19. Hebgen Creel Survey.** Work planned for 2020 season.

End of Year 2019 Budget and Reserve Account *Updated for all end of year expenses

Project Number	Project Description	Approved Cost For 2019	Spent in 2019	Unspent
001-19	FWP Operations and Personnel	\$187,300	\$187,300	\$0
002-19	Ennis Office Rent	\$6,000	\$6,000	\$0
005-19	Emergency fund	\$10,000	\$3,337	\$6,663
006-19	Habitat Project Assistance	\$10,000	\$8,049	\$1,951
008-19	BDNF seasonals	\$9,000	\$9,000	\$0
009-19	CGNF seasonals	\$6,000	\$6,000	\$0
010-19	Tepee Cr Barrier	\$26,930	\$26,840	\$90
011-19	Private Ponds	\$10,000		\$10,000
013-19	Wall Cr barrier	\$60,000	\$60,000	\$0
014-19	MWF temp study	\$30,000	\$18,450	\$11,550
015-19	Lower Jack Creek	\$44,000	\$44,000	\$0
016-19	Three Dollar Bridge	\$10,000	\$10,000	\$0
017-19	South Meadow Creek Restoration	\$29,370	\$25,570	\$3,800
012-19	Hebgen Creel survey	\$71,960	\$71,960	\$0
	TOTAL	\$510,560	\$476,506	\$34,054
	2018 Approved Payment made in 2019			
010-18	French Cr barrier design	\$30,000	\$16,926	
	2019 MADTAC funding \$411,979		\$64,527	
	US Bank Account 12/31/2018			
	2019 Budget		\$411,979	
	Total 2019 Payments		\$476,506	
	2019 Reserve Account payments		-\$64,527	
	2018 French Creek allocation to Reserve Account		-\$16,926	
	Addition to Reserve Account 2019		\$96,649	
	Total 2020 Reserve Account		\$132,157	

Review and Comments on Selected 2020 Proposals

There were 11 projects proposed for 2020, totaling \$465,329. In most cases there was little discussion following the brief presentations by project sponsors. There were questions or comments on a few of the proposals as follows:

005-20. BH/DL USFS NTE biologist: Dale Olson introduced this as a 1-year GS-7 fisheries biologist position that would be focused on identifying habitat restoration opportunities and would produce a 5 year aquatic habitat restoration plan. Travis H. indicated this would be a tall task to accomplish within 1 year and coordination with FWP was needed. Jon reiterated the need for interagency coordination for this and the TU proposal for project planning. Dale says the FS has a long-term technician that would be good in the position.

007-20. Wall Creek Fish Barrier: Travis Lohrenz presented this project as a continuation from previous years and talked about Future Fisheries and WNTI funds that are being applied for. FF looks like it will fund \$20,000 of the \$40,000 requested and WNTI status was unknown at this time. Jon emphasized NWE has contributed \$120,000 to date and Reserve funding is an option to get this completed depending on outcome of other sources.

008-20. MSU Macroinvertebrate Study: Lindsey Albertson proposed this study to look at invertebrate and fish relationships, with a focus on salmonflies. There was discussion around if there is a link to NWE FERC license articles and what, if anything, operationally NWE could do differently to improve salmonfly populations. General agreement that the link is weak but possibly there. Additional refinement to the study to focus on key objectives would be needed if approved.

009-20. TU Restoration Planning: Jeff Dunn talked about how this coordination project would be an assessment on tributaries that would look at aerial imagery and on the ground reconnaissance to look for restoration projects. It would lay the foundation for WRP development for the Madison. Similar discussion as FS NTE biologist project occurred about the need for coordination with agencies and to develop an integrated work product that sets up real on the ground projects.

Summary of 2020 Funding Decisions and End of Year Budget Report

The budget for 2020 is \$420,218, and the total amount proposed was \$465,329 which would be overspending by \$45,111. There is available funding in the Reserve Account to cover the over budget. There was discussion about the reserve account limit (capped at \$250,000), the account is near this cap currently but NWE is waiting on some project expenses and has requested these from agencies to get them submitted prior to 2020.

At the end of 2019 the Reserve Account balance was \$132,153. Expenses for the 2019 Private Ponds Project were not submitted in 2019 and will be a carryover project. This results in a Reserve Account uncommitted funds balance of \$122,153.

After some discussion on the proposed MSU study and the need for follow-up discussions with TAC members on the planning projects Jon H. (NWE) made a motion to approve the 2020 Project Proposals as shown below, Don S. (FWP) seconded motion and all present voting members (FWP, USFS, FWS,

NWE) unanimously voted to approve the 11 projects for 2020. The TAC approved costs up to \$424,138 for 2020.

2020 MadTAC Proposals

ID	Project Title	Agency/ Contact	TAC Funding Request	TAC Approved Cost
001-20	2188 Operations and Personnel	FWP	\$196,034	\$196,034
002-20	Ennis Office Rent	FWP	\$7,200	\$7,200
003-20	Emergency/Contingency fund	NWE	\$10,000	\$10,000
004-20	Habitat Project Assistance	NWE/FWP	\$10,000	\$10,000
005-20	BH/DL FS NTE biologist	USFS	\$29,250	\$29,250
006-20	Custer/Gall NF Seasonal	USFS	\$6,020	\$6,020
007-20	Wall Creek Fish Barrier	USFS	\$60,000	\$60,000
008-20	MSU invert study	MSU/FWP/TU	\$81,191	40,000
009-20	Restoration planning WRP	TU	\$30,634	\$30,634
010-20	O'dell Creek restoration	RDG	\$15,000	\$15,000
011-20	Madison River Riparian Restoration	MRF	\$20,000	\$20,000
	TOTAL		\$465,329	
	Budget for CY2020		\$420,218	
	Total approved by TAC for CY2020			\$424,138
	Difference		(\$3,920)	

	RESERVE ACCOUNT	
	2020 Reserve Account balance	\$132,153
011-19	Private Ponds Project (2019 carry over)	\$10,000
	Unallocated Reserve Funds available for 2020	\$122,153

Attendees

Name	Affiliation	
Andy Welch	NWE	
Grant Grisak	NWE	
Jordan Tollefson	NWE	
Mary Gail Sullivan	NWE	
Jon Hanson	NWE	
Jim Boyd	FWS	
Travis Horton	MFWP	
Don Skaar	MFWP	
Travis Lohrenz	MFWP	
Dale Olson	BDNF	
Jake Chaffin	CGNF	
Jeff Dunn	TU	
Quincey Johnson	MRF	
Lindsey Albertson	MSU	