MISSOURI RIVER FISHERIES TECHNICAL ADVISORY COMMITTEE (MoTAC)

MINUTES OF ANNUAL MEETING FOR 2020 CALENDAR YEAR

MDFWP Office, Great Falls MT
20 November 2019
AND
End of Year Budget Report – December 18, 2019

Attendees

Grant Grisak (Chair, NWE – Gt Falls); Jason Rhoten (FWP-Great Falls); George Liknes (USFS - Lincoln); Jim Boyd (USFWS – Helena, by phone); Jon Hanson (NWE – Missoula); Mary Gail Sullivan (NWE – Butte); Andy Welch (NWE – Helena); Jason Mullen (FWP-Gt Falls); Dan Madel (FWP – Gt Falls); Adam Geik (FWP – Gt Falls); Adam Strainer (FWP – Helena); Luke Holmquist (FWP-Lewistown); Rob Beattie (FWP – Lewistown; Nate Beckman (FWP-Lewistown); Mike Schilz (FWP – Lewistown); Alli Russell (USFS-Helena); Eric Archer (USFS-Great Falls).

MoTAC Business Items

Recent Staff Changes/Transition. NWE reported Jon Hanson was hired to take over Hydro License Compliance responsibilities from Brent Mabbott, who recently retired. He is located in the Missoula office and deals with Thompson Falls Dam, Madison River fisheries issues and Mystic Lake. Montana FWP also hired Dan Madel for the Great Falls fish technician funded 0.35 FTE by NWE and Chris Hurley for Hauser/Holter fish technician funded 0.29 FTE by NWE. Jason Rhoten was hired as the new Region 4 Fisheries Program Manager by FWP.

Update on Ryan license amendment and Reservoirs Drawdown Plan. Andy Welch provided an overview of the Great Falls reservoirs drawdown plan that evaluated 2013-2018 drawdowns for use in the 2019-2024 proposed plan recently filed with FERC. Analysis of these data show there are turbidity spikes associated with drawdowns, but they appear to be related to certain elevation thresholds reached during the drawdown and not the drawdown rate. Turbidity increases are attenuated by downstream reservoirs. Andy reported drawdown rates of 0.05 feet per hour, or less, listed in the previous plan, are difficult to manage/measure, so the new proposal included changing the optimal [low] rate to 0.10 feet per hour and measuring on a 4 hour running average. Andy thanked the agencies for their review and comments. Still waiting for FERC's response to the proposed changes. Andy provided an update on the Ryan Reservoir license amendment. The license states Ryan can be used for peaking operations, but the pool elevation range is only 1 foot. In order to provide grid stability and reliability, NWE proposed to define the range as 1 foot above normal operating elevation and 8 feet below. Typical peaking demands are generally short term and can range from 1.5 to 6 minutes, as demonstrated on Cochrane Reservoir. Andy thanked the agencies for their review. Still waiting for FERC response to the proposed amendment.

Cultural Resources Management and Water Rights. Grant stated NWE met internally in June 2019 to discuss strategies to ensure CRM compliance with License requirements regarding TAC-funded projects. Normally, CRM reviews would be completed by NWE consulting archaeologist in January/February following the TAC meeting. For both timing and tracking purposes, and to ensure compliance, NWE identified 5 steps to address CRM earlier in the process. These include reminding partners before submitting proposals, screening applications as they come in, developing a separate proposal for CRM, preliminary review by NWE consulting archaeologist and, follow-up with federal partners who can complete their own CRM inventories/review. Grant reminded applicants that this year NWE included a proposal for CRM. Projects that get approved and require CRM inventories will be moved to this proposal at the end of the meeting and appropriately funded based on estimates provided by the consulting archaeologist [or federal partner]. NWE will follow-up to make sure the CRM requirements are met. Grant also reminded the TAC of water right issues and to please follow the DNRC guidelines included at the end of the annual meeting booklets.

Status of Project Completion Reports. Grant reviewed the list of project completion reports from 2014-2019. The list shows 2 missing reports for 2013 projects, 2 missing for 2017 projects and a number of projects from 2019-2019. We continue to use the guideline that reports are due within 6-9 months of project completion and we maintain good success over the years. Reports for habitat improvement and other 'on-the-ground' projects that do not involve data analysis and

interpretation do not need to be lengthy (2-4 pages often sufficient) can often be completed more quickly. TAC that reports should contain, at a minimum, location map, budget, photographs. Ideally these should also include timeframe, summary of accomplishment. Grant will contact applicants in 2020 to keep progress reports on track.

Review of Selected 2019 Projects

2019-2. Fisheries Monitoring. Adam Strainer (FWP) reviewed habitat restoration projects and fisheries monitoring results completed in the Hauser/Holter reservoir areas. Westslope cutthroat trout were translocated from Cottonwood Creek (Holter tributary) to Upper Log Gulch reservoir/creek (Holter tributary) in May. FWP is anticipating adding spawning gravel to the outlet stream to facilitate natural reproduction. This population is considered a "warehouse" for conservation purposes. The landowner also expressed interest in introducing WCT into Falls Creek which is the next drainage south and is believed to be fishless. FWP will continue to investigate. Fish monitoring in the area of the Tryan diversion showed kokanee, walleye and brown trout. These findings demonstrate that multiple species of fish have passage from Lake Helena into Prickly Pear Creek, as desired.

Monitoring of the Helena-area reservoirs was reported as relative is based on a three year running average of fall gill net catch. In Hauser, walleye numbers are at 11.1 per net, rainbow trout numbers are at 2.2 per net and perch are at 1.7 per net. In Holter, walleye numbers were 1.5 per net, rainbow trout were 2.4 per net and perch were 1.8 per net. Lower numbers of walleye and perch prompted FWP fishery managers to recommend regulations changes to meet management plan objectives. In odd years a fall electrofishing survey is conducted in the Hauser tailrace. In 2019 the rainbow trout estimate was 3.814 per mile and the brown trout estimate was 217 per mile. This year, hatchery fish represented 80.0% of the rainbow trout population. FWP reported a high proportion of 3-5 pound rainbow trout in this section in 2019. A brown trout weighing 19.3 pounds was sampled in the Hauser tailrace section this year. A discussion between FWP and USFS staff who have experience with this area, reaching back as much as 30 years, indicated this was the largest-known brown sampled by a resource agency in this section. There was also 15 burbot and 22 kokanee observed/sampled. Kokanee are generally not netted because secondary sexual characteristics, like large tooth development, cause them to get caught in the nets. FWP crews continue mark Eagle Lake strain rainbow trout at the Lewistown hatchery before they are stocked in Hauser and Holter reservoirs. This helps fishery crews monitor the return to creel, strain performance, and differentiates the Eagle Lake strain from Arlee strain when collecting rainbow trout eggs for the hatchery system. In 2019 FWP technicians conducted 1,536 interviews of anglers using the Hauser tailrace. The number of boats was down from over 500 from 2016-2018 to 299 in 2019. Rainbow trout had the highest catch rate followed by kokanee, brown trout and walleye, respectively. Canyon Ferry Reservoir is now free from detection of dreissenid mussel evidence and not under quarantine any longer.

Jason Mullen (FWP) reported rainbow trout numbers (2,860 per mile) in the Craig section downstream from Holter Dam decreased from recent years and are closer to the long term average of 3,391 per mile. Brown trout numbers were also lower (390). Rainbow trout in the Cascade section were estimated at 1,104 and brown trout were 390. Relative weight of rainbow trout was 97 in the Craig section and 100 in the Cascade section. Maximum flows below Holter Dam were 11,000 cfs which is below the long term average of 14,097 cfs. A massive ice jam in March created ice as deep as 12 feet and reached as far upstream as Devils Kitchen FAS. The 2017 angler use data for 2017 shows 170,736 angler days per year in section 9. The fence project at Willo Ranch was completed and setbacks from the river were generous, mainly to prevent damage from ice. Carpenter Creek fish barrier, Hardy Creek stream channel and Smith River bank projects are works in progress. Both are expected to go forward in 2020.

Luke Holmquist (FWP) reported on Missouri River fisheries monitoring from Morony Dam to the headwaters of Fort Peck Reservoir. Massive ice jams in early 2019 caused flooding and displaced a number of radio tagged pallid sturgeon to the flood benches where they were stranded and died. Under Article 417 monitoring, all projects were completed, except for long lining, and for the second year in a row. Flows peaked at 32,000 cfs at Landusky and a large component of this was from the Sun River and Marias River flooding. Electrofishing sampled 5,701 fish; SHRH was the most abundant species (32%). Seining sampled 22 species. Trawling was changed in 2019 [from recent years], in that, timing occurred slightly earlier this year and catch rate of SFC and STC was much higher. Luke postulated that the presence of algae in trawl catches coincides with lower catch rates. PIT stations on the Marias and Teton rivers detected large numbers of shovelnose sturgeon despite fouled arrays in the Marias and high flows. There are 1,917 tagged fish from 13 species in the system. Tag retention on shovelnose remains high (100%). Larval fish sampling in the Marias, Teton and Missouri rivers

captured 196 embryos. Most of those have been positively identified as shovelnose or paddlefish. Suspect larvae/eggs will be sent to Southern Illinois University of positive ID.

- **2019-3. Habitat Project Consultant.** Allen McNeal worked on several projects this year, including completing the Sevenmile Creek project, Little Prickly Pear Creek (Sieben property); planning and survey on lower Hardy Creek; survey and planning on Smith River. This project was underspent in 2019 due to several large projects not moving to implementation yet.
- **2019-5**. **Holter Boat House Maintenance**. Grant reported that the roof on the boat house at Holter was replaced in April. Door trim painting was completed in October.
- **2019-6. Missouri River Fence Willo Ranch.** Jason Mullen reported the fence was installed in mid 2019. Given the amount of ice observed on the banks this year, the landowner was receptive to a generous setback to protect the fence from severe ice.
- **2019-7. Blue Sucker Report Publication.** Grant reported the project would not likely be billed in 2019 but that a manuscript was submitted for publication. This project will likely carry over into 2020.
- **2019-8.** Middle Missouri River Fish Tracking. Mike Schilz reported the radio telemetry project conducted 2,931 relocations using stationary and mobile methods. Flooding/ice in 2019 destroyed a number of stations that were ultimately replaced by FWP insurance. Radios in a number of tagged fish failed before their anticipated end-of-life period. The plan for 2020 is to implant 18 new radios bringing the total number of tagged fish to 121.
- **2019-10. Missouri River Creel Survey.** Nate Beckman presented the results of the 2019 creel survey that is conducted every 4 years. There were 741 interviews conducted over 91 days in the field between April and September. Channel catfish was the most abundant game fish angled. Angler satisfaction remained high with 18% of the respondents rating their experience as good.
- **2019-17. Prickly Pear Water Exchange.** This project was continued in 2019. L&C County will summarize 2019 data and provide a report before the end of 2019.
- **2019-18.** Water Lease Teton River. This project was not completed in 2019. A change in right was filed with DNRC. It remains held up in the Havre office. Grant spoke with Andy Brummond who said the change was reconsidered by another DNRC reviewer and will likely be approved. This project will carry over into 2020.
- **2019-19. Water Lease Little Belt Creek.** This project was implemented in 2019. A report by FWP will follow detailing the instream flow measured at this site.
- **2019-20. Wegner Creek WCT Transfer.** This is a multi-year project. Sampling this summer found several brook trout and rainbow trout above the barrier. FWP marked fish below the barrier to evaluate if they are able to cross upstream. Translocations will be performed after the fish have been completely removed and the barrier conclusively evaluated.
- **2019-21.** LPP Creek Channel Maintenance. Jason Mullen presented an overview of this project and indicated it was completed in early 2019.
- **2019-22. Sevenmile Cr Design and Permitting.** Adam Strainer presented Sevenmile Creek restoration in the SM3 section was completed in early 2019. The permits were obtained, CRM inventory was completed and SHPO letter of concurrence was received for SM4 phase. A design was completed and sent out to bid to three firms, as requested by the TAC. One company bid slightly higher than the budget. The other two came in considerably higher. The project is expected to be implemented in 2020 pending some more fund-raising. Fisheries monitoring showed adult brown trout and YOY brown trout in the restored section. Streamside vegetation is growing well. In 2019 a large number of grasshoppers were observed in the area and in fish stomachs. Monitoring will continue.

2019-23. WCT Assistance. No report.

2019-24. Smith River Bank Restoration. Jason Mullen reported this project was not completed in 2019. Still working on design and permitting. Some of the funding issues from contributors became problematic and he is working to straighten it out. Allan McNeal has visited the site and is developing a design for permits. Jason is working on the CRM compliance with DNRC. Grant indicated the DNRC archaeologist could provide a report, or the funds [\$1,000] budgeted for this could be used to have a NWE consulting archaeologist do the inventory.

2019-25. Missouri River Tributary Sauger Track. Luke Holmquist reported this project was not completed in 2019 due to ice and flooding in the spring. Grant added the project start date was delayed due to contracting problems associated with NWE Risk Management Dept assessments and. Most of this work will be continued in 2020.

2019-26. INTERIM Prickly Pear Creek-Tryan Fence and Bank Addition. Adam Strainer provided an update that this project has not been completed yet. The floodplain permit was issued on Nov 18. The contractor is finishing up work on another project and is expected to get started next week or the first week of December.

Review of Projects Carried Over from Previous Years

2016-11. Carpenter Cr Fish Barrier. Jason Mullen reported EPA continues to work with the neighboring landowner and County to determine the right of way for the proposed fish barrier/bridge location.

2017-10. Prickly Pear Cr Construction Oversight – Tryan. Adam Strainer reported this project was completed in June.

2018-7. Conservation Easement - Tall Grass Ranch. Grant reported the project was completed in 2019.

2018-10. Hardy Creek. Jason reported the project is in the permitting phase and is expected to begin in 2020.

2018-26. Mo. River Bank Restoration – **Wolf Creek Bridge.** Grant reported a balance of \$313 in the budget and was expecting the UMOWA folks to call with a materials list for a fence style. Jason thought the project was completed. Grant said the project would be considered complete and if the fence style materials was needed \$313 could be used from the contingency.

Review of 2019 Expenses and Reserve Account

In 2019 the TAC approved 29 projects totaling \$646,096. At the end of the year \$593,004 was spent. Of the unspent balance, \$26,527 was for four approved projects (2019-7, 2019-18, 2019-22, 2019-24) and the remaining \$26,565 was surplus from underspent projects or the balance of the two projects that were paid with 2018 end-of-year funds.

The estimated Reserve Account in November 2019 was \$108,656 which includes \$96,330 (2016-11, \$25,200 and 2018-10, \$78,036) for past projects, plus \$12,326 in uncommitted funds. The unspent 2019 funds balance at the time of the TAC meeting was about \$147,000 for yet-to-be-invoiced projects and the 2019 projects paid with 2018 funds. Combined with the existing Reserve commitments, the Reserve was in jeopardy of being over committed. The TAC agreed to make an attempt to spend this down as much as possible to ensure TAC funds remain dedicated to program rather than returned to the Company. Those decisions and efforts are chronicled in the section titled "Summary of 2020 Funding Decisions and End of Year Budget Report 2020" below.

The end-of-year 2019 budget is provided below;

MOTAC	Projects & Budget for CY2019				
As Of: Dec	: 18, 2019				
Project #	Project description	Proposed budget for 2019	Approved amount for 2019	Spent in 2019	Diff in budget (unspent)
	Contingency / Emergency fund	\$10,000	\$10,000	\$10,000	\$0
	Fisheries Monitoring - FWP	\$244,977	\$244,977	\$153,415	\$91,562
	Habitat Projects Consultant	\$20,000	\$20,000	\$6,299	\$13,701.00
	Field Operations - NorthWestern	\$10,000	\$10,000	\$9,321	\$679
	Holter Boat House Maint Missouri River Fence - Willo Ranch	\$11,000 \$10,504	\$11,000	\$11,000	\$0
	Blue Sucker Report Publication	\$18,584 \$2,000	\$18,584 \$2,000	\$18,584 \$0	\$0 \$2,000
	Middle Missouri Fish Tracking	\$57,646	\$57,646	\$57,646	\$0
	Equipment - Boat Motor - Middle Missouri	\$11,700	\$11,700	\$10,482	\$1,218
	Middle Missouri Creel Survey	\$67,465	\$67,465	\$67,465	\$0
	Equipment - Pit Tag Antennae	\$880	\$880	\$766	\$114
	Equipment - Sonar	\$700	\$700	\$700	\$0
2019-13	Equipment - Pallid Sturgeon Trammel Nets	\$3,965	\$3,965	\$3,995	-\$30
2019-14	Equipment - Gill Nets	\$1,373	\$1,373	\$2,045	-\$672
2019-15	Equipment - Trolling Motor	\$330	\$330	\$300	\$30
	Equipment - Boat Motor - Holter Tailwater	\$17,826	\$17,826	\$0	\$17,826
	Prickly Pear Cr Water Exchange 2 yrs	\$10,000	\$10,000	\$10,000	\$0
	Water Lease Teton River (2017-22)	\$6,198	\$6,198	\$0	\$6,198
	Water Lease Little Belt Creek (2018-17)	\$5,725	\$5,725	\$5,725	\$0
	Wegner Creek -WCT Transfer	\$5,152	\$5,152	\$5,152	\$0
	LPP Creek - Channel Maint at Sieben	\$38,375	\$41,375	\$38,806	\$2,569
	Sevenmile Creek Design and Permitting #2	\$39,000	\$36,500	\$30,102	\$6,399
	WCT Assistance	\$16,400	\$21,200	\$21,200	\$0
	Smith River Bank Restoration	\$11,930	\$11,930	\$0	\$11,930
	Missouri River tributary Sauger Track INTERIM PPC Tryan Bank and Fence	\$2,061 \$17,674	\$2,061 \$17,674	\$2,061 \$21,783	\$0 -\$4,109
	INTERIM-pallid sturgeon larval nets	\$1,335	\$17,074	\$1,335	-\$4,109 \$0
2013-21	IIVIEIVIIVI-palliu sturgeon larvai nets	φ1,333	φ1,555	φ1,555	ΨΟ
	INTERIM-Beaver Creek restoration addition	\$6,000	\$6,000	\$6,495	-\$495
2019-00	CRM-Legacy Consulting Inc.		\$2,500	\$4,327	-\$1,827
	TOTAL	\$638,296	\$646,096	\$499,004	\$147,092
	Budget for CY2019	\$633,813		\$26,527	
	Total approved by TAC for CY2019		\$646,096		\$120,565
	Balance		(\$12,283)		
	RESERVE ACCOUNT	* (capped at	t \$250K beginni	ng in 2017)	
Projects A	approved in Prior Year(s) But Not Fully Comp	oleted Yet:	Order 10007921-00		
Project #	Project Description	Project cmmt	Amount spent in 2018/19	Balance of commitment remaining	
2016-11	Carpenter Cr Fish Barrier	\$25,200	\$0	\$25,200	
	Prickly Pear Cr Construc Oversight - Tryan	\$26,748	\$33,967	(\$7,219)	
	Conservation Easement - Tall Grass Ranch	\$16,699	\$16,699	\$0	
	Hardy Creek Restoration	\$81,118	\$3,082	\$78,036	
	Mo River Bank Restoration - Wolf Cr Bridge	\$12,200	\$11,887	\$313	
	total	\$161,965	\$65,635	\$96,330	
	December Assessment and COOAS	# 00 000			
	Reserve Account end of 2018 \$66,626 Est Reserve Account				
	Commitments - start of 2019	\$161,964			
	- Communication Country of Euro	ψ101,304			
	Estimated Uncommitted Reserve Funds available end of 2019	\$12,326			
	Total Reserve amount beginning 2019	\$160,763			
	Reserve spent in 2019	\$52,107			
	Reserve Balance end of 2019	\$108,656			1

Between the TAC meeting and the end of 2019, the Reserve budget calculations could not be reconciled with what was reported at the Nov 20, 2019 meeting and showed a difference of -\$81,000. In order to reconcile this Grant worked with NWE accounting staff on December 26, 2019 to evaluate TAC budgets from 2014 forward. The following observations were made and conveyed to the TAC by phone and email in late December and early January;

I worked with our budgeting folks to go through the MoTAC accounts from 2014 forward for the annual (9601-751) and the Reserve (7921-001) accounts. This included reconciling individual expenditures for 2018 and 2019. What I discovered was in 2015, 2016, 2017 under-expenditures caused the reserve account to go over the cap in each of the three succeeding years (2016, 2017, 2018). At the end of 2017, the Reserve account ballooned to \$381,000 due to \$83,000 in previous commitments, \$105,000 in uncommitted funds, plus \$174,000 in 2017 projects that were not spent. The TAC approved pre-spending \$116,062 for 2018 projects using 2017 funds. A similar pattern occurred in 2018-19.

During this analysis, I discovered three issues that contributed to my mistake in the calculations I presented at the meeting on Nov 20, 2019. First, when I took over as chair of the TAC in September 2018, I studied the 2017 minutes that referred to the budget being underspent. I mistakenly took "underspent" to mean the funds were not dedicated, when in fact, those funds were dedicated to four projects (2017-5, 2017-10, 2017-14, 2017-21). Over 2018, those projects were progressively spent down, but being new to the accounting methods and system, I did not observe the anomalies until early 2019, and did not confirm until late 2019. Second, complicating the issue was, at the same time, the TAC approved pre-paying 1/3 of the FWP monitoring project in both 2018 and 2019. This was a continuation of managing the 2017 crisis, and ensuing 2018 over-cap which I expected to free up about \$80,000 in Reserve. In addition, a portion of that was used to cover \$20,095 in overruns for the Sevenmile Creek SM3 project in 2018 and 5 Interim projects totaling \$54,258 during the same time.

All of these were approved by the TAC, but based on my mistaken calculations, the expected uncommitted funds at the end of 2019 was much less than anticipated. As such, instead of having \$120,237 in uncommitted funds, the figure is estimated to be \$38,754 which is a combination of prepaying three 2020 projects (\$25,109) and \$13,464 in carryover from 2019.

Review and Comments on Selected 2020 Proposals

There were 13 projects proposed for 2020, totaling \$702,694. 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:

2020-00. CRM-Legacy Consulting Inc. Grant introduced this proposal as a new mechanism to track CRM for NWE-funded projects. The proposal is a placeholder for projects requiring CRM. The NWE consulting archaeologist reviewed the 2020 proposals before the TAC meeting and determined only one project (2020-7) would require additional CRM and the estimated cost of the inventory was \$3,105. If this project were approved by the TAC, funds would be dedicated specifically toward the CRM inventory.

2020-7 Missouri River Bank Restoration – **Engman.** Jason Mullen said the project sponsor has most of the permits in hand, a design, and contractor has been selected. Grant reminded Jason that the applicants contractor would need pollution insurance as required by NWE. Jason said the contractor was willing to do so. The application listed \$2,000 for CRM inventory. The NWE consulting archaeologist estimated \$3,105 for the inventory. If approved this project would require additional funding.

2020-8. Equip - Radio Tel Remote Monitoring. Luke indicated this proposal was to upgrade to newer technology with SRX800 recievers and add 3 satellite interface devices that would allow rapid response to radio tagged pallid sturgeon that showed signs of making spawning runs. Rapid response would involve larval fish sampling and possible netting to sample concentrations of mature pallid sturgeon. General comments of the TAC were supportive.

2020-10. Chub Genetics. Luke indicated the USFWS was working on funding the chub genetics project throughout the Upper Missouri Basin in preparation for the up-and-coming status review. Jim Boyd indicated a proposal was submitted

by the Service to fund the project, but no decision had been made. There were no other questions raised about this proposal.

2020-13. Sevenmile Creek Restoration – **final phase.** There was a brief discussion about not funding contingency listed in this proposal and adjusting the pollution insurance estimate based on known cost of previous policies. As such, Adam provided a revised budget for this project of \$126,030.

There was a brief discussion about the proposals being \$26,795 over the 2020 budget. Grant proposed one option of funding the overage out of the uncommitted Reserve funds, purchasing some of the equipment with 2019 funds, or a combination of both. There were no objections to increasing the budget.

Summary of 2020 Funding Decisions and End of Year Budget Report

The budget for 2020 is \$646,489 and the total amount proposed was \$672,980, which means the 2020 budget would be overspent by \$26,491. The TAC discussed using Reserve account funds to cover the over budget.

By the end of December, there was \$34,553 from 2019 that was unspent. Those funds were from four TAC approved projects (2019-7, 2019-18, 2019-22, 2019-24) totaling \$26,527 and the 2019 projects that were paid with 2018 funds and underspent projects totaling \$120,565. Billing for project 2019-7 and 2019-26 were uncertain at the time of the TAC meeting which suggested the Reserve Account was in jeopardy of being over the cap by \$31,759. There was discussion about paying for 2020 equipment with 2019 funds to prevent exceeding the cap. The TAC approved Grant purchasing equipment for three 2020 proposals (2020-8, 2020-11, 2020-12) totaling \$24,709 using 2019 funds.

The TAC also discussed the likelihood of using a portion of the uncommitted Reserve to implement any or all of the large habitat projects likely to occur in 2020. There was a general acknowledgement from the TAC that this could possibly happen and the TAC supported this approach. After review, comments and questions for the 13 proposals, and the budget strategy noted above, the MoTAC voted unanimously to approve the 13 projects proposed for 2020.

After the Reserve budget correction described above, the Reserve account at the beginning of 2020 was \$143,208 which included 129,763 for uncompleted projects (2016-11, 2018-10, 2019-7, 2019-18, 2019-22, 2019-24) and \$13,445 in uncommitted funds. The new 2020 commitments for the Reserve account was \$26,491 for a total Reserve of \$156,254 which means it would be overcommitted by \$13,046. Three 2020 proposals (2020-8, 2020-11, 2020-12) totaling \$24,709 paid with 2019 funds means the over commitment of \$13,046 could be covered by these funds. As such, the available underspent 2020 funds should be \$11,463.

	Projects & Budget for CY2020 cember 18, 2019			
Project #	Project description	Proposed budget for 2020	Approved amount for 2020	
2020-0	CRM-Legacy Consulting Inc.		\$2,711	
2020-1	Contingency/Emergency Fund	\$10,000	\$10,000	
2020-2	Fisheries Monitoring - FWP	\$242,368	\$243,064	
2020-3	Habitat Projects Consultant	\$20,000	\$20,000	
2020-4	Field Operations - NWE	\$10,000	\$10,000	
2020-5	WCT Field Assistance	\$13,500 \$150,000	\$13,500	
2020-6	Beaver Creek Riparian Restoration - phase I		\$150,000	
2020 7	Missauri Dinar Bonk Destaration - Engman		\$20.664	
2020-7 Missouri River Bank Restoration - Engman 2020-8 Equip - Radio Tel Remote Monitoring		\$25,375 \$16,342	\$22,664	
			\$0	
2020-9 Middle Missouri Radio Telemetry 2020-10 Missouri River Chub Genetics 2020-11 Equip - Trammel Nets		\$55,011	\$55,011	
		\$20,000	\$20,000	
		\$6,380	\$0	
2020-12	• •	\$1,987	\$0	
2020-13	Sevenmile Ck Restoration - final phase	\$131,731	\$126,030	
	TOTAL	\$702,694	\$672,980	
	Budget for CY2020	\$646,489	\$646,489	
	Total approved by TAC for CY2020		\$672,980	
	Difference	-\$56,205	(\$26,491)	
Projects A	***RESERVE ACCOUNT*** Approved in Prior Year(s) But Not Fully Comp	leted Yet:		Balance of
Project #	Approved in Prior Year(s) But Not Fully Comp Project Description	Project Cmmt	Amount spent in 2020	Balance of commitment remaining
Project # 2016-11	Approved in Prior Year(s) But Not Fully Comp Project Description Carpenter Cr Fish Barrier	Project Cmmt \$25,200	Amount spent in 2020	Balance of commitment remaining \$25,200
Project # 2016-11 2018-10	Approved in Prior Year(s) But Not Fully Comp Project Description Carpenter Cr Fish Barrier Hardy Creek Restoration	Project Cmmt \$25,200 \$78,036	Amount spent in 2020 \$0 \$0	Balance of commitment remaining \$25,200 \$78,036
Project # 2016-11 2018-10 2019-7	Approved in Prior Year(s) But Not Fully Comp Project Description Carpenter Cr Fish Barrier Hardy Creek Restoration Blue Sucker Report Publication	Project Cmmt \$25,200 \$78,036 \$2,000	Amount spent in 2020 \$0 \$0 \$0	Balance of commitment remaining \$25,200 \$78,036 \$2,000
Project # 2016-11 2018-10 2019-7 2019-18	Project Description Carpenter Cr Fish Barrier Hardy Creek Restoration Blue Sucker Report Publication Water Lease Teton River (2017-22)	Project Cmmt \$25,200 \$78,036 \$2,000 \$6,198	Amount spent in 2020 \$0 \$0 \$0 \$0	Balance of commitment remaining \$25,200 \$78,036 \$2,000 \$6,198
Project # 2016-11 2018-10 2019-7 2019-18 2019-22	Project Description Carpenter Cr Fish Barrier Hardy Creek Restoration Blue Sucker Report Publication Water Lease Teton River (2017-22) Sevenmile Creek Design and Permitting #2	Project Cmmt \$25,200 \$78,036 \$2,000 \$6,198 \$6,399	Amount spent in 2020 \$0 \$0 \$0 \$0 \$0	Balance of commitment remaining \$25,200 \$78,036 \$2,000 \$6,198 \$6,399
Project # 2016-11 2018-10 2019-7 2019-18 2019-22	Project Description Carpenter Cr Fish Barrier Hardy Creek Restoration Blue Sucker Report Publication Water Lease Teton River (2017-22)	Project Cmmt \$25,200 \$78,036 \$2,000 \$6,198	Amount spent in 2020 \$0 \$0 \$0 \$0	Balance of commitment remaining \$25,200 \$78,036 \$2,000 \$6,198
Project # 2016-11 2018-10 2019-7 2019-18 2019-22	Project Description Carpenter Cr Fish Barrier Hardy Creek Restoration Blue Sucker Report Publication Water Lease Teton River (2017-22) Sevenmile Creek Design and Permitting #2	Project Cmmt \$25,200 \$78,036 \$2,000 \$6,198 \$6,399	Amount spent in 2020 \$0 \$0 \$0 \$0 \$0	Balance of commitment remaining \$25,200 \$78,036 \$2,000 \$6,198 \$6,399
Project # 2016-11 2018-10 2019-7 2019-18 2019-22	Project Description Carpenter Cr Fish Barrier Hardy Creek Restoration Blue Sucker Report Publication Water Lease Teton River (2017-22) Sevenmile Creek Design and Permitting #2 Smith River Bank Restoration Total Reserve Account Bal end of 2019 (NWE data 12/31/19)	Project Cmmt \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$11,930	Amount spent in 2020 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	Balance of commitment remaining \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$11,930
Project # 2016-11 2018-10 2019-7 2019-18 2019-22	Project Description Carpenter Cr Fish Barrier Hardy Creek Restoration Blue Sucker Report Publication Water Lease Teton River (2017-22) Sevenmile Creek Design and Permitting #2 Smith River Bank Restoration Total Reserve Account Bal end of 2019 (NWE data 12/31/19) Reserve Acct commitments before 2019	Project Cmmt \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$11,930 \$129,763	Amount spent in 2020 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	Balance of commitment remaining \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$11,930
Project # 2016-11 2018-10 2019-7 2019-18 2019-22	Project Description Carpenter Cr Fish Barrier Hardy Creek Restoration Blue Sucker Report Publication Water Lease Teton River (2017-22) Sevenmile Creek Design and Permitting #2 Smith River Bank Restoration Total Reserve Account Bal end of 2019 (NWE data 12/31/19) Reserve Acct commitments before	Project Cmmt \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$11,930 \$129,763	Amount spent in 2020 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	Balance of commitment remaining \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$11,930
Project # 2016-11 2018-10 2019-7 2019-18 2019-22	Project Description Carpenter Cr Fish Barrier Hardy Creek Restoration Blue Sucker Report Publication Water Lease Teton River (2017-22) Sevenmile Creek Design and Permitting #2 Smith River Bank Restoration Total Reserve Account Bal end of 2019 (NWE data 12/31/19) Reserve Acct commitments before 2019 New Reserve Account	Project Cmmt \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$11,930 \$129,763 \$143,208	Amount spent in 2020 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	Balance of commitment remaining \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$11,930
Project # 2016-11 2018-10 2019-7 2019-18 2019-22	Project Description Carpenter Cr Fish Barrier Hardy Creek Restoration Blue Sucker Report Publication Water Lease Teton River (2017-22) Sevenmile Creek Design and Permitting #2 Smith River Bank Restoration Total Reserve Account Bal end of 2019 (NWE data 12/31/19) Reserve Acct commitments before 2019 New Reserve Account Commitments from 2019	Project Cmmt \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$11,930 \$129,763 \$143,208	Amount spent in 2020 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	Balance of commitment remaining \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$11,930
Project # 2016-11 2018-10 2019-7 2019-18 2019-22	Project Description Carpenter Cr Fish Barrier Hardy Creek Restoration Blue Sucker Report Publication Water Lease Teton River (2017-22) Sevenmile Creek Design and Permitting #2 Smith River Bank Restoration Total Reserve Account Bal end of 2019 (NWE data 12/31/19) Reserve Acct commitments before 2019 New Reserve Account Commitments from 2019 Estimated Uncommitted Reserve Funds end of 2019 Reserve account commitments	Project Cmmt \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$11,930 \$129,763 \$143,208 \$103,236 \$26,527 \$13,445	Amount spent in 2020 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	Balance of commitment remaining \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$111,930 \$129,763
Project # 2016-11 2018-10 2019-7 2019-18 2019-22	Project Description Carpenter Cr Fish Barrier Hardy Creek Restoration Blue Sucker Report Publication Water Lease Teton River (2017-22) Sevenmile Creek Design and Permitting #2 Smith River Bank Restoration Total Reserve Account Bal end of 2019 (NWE data 12/31/19) Reserve Acct commitments before 2019 New Reserve Account Commitments from 2019 Estimated Uncommitted Reserve Funds end of 2019	Project Cmmt \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$11,930 \$129,763 \$143,208 \$103,236	Amount spent in 2020 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	Balance of commitment remaining \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$11,930 \$129,763
Project # 2016-11 2018-10 2019-7 2019-18 2019-22	Project Description Carpenter Cr Fish Barrier Hardy Creek Restoration Blue Sucker Report Publication Water Lease Teton River (2017-22) Sevenmile Creek Design and Permitting #2 Smith River Bank Restoration Total Reserve Account Bal end of 2019 (NWE data 12/31/19) Reserve Acct commitments before 2019 New Reserve Account Commitments from 2019 Estimated Uncommitted Reserve Funds end of 2019 Reserve account commitments	Project Cmmt \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$11,930 \$129,763 \$143,208 \$103,236 \$26,527 \$13,445	Amount spent in 2020 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	Balance of commitment remaining \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$11,930 \$129,763
Projects # 2016-11 2018-10 2019-7 2019-18 2019-22 2019-24	Project Description Carpenter Cr Fish Barrier Hardy Creek Restoration Blue Sucker Report Publication Water Lease Teton River (2017-22) Sevenmile Creek Design and Permitting #2 Smith River Bank Restoration Total Reserve Account Bal end of 2019 (NWE data 12/31/19) Reserve Acct commitments before 2019 New Reserve Account Commitments from 2019 Estimated Uncommitted Reserve Funds end of 2019 Reserve account commitments beginning 2020	Project Cmmt \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$11,930 \$129,763 \$143,208 \$103,236 \$26,527 \$13,445	Amount spent in 2020 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	Balance of commitment remaining \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$11,930 \$129,763
Project # 2016-11 2018-10 2019-7 2019-18 2019-22	Project Description Carpenter Cr Fish Barrier Hardy Creek Restoration Blue Sucker Report Publication Water Lease Teton River (2017-22) Sevenmile Creek Design and Permitting #2 Smith River Bank Restoration Total Reserve Account Bal end of 2019 (NWE data 12/31/19) Reserve Acct commitments before 2019 New Reserve Account Commitments from 2019 Estimated Uncommitted Reserve Funds end of 2019 Reserve account commitments beginning 2020 Uncomitted Reserve Funds	Project Cmmt \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$11,930 \$129,763 \$143,208 \$103,236 \$26,527 \$13,445	Amount spent in 2020 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	Balance of commitment remaining \$25,200 \$78,036 \$2,000 \$6,198 \$6,399 \$11,930 \$129,763

In addition to the Reserve account corrections, all MoTAC account calculations were summarized from 2014 through the beginning to 2020 (see below). This should serve as an appropriate tracking mechanism for TAC account balances moving forward.

	RESERVE Cap	200,000	200,000	200,000	250,000	250,000	250,000	250,000
		2014	2015	2016	2017	2018	2019	2020
NWE Order#								
10007921-001	Reserve Start Bal	\$200,000.00	\$186,589.88	\$200,000.00	\$250,000.00	\$250,000.00	\$160,763.18	\$143,208.38
	Reserve Commitments	\$123,970.00	\$122,342.00	\$175,684.00	\$144,340.00	\$231,692.00	\$161,965.00	\$129,763.00
	Reserve Uncommited	\$76,030.00	\$64,247.88	\$24,316.00	\$105,660.00	\$18,308.00	-\$1,201.82	\$13,445.38
	Reserve Expenses	\$135,878.55	\$34,763.00	\$26,048.43	\$46,142.30	\$183,373.82	\$52,107.50	
	Reserve End Bal	\$64,121.45	\$151,826.88	\$173,951.57	\$203,857.70	\$66,626.18	\$108,655.68	
10009601-751	Start MoTAC Balance	\$565,704.00	\$579,647.00	\$594,343.00	\$609,201.00	\$621,385.00	\$633,812.70	\$646,489.00
	MoTAC Expenses	\$501,582.55	\$507,603.00	\$486,560.00	\$532,258.00	\$527,248.00	\$599,260.00	
	End MoTAC Balance	\$64,121.45	\$72,044.00	\$107,783.00	\$76,943.00	\$94,137.00	\$34,552.70	
	Reserve Begin Next Year	\$128,242.90	\$223,870.88	\$281,734.57	\$280,800.70	\$160,763.18	\$143,208.38	
	Refund Back to Cmpny		\$23,870.88	\$31,734.57	\$30,800.70			