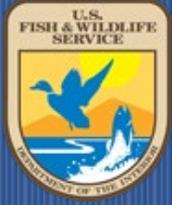


Montana Fish and Wildlife Conservation Office

BILLINGS–BOZEMAN–LEWISTOWN, MT

April 2020



“Telecommute”

If a single word can summarize April 2020, it would have to be “telework” or the slight variation– “telecommute”. According to Merriam-Webster’s online dictionary, *Telecommute* is derived from the Greek *tele*, meaning "far off, operating over distance," and the verb "commute," which arose from the Latin *commutare*, meaning "to change" or "to exchange." Given various state and federal closure policies associated with the Covid-19 pandemic, all Montana FWCO staff were telecommuting to work. With new tools like Microsoft Teams, and older tools like the telephone, business continued. Following are some of our accomplishments for the month away from the office.

St Mary Bull Trout:

In response to a complaint filed by the Alliance for the Wild Rockies, Reclamation initiated formal consultation with the U.S. Fish and Wildlife Service (Helena, MT) pertaining to Reclamation’s Milk River Irrigation Project; specifically, the St Mary irrigation canal and associated diversion dam and effects on the threatened Bull Trout.

As consultation progresses, Jim Mogen provided biological and analytical data expertise to both Reclamation and Ecological Services, as well as compiling and organizing all past emails, reports, files and information associated with St. Mary Bull Trout that will be included as part of the administrative record.



Built in the early 1900s, the St. Mary Canal and associated headgates and diversion dam have been identified as a threat to the St. Mary Bull Trout population—the only Bull Trout population east of the Continental Divide. Pictured are the headgates and beginning of the canal. The St. Mary River and diversion dam are on the other side of the concrete structure.

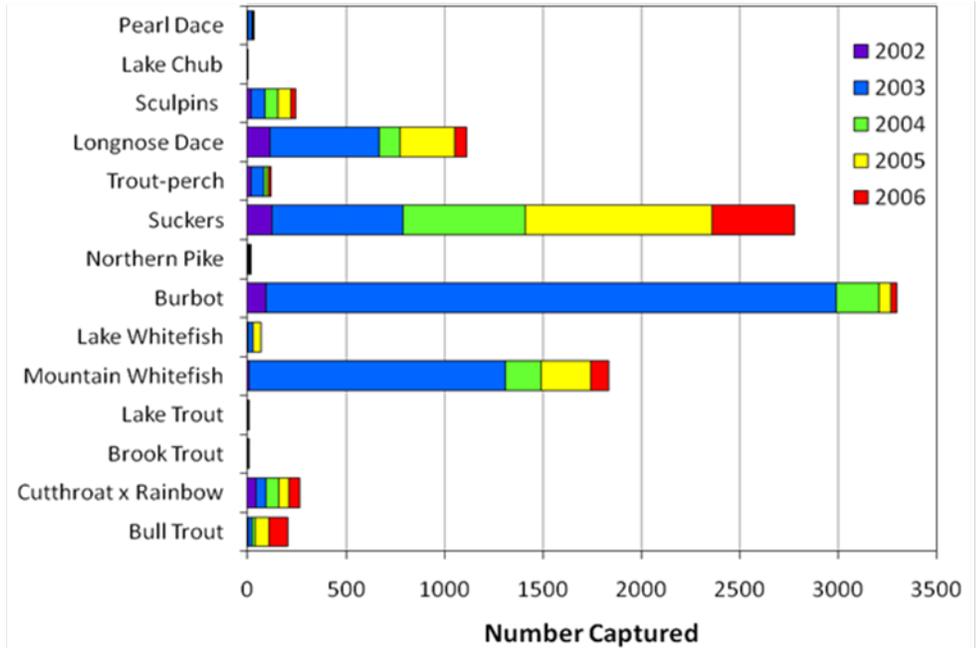
USFWS photo-Jim Mogen

Information collected during our 5-year entrainment investigation (2002-2006) indicates that Bull Trout, along with 17 other species of fish (14 native, 3 introduced), are lost through the canal’s unscreened headgates.

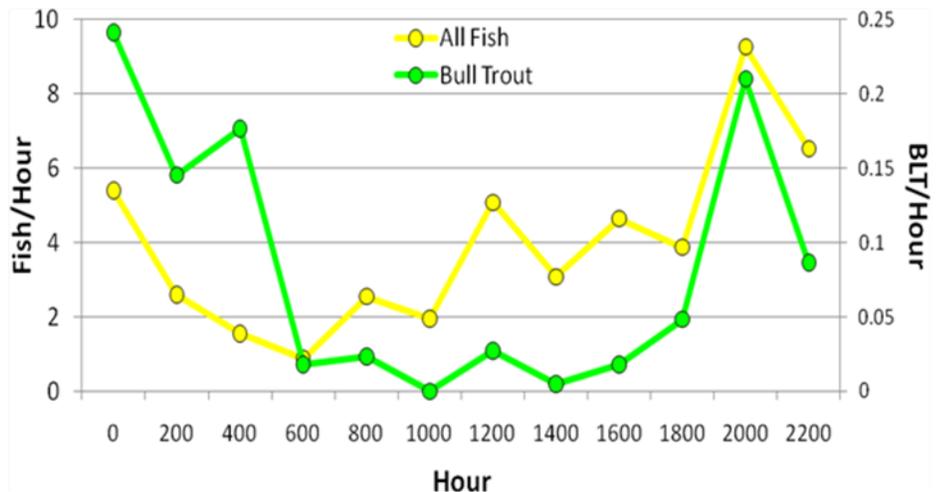
While a total of 207 Bull Trout were captured in the canal during that study, estimating an actual annual entrainment rate tied to the dynamics of both water management and Bull Trout biology, is not a simple calculation.

Jim and Lynn Keading (USFWS, retired) quantified and characterized annual entrainment losses and estimated the extent that changes to current canal operations could reduce fish losses.

Bull Trout entrainment was lowest during daylight hours and highest during darkness. Entrainment was also highest in spring, lowest in summer, and of moderate size in early fall. A report describing that study and titled “Quantification and characterization of bull trout annually entrained in the major irrigation canal on the St. Mary River, Montana, USA, and identification of operations changes that would reduce that loss” was submitted to River Research and Applications for peer review and publication.



Cumulative catch, by species and year, entrainment nets, St. Mary Diversion, St. Mary River, Montana, 2002-2006. Because of the difficulty in distinguishing between juveniles of individual species (or hybrids) of Westslope Cutthroat Trout, Yellowstone Cutthroat Trout and Rainbow Trout, as well as White Suckers, Longnose Suckers and Mountain Suckers, and Mottled Sculpin and Spoonhead Sculpin, those fishes were therefore assigned to a single taxon (i.e., Cutthroat × Rainbow intergrades, Suckers, and Sculpins). Data are preliminary and not for citation.



Mean bi-hourly catch rates (number of fish captured in nets per hour) rates for all fish combined and for bull trout (BLT) only, entrainment nets, St. Mary Diversion, St. Mary River, Montana, 2002-2006. Data are preliminary and not for citation.

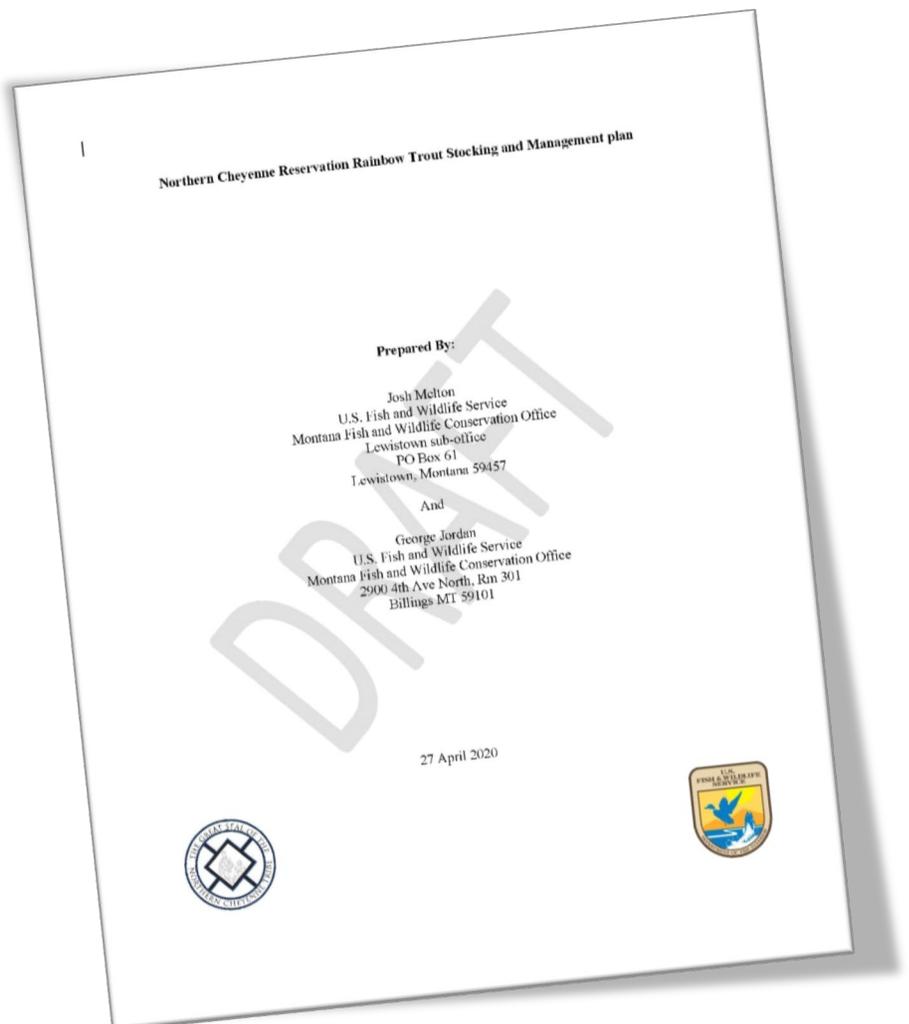
Reclamation and the Service recently began exploring interim measures to minimize negative impacts to Bull Trout that result from diversion and entrainment. In April, MFWCO staff were asked to recommend options to minimize Bull Trout entrainment as well as evaluate the effectiveness of salvaging (rescuing) entrained fish from the canal. We developed a briefing on the subject, describing electrofishing and netting options that could be employed to capture stranded fish and safely return them to the river. We concluded that a canal salvage effort is feasible though efficacy is difficult to gauge. We also described operational considerations, if feasible, that may reduce entrainment.

Tribal Trust:

MFWCO staff continue to work on updating older tribal fish management plans. A revised plan was transmitted to the Northern Cheyenne Tribe for review, consideration, comment and/or concurrence. Draft plans for the Crow and Blackfoot Reservations are in development.



Normally in April, MFWCO conducts a cutthroat trout survey on Red Rock Lakes NWR. This year due to budget constraints and COVID-19 restrictions, Montana Fish Wildlife and Parks will be conducting this work. Pictured is technician Jason Marsh holding a cutthroat trout collected in 2019 as part of past survey efforts. Photo-USFWS



Other happenings:

Andrew Gilham provided MT Fish Wildlife and Parks a written methods description of our Yellowstone Cutthroat Trout sampling protocol for Red Rock Lakes NWR as MFWP will be conducting the sampling this year.

Jason Marsh continues to make progress on his Master's Thesis.

Biological Science Technician, Geoff Popken, was reinstated in late-April, but unable to report to duty due to COVID-19 restrictions. We anticipate him being able to report for duty in May.

George Jordan and Jim Mogen were asked to participate on an interagency team (USFWS and Reclamation) to identify possible minimization measures related to Bull Trout losses in the St. Mary diversion. First planned call is in early May.

George completed a funding agreement with Trout Unlimited to support a dam removal project near Missoula Montana. Once completed, this project will provide Bull Trout access to 20 miles of Rattlesnake Creek.



Rattlesnake Creek Dam, near Missoula MT, was originally constructed in the early 1900's with an earthen embankment and a wood spillway structure. In 1983, the dam was rendered inoperable due to drinking water quality concerns, and the city's water supply being transferred to groundwater wells in the valley aquifer. The project is located on Rattlesnake Creek approximately 3.5 miles upstream of its confluence with the Clark Fork River. Once removed, threatened Bull Trout will have access to 20 additional miles of upstream habitat. USFWS photo-George Jordan

Staff also completed various training. Following is a comprehensive list of training completed (note: this list includes items completed by more than one employee):

- Cybersecurity (FISSA), Privacy, Records Management, Section 508 Compliance, Controlled Unclassified Information Reference Guides and the DOI Rules of Behavior (IMT)
- AM: Lead Author ILT Program
- AM: Program Official ILT Program
- AM: Publisher ILT Program
- GMM: Process New Awards ILT
- GMM: Process New Applications ILT
- GMM: Post Award Actions (Grants Office) ILT
- GMM: Post Award Actions (Program Office) Pre-Recorded ILT
- GMM: Setup Actions Pre-Recorded ILT
- GMM: Introduction to GrantSolutions Grants Management Module (GMM) Pre-Recorded ILT
- GMM: Funding Memo Approvers Pre-Recorded ILT
- Empowering our Future Leaders
- LGBTQ Pride Month Observance Event
- Equal Employment Opportunity Alternative Dispute Resolution
- ADA & Employment
- Federal Complaint Process
- Celebrating African American History Month: "Empowering Our Future Leaders"
- Dr. Martin Luther King, Jr. Observance Day: "Working Towards the Dream - Past, Present & Future"
- Native American Heritage Month- Traditional Ecological Knowledge
- Native American Heritage Month Storytelling: The Importance of Traditional Knowledge to Native American Culture
- Understanding and Managing Generations in the Workplace
- Computer Electronics Accommodation Program (CAP) Disability Etiquette
- Waters that are Never Still: Stockbridge-Munsee Mohican Nation and Cultural Heritage
- Understanding Reasonable Accommodations
- Service and Emotional Support Animals
- Preventing and Eliminating Harassment

*For more information, click on the following logos
Or feel free to contact any of the Montana FWCO
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