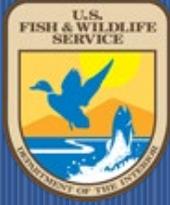


Montana Fish and Wildlife Conservation Office

BILLINGS–BOZEMAN–LEWISTOWN, MT

Nov-Dec 2020



Wow, what a year 2020 was. Just shy of 1 year ago, the first COVID-19 case was reported in the United States. By late March, all Montana FWCO staff were in telework status where we have remained. Limited travel was authorized for high-priority work beginning in June, though other State, Tribal, and local restrictions created some logistical challenges. As a result, “normal” activities were curtailed or extremely limited. We had to learn new ways of conducting business which included social distancing, increased sanitization, changes in protective equipment, “teams” meetings, and working in isolation. Needless to say, 2020 was challenging, though not without some great accomplishments. The following summary highlights activities during November and December of 2020.

St. Mary Bull Trout:

The Montana FWCO crew returned to St. Mary for a final 2020 mission—to conduct year-end fish salvage efforts in the St. Mary Canal and Swiftcurrent Creek (downstream from Sherburne Dam) following the annual winter shutdown of Reclamation’s operations.

At both locations, the crew used nets and electrofishing equipment to rescue native fishes stranded in isolated habitats after flows had ceased.

In the canal, only low densities of Mountain Whitefish, White and Longnose suckers, Northern Pike, and Burbot were found; which was similar to what was encountered during canal salvage efforts last June where only a single Bull Trout was collected.



Geoff Popken (left) and Jim Mogen (right) finishing up electrofishing efforts in the St Mary Canal. Photo: USFWS: Josh Melton

St. Mary Bull Trout (cont.)

This was not the case in Swiftcurrent Creek, where numerous whitefish and suckers, three Burbot, one Kokanee, several Cutthroat Trout (177-323 mm TL), one Brook Trout (230 mm), and eight threatened Bull Trout (286-615 mm) were recovered. All native species, were safely returned to downstream habitats and each Bull Trout was marked with a Passive Integrated Transponder (PIT) tag.

While in St. Mary, the crew also downloaded and maintained our network of 12 PIT (tag) – Detection Stations deployed in the St. Mary drainage, including four in Swiftcurrent Creek, three in Boulder Creek, three in Divide Creek, and two in the St. Mary Canal. This network of PIT-detection stations should provide managers and consultation biologists with additional biological information regarding the primary concerns associated with Reclamation’s Milk River Project, specifically passage and entrainment at the St. Mary Diversion and the effects of altered hydrographs and complete winter dewatering of Swiftcurrent Creek downstream from Sherburne Dam. These PIT-Detection Stations should also provide a sound means of estimating important parameters like population size and age-specific survival rates as well as additional insight regarding

seasonal movements associated with adult spawning migrations and juvenile emigration in Boulder and Divide creeks—two important spawning tributaries for migratory Bull Trout in the St. Mary drainage.



Toby Tabor (Left, Reclamation) and USFWS technician Geoff Popken (right) collect data on a threatened Bull Trout salvaged from Swiftcurrent creek before it becomes dewatered following the annual shutdown of Sherburn Dam. Photo: USFWS, Jim Mogen

Sikes Act:

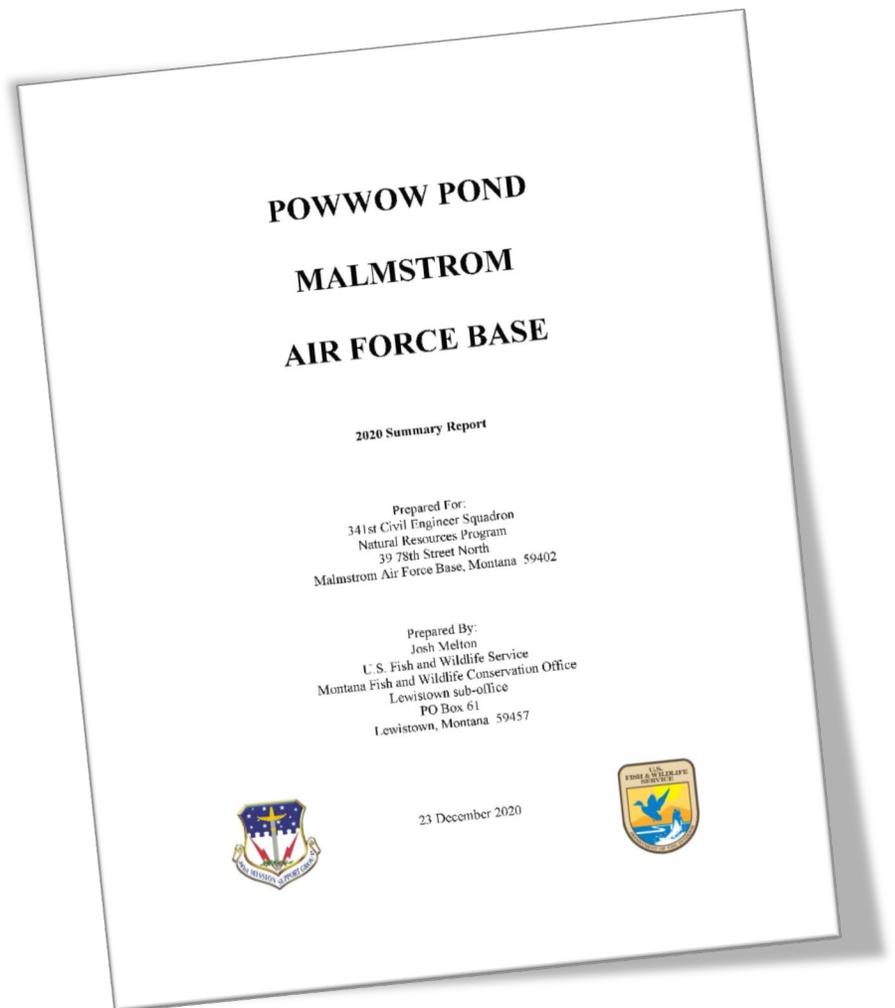
Fall is our usual period of data analysis and report writing. During November and December we have been working on reviewing our game camera data and wrapping up the final year of this project. This mammal monitoring effort was developed for Malmstrom Air Force Base (AFB) to get an idea of federal and state species of concern presence/absence near missile launch facilities (LFs). Overall we operated cameras 24/7 at 25 LFs beginning in May 2017. All cameras were removed in June 2020. Over the course of this project we documented grizzly bears at a few LFs and even one gray wolf. Our final summary report will be prepared and submitted to the Air Force in the coming months.

In addition to working on our own game camera data, Jason Marsh has been assisting the Great Plains FWCO with review of camera data collected to assess angler usage at three lakes on Ellsworth AFB, SD.

Finally Josh Melton has completed his data analysis for our annual Malmstrom AFB Powwow Pond surveys. A final report has been drafted and is undergoing internal office review prior to sending to our Air Force partners.



A rafter of turkeys visits one of our game cameras just in time for Thanksgiving. Photo: USFWS game camera



Habitat Restoration:

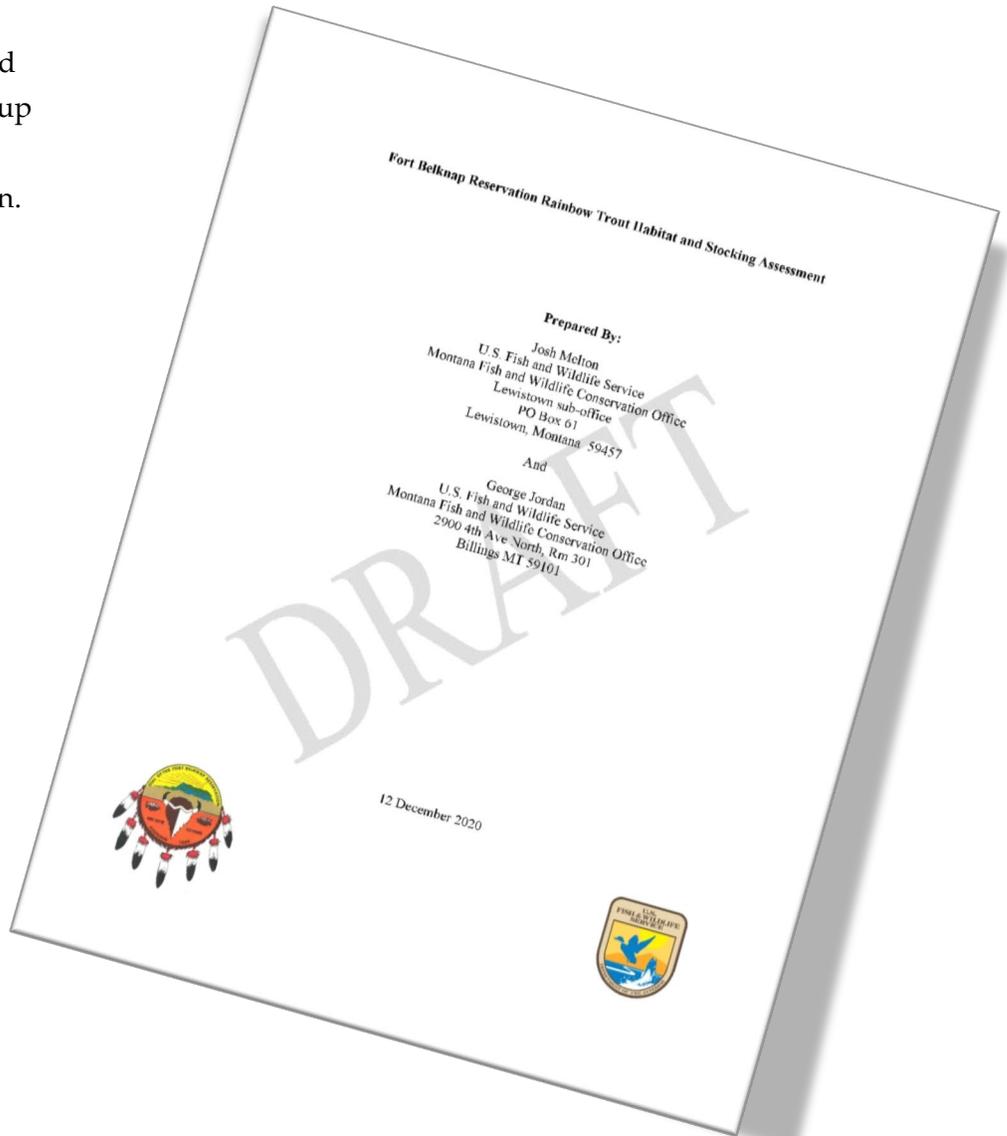
Alvi-Beck Fish Screen: This project was implemented to improve fish passage, reduce entrainment, and improve riparian habitat in a Bull Trout migration corridor in the headwaters of the Clark Fork River. The project was partly funded with USFWS National Fish Passage Program dollars and key partners included the Clark Fork Coalition, Trout Unlimited, and the State of Montana.

The project included replacing a rock weir and makeshift diversion structure with engineered riffles, installing a fish screen, and restoration of 400 feet of eroding streambank upstream of the diversion.



Tribal Support:

Over the summer months we were working to develop updated stocking and management strategies for our tribal partners. The final draft plan for Fort Belknap was submitted in December and final analysis is wrapping up for the Blackfeet Sport Fisheries Management Plan.



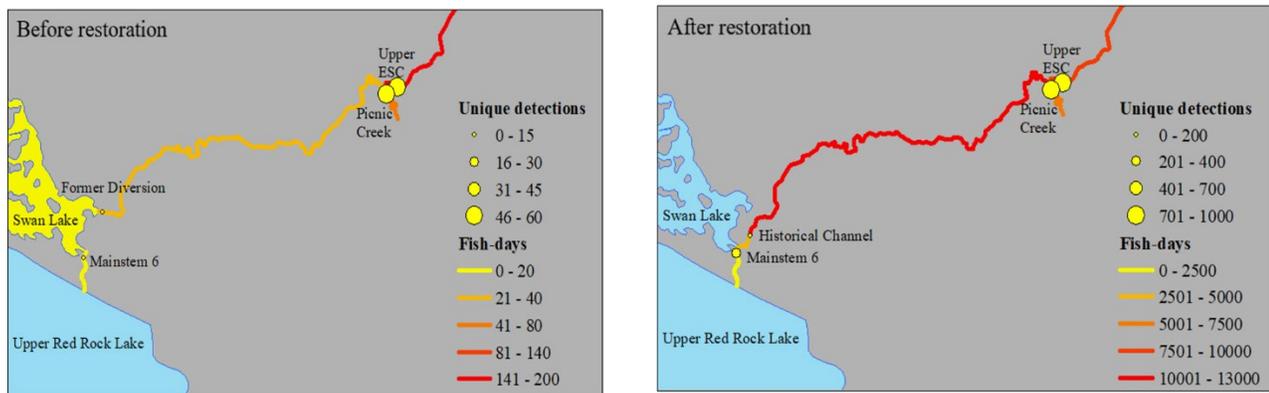
OTHER HAPPENINGS

Seasonal technician extraordinaire, Geoffrey Popken, resigned in early November. He and his fiancé moved on to Minnesota to be closer to family. During his tenure with MTFWCO, Geoff served the USFWS diligently, was a “jack-of-all-trades”, brought levity to the team, and was an exemplary employee. We wish you all the best Geoff!



Geoff Popken with a bull trout collected during fall monitoring.

Jason Marsh presented and defended his MS thesis on evaluating fish response to habitat restoration efforts in Red Rock Lakes NWR. He will technically be graduated with his degree from Montana State University-Bozeman in January.



Inferred spatial distribution of Brook Trout in Elk Springs and Picnic creeks before and after habitat restoration.

Jason developed a comprehensive understanding of Passive Integrated Transponder (PIT) arrays during his MS research and our St Mary Bull Trout project. As a result, he was selected to work with NCTC to prepare a presentation covering the utility of PIT array data, and general knowledge on how to construct and operate PIT array stations. His presentation will occur as an installment of the Fish and Wildlife Conservation Office webinar series on January 28th, 2021.

Andrew Gilham and co-authors responded to editor and reviewer comments associated with his submission to the North American Journal of Fisheries Management titled: "Proposed Standard Weight (Ws) Equations for Arctic Grayling (*Thymallus arcticus*).

*For more information, click on the following logos
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