#### Montana Department of Fish, Wildlife and Parks Fisheries Division

#### **Job Progress Report**

STATE: Montana PROJECT: Statewide Fisheries Management

**TITLE: <u>Yellowstone River Drainage Investigations</u>** 

JOB: Southeast Montana Warm Water Lakes Investigations

#### FEDERAL GRANT: F-113-SI-R7

FISCAL YEAR: 2020 (July 1, 2019 through June 30, 2020)

#### REPORT PERIOD: March 1, 2020 through November 1, 2020

#### ABSTRACT

Montana Fish, Wildlife & Parks (FWP) manages 102 ponds in Region 7. Sixty-One of these ponds were visited by FWP Fisheries staff in 2020. Thirty-nine of the managed ponds had fishable populations of target species, six were void of fish, and eleven ponds were only checked for depth. Five new ponds were visited in 2020. Wild fish were transferred into thirteen ponds by FWP in 2020. Yellow Perch from South Sandstone Reservoir and Maier Reservoir were transferred into three ponds. Fathead Minnows were transferred into four ponds. Crappie were transferred from South Sandstone Reservoir into one pond. Walleye were transferred from the Yellowstone River at Intake into two ponds. Channel Catfish from the Yellowstone River at Intake into three ponds. Northern Pike were transferred from South Sandstone Reservoir into one pond. Bluegill and Largemouth Bass from Castle Rock were transferred into two ponds. Pond anglers in FWP region 7 are likely to see similar success in 2021 as ponds throughout much of the region filled in the Spring of 2020, promoting fish survival and growth in ponds with existing populations and allowing widespread restocking of fishless ponds throughout the region.

#### PROCEDURES

Ponds are classified as either managed or new. Managed ponds are those that are currently stocked by Fish, Wildlife & Parks (FWP). New ponds are those that have not been sampled or stocked by FWP in the last 20 years. Pond depths were measured using a Lucky Wireless portable depth finder. Pond locations were recorded using township, range and section as well as GPS coordinates in decimal degrees, geographic projection NAD 1983. Fish populations were sampled using one or a combination of the following: modified fyke nets with 4 x 6-foot frames of 0.5-inch mesh (bar measure), experimental sinking gill nets with 25 ft. panels of 0.75, 1.0, 1.25, 1.5, and 2.0-inch mesh (bar measure) for an overall length of 125 feet, bag seine 100-foot-long by 0.25-inch mesh, mini-fyke nets with a 2 x 4-foot frame of 1/8<sup>th</sup>-inch mesh (bar measure) and/or hook and line. All fish were identified and counted, a sub-sample of up to 40 fish per species were measured for total length (mm) and weight (g). Metric measurements in Appendix A were converted to English equivalents to provide unit consistency between this report, stocking records, and the Region 7 Pond Fishing Guide.

#### **RESULTS AND DISCUSSION**

#### Wild Fish Transfer and Hatchery Stocking

Wild fish transfers are currently being used as a tool to augment existing populations of game fish, and to start new populations where they currently do not exist. South Sandstone was used as the primary donor source in 2020 (Table 1). Yellow Perch from South Sandstone were transferred into Baker Lake, Grants Reservoir (males only), Homestead Reservoir, Johnson Reservoir, Maier Reservoir and Spotted Eagle. Crappie from South Sandstone were transferred into Baker Lake and Rattlesnake Reservoir. Northern Pike from South Sandstone were transferred into Homestead Reservoir. Walleye from the Yellowstone River at Intake were transferred into Baker Lake. Yellow Perch and Fathead Minnows from Maier Reservoir were transferred into Spotted Eagle. Bluegill and Largemouth Bass from Castle Rock Reservoir were transferred into Hagloff Reservoir and Fat West Pond.

Table 1.	Wild fish	transfers	conducted	in 2020.
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	Receiveing			Donor		Number
Date	Water	County	Species	Water	County	Transferred
4/8/2020	Baker Lake	Fallon	Walleye	Yellowstone River (Intake)	Dawson	68
4/10/20	Baker Lake	Fallon	Walleye	Yellowstone River (Intake)	Dawson	152
4/29/2020	Cherry Creek	Prairie	Fathead Minnow	Maier	Fallon	1800
4/29/2020	Coal Creek	Prairie	Fathead Minnow	Maier	Fallon	1800
5/14/2020	Far West	Rosebud	Bluegill	Castle Rock	Rosebud	147
5/14/2020	Far West	Rosebud	Largemouth Bass	Castle Rock	Rosebud	32
4/14-15/2020	Gartside	Richland	Channel Catfish	Yellowstone River (Intake)	Dawson	41
4/20-21/2020	Gartside	Richland	Channel Catfish	Yellowstone River (Intake)	Dawson	20
4/23/2020	Gartside	Richland	Channel Catfish	Yellowstone River (Intake)	Dawson	88
4/21-23/2020	Grants	Prairie	Fathead Minnow	Maier	Fallon	300
4/29/2020	Grants	Prairie	Fathead Minnow	Maier	Fallon	1200
4/21-23/2020	Grants	Prairie	Yellow Perch	Maier	Fallon	901 males
5/14/2020	Hagloff	Rosebud	Bluegill	Castle Rock	Rosebud	138
5/14/2020	Hagloff	Rosebud	Largemouth Bass	Castle Rock	Rosebud	49
5/11-14/2020	Hollecker	Dawson	Black Crappie	South Sandstone	Fallon	129
5/11/2020	Hollecker	Dawson	Channel Catfish	Yellowstone River (Intake)	Dawson	100
5/11-14/2020	Hollecker	Dawson	Yellow Perch	South Sandstone	Fallon	334
10/7/2020	Homestead	Prairie	Fathead Minnow	Cherry Creek Pond	Prairie	12200
10/7/2020	Homestead	Prairie	Fathead Minnow	Coal Creek Pond	Prairie	24000
4/6-7/2020	Homestead	Prairie	Northern Pike	South Sandstone	Fallon	145
4/6-7/2020	Homestead	Prairie	Yellow Perch	South Sandstone	Fallon	60
10/9/2020	Ponessa	Rosebud	Fathead Minnow	Coal Creek Pond	Prairie	2306
5/7-8/2020	Spotted Eagle	Custer	Channel Catfish	Yellowstone River (Intake)	Dawson	76
4/21-23/2020	Spotted Eagle	Custer	Fathead Minnow	Maier	Fallon	1600
4/30/2020	Spotted Eagle	Custer	Fathead Minnow	Maier	Fallon	16200
9/29/2020	Spotted Eagle	Custer	Fathead Minnow	Maier	Fallon	18
10/8-9/2020	Spotted Eagle	Custer	Fathead Minnow	Cherry Creek Pond	Prairie	84158
4/17/2020	Spotted Eagle	Custer	Walleye	Yellowstone River (Intake)	Dawson	74
4/20/2020	Spotted Eagle	Custer	Walleye	Yellowstone River (Intake)	Dawson	126
4/21-23/2020	Spotted Eagle	Custer	Yellow Perch	Maier	Fallon	246
4/30/2020	Spotted Eagle	Custer	Yellow Perch	Maier	Fallon	1280
9/29/2020	Spotted Eagle	Custer	Yellow Perch	Maier	Fallon	306
9/30-10/2/2020	Spotted Eagle	Custer	Yellow Perch	South Sandstone	Fallon	783
10/5/2020	Spotted Eagle	Custer	Yellow Perch	South Sandstone	Fallon	335
4/6/2020	Walkers	Dawson	Channel Catfish	Yellowstone River (Intake)	Dawson	16
4/8/2020	Walkers	Dawson	Channel Catfish	Yellowstone River (Intake)	Dawson	13
4/10/2020	Walkers	Dawson	Channel Catfish	Yellowstone River (Intake)	Dawson	60

Fathead Minnows were planted into Cherry Creek and Coal Creek Ponds to evaluate their reproductive success and sustainability for potential use of these ponds as sources of live bait, this will continue in 2021. Fathead Minnows are proposed to be transferred from Cherry Creek Pond and Coal Creek Reservoir to Lake Elmo in Billings after it is drained and refilled in 2021.

Seven ponds were stocked with catchable Rainbow Trout (7-14 inches) from Bluewater Springs and Miles City Hatcheries (Table 2) in 2020. Miles City Hatchery stocked Rainbow Trout fingerlings (3-4 inches) into 49 ponds and Brown Trout Fingerlings into one pond (Appendix B). Miles City Hatchery stocked catchable Yellow Perch in two ponds, Northern Pike fingerlings into three ponds, Walleye fingerlings into three ponds, fingerling Channel Catfish into one pond, retired brood stock Smallmouth Bass into two ponds and Largemouth Bass fingerlings into nine ponds in 2020 (Appendix B).

Date	Water Name	Number	Strain	Length(in)	Hatchery
5/8/2020	Clarks	200	Arlee	8.12	Miles City
4/9/2020	Baker Lake	600	McConaughy	10.39	Miles City
4/28/2020	Hollecker	600	Arlee x Erwin	7.39	Bluewater Springs
4/28/2020	Hollecker	30	Arlee	12.6	Bluewater Springs
5/8/2020	Hollecker	200	McConaughy	8.12	Miles City
6/2/2020	Johnson	205	McConaughy	11.3	Miles City
5/28/2020	Rest	1000	Arlee	6.76	Bluewater Springs
5/28/2020	Rest	205	McConaughy	10.64	Miles City
4/27/2020	Roerick	200	Arlee x Erwin	7.39	Bluewater Springs
4/2/2020	Spotted Eagle	300	McConaughy	10.66	Miles City

Table 2. Catchable Rainbow Trout stockings in 2020.

Non-trout ponds without pre-existing populations of fish generally receive a one-time stocking of fish to establish a population that will reproduce on its own until winterkill or dewatering necessitates re-establishment of the population.

There are six ponds on the list of proposed wild fish transfers to be completed in 2021 (Table 3). Grants Reservoir would receive male-only Yellow Perch to reduce fish stunting due to excessive reproductive success.

Receiveing			Donor	
Water	County	Species	Water	County
Spotted Eagle	Custer	Yellow Perch	Maier/South Sandstone	Fallon
Spotted Eagle	Custer	Northern Pike	South Sandstone	Fallon
Spotted Eagle	Custer	Walleye	Yellowstone River-Intake	Dawson
Spotted Eagle	Custer	Fathead Minnow	Coal Creek Reservoir	Prairie
Gartside	Richland	Channel Catfish	Yellowstone River-Intake	Dawson
Hollecker	Dawson	Channel Catfish	Yellowstone River-Intake	Dawson
Homestead	Prairie	Yellow Perch	Maier/South Sandstone	Fallon
Multiple	Multiple	Fathead Minnow	Coal Creek Reservoir	Fallon

Table 3. Wild fish transfers proposed for 2021.

#### **Survey of New Ponds**

Regional fisheries staff investigate new pond fishery opportunities when approached by interested landowners. Review typically begins by looking at the aerial photography for the pond location and checking past stocking records and private pond license history to determine if the proposed pond has been previously managed. A site visit follows where regional staff check the pond for current and maximum water depth as well as make a valuation on the habitat potential and begin discussions with the landowner as to what species may be suitable in the waterbody. Many of the stock ponds and small reservoirs that are in the regional pond program were built prior to the 1960's. Siltation over the decades has made many of these waterbodies too shallow to sustain quality fisheries. Few deep, high quality ponds are being built in recent decades. This reality makes efforts like the draining and rebuilding of Baker Lake and Rattlesnake Reservoir important actions to revitalize the aging ponds program.

Five new ponds were inspected in 2020 (Table 4). Ponessa Pond in Rosebud County was added to the Region 7 ponds program and will be managed as a Rainbow Trout pond. Pocaseetchee Reservoir in Carter County was inspected in 2020. The depth in this reservoir was such that fish survival was unlikely, therefore it will not be added to the Region 7 ponds program. Smith Reservoir in Powder River County also lacked suitable depth for fish survival and will thus not be added to the Region 7 ponds program. Cherry Creek Reservoir and Coal Creek Reservoir were evaluated for production of Fathead Minnows to learn if they could be a viable source of baitfish for anglers, commercial collectors and wild fish transfers to other waters.

		Pond Lo	ocation		Depth	Depth	Management
Pond Name	County	TRS	Latitude	Longitude	(feet) *	(feet)**	Plan
Pocaseetchee Reservoir	Carter	T3S R55E S30	N45.54584	W104.96914	6	0	Pond not to be managed
Smith Reservoir	Powder River	T4S R47E S8	N45.50349	W105.96547	7	0	Pond not to be managed
Cherry Creek Reservoir	Prairie	T13N R48E S29	N46.85499	W105.67174	6	0	Fathead Minnows Planted
Coal Creek Reservoir	Prairie	T13N R51E S36	N46.84626	W105.23179	6	0	Fathead Minnows Planted
Ponessa Pond	Rosebud	T10N R44E S12	N46.64090	W106.13351	17	2	Fathead Minnows/Rainbow Trout
* Water depth when same	pled.						

Table 4. New ponds visited in 2020.

\*\* Depth between current water level and normal high water mark.

## **Managed Ponds**

Managed ponds below are sorted by county and then alphabetically by pond name. Detailed gear and species information for each pond is found in Appendix A. Location of all ponds described below can be found using the 2020 Region 7 Ponds Guide.

## **Carter County**

## <u>Frigid</u>

Frigid was stocked with 1,000 fingerling Rainbow Trout April 22, 2020. Frigid was sampled July 2020 with an experimental gill net along with hook and line sampling. Rainbow Trout averaged 11 inches long, Green Sunfish were very numerous in both sampling methods.

### Gardner

One experimental gill net captured Northern Pike and Yellow Perch in 2020. Average length of Northern Pike was 20 inches and Yellow Perch 8 inches.

### Gardner #2

Gardner #2 was 21 feet deep in 2020. An experimental gill net captured Black Crappie, Golden Shiner and Yellow Perch. Black Crappie averaged 7 inches, Yellow Perch averaged 7 inches and Golden Shiners were very abundant.

## <u>Hansen</u>

Hansen was stocked with 500 Largemouth Bass July 22, 2020. When visited in July, Hansen had a maximum depth of 16 feet and was 3 feet from full pool. Black Bullhead, Largemouth Bass, and Northern Pike were captured using an experimental gill net. Average length of Black Bullhead, Largemouth Bass, and Northern Pike was 9 inches, 12 inches, and 23 inches respectively.

## <u>McNabb</u>

McNabb was sampled with an experimental gill net July 2020. Maximum depth was 15 feet deep and the reservoir was 5 feet from full pool. Black Bullheads and Green Sunfish were the only species captured. None of the planted Channel Catfish from 2016 were captured in 2020. Frequency of failure of warmwater species (channel catfish, largemouth bass) and catchable sized rainbow trout lead to management decision of annual stocking 500 two-inch Rainbow Trout beginning in 2021 (stocking update submitted December 8, 2020). This provides a stocked species for angler opportunity while reducing the cost of stocking catchable sized fish. Decision could be changed in future if angler demands request catchable sized fish.

#### Pat Labree

Pat Labree was stocked with 2,500 fingerling Rainbow Trout April 22, 2020. The Reservoir was sampled in July 2020 and was at full pool with a maximum depth of 19 feet. An experimental gill net captured Rainbow Trout with an average length of 14 inches.

#### Pocaseetchee Reservoir

Pocaseetchee Reservoir was a potential new pond inspected July 2020. The reservoir was 6 feet deep at full pool. Due to limited depth, the pond will not be managed.

## <u>Rath</u>

Rath Pond was a new pond to the program in 2019. Rath had a maximum depth of 8 feet deep and was 4 feet from full pool when checked in September 2020. Two experimental gill nets were set overnight,

but no fish were captured. Rath will be stocked with Rainbow Trout in the spring of 2021. Management decision in 2020 to continue with annual stocking of 500 Rainbow Trout, request made December 2020.

## <u>Sidney</u>

Sidney was stocked with 1,000 fingerling Rainbow Trout on April 22, 2020. Sidney was sampled in July 2020 with an experimental gill net set overnight. Sidney had a maximum depth of 16 feet and was 2 feet from full pool. Rainbow Trout captured had an average length of 15 in (range: 6-20 in). Sidney has consistently overwintered fish which has allowed good growth and multiple year classes of trout to survive.

### Talcott

Talcott was stocked with 10,000 Northern Pike May 4, 2020. Sampling with an experimental gill net yielded only 1 Northern Pike and 1 Yellow Perch.

### **Custer County**

### Beardsley Pond

Beardsley Pond was stocked with 381 fingerling Rainbow Trout June 2020 and 500 fingerling May 2019. This pond is located just upstream of the Pat Beardsley trout pond and has received opportunistic trout stocking between 1992-2020. Historically, the pond has not had adequate water depth to justify stocking. However, water conditions were adequate in 2019-2020 to allow for opportunistic one-time only stocking. No fish were captured in an experimental gill net set overnight; the pond was 12 feet deep and 2 feet from full pool.

#### Boulware

Boulware was stocked with 2,000 fingerling Rainbow Trout on April 22, 2020. Depth at Boulware was only checked for depth in 2020. It had a maximum depth of 20 feet and was 2 feet from full pool in April. In June, it had a maximum depth of 19 feet and was 3 feet from full pool.

#### Cap Rock Pond

Cap Rock Pond was a new pond to the program in 2019. The Miles City Hatchery stocked 1,000 catchable (7 inch) Rainbow Trout in the fall of 2019, and it will annually receive 1,000 fingerling Rainbow Trout which started in 2020. An experimental gill net set in May 2020 captured 21 Rainbow Trout with an average length of 11 inches. Cap Rock Pond had a maximum depth of 15 feet, and it was 1 foot from full pool.

#### Cody Taylor

Cody Taylor was checked for depth only on June 5, 2020. The pond had a maximum depth of 5 feet and was 2 ft from full pool. Conversations with the landowner informed us that bullheads were still present, along with bass.

#### Pat Haughian (Haughian Bass Pond)

In the spring of 2019, the spillway pipe was damaged by ice out. Future Fisheries Grant Program funds were obtained in the summer of 2019 and the spillway pipe was repaired by the fall of 2019. Depth was checked April 2, 2020, and the reservoir had a maximum depth of 16 feet, and it was 2 feet from full pool, the pond will continue to be managed as a Largemouth Bass/Yellow Perch pond.

## Dean S

The Bureau of Land Management (BLM) started draining the pond in the summer of 2019 to rebuild the dam in 2020. Construction of the new dam/spillway was completed by the fall of 2020, and Rainbow Trout stocking will resume when the reservoir fills again.

### Dick Stanley

Dick Stanley was a new pond to the program in 2019. It has a full pool maximum depth of 18 feet. When checked on May 15, 2019, maximum depth was 15 feet. Miles City Hatchery stocked 500 Largemouth Bass in July 2019. An experimental gill net set in July 2020 captured Largemouth Bass with an average length of 10 inches and Yellow Perch with an average length of 7 inches. The origin of Yellow Perch is unknown, as they were not stocked by FWP. The pond had a maximum depth of only 7 feet when checked in 2020.

## <u>Ft. Keogh</u>

Ft. Keogh was sampled with an experimental gill net, Rainbow Trout captured had an average length of 12 inches. The pond had a maximum depth of 10 feet and was 2 feet from full pool. Due to difficulties and uncertainties with obtaining angler access the pond is proposed to be dropped from the ponds program and stocking efforts in 2021.

### Haughian Trout (Haughian Reservoir #1, Henry Haughian, Leo Billing)

Miles City Hatchery planted 2,000 fingerling Rainbow Trout into Haughian Trout pond on May 21, 2020. The Reservoir was sampled with an experimental gill net in June of 2020. Rainbow Trout captured had an average length of 13 inches long.

## Houston Rodgers (Rodgers Pond, Houston Rodgers)

Houston Rodgers was a private pond that was managed as a trout fishery by FWP from 1965-1990 before siltation reduced pond depth to a state that was unlikely to allow fish to survive. Ownership of the pond became public when the BLM acquired the property in 2007 through a land exchange. Depth of the reservoir was checked on June 5, 2020. Maximum depth was 7 feet and the water level was 1 foot from full pool. Given the unlikelihood of game fish survival, the pond may be used to attempt to grow Fathead Minnows for baitfish in 2021.

## Pat Beardsley (Beardsley Lake, Beardsley Trout)

The Pat Beardsley trout pond was sampled with an experimental gill net set overnight. Average length of Rainbow Trout captured was 15 inches. The pond had a maximum depth of 18 feet deep and was at full pool.

#### Rest Reservoir

Rest Reservoir was surveyed for depth in June. The maximum depth was 22 feet and the pond was 5 feet from full pool. Rest Reservoir was stocked with 1,200 catchable Rainbow Trout on May 18, 2020.

## Spotted Eagle

Spotted Eagle in Miles City continues to be popular with local fisherman and other recreationists. Several community groups have contributed to cleaning and mowing the area and adding park benches and picnic shelters. The City of Miles City constructed a walking path, including three bridges, which cross the outlet channel. Walleyes Unlimited of Miles City built a handicap accessible fishing pier near the outlet channel. In 2014, the City of Miles City installed a restroom purchased by Walleyes Unlimited. An outdoor classroom was completed in the summer of 2015. In 2017 and 2018, Walleyes Unlimited, the City of Miles City and Miles Community College Heavy Equipment Class created two fishing jetties to provide additional fish habitat and access for shore anglers. Christmas trees continue to be sunk annually to provide fish habitat, an effort that has occurred since 2005. The Christmas tree project will be continued in 2021. Increased public use of Spotted Eagle demands continued monitoring and improvements to the fishery.

Establishment of undesired riverine fish species has been a historical issue at Spotted Eagle. Wet conditions in 2010, 2011, 2013, and 2014 provided ample opportunity for riverine species (i.e. Common Carp, River Carpsucker, Goldeye, Shorthead Redhorse Sucker, Smallmouth Buffalo, and Largemouth Buffalo) to move into Spotted Eagle through the outlet channel or across the floodplain. The low elevation change from Spotted Eagle to the Tongue River makes fish movement into the pond easier when water levels rise in the Tongue River. In 2016, Walleyes Unlimited placed a fish barrier in the outlet channel. The barrier is intended to impede migration of riverine species into Spotted Eagle, which will make mechanical fish removal efforts more effective. The barrier helps create a drop of six feet, from the outlet of Spotted Eagle to the Tongue River (at base flow).

Efforts to mechanically remove unwanted riverine fish species in Spotted Eagle have been undertaken to improve the fish species composition. Efforts to mechanically remove non-target fish with gill nets and electrofishing were conducted in 2012, 2013, 2017-2020. Common Carp and Bigmouth Buffalo were the species found in the highest abundance during the 2020 samples. In 2020 there were 7 days of varying effort to remove non-target fish. A total of 155 fish were removed from Spotted Eagle in 2020 (Table 5). A general trend of declining catch rate of River Carpsucker suggests that mechanical removal may be lowering the abundance of this species (Figure 1). Annual trend sampling has not captured Bigmouth Buffalo, Common Carp and Smallmouth Buffalo consistently enough to be able to develop a trend for these species. Based on varied removal efforts from 2012-2020 Bigmouth and Smallmouth Buffalo catch rates have declined. Common Carp have not been captured consistently in gill nets, with most removal coming from electrofishing, which indicates that the population has not been affected by removal efforts. Focused efforts to mechanically remove non-target species will continue in 2021.

					Shorthead		
	Bigmouth	Black	Common	River	Redhorse	Smallmouth	Yellow
	Buffalo	Bullhead	Carp	Carpsucker	Sucker	Buffalo	Bullhead
5/15	3			6		7	
5/22	30	2	57	5		4	2
5/26	1			2			
5/29	7		2	3	2	2	
6/8					1	1	
6/24			1		2		
7/31			10			3	2
Totals	41	2	70	16	5	17	4

Table 5. Number of fish Removed from Spotted Eagle by date and species during 2020 mechanical removal efforts.

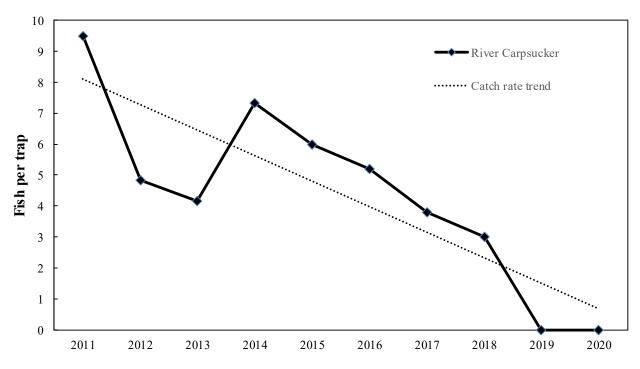


Figure 1. Fish per trap for River Carpsucker in Spotted Eagle, 2011-2020.

Fourteen species were found in Spotted Eagle in 2020 during the annual sampling effort. Black Crappie was the most abundant species sampled at 11 fish per trap followed by White Crappie at 9.6 fish per trap. Bluegill, Channel Catfish, Largemouth Bass, Rainbow Trout, Smallmouth Bass, Walleye and Yellow Perch were other sport fish caught in 2020 (Appendix A).

Efforts continued in 2020 to improve angling opportunities at Spotted Eagle by planting sportfish. Miles City Hatchery stocked 300 catchable Rainbow Trout, 250 brood stock Smallmouth Bass and 2,800 Yellow Perch in 2020 (Table 2, Appendix B). Approximately 3,000 Yellow Perch were transferred into Spotted Eagle from South Sandstone and Maier Reservoirs. Additionally, 76 Channel Catfish and 200 Walleye from the Yellowstone River downstream of Intake Dam were transferred into Spotted Eagle. Over 100,000 Fathead Minnows were transferred from Coal Creek Reservoir, Cherry Creek Reservoir and Maier Reservoir to provide more forage for sport fish (Table 1). Anecdotal evidence suggests anglers are reaping benefits from removing non-target fish, and transfers of sport fish.

#### **Dawson County**

#### Hollecker Lake

Hollecker Lake, located on the outskirts of Glendive, is a popular destination for the community. Walleyes Unlimited Glendive Chapter has taken interest in improving the fishery. In the winter of 2019, the chapter, under approval from Dawson County, led an effort to drain Hollecker Lake to rid the overabundant unwanted species and provide a fresh start to the fishery. Additionally, the chapter funded and donated time to improving and diversifying fish habitat. An excavator was used to dredge areas of the reservoir and material from those excavations were used to create peninsulas extending into the water. An aeration system was designed and installed by chapter members to decrease the occurrence of winter fish kills that have commonly taken place at Hollecker Lake in the past. The chapter, along with guidance from FWP fisheries staff and input from local anglers, decided on a restocking composition comprised of Rainbow Trout, Yellow Perch, Black Crappie, White Crappie, Channel Catfish, and Walleye. Hollecker Lake refilled in the Spring of 2020 and restocking of the reservoir began. A total of 830 Rainbow Trout were stocked in April and May. Adult Black Crappie (n=129) and Yellow Perch (n=334) from South Sandstone and adult Channel Catfish (n=100) from the Yellowstone River downstream of Intake Dam were transferred into Hollecker Lake in May.

Annual sampling of Hollecker Lake was completed in July of 2020. Two mini-fyke nets captured six species, including Black Bullhead, Black Crappie, Fathead Minnow, Longnose Sucker, Rainbow Trout and Yellow Perch. Only a single adult Black Crappie from the wild fish transfer was recaptured. However, 522 young-of-the-year (YOY) crappie were captured, indicating some level of successful spawning. Conversely, many adult (n=268) but few YOY (23) Yellow Perch were captured (Appendix A). Given the timing of wild fish transfers (e.g. May), it is was expected that the Yellow Perch production for 2020 would be low. Rainbow Trout return to anglers in Hollecker seems to be limited to a short timeframe after stocking. Only 3 Rainbow Trout were captured during the July sample and anecdotal reports from anglers suggest the catch is minimal through late summer months. Unwanted species present were at low levels (Black Bullhead n=3, Longnose Sucker n=2). While Fathead Minnow was not part of the restocking plan, their presence is expected to have minimal impacts to the fishery. Fathead Minnow may buffer predation on Black Crappie and provide additional food resource for all game species present. Of more concern is the method of which these unwanted species entered Hollecker Lake. Large riverine species (e.g. Common Carp, River Carpsucker) have been present in the reservoir in the past, and these species promote increases in turbidity and can further exacerbate demands on food and nutrient resources. Monitoring at the fish screen at the inlet to Hollecker Lake would be beneficial to understand the source and timing of unwanted species introduction.

Use of Channel Catfish in the Region 7 Ponds program is relatively new. Several ponds, including Hollecker Lake, received adult Channel Catfish as an experimental transfer. The purpose of these transfers was two-fold. First, they would provide a new opportunity for large, predatory fish within the ponds program. Channel Catfish have the ability to grow to large sizes when conditions are such that they survive and there is an abundance of pretty species. The Montana state record Channel Catfish, weighing over 35 pounds, was captured from Castle Rock Lake in 2019. Castle Rock Lake is a small reservoir that hosts an abundant Bluegill population and it is likely that this state record catfish capitalized on the opportunity to forage on Bluegill. Secondly, Channel Catfish transfers are intended to reduce the abundance of overpopulated, and often growth-stunted, prey species. In Hollecker Lake, historic Yellow Perch populations have been overabundant, and the size distribution was heavily skewed towards very small individuals. In 2020, 100 adult Chanel Catfish were transferred into Hollecker Lake. All of these individuals were uniquely marked with a green, T-bar tag inserted inferior the dorsal fin. These tags include an individual identification number along with contact information to report the recapture to FWP. In 2020, 13 Channel Catfish angler recaptures were reported to FWP. Of these, 8 were harvested and 5 were released. It is too early in the experiment to evaluate the 2 objectives, but it is apparent that adult Channel Catfish transfers provide immediate opportunity for anglers at Hollecker Lake. Channel Catfish angler returns as well as directed sampling via baited hoop nets will be vital in evaluation Channel Catfish growth through time.

#### Johnson

Johnson Reservoir was stocked with 205 catchable Rainbow Trout June 2, 2020. Johnson Reservoir was sampled with two experimental gill nets and two mini-fyke nets May 2020. Average length of Yellow Perch captured was 8 inches.

#### Lindsay Reservoir

Lindsay Reservoir was sampled with two experimental gill nets in June 2020. Gill nets captured five species: Black Bullhead, Common Carp, Northern Pike, Walleye and Yellow Perch. Average length of Northern Pike was 24 inches, Walleye was 8 inches, and Yellow Perch was 8 inches. The reservoir had a maximum depth of 10 feet deep and was 2 feet from full pool. Walleye presence is the result of an illegal introduction that occurred prior to 2014, the first year they were captured in routine sampling. They continue to be present seven years later and their larger size and lack of smaller fish suggests that illegal supplemental stocking of adult sized fish is occurring with some frequency.

### Marvin Burman

Marvin Burman was stocked with 1,000 fingerling Rainbow Trout April 22, 2020. Burman was sampled June 3, 2020 with an experimental gill net, but no fish were captured. The pond had a maximum depth of 14 ft and was 2 ft from full pool. Burman will continue to be stocked with Rainbow Trout annually.

### Rattlesnake

The dam at Rattlesnake reservoir was rebuilt by the Bureau of Land Management (BLM) in 2017. Crappie were caught at South Sandstone Reservoir and 292 were transferred to Rattlesnake in the spring of 2019. Rattlesnake Reservoir had a maximum depth of 10 feet deep and was 3 feet from full pool in September 2020.

### Trangmoe

Trangmoe was sampled with two experimental gill nets in June 2020. Eleven species were captured including Black Bullhead, Black Crappie, Bigmouth Buffalo, Channel Catfish, Common Carp, River Carpsucker, Shorthead Redhorse Sucker, Smallmouth Buffalo, White Crappie, White Sucker and Yellow Perch.

## Walker's Dam

Walker's Dam is a small, privately owned pond East of Glendive, Montana. The pond is not in the Region 7 Pond Program, but the owner does allow public access to the waterbody. The Walleyes Unlimited Glendive Chapter, with permission from the landowner, intended to stock Rainbow Trout in this pond. Unfortunately, Yellow Perch were introduced, and they quickly became overabundant and their growth was stunted. For example, 838 Yellow Perch were captured in 3 mini-fyke nets set overnight in 2018. Average length of Yellow Perch captured was 5 inches and max length was 7 inches. The chapter and FWP decided to transfer adult Channel Catfish into Walker's Dam in an attempt to control the overabundant Yellow Perch. A total of 36 adult Channel Catfish were transferred in one day of effort from the Yellowstone River downstream of Intake Dam in 2018 and 89 were transferred in three day's worth of effort in 2020. Channel Catfish were captured using boat electrofishing downstream of Intake Fishing Access Site. Average length of catfish transferred in 2018 was 19 inches (range 14-30 inches) and was 22 inches (range 14-28 inches) in 2020. All Channel Catfish released into Walker's dam were individually marked with green T-bar tags near the base of the dorsal fin. To date, no angler tag returns have been reported to FWP. It is recommended that a targeted Channel Catfish sampling protocol be developed to monitor survival and growth.

## **Fallon County**

#### Baker Lake

Like other ponds in or near community centers, Baker Lake provides important recreational opportunities to the surrounding citizens. In recent years, the reservoir had not been providing suitable habitat when average lake depth was 6 feet deep. Winter kill was common and stocked and transferred

sport fish populations were not establishing. Fallon County was already planning and raising funds for a Baker Lake improvement project when a tornado hit the area and left substantial debris in the lake. Draining the lake was a necessary first step for both the cleanup and habitat improvement project. The county took the opportunity to implement a major lake and wetland restoration project in 2018 including overall depth contouring and creation of wetland complexes, deep refuge areas (i.e. some areas over 40-foot-deep at full pool), depth transition zones and rock pile shoals. The total cost is approximately 8.5 million dollars (Billings Gazette 2017) and has taken about two years to complete. Fallon County commissioners sought public opinion on fish stocking options during 2018 through an online survey as well as public meetings. Several hundred comments were received, and the commissioners decided to have FWP stock Black Crappie, White Crappie, Walleye and Yellow Perch.

Fingerling Rainbow Trout and Walleye were stocked by FWP hatcheries in 2019. and surplus catchable sized Rainbow Trout (10-11 inches long) and fingerling Walleye were stocked by FWP hatcheries in 2020. Adult crappie and Yellow Perch were transferred in pre-spawn condition by FWP staff in 2019, and adult Walleye in pre-spawn condition in both 2019 (19 fish) and 2020 (220 fish) using the wild fish transfer policy (Table 1). Transferred adult Walleye at Baker Lake have provided an instantaneous opportunity to anglers. Ten tagged Walleye were caught with eight harvested and two released out of a total of 225 tagged Walleye in Baker Lake. Walleye were transferred into Baker Lake April 8<sup>th</sup> and 10<sup>th</sup> 2020, with the first tagged fish being caught just 15 days after it was transferred on April 25, 2020. Additional adult walleye transfers will not occur for 2-3 years to provide an adequate evaluation of growth rates and recruitment to angler creel that the hatchery stocked walleye provide. The current annual stocking plan, until changes are requested or annual sampling necessitates changes, consists of annual stocking 10,000 Walleye fingerling. Natural reproduction of Yellow Perch and crappie should be enough to sustain these two populations.

Baker Lake is sampled annually with a suite of gears. In September 2019, Baker Lake was sampled with two fyke nets and six mini-fyke nets. Average length of Black Crappie captured was 11 inches, Walleye was 11 inches and Yellow Perch was 8 inches. Thousands of YOY Crappie captured in the sample indicate that the transferred adult fish had successfully spawned. Fathead Minnows were also sampled and likely got into Baker Lake from the upper reservoir. Fathead Minnows will provide variety to the prey base at Baker Lake. Baker Lake was also sampled in the spring and fall of 2020 to assess the fishery using two fyke nets in each sample and three mini-fyke nets in the spring of 2020 and six mini-fyke nets in the fall of 2020. Average length of Black Crappie was 12 inches, Walleye was 18 inches and Yellow Perch was 7 inches in May 2020. Fish length in the May sample indicated continued growth of stocked fish. The sample in September 2020 had reduced average length, indicating that natural reproduction has been occurring for at least Yellow Perch and Black Crappie. Average length of Black Crappie was 6 inches, Walleye was 11 inches and Yellow Perch was 7 inches in September 2020.

#### Maier Reservoir

Maier Reservoir was used as a source for Yellow Perch and Fathead Minnows transfers in 2020. Approximately 1,800 Yellow Perch and more than 17,800 Fathead Minnows were transferred to Spotted Eagle in 2020. Approximately 900 male Yellow Perch and 1,500 Fathead Minnows were transferred to Grants Reservoir in 2020. Fathead Minnows from Maier Reservoir were transferred to Cherry Creek Reservoir (n=1,800) and Coal Creek Reservoir (n=1,800) to start minnow populations in these ponds.

#### Pinnow #1

Pinnow #1 was stocked with 500 fingerling Rainbow Trout April 22, 2020. Pinnow #1 was sampled for depth only, the pond had a maximum depth of 7 feet and was 2 feet from full pool.

#### Pinnow #2

Pinnow #2 was stocked with 500 fingerling Rainbow Trout April 22, 2020. Pinnow #2 was sampled for depth only, the pond had a maximum depth of 12 feet and was at full pool.

## Roddy Rost

Roddy Rost was stocked with 562 fingerling Brown Trout July 29, 2020. Roddy Rost was a new pond in 2019. Sampling in September 2020 was done with an experimental gill net set overnight. Ten Brown Trout captured had an average length of 8 inches. The pond had a maximum depth of 13 feet and was 2 feet from full pool.

#### South Sandstone

South Sandstone Reservoir is located in Southeast Montana and encompasses 372 acres. The reservoir has camp sites on both the east and west shore, it is a popular destination for Southeastern Montana campers and anglers/hunters. South Sandstone sustains fishable populations of bullhead, crappie, Northern Pike, Yellow Perch and Walleye. Many improvement projects have been occurring at South Sandstone including adding an ADA approved fishing pier on the west side of the reservoir, armoring the jetty near the boat ramp to prevent erosion, replacement of the lower section of boat ramp, road work and other ongoing projects.

South Sandstone is both a receiving water and donor water for multiple stocking and wild fish transfers. South Sandstone is annually stocked with Walleye fingerling and bi-annually stocked with fingerling Northern Pike, it was stocked with 1,507 Northern Pike and 10,000 Walleye June 9, 2020. South Sandstone was used as a source for multiple wild fish transfers in 2020. Ten days of varying effort transferred: 129 Black Crappie, 145 Northern Pike and 1,512 Yellow Perch into three different ponds in the region.

Annual South Sandstone sampling was completed in July of 2020. Three experimental gill nets and 3 seine hauls collected Black Bullhead, Northern Pike, Walleye, and Yellow Perch. Black Bullhead were the most abundant species sampled in gill nets at South Sandstone Reservoir followed by Yellow Perch. Northern Pike relative abundance has increased over the past two years (Figure 2). Average length of Yellow Perch caught in gill nets was 7 inches in 2020 and ranged between 5 and 10 inches. Lengths of Walleye captured in gill nets in 2020 ranged from 21 to 26 inches (average length was 23 inches). Northern Pike caught in gill nets had an average length of 20 inches (range 8-37 inches). Angler opportunity for Yellow Perch and Northern Pike at South Sandstone continue to make this reservoir one of the best in the region.

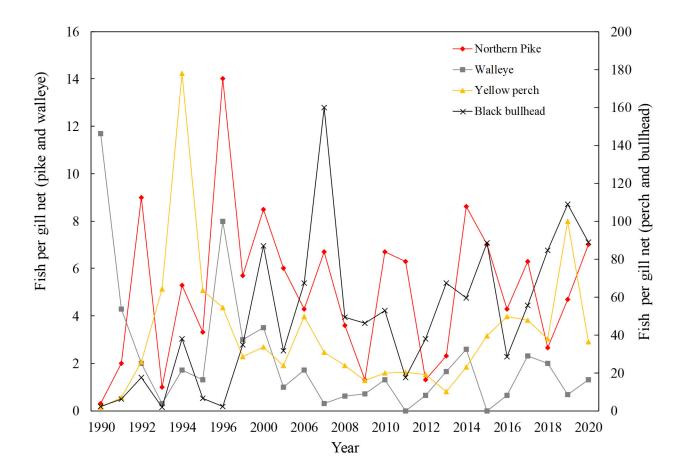


Figure 2. Catch per gill net for Northern Pike, Walleye, Yellow Perch and Black Bullhead in South Sandstone Reservoir, 1990-2020.

#### **Garfield County**

#### Cottonwood

Cottonwood was sampled with two experimental gill nets set overnight. Common Carp, Largemouth Bass and Yellow Perch were captured in low abundances. Yellow Perch were the most abundant fish caught (n=4) and had an average length of 7 inches. Cottonwood was at full pool.

#### Jack McRae

Jack McRae was stocked with 2,000 fingerling Rainbow Trout on April 23, 2020. McRae was sampled with an experimental gill net set overnight. Rainbow Trout caught ranged in size from 7 inches to 16 inches (average 12 inches). McRae had a maximum depth of 10 feet deep and was 3 feet from full pool.

#### John Ryan

John Ryan was sampled with an experimental gill net set overnight; no fish were captured. The pond had a maximum depth of 13 feet and was at full pool. John Ryan was stocked with 1,000 fingerling Rainbow Trout on April 23, 2020.

## Kreider #1

Kreider #1 was sampled with two experimental gill nets set overnight. The gill nets caught 31 Largemouth Bass with an average length 10 inches. Kreider #1 was 3 feet from full pool in 2020.

## Kreider #2

Kreider #2 was stocked with 1,500 fingerling Rainbow Trout April 23, 2020. Kreider #2 was sampled with an experimental gill net set overnight. The gill net caught one Rainbow Trout measuring 8 inches long. The reservoir was 19 feet deep and was at full pool.

## Kreider #3

Kreider #3 was sampled with two experimental gill nets set overnight. The nets caught 8 Largemouth Bass with an average length of 11 inches. The reservoir had a maximum depth of 13 feet and was 4 feet from full pool.

## <u>Haglof</u>

Haglof was a new pond in April 2019, it was 16 feet deep at full pool. Bluegill and Largemouth Bass were stocked in 2019 and 2020.

## **Powder River County**

## Mud Turtle

Mud Turtle was stocked with 1,000 fingerling Rainbow Trout on April 22, 2020. Mud Turtle was sampled in July with one experimental gill net set overnight. Ten Rainbow Trout were caught with an average length of 7 inches. The reservoir had a maximum depth of 7 feet and was 5 feet from full pool.

## Roerick

Roerick was stocked with 200 catchable Rainbow Trout on April 27, 2020. Roerick was sampled with one seine haul. This seine haul caught Black Bullhead, Common Carp and Green Sunfish. Roerick had a maximum depth of 7 feet and was 2 feet from full pool.

## Smith Reservoir

Smith Reservoir was a proposed new pond that was inspected in 2020. Smith Reservoir was sampled with one seine haul, no fish were captured. Smith Reservoir had a maximum depth of 7 feet and was at full pool. The reservoir will not be included in the Region 7 Ponds program due to lack of depth.

## **Prairie County**

#### Cherry Creek Reservoir

Cherry Creek Reservoir was a new pond in 2020 stocked with 1,800 Fathead Minnows April 29, 2020. The purpose of this stocking was to evaluate Fathead Minnow survival/production in a small/shallow, likely to winterkill, pond to duplicate other northern states efforts to produce live bait fish sources. Fathead Minnows can prosper in these environments because competition or predation from other fish is greatly reduced (Gunderson 2019). Sampling in October 2020 captured more than 24,000 Fathead Minnows in three days using four mini-fyke nets. Standard minnow traps baited with canned dog food set overnight averaged 62 Fathead Minnows per trap, indicating that this method could be successful for anglers looking for live bait. In the future this pond could be used as a source for live bait either available directly to the public and/or for commercial collectors. This same effort was duplicated at Coal Creek Reservoir in 2020. AIS and pathogen testing were conducted as part of this study; test results were clean. The fish handled during fall collections were distributed to two other regional waters as supplemental forage for game and sport fish (Table 1).

#### Clarks Reservoir

Clarks Reservoir was stocked with 2,000 fingerling Rainbow Trout on April 21, 2020 and 200 catchable Rainbow Trout May 8, 2020. Clarks Reservoir was checked for depth on April 2, 2019, and it was 12 feet deep, 3 feet from full pool.

#### Coal Creek Reservoir

Coal Creek Reservoir was a new pond in 2020. It was stocked with 1,800 Fathead Minnows April 29, 2020. The purpose of this stocking was to evaluate Fathead Minnow survival and production in a shallow pond likely to winterkill. Fathead Minnows can prosper in these environments because competition or predation from other fish is greatly reduced (Gunderson 2019). Sampling in October 2020 captured more than 142,000 Fathead Minnows in three days using four mini-fyke nets. Standard minnow traps baited with canned dog food set overnight averaged 0.5 Fathead Minnows per trap, indicating that at this time this method would not be successful for anglers looking for live bait. In the future this pond could be used as a source for live bait either available directly to the public and/or for commercial collectors. This same effort was duplicated at Cherry Creek Reservoir in 2020. AIS and pathogen testing were conducted as part of this study; test results were clean. Fathead Minnows handled during fall collections were distributed to two other regional waters, one to supplemental forage for game and sport fish and one to establish another bait fish population (Table 1).

#### Doug Singleton

Doug Singleton was stocked with 1,000 Largemouth Bass on July 17, 2020. Doug Singleton was sampled with two experimental gill nets set overnight. No fish were captured and it was 16 feet deep and at full pool when sampled.

#### Grants Reservoir

Grants Reservoir was a new pond in 2014 that we attempted to stock with only female Yellow Perch as an experiment to establish a trophy population. Yellow Perch exhibit sexual size dimorphism, with adult females typically being larger than the males at a given age. Females mature later allowing more time for energy to be put into body growth. This biological principle in the absence of density dependent factors should have resulted in a population of all female Yellow Perch that could be expected to exceed ten inches relatively quickly. The experiment had early indications of success as mean total length of the Yellow Perch planted increased from 5.2 inches to 9.4 inches in 6 months (Figure 3). Sampling in spring 2015 found male Yellow Perch in Grants Reservoir suggesting some of the fish transferred in 2014 that were assumed to be immature females because they were small but not running milt were misidentified. Yellow Perch can reach 14 inches in length and 2 pounds in weight, but high fecundity and annual reproductive success often cause density dependent factors to result in populations with high relative abundance but small average size. This density dependence was observed as the abundance of Yellow Perch drastically increased after successful spawning events from 2014-2017, and the average total length of Yellow Perch decreased (Figure 3). Grants killed out during the 2017/2018 winter, confirmed by an experimental gillnet set overnight in 2018 that caught no fish.

The reservoir was 12 feet deep at full pool on March 27, 2019. Grants was stocked with 500 fingerling Rainbow Trout on April 23, 2019. As a second attempt to maximize Yellow Perch growth, Grants was planted with 901 and 75 male Yellow Perch in 2020 and 2019 respectively, to decrease the risk of planting both sexes (i.e. only fish running milt were transferred)., Grants will be sampled with fyke nets in 2021 to assess the survival/growth of Yellow Perch.

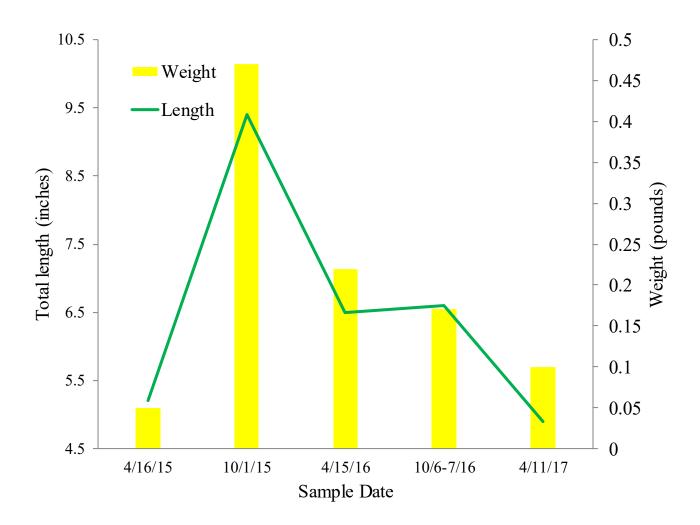


Figure 3. Yellow Perch average length and average weight in Grants Reservoir from 2014 to 2017.

#### Harms (Reukauf)

Harms was stocked with 1,000 fingerling Rainbow Trout on April 21, 2020. Harms\_was sampled with an experimental gill net set overnight. Rainbow Trout caught had an average length of 12 inches. Harms had a maximum depth of 8 feet and was 8 feet from full pool.

#### Homestead Reservoir

Homestead Reservoir was stocked with 1,053 Northern Pike fingerling on June 9, 2020 by the Fort Peck Hatchery and 145 adult fish transfer from South Sandstone Reservoir in April 2020. Homestead Reservoir was sampled in September 2020 with two fyke nets and two mini-fyke nets. Northern Pike captured had an average length of 19 inches and ranged from 7-35 inches, no Yellow Perch were captured. Yellow Perch are proposed to be transferred in 2021 to help establish/supplement the population.

## <u>Oil Pump</u>

Oil Pump Reservoir was stocked with 2,000 fingerling Rainbow Trout on April 22, 2020. Oil Pump Reservoir was sampled with an experimental gill net set overnight. Forty-six Rainbow Trout captured

had an average length of 11 inches. The reservoir had a maximum depth of 16 feet and was 1 foot from full pool.

## Silvertip Reservoir

Silvertip Reservoir was stocked with 1,000 fingerling Rainbow Trout April 21, 2020. Maximum depth of Silvertip Reservoir in April was 17 feet and the reservoir was one foot from full. Silvertip Reservoir was sampled in June 2020 with one experimental gill net. This overnight set caught 46 Rainbow Trout averaging 13 inches long. The reservoir had a maximum depth of 15 feet in June.

#### South Fork Reservoir

South Fork Reservoir was stocked with 500 fingerling Rainbow Trout on April 21, 2020. Depth of South Fork Reservoir was checked on April 2, 20120, and it had a maximum depth of 13 feet and was 2 feet from full pool.

### **Richland County**

### Gartside Reservoir

Gartside Reservoir is a very popular destination for fishing, kayaking, canoeing and picnicking located near Sidney, the reservoir is approximately 109 acres. The reservoir provides fishing opportunities for Bluegill, Channel Catfish, Largemouth Bass, Northern Pike and Yellow Perch. In recent years FWP along with local groups in the area have made improvements to the site improving an existing two-track road that provided access to the north side of the reservoir. In addition, multiple existing parking and picnic areas would be improved by providing gravel, barrier posts and picnic tables. The objective was to create more space for families to recreate and enjoy. The project cost was estimated at \$70,000, but because of donated work and materials and volunteer labor, it came with little or no cost to FWP. Natural reproduction for Northern Pike has generally been successful at Gartside Reservoir. Northern Pike stocking in the reservoir was discontinued in 2004 to evaluate natural spawning and recruitment. Catch rates of Northern Pike have been variable between years, but the average relative abundance post stocking is greater than that of the time period when Northern Pike were being stocked. (Figure 4). This suggests that natural production of Northern Pike in Gartside Reservoir is adequate to warrant discontinuing stocking.

During annual sampling in 2020 Northern Pike averaged 21 inches long. The highest recorded catch rate of Northern Pike in 2010 was partially attributed to increased sampling efficiency of gill nets while pool level was reduced for construction of a fishing pier. Miles City Hatchery planted a one-time surplus of 286 Smallmouth Bass brood stock that were retired May 7, 2020.

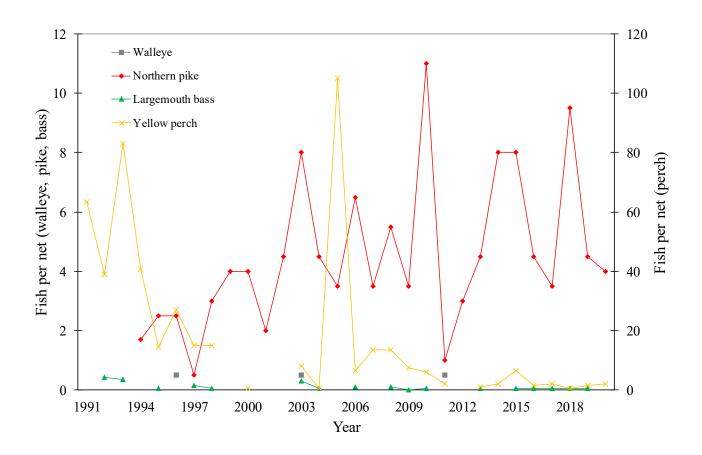


Figure 4. Catch rate (fish per gill net) of Walleye, Northern Pike, Largemouth Bass, and Yellow Perch from Gartside Reservoir, 1991-2020.

Gartside Reservoir received an experimental stocking of 400 Tiger Muskellunge approximately 10 inches long in October 2010. The fish were purchased from a certified, disease-free private hatchery in South Dakota. Tiger Muskellunge were stocked to improve pan-fish size structure and to provide additional angler opportunity at Gartside. Tiger Muskellunge stocking and associated sampling goals are described in a five-year stocking proposal (Backes 2006). Tiger Muskies were supposed to be stocked annually, but the outbreak of viral hemorrhagic septicemia (VHS) virus in the Great Lakes region eliminated the muskellunge egg supply. The stocking proposal has expired for Tiger Muskellunge at Gartside. Survival of the first stocking in 2006 was not successful. Survival of individuals from the 2010 stocking was thought to be low. Three Tiger Muskie were sampled in 2011 gill net and seine haul efforts but have not been sampled since.

An experimental transfer of adult Channel Catfish into Gartside was executed in 2019 and 2020. Similar to Hollecker Lake, the objectives of the transfer were to provide angler opportunity for a large, predatory species and to reduce abundance of stunted prey species. A total of 24 and 149 Channel Catfish were transferred from the Yellowstone River downstream of Intake Dam into Gartside in 2019 and 2020, respectively. Average length of Channel Catfish in 2019 was 24 inches (range 16-30 inches) and in 2020 was 22 inches (range 14-28 inches). All catfish were tagged with a uniquely numbered green T-bar tag inferior to the dorsal fin. In 2020, 17 angler recaptures were reported to FWP. Of those, 10 were harvested, 6 were released, and 1 return didn't specify whether the fish was harvested or released. Adult Channel Catfish transferred provided immediate angling opportunity and the return in investment to anglers was rapid. That is, the earliest reported recapture by an angler was less than 2 months after the transfer date. Continued monitoring of angler returns as well as a directed Channel Catfish sampling effort (i.e. baited hoop nets) will hopefully provide insights into survival and growth of catfish in Gartside.

## **Rosebud County**

## A.G. Lee #2

A.G. Lee #2 was sampled with two experimental gill nets set overnight. Two Green Sunfish were captured with an average length of 4 inches. The reservoir had a maximum depth of 11 feet and was 1 foot from full pool.

## A.G. Lee Pit

A.G. Lee Pit was stocked with 500 fingerling Largemouth Bass on July 17, 2020. A.G. Lee Pit was sampled with an experimental gill net set overnight. Twenty-three Largemouth Bass were captured with an average length of 7 inches. The pond had a maximum depth of 5 feet deep and was 5 feet from full pool.

## A.G. Lee Pit #2

A.G. Lee Pit #2 was sampled with two experimental gill nets set overnight. Average length of 23 Largemouth Bass captured was 6 inches. The reservoir had a maximum depth of 6 feet deep and was 8 feet from full pool.

## **Big Timber Trout**

Big Timber Trout was stocked with 1,000 fingerling Rainbow Trout on April 21, 2020. The reservoir was sampled with an experimental gill net set overnight; no fish were captured. Big Timber Trout had a maximum depth of 13 feet and was 2 feet from full pool.

## Blacks Sawmill

Blacks Sawmill was stocked with 2,000 fingerling Rainbow Trout on April 22, 2020. Blacks Sawmill was sampled with hook and line. Average length of 12 Rainbow Trout caught was 11 inches.

## Castle Rock Lake

Castle Rock Lake has been a destination pond for Bluegill. It was renowned for large and abundant Bluegill in the 1980s and early 1990s. In 1996, Bluegill catch rates dropped to a record low of 3.3 per gill net. An expanding Walleye population was thought to be suppressing Bluegill abundance. Annual Walleye stocking rates were reduced from 5,000 fingerlings to 1,000 fingerlings in 1997 to improve Bluegill abundance (Stewart 1996). However, the inflated Bluegill abundance from the 1980s and early 1990s was not sustainable nor was that abundance standard a practical management objective moving forward. The high Bluegill abundance resulted from a new and expanding population. Castle Rock Lake was constructed from 1974 to 1975 and Bluegill were stocked in 1979 to establish a forage base for Northern Pike. With little competition for forage, the Bluegill population expanded, reaching a peak in 1987. The Bluegill population stabilized around 1998 and has produced relatively consistent catch rates since then. Bluegill catch rates in 2020 reached their lowest since the 2015 survey (Figure 5). Bluegill averaged 8 inches in length in 2020, the largest average size since 2001 (Figure 6). Castle Rock Reservoir was stocked with 1,000 Channel Catfish August 19, 2020 and 2,000 fingerling Walleye on June 10, 2020.

Aquatic invasive species and disease testing was completed on Castle Rock Reservoir in 2019 so that the reservoir could offer a source for adult Largemouth Bass and Bluegill transfers. Bluegill and Largemouth Bass were transferred to two ponds in 2020 (Table 1).

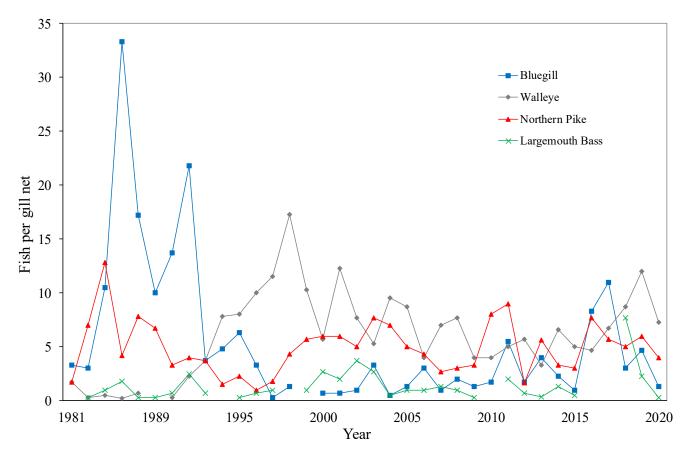


Figure 5. Catch per gill net for Bluegill, Walleye, Northern Pike and Largemouth Bass from Castle Rock Lake, 1981-2020.

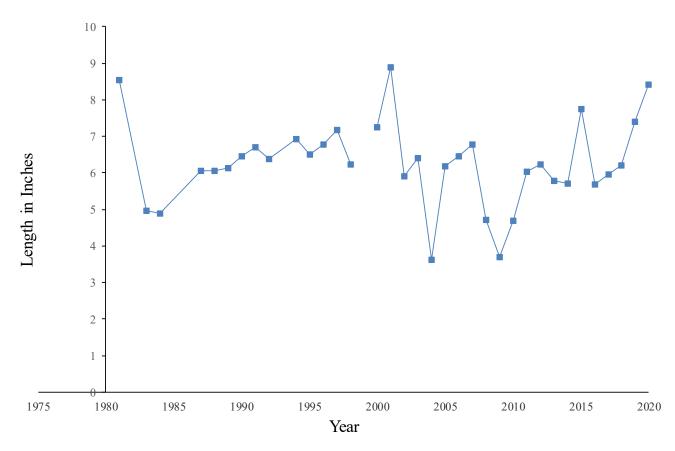


Figure 6. Average size of Bluegill captured from Castle Rock Lake, 1981-2020.

## Far West Pond

Far West Pond was sampled with two mini-fyke nets and one large fyke net; six species were captured: Channel Catfish, Common Carp, Green Sunfish, Pumpkinseed, Smallmouth Buffalo and Yellow Bullhead. Far West was stocked with 500 fingerling Rainbow Trout from the Miles City Hatchery on May 26, 2020 and stocked with adult Bluegill and Largemouth Bass through a wild fish transfer from Castle Rock Reservoir on May 14, 2020.

## Grebe #2

Grebe #2 was stocked with 1,000 fingerling Rainbow Trout on April 21, 2020. Grebe #2 was sampled for depth only, it was 5 feet deep, 2 feet from full pool. The dam on Grebe #2 is washing out, after talking with the landowner it was decided due to lack of depth to remove the pond from the Region 7 program.

## Newman (Harold Newman)

Newman Pond was a new pond sampled for depth only in October 2019. It was 12 feet deep, one foot from full pool. Newman was 8 feet deep in 2020 and is proposed to be stocked with Largemouth Bass in 2021.

## Potts Bass

Potts Bass was sampled with an experimental gill net set overnight, three Largemouth Bass averaging 7 inches long were captured, also 35 Rainbow Trout averaging 14 inches long were captured. Potts Bass was 12 feet deep, 3 feet from full pool when sampled.

#### Potts Trout

Potts Trout was stocked with 2,000 fingerling Rainbow Trout on April 21, 2020. Potts Trout was sampled with an experimental gill net set overnight, one Rainbow Trout was captured (14 inches long). The reservoir was 7 feet deep at full pool.

#### Ponessa

Ponessa was a new pond to the program in 2020, it was sampled for depth only May 18, 2020, and was found to be 17 feet deep, 2 feet from full pool. Ponessa was stocked with Fathead Minnows in the fall of 2020 and is proposed to be stocked with Rainbow Trout in the spring of 2021.

#### **Treasure County**

No ponds were sampled in Treasure County in 2020.

#### Wibaux County

#### Temple Pond

Temple Pond was stocked with 1,500 fingerling Rainbow Trout April 22, 2020. Temple Pond was sampled with an experimental gill net set overnight, numerous Rainbow Trout were captured. Rainbow Trout captured averaged 13 inches long. Temple Pond was 13 feet deep, 2 feet from full pool.

#### Prepared by: Kevin McKoy

Date: December 2020

Waters referred to:

Gartside	21-3250
Castle Rock	21-2527
Spotted Eagle	21-8815

#### Keywords

Small ponds	Yellow Perch
Largemouth Bass	Smallmouth Bass
Northern Pike	Bluegill
Rainbow Trout	Walleye
Crappie	Black & Yellow bullhead

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		Depth	u reservoirs in 2020.			Mean	Mean	Length	Weight
			Type of		Number	Length	Weight	Range	Range
Reservoir Name	Date	(feet) *	Sample	Species	Caught	(mm)	(gr)	(mm)	(gm)
				<b>Carter County</b>					
Frigid	7/8/2020		Gillnet (1)	Green Sunfish	62				
			Hook and Line	Green Sunfish	31	114	31	100-192	10-180
				Rainbow Trout	12	277	221	210-340	100-380
Gardner	6/29/2020		Gillnet (1)	Northern Pike	6	496	890	328-697	200-1960
				Yellow Perch	14	206	171	133-285	20-340
Gardner #2	6/29/2020	21/	Gillnet (1)	Black Crappie	11	188	135	124-297	10-380
				Golden Shiner	72	164	46	138-228	
				Yellow Perch	139	164	35	145-213	10-90
Hansen	7/2/2020	16/3	Gillnet (1)	Black Bullhead	20	237	190	222-260	150-290
				Largemouth Bass	1	300	420	300	420
				Northern Pike	6	589	1320	521-693	830-2200
McNabb	7/2/2020	15/5	Gillnet (1)	Black Bullhead	5	144	38	130-155	30-50
				Green Sunfish	1	90	10	90	10
Pat LaBree	7/9/2020	19/0	Gillnet (1)	Rainbow Trout	2	362	785	353-370	720-850
Pocaseetchee Reserv	oir 7/17/2020	6/0	Depth Check						
Rath	9/22/2020	8/4	Gillnet (2)	No Fish					
Sidney	7/9/2020	16/2	Gillnet (1)	Rainbow Trout	27	375	687	152-510	40-1500
Talcott	6/29/2020		Gillnet (1)	Northern Pike	1	472	800	472	800
				Yellow Perch	1	250	240	250	240
				Custer County					
Beardsley Pond	6/1/2020	12/2	Gillnet (1)	No Fish					
Boulware	4/2/2020	20/2	Depth Check						
	6/17/2020	19/3	Depth Check						
Cap Rock Pond	5/19/2020	15/1	Gillnet (1)	Rainbow Trout	21	273	258	232-300	170-340
Cody Taylor	6/5/2020	5/2	Depth Check						
Dick Stanley	7/27/2020	7/5	Gillnet (1)	Largemouth Bass	12	265	346	232-282	240-460
				Yellow Perch	47	178	82	130-305	30-420
Ft. Keogh	6/5/2020	10/2	Gillnet (1)	Rainbow Trout	3	299	273	275-319	220-340
Haughian Trout	6/25/2020		Gillnet (1)	Rainbow Trout	29	338	522	288-437	300-1100
Houston Rodgers	6/5/2020	7/1	Depth Check						
Pat Bearsdley	6/1/2020	18/0	Gillnet (1)	Rainbow Trout	11	375	786	300-470	320-2020
Pat Haughian	4/2/2020	16/2	Depth Check						
Rest Reservoir	6/17/2020	22/5	Depth Check						
Spotted Eagle	6/16/2020		Fyke (5)	Bluegill	19	141	54	109-154	20-90
- 0				Black Crappie	55	163	56	100-205	10-120
				Channel Catfish	6	470	847	390-545	400-1320
				Green Sunfish	2	140	80	140	80
*S = Depth in feet of	waterbody at t	ime of sau	nple, F=Depth in feet fi						

## Appendix A. Results of sampling managed reservoirs in 2020.

Appendix A continu	ed. Results o	fsampli	ng managed reservoirs in 20	20.					
		Depth				Mean	Mean	Length	Weight
		S/F	Type of		Number	-	-	Range	Range
Reservoir Name	Date	(feet) *	Sample	Species	Caught	(mm)	(gr)	(mm)	(gm)
Spotted Eagle	6/16/2020		Fyke (5)	Rainbow Trout	2	298	260	265-331	180-340
				Shorthead Redhorse		377	569	360-390	430-680
				Walleye	14	477	939	368-582	410-1700
				White Crappie	48	178	63	105-210	10-110
				White Sucker	1	343	500	343	500
				Yellow Perch	1	206	140	206	140
	6/16/2020		Seine Haul (5)	Bluegill	56	111	63	37-170	10-120
				Black Crappie	29	165	75	93-192	10-100
				Emerald Shiner	1	90		90	
				Green Sunfish	1	116	40	116	40
				Largemouth Bass	1	375	280	375	280
				Pumpkinseed	3	110	45	97-123	30-60
				Rainbow Trout	4	283	250	256-310	160-340
				Smallmouth Bass	1	406	720	406	720
				Walleye	6	322	510	22-472	80-920
				White Crappie	17	174	70	110-196	10-100
	6/16/2020		Seine Haul (5)	Yellow Perch	1	117	10	117	10
5/15	5/15/2020		Fish Removal (Gillnets)	Bigmouth Buffalo	8				
				Channel Catfish	1				
				Crappie	1				
				River Carpsucker	1				
				Smallmouth Buffalo	1				
				Yellow Perch	3				
	5/22/2020		Fish Removal (Electrofishing)	Black Bullhead	2				
			( 0)	Common Carp	57	349		197-462	
				Yellow Bullhead	2				
			Fish Removal (Gillnets)	Bigmouth Buffalo	30				
				Channel Catfish	5				
				River Carpsucker	5				
				Smallmouth Buffalo	4				
	5/26/2020		Fish Removal (Gillnets)	Bigmouth Buffalo	1				
	5/20/2020			Channel Catfish	1				
				River Carpsucker	2				
	5/29/2020		Fish Removal (Gillnets)	Bigmouth Buffalo	7				
	5.29.2020			Channel Catfish	2				
				Common Carp	2				
				River Carpsucker	3				
				Shorthead Redhorse					
				Smallmouth Buffalo	2				
*S - Donth in fact -f	watarka der at t	ima of a-	mple, F=Depth in feet from full		4				

	cui itesuits o	i sampin	ng managed reservoirs in 20	20.					
		Depth				Mean	Mean	Length	Weight
		S/F	Type of		Number	Length	Weight	Range	Range
Reservoir Name	Date	(feet) *	Sample	Species	Caught	(mm)	(gr)	(mm)	(gm)
Spotted Eagle	5/29/2020		Fish Removal (Gillnets)	Smallmouth Bass	2				
				Walleye	4				
	6/8/2020		Fish Removal (Gillnets)	Channel Catfish	4				
				Shorthead Redhorse	1				
				Smallmouth Buffalo	1				
	6/24/2020		Fish Removal (Gillnets)	Channel Catfish	1				
				Common Carp	1				
				Northern Pike	1				
				Shorthead Redhorse	2				
				Walleye	1				
	7/31/2020		Fish Removal (Electrofishing)	Common Carp	10				
				Smallmouth Buffalo	3				
				Yellow Bullhead	2				
				Dawson County					
Hollecker	7/20/2020		Mini-Fyke (2)	Black Bullhead	1	181	80	181	80
				Black Crappie	1	280	340	280	340
				Fathead Minnow	320	49		32-67	
				Longnose Sucker	2	93		90-95	
				Rainbow Trout	3	208	107	170-255	60-180
				Yellow Perch	268	179	83	146-225	20-160
				YOY Crappie	522	35.7		28-44	
				YOY Yellow Perch	23	62		53-80	
Johnson	4/2/2020	14/0	Depth Check						
	5/19/2020	14/0	Gillnet (2)	Yellow Perch	30	211	129	177-270	80-280
			Mini-Fyke (2)	Brook Stickleback	710	68		60-75	
				Yellow Perch	53	194	132	80-283	80-330
Lindsay Reservoir	6/17/2020	10/2	Gillnet (2)	Black Bullhead	35	135	45	117-190	30-90
2				Common Carp	1	247	200	247	200
				Northern Pike	8	600	1714		400-4250
				Walleye	4	460	1103		520-2170
				Yellow Perch	2	193	100	176-210	
Marvin Burman	6/3/2020	14/2	Gillnet (1)	No Fish					
Rattlesnake	4/2/2020	13/0	Depth Check						
	9/22/2020	10/3	Depth Check						
Trangmoe	6/4/2020		Gillnet (2)	Black Bullhead	20	139	38	120-220	20-140
0			× /	Black Crappie	3	134	20	125-144	20
				Bigmouth Buffalo	1	310	500	310	500
				Channel Catfish	3	340	513		80-1300
*S = Depth in feet of y	waterbody at t	ime of sat	nple, F=Depth in feet from full		č	2.0	0.10		20 1000

Reservoir Name Trangmoe	Date 6/4/2020	Depth S/F (feet) *	Type of Sample		Number	Mean Length	Mean Weight	Length	Weight Banga
					Number	Length	Wojaht	Danga	Danga
		(feet) *	Sample	<b>~</b> •			weight	Range	Range
Trangmoe	6/4/2020			Species	Caught	(mm)	(gr)	(mm)	(gm)
			Gillnet (2)	Common Carp	7	304	446	115-425	20-920
				River Carpsucker	1	616	3450	616	3450
				Shorthead Redhorse	3	475	1060	465-490	1000-1120
				Smallmouth Buffalo	2	270	350	265-275	320-380
				White Crappie	4	132	25	125-143	
				White Sucker	1	460	1000	460	1000
				Yellow Perch	6	150	43	140-161	40-60
				Fallon County					
Baker Lake	5/5/2020		Fyke Net (2)	Black Crappie	68	293	460	259-326	340-670
			•	Rainbow Trout	4	323	403	313-340	380-430
				Walleye	42	454	916	206-606	60-2260
				White Crappie	2	347	830	300-394	460-1200
				Yellow Perch	308	180	162	94-290	90-360
			Mini-Fyke (3)	Black Crappie	10	56		45-66	
			• • • •	Fathead Minnow	6	54		43-64	
				Yellow Perch	4	161	73	114-211	20-130
Baker Lake	9/8/2020		Fyke Net (2)	Black Crappie	35	145	77	110-312	20-500
			•	Rainbow Trout	1	365	520	365	520
				Walleye	60	283	222		100-1460
				Yellow Perch	121	181	95	80-235	60-200
			Mini-Fyke (6)	Black Crappie	3	177	230	116-298	20-440
				Walleye	5	256	160		120-220
				Yellow Perch	4	179	88	125-210	20-130
				YOY Black Crappie	26	57		45-70	
				YOY Yellow Perch	42	84		75-95	
Maier	4/21/2020		Fish Transfer	Fathead Minnow	300				
				Rainbow Trout	12				
				Yellow Perch	326				
2	4/22/2020		Fish Transfer	Fathead Minnow	1300				
				Yellow Perch	439				
2	4/23/2020		Fish Transfer	Fathead Minnow	300				
				Yellow Perch	382				
2	4/29/2020		Fish Transfer	Fathead Minnow	4500				
	4/30/2020		Fish Transfer	Fathead Minnow	16200				
				Yellow Perch	1280				
(	9/29/2020		Fish Transfer	Fathead Minnow	48				
				Rainbow Trout	37				
				Yellow Perch	306				
*S = Depth in feet of wat	erbody at ti	me of san	nple, F=Depth in feet from						

Appendix A continu	ed. Results o	of sampli	ng managed rese	voirs in 2020.					
		Depth				Mean	Mean	Length	Weight
		S/F	Type of		Number	Length	Weight	Range	Range
Reservoir Name	Date	(feet) *	Sample	Species	Caught	(mm)	(gr)	(mm)	(gm)
Maier	9/29/2020		Fish Transfer	YOY Yellow Perch	20				
Pinnow #1	4/2/2020	7/2	Depth Check						
Pinnow #2	4/2/2020	12/0	Depth Check						
Roddy Rost	9/22/2020	13/2	Gillnet (1)	Brown Trout	10	207	90	202-212	80-100
South Sandstone	4/6/2020		Fish Transfer	Black Crappie	22				
	4/6/2020		Fish Transfer	Northern Pike	41				
				Walleye	5				
				White Sucker	1				
				Yellow Perch	7				
	4/7/2020		Fish Transfer	Northern Pike	104	585	1560	408-1010	380-7000
				Walleye	6				
				Yellow Perch	53	171	60	164-177	40-80
	5/11/2020		Fish Transfer	Black Crappie	34				
				Yellow Perch	108				
	5/12/2020		Fish Transfer	Black Crappie	5				
				Yellow Perch	70				
	5/13/2020		Fish Transfer	Black Crappie	44				
				Yellow Perch	77				
	5/14/2020		Fish Transfer	Black Crappie	46	275	370	257-293	280-420
				Yellow Perch	79	199	119	111-252	20-240
	7/23/2020		Gillnet (3)	Black Bullhead	267	201	157	117-305	20-400
				Northern Pike	21	500	1012	215-935	70-4540
				Walleye	4	581	2130	535-655	1700-2720
				Yellow Perch	109	181	84	136-255	20-200
			Seine Haul (3)	Black Bullhead	1	240	200	240	200
				Northern Pike	6	277	147	215-415	70-400
				Yellow Perch	175	180	83	112-235	20-170
				YOY Yellow Perch	1780	58		50-69	
	9/30/2020		Fish Transfer	Black Crappie	15				
				Northern Pike	2				
				Walleye	1				
				Yellow Perch	242				
	10/1/2020		Fish Transfer	Black Crappie	23				
				Northern Pike	6				
				Walleye	1				
				Yellow Perch	128	222	153	156-255	40-230
	10/2/2020		Fish Transfer	Black Crappie	35				
				Northern Pike	1				
				Yellow Perch	413				
*S = Depth in feet of	waterbody at t	time of sai	mple, F=Depth in f		-				

Appendix A continue	d. Results o	of sampli	ng managed reservoirs in 2	2020.					
		Depth				Mean	Mean	Length	Weight
		S/F	Type of		Number	Length	Weight	Range	Range
Reservoir Name	Date	(feet) *	Sample	Species	Caught	(mm)	(gr)	(mm)	(gm)
South Sandstone	10/5/2020		Fish Transfer	Black Crappie	87				
				Northern Pike	3				
				Walleye	4				
				Yellow Perch	335				
				<b>Garfield County</b>					
Cottonwood	7/6/2020	/0	Gillnet (2)	Common Carp	1	197	80	197	80.0
				Largemouth Bass	3	215	127	191-240	100-150
				Yellow Perch	4	168	38	153-188	30-50
Jack McRae	7/6/2020	10/3	Gillnet (1)	Rainbow Trout	42	299	481	173-405	80-850
John Ryan	7/6/2020	13/0	Gillnet (1)	No Fish					
Kreider #2	7/16/2020	19/0	Gillnet (1)	Rainbow Trout	1	216	160	216	160.0
Kreider #1	7/16/2020	/3	Gillnet (2)	Largemouth Bass	31	257	370	164-332	80-700
Kreider #3	7/16/2020	13/4	Gillnet (2)	Largemouth Bass	8	274	343	255-297	280-430
				Powder River Co	unty				
Mud Turtle	7/27/2020	7/5	Gillnet (1)	Rainbow Trout	10	184	93.3	164-195	60-120
Roerick	7/17/2020	7/2	Seine Haul (1)	Black Bullhead	35	67		51-84	
				Common Carp	45	153	39	105-190	10-70
				Green Sunfish	773	43		35-47	
Smith Reservoir	7/17/2020	7/0	Seine Haul (1)	No Fish					
				Prairie County					
Cherry Creek Reservoi	ir 4/30/2020	8/0	Minnow Trap (4)	Fathead Minnow	5				
2	10/7/2020	5/3	Mini-Fyke (4)	Fathead Minnow	12200				
			Minnow Trap (4)	Fathead Minnow	248				
	10/8/2020	5/3	Mini-Fyke (4)	Fathead Minnow	4801				
	10/9/2020	5/3	Mini-Fyke (4)	Fathead Minnow	7035				
Clarks	4/2/2020	12/3	Depth Check						
Coal Creek Reservoir	4/30/2020	7/0	Minnow Trap (4)	No Fish					
	10/7/2020	5/2	Minnow Trap (4)	Fathead Minnow	2				
			Mini-Fyke (3)	Fathead Minnow	68000				
	10/8/2020	5/2	Mini-Fyke (4)	Fathead Minnow	40990				
	10/9/2020	5/2	Mini-Fyke (4)	Fathead Minnow	33638				
Doug Singleton	6/1/2020	16/0	Gillnet (2)	No Fish	-				
Harms	4/2/2020	10/6	Depth Check						
	6/25/2020	8/8	Gillnet (1)	Rainbow Trout	33	306	324	272-343	230-500
Homestead	4/2/2020	/0	Depth Check						
	9/29/2020	-	Fyke (2), Mini-Fyke (2)	Northern Pike	7	492	1339	178-885	20-5000
S = Depth in feet of w	aterbody at t	time of sat	mple, F=Depth in feet from f	ull pool level					

Appendix A continu	ed. Results o	of sampli	ng managed reservoi	rs in 2020.					
		Depth				Mean	Mean	Length	Weight
		S/F	Type of		Number	Length	Weight	Range	Range
Reservoir Name	Date	(feet) *	Sample	Species	Caught	(mm)	(gr)	(mm)	(gm)
Oil Pump	4/2/2020	16/1	Depth Check						
Oil Pump	6/17/2020	15/2	Gillnet (1)	Rainbow Trout	44	279	342	161-356	60-580
Silvertip	4/2/2020	17/1	Depth Check						
	6/25/2020	15/3	Gillnet (1)	Rainbow Trout	46	332	684	146-407	50-1120
South Fork	4/2/2020	13/2	Depth Check						
				<b>Richland County</b>					
Gartside	7/20/2020		Gillnet (2)	Bluegill	5	118	30	115-120	20-40
	7/20/2020		Gillnet (2)	Channel Catfish	14	555	1850	440-668	750-3200
				Northern Pike	8	529	989		80-1720
				Yellow Perch	4	162	58	152-170	40-70
			Seine Haul (2)	Bluegill	269	98	51	40-148	10-80
				Black Crappie	5	159	62	150-170	50-80
				Largemouth Bass	4	122	70	95-156	40-100
				Northern Pike	2	430	750	238-622	80-1420
				Smallmouth Bass	2	234	170	190-277	100-240
				Yellow Perch	6	152	47	125-165	20-60
				YOY Largemouth B	: 3	50		48-52	
				YOY Northern Pike		85		85	
				YOY Yellow Perch	1	51		51	
				<b>Rosebud</b> County					
A.G. Lee #2	6/9/2020	11/1	Gillnet (2)	Green Sunfish	2	111	20	97-125	20
A.G. Lee Pit	6/9/2020	5/5	Gillnet (1)	Largemouth Bass	23	174	67	131-196	20-120
A.G. Lee Pit #2	6/9/2020	6/8	Gillnet (1)	Largemouth Bass	23	151	49	135-172	
Big Timber Trout	7/29/2020	13/2	Gillnet (1)	No Fish					
Blacks Sawmill	7/27/2020		Hook and Line	Rainbow Trout	12	270	190	246-291	130-240
Castle Rock	5/14/2020		Fish Transfer	Bluegill	285	178	100	110-219	10-180
				Largemouth Bass	81	306	546		20-2200
	7/21/2020		Gillnet (3)	Bluegill	4	214	243		210-280
				Largemouth Bass	1	209	160	209	160
				Northern Pike	12	384	391		80-1140
				Smallmouth Bass	1	215	140	215	140
				Walleye	22	397	574		200-1000
			Seine Haul (3)	Bluegill	102	125	56	92-224	10-300
			~ /	Black Crappie	30	120	123	76-243	20-240
				Largemouth Bass	19	196	226	105-380	10-900
				Northern Pike	4	315	265		140-600
				YOY Bluegill	2236	53		35-84	
*S = Depth in feet of	waterbody at t	ime of sa	mple, F=Depth in feet f	ě		-		-	,

Appendix A continue	ed. Results o	of sampli	ng managed reservoirs in 2	2020.					
		Depth				Mean	Mean	Length	Weight
		S/F	Type of		Number	Length	Weight	Range	Range
<b>Reservoir Name</b>	Date	(feet) *	Sample	Species	Caught	(mm)	(gr)	(mm)	(gm)
Castle Rock	7/21/2020		Seine Haul (3)	YOY Crappie	1034	46		35-50	<u> </u>
				YOY Largemouth B	30	48		27-66	
				YOY Walleye	6	77		67-91	
Far West	5/6/2020		Mini-Fyke (2), Fyke (1)	Channel Catfish	2	470	1145	448-492	1090-1200
				Common Carp	8	234.9	171.3	213-257	130-240
				Green Sunfish	22	145	67	113-165	20-120
				Pumpkinseed	28	135	47	118-194	20-100
				Smallmouth Buffalo	1	408	960	408	960
				Yellow Bullhead	3	193	107	173-223	80-140
Grebe #2	7/29/2020	5/2	Depth Check						
Newman	7/29/2020	8/3	Gillnet (1)	No Fish					
Ponessa	5/18/2020	17/2	Depth Check						
Potts Bass	6/10/2020	12/3	Gillnet (1)	Largemouth Bass	3	186	140	175-196	140
				Rainbow Trout	35	344	704	283-403	350-1000
Potts Trout	6/10/2020	7/0	Gillnet (1)	Rainbow Trout	1	350	520	350	520
				Wibaux County					
Temple	6/3/2020	13/2	Gillnet (1)	Rainbow Trout	37	338	477	276-400	220-760
*S = Depth in feet of v	waterbody at t	ime of sai	nple, F=Depth in feet from f	all pool level					

# Appendix B Hatchery Plantings 2020.

Water	County	Date	Species	Number	Size	Planting Hatchery
Al Lee Pit Res. (Lee, A.G. Pit)	Rosebud	7/17/2020	17 - Largemouth Bass	500	2.24	14 - Miles City Fish Hatchery
Ayers Pond (Courtney Ayers Pond)	Prairie	7/17/2020	17 - Largemouth Bass	1000	0.76	14 - Miles City Fish Hatchery
BLM Pond East of John Vassor	Fallon	6/9/2020	1 - Rainbow Trout	220	3.14	14 - Miles City Fish Hatchery
Beardsley Lake (Pat Beardsley, Beardsley						
Trout)	Custer	4/22/2020	1 - Rainbow Trout	2000	4.42	14 - Miles City Fish Hatchery
Beardsley Pond	Custer	6/23/2020	1 - Rainbow Trout	381	3.39	14 - Miles City Fish Hatchery
Beaver Creek	Fallon,Wibaux	6/9/2020	82 - Walleye	2000	0.9	14 - Miles City Fish Hatchery
Beecher Trout Reservoir	Rosebud	4/21/2020	1 - Rainbow Trout	1000	4.4	14 - Miles City Fish Hatchery
Big Timber Trout Pond	Rosebud	4/21/2020	1 - Rainbow Trout	1000	4.4	14 - Miles City Fish Hatchery
Blacks Sawmill Pond	Rosebud	4/22/2020	1 - Rainbow Trout	2000	4.42	14 - Miles City Fish Hatchery
Boulware Reservoir (Boulware Pond)	Custer	4/22/2020	1 - Rainbow Trout	2000	4.4	14 - Miles City Fish Hatchery
Brooks Reservoir 3 (L.C. Brooks #3)	Garfield	4/21/2020	1 - Rainbow Trout	2000	4.42	14 - Miles City Fish Hatchery
Burman Pond	Dawson	4/22/2020	1 - Rainbow Trout	1000	4.4	14 - Miles City Fish Hatchery
Buxbaum (Daryl), Reservoir (Buxbaum Pond,						
Daryle; Rod Prewitt)	Richland	10/14/2020	2 - Cutthroat Trout	1500	5.63	14 - Miles City Fish Hatchery
Cap Rock Reservoir	Custer	6/1/2020	1 - Rainbow Trout	1000	3.14	14 - Miles City Fish Hatchery
Castle Rock Reservoir	Rosebud	8/19/2020	24 - Channel Catfish	1000	1.61	14 - Miles City Fish Hatchery
Castle Rock Reservoir	Rosebud	6/10/2020	82 - Walleye	2000	2.79	14 - Miles City Fish Hatchery
Chamberlain Reservoir #3	Garfield	4/23/2020	1 - Rainbow Trout	1500	4.4	14 - Miles City Fish Hatchery
Clark Reservoir (Clark Pond)	Garfield	4/23/2020	1 - Rainbow Trout	2500	4.41	14 - Miles City Fish Hatchery
Clarks Reservoir	Prairie	5/8/2020	1 - Rainbow Trout	200	8.12	14 - Miles City Fish Hatchery
Clarks Reservoir	Prairie	4/21/2020	1 - Rainbow Trout	2000	4.42	14 - Miles City Fish Hatchery
Craft Pond 2 (Gerald Craft Bass Pond)	Carter	4/22/2020	1 - Rainbow Trout	1500	4.4	14 - Miles City Fish Hatchery
Far West Pond (Far West Pond)	Rosebud	10/14/2020	74 - Bluegill	2088	0.6	14 - Miles City Fish Hatchery
Far West Pond (Far West Pond)	Rosebud	5/26/2020	1 - Rainbow Trout	500	3.1	14 - Miles City Fish Hatchery
Frigid Reservoir (Frigid Pond)	Carter	4/22/2020	1 - Rainbow Trout	1000	4.4	14 - Miles City Fish Hatchery
Gartside Reservoir	Richland	5/7/2020	73 - Smallmouth Bass	286	13.31	14 - Miles City Fish Hatchery
Gaskill # 2	Powder River	7/17/2020	17 - Largemouth Bass	500	2.27	14 - Miles City Fish Hatchery
Gaskill # 2	Powder River	4/22/2020	1 - Rainbow Trout	500	4.4	14 - Miles City Fish Hatchery
Gaskill Reservoir	Powder River	4/22/2020	1 - Rainbow Trout	1000	4.4	14 - Miles City Fish Hatchery
Grebe Pond #2	Rosebud	4/21/2020	1 - Rainbow Trout	1000	4.4	14 - Miles City Fish Hatchery
Hansen Pond	Carter	7/22/2020	17 - Largemouth Bass	500	2.27	14 - Miles City Fish Hatchery
Haughian Reservoir #1 (Henry Haughian, Leo			-			
Billing)	Custer	4/21/2020	1 - Rainbow Trout	2000	4.42	14 - Miles City Fish Hatchery
Hollecker Lake	Dawson	6/2/2020	20 - Yellow Perch	314	5.5	14 - Miles City Fish Hatchery
Hollecker Lake	Dawson	5/8/2020	1 - Rainbow Trout	200	8.12	14 - Miles City Fish Hatchery
Hollecker Lake	Dawson	4/28/2020	1 - Rainbow Trout	30	12.6	04 - Bluewater Springs Trout Hatchery
Hollecker Lake	Dawson	4/28/2020	1 - Rainbow Trout	600	7.39	04 - Bluewater Springs Trout Hatchery
Homestead Reservoir	Prairie	6/9/2020	23 - Northern Pike	1053	3.43	52 - Fort Peck Hatchery
Jarden Reservoir 1	Garfield	7/16/2020	17 - Largemouth Bass	1073	1.66	14 - Miles City Fish Hatchery
Jarden Reservoir 2	Garfield	4/23/2020	1 - Rainbow Trout	1000	4.4	14 - Miles City Fish Hatchery
Johnson Reservoir	Dawson	6/2/2020	1 - Rainbow Trout	205	11.3	14 - Miles City Fish Hatchery
Killen, John #2 Res. (John Killen #4)	Rosebud	4/21/2020	1 - Rainbow Trout	1500	4.38	14 - Miles City Fish Hatchery
Kreider Reservoir #2	Garfield	4/23/2020	1 - Rainbow Trout	1500	4.4	14 - Miles City Fish Hatchery

# Appendix B. Hatchery Plantings 2020 continued.

Water	County	Date	Species	Number	Size	Planting Hatchery
Lake Baker (Baker Lake)	Fallon	6/9/2020	82 - Walleye	10000	2.18	14 - Miles City Fish Hatchery
Lake Baker (Baker Lake)	Fallon	4/9/2020	1 - Rainbow Trout	600	10.39	14 - Miles City Fish Hatchery
Lee Pit, A.G.	Rosebud	7/17/2020	17 - Largemouth Bass	500	1.04	14 - Miles City Fish Hatchery
Lee, A. G. Pit #2 Reservoir (Lee Pit #2, A.G)	Rosebud	7/17/2020	17 - Largemouth Bass	500	2.24	14 - Miles City Fish Hatchery
Mardrie Baker Reservoir	Garfield	4/23/2020	1 - Rainbow Trout	500	4.4	14 - Miles City Fish Hatchery
McRae Reservoir 1, Jack	Garfield	4/23/2020	1 - Rainbow Trout	2000	4.44	14 - Miles City Fish Hatchery
Meccage Dam	Fallon	7/17/2020	17 - Largemouth Bass	500	2.27	14 - Miles City Fish Hatchery
Meccage Dam	Fallon	4/22/2020	1 - Rainbow Trout	500	4.4	14 - Miles City Fish Hatchery
Meckle Reservoir 1	Garfield	4/23/2020	1 - Rainbow Trout	700	4.4	14 - Miles City Fish Hatchery
Mud Turtle Reservoir	Powder River	4/22/2020	1 - Rainbow Trout	1000	4.4	14 - Miles City Fish Hatchery
Oil Pump Reservoir	Prairie	4/22/2020	1 - Rainbow Trout	2000	4.42	14 - Miles City Fish Hatchery
Pat Labree Reservoir	Carter	4/22/2020	1 - Rainbow Trout	2500	4.41	14 - Miles City Fish Hatchery
Pinnow Reservoir	Fallon	4/22/2020	1 - Rainbow Trout	500	4.4	14 - Miles City Fish Hatchery
Pinnow Reservoir 2	Fallon	4/22/2020	1 - Rainbow Trout	500	4.4	14 - Miles City Fish Hatchery
Potts Reservoir	Rosebud	4/21/2020	1 - Rainbow Trout	2000	4.42	14 - Miles City Fish Hatchery
Pruett Pond	Fallon	4/22/2020	1 - Rainbow Trout	500	4.4	14 - Miles City Fish Hatchery
Rest Reservoir	Custer	5/28/2020	1 - Rainbow Trout	1000	6.76	14 - Miles City Fish Hatchery
Rest Reservoir	Custer	5/28/2020	1 - Rainbow Trout	205	10.64	14 - Miles City Fish Hatchery
Reukauf Reservoir (Harms Reservoir, Reukauf						
Pond)	Prairie	4/21/2020	1 - Rainbow Trout	1000	4.4	14 - Miles City Fish Hatchery
Ringstveit Lake	Rosebud	4/21/2020	1 - Rainbow Trout	1000	4.4	14 - Miles City Fish Hatchery
Roerick Pond	Powder River	4/27/2020	1 - Rainbow Trout	200	7.39	04 - Bluewater Springs Trout Hatchery
Rost Pond	Fallon	7/29/2020	4 - Brown Trout	562	3.1	04 - Bluewater Springs Trout Hatchery
Ryan Ponds (John Ryan)	Garfield	4/23/2020	1 - Rainbow Trout	1000	4.42	14 - Miles City Fish Hatchery
Samuelson, Norman #2	Powder River	4/22/2020	1 - Rainbow Trout	1000	4.4	14 - Miles City Fish Hatchery
Saylor Pond (Clyde Saylor)	Garfield	4/23/2020	1 - Rainbow Trout	1500	4.4	14 - Miles City Fish Hatchery
Saylor Reservoir (Irvine Saylor)	Garfield	4/23/2020	1 - Rainbow Trout	1000	4.4	14 - Miles City Fish Hatchery
Schlesinger Reservoir 1	Rosebud	4/21/2020	1 - Rainbow Trout	500	4.4	14 - Miles City Fish Hatchery
Schweigert Dam (Schweigert Pond, Schweigert						
Reservoir)	Fallon	4/22/2020	1 - Rainbow Trout	500	4.4	14 - Miles City Fish Hatchery
Sidney Reservoir	Carter	4/22/2020	1 - Rainbow Trout	1000	4.4	14 - Miles City Fish Hatchery
Silvertip Reservoir	Prairie	4/21/2020	1 - Rainbow Trout	1000	4.4	14 - Miles City Fish Hatchery
Singleton Reservoir (Doug Singleton,	Prairie	7/17/2020	17 Largementh Page	1000	0.76	14 Milas City Fich Hatahamy
Singleton Pond) South Fork Reservoir	Prairie		17 - Largemouth Bass 1 - Rainbow Trout	500		14 - Miles City Fish Hatchery
	Fallon	4/21/2020			4.4	14 - Miles City Fish Hatchery
South Sandstone Reservoir South Sandstone Reservoir	Fallon	6/9/2020 6/9/2020	23 - Northern Pike	1507 10000	3.43	52 - Fort Peck Hatchery
			82 - Walleye		2.18	14 - Miles City Fish Hatchery
Spotted Eagle Lake (Speckled Bird)	Custer	7/24/2020	20 - Yellow Perch	800 2000	4.8 4.55	14 - Miles City Fish Hatchery
Spotted Eagle Lake (Speekled Bird)	Custer	7/22/2020	20 - Yellow Perch	2000	4.55	14 - Miles City Fish Hatchery
Spotted Eagle Lake (Speekled Bird)	Custer	5/7/2020	73 - Smallmouth Bass	250 200	13.32	14 - Miles City Fish Hatchery
Spotted Eagle Lake (Speckled Bird)	Custer	4/2/2020	1 - Rainbow Trout	300	10.66	14 - Miles City Fish Hatchery
Spring Canyon Reservoir	Carter	4/22/2020	1 - Rainbow Trout	400	4.4	14 - Miles City Fish Hatchery
Talcott Pond	Carter	5/4/2020	23 - Northern Pike	10000	0.75	52 - Fort Peck Hatchery
Temple Pond	Wibaux	4/22/2020	1 - Rainbow Trout	1500	4.4	14 - Miles City Fish Hatchery

# Appendix B. Hatchery Plantings 2020 continued.

Water	County	Date	Species	Number	Size	Planting Hatchery
Tongue River Reservoir	Big Horn	6/10/2020	82 - Walleye	50000	2.8	14 - Miles City Fish Hatchery
Tongue River Reservoir	Big Horn	5/19/2020	82 - Walleye	1000000	0.47	14 - Miles City Fish Hatchery
Watt Reservoir	Garfield	4/23/2020	1 - Rainbow Trout	2000	4.42	14 - Miles City Fish Hatchery
West Plum Creek Reservoir	Carter	4/22/2020	1 - Rainbow Trout	600	4.41	14 - Miles City Fish Hatchery