



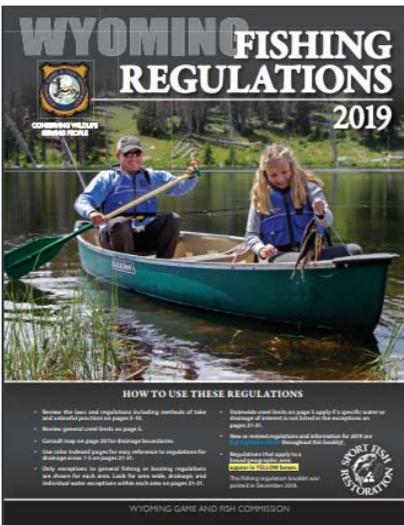
2019

the wyoming game & fish department

CASPER REGION angler newsletter

Fishing Regulation Changes Notable Changes for 2019

With the onset of a new year, quite a few new regulations have gone into effect. If you have not already done so, please make sure to take a look at the new fishing regulation booklet before you hit the water. Copies of the 2019 regulations are available wherever you get your licenses or on our website: https://wgfd.wyo.gov/Regulations/Regulation-PDFs/WYFISHINGREGS_BROCHURE



Many of the regulatory changes that took effect this year revolve around license sales, redefined boundaries for wild-caught baitfish, and a general push to reduce the number of special regulations in the Casper Region. Continue reading for a brief description of these key changes, but also consult your regulation book for more detailed and complete information (changes will be highlighted in blue).

In order to better serve an increasingly broad array of angler types, the Wyoming Game and

Fish Department decided to redefine the terms and conditions of fishing license sales in 2019. As such, rather than being bound to the calendar year, annual fishing licenses will now be valid for one full year (365 days) from the date of purchase.

Balancing the simplification of baitfish regulations with the need to control the spread of potential AIS has long been a goal of the Casper Fisheries Management Crew. Accordingly, the upstream boundary of wild-caught baitfish location A has been moved downstream to Glendo Dam. This change was in response to Asian Clam being found below Guernsey Reservoir. The change will make it more difficult for this AIS to

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2019 Casper Region

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from the central waterways of the North Platte River

colonize upstream of Glendo Dam. Additionally, it is important to remember that it is unlawful to have live baitfish in your possession while fishing on waters where they are not permitted.

Lastly, several creel limits on trout have changed. The North Platte River between the base of Pathfinder Dam and the vehicle bridge upstream of the Cardwell access has been changed from the special regulation of one fish in possession to the statewide river regulation of three trout, only one of which may be above 16-inches. Similarly, the North Platte River between Alcova and Gray Reef Reservoirs has reverted to the statewide stream regulation for trout as well as all North Platte drainage streams downstream of Bessemer Bend bridge.

New Casper Region Fisheries Biologist Welcome Jessica Dugan

The Wyoming Game and Fish Department Casper Region Fisheries Management crew is excited to welcome Jessica Dugan to the team. Dugan comes to the Casper Region after working as a biologist for Game and Fish studying Roundtail Chub in the Blacks Fork drainage of Southwest Wyoming.

Dugan completed her master's from UW in fisheries management in 2015 where she studied Brown Trout and nongame fish in Southeast Wyoming. She used GIS technology to analyze fish habitat selection in series with stable isotope and diet analyses to examine brown trout food preferences in the Laramie River.



Dugan's passion for fish and wildlife has led her all across Wyoming, even the world. She conducted independent fieldwork at a remote research station on the island of Mo'orea, French Polynesia. Dugan worked for the National Park Service engaging in cutthroat trout conservation in Yellowstone National Park and completed two field seasons as a fisheries technician for Game and Fish working in multiple regions across Wyoming before started her work with Roundtail Chub.

When not studying fish, you can find Jessica enjoying the outdoors. She has backpacked the Pacific Crest Trail in the Sierra Nevada's, and now spends time backpacking and packing horses in Wyoming. On snowy, windy Wyoming winter days if she isn't ice fishing, you might find Dugan on the slopes. She looks forward to meeting many of the anglers in the Casper area as she begins to explore and study the fisheries along the North Platte.



Returning Aquatic Invasive Species Specialist Eric Hansen returns to the Casper Region



Eric Hansen has recently returned to the Casper Region to continue his role as the AIS Specialist. Eric was an AIS technician for two years before moving into this supervisory position in 2018. He holds a degree in Wildlife Management from Casper College.

Eric transplanted from the plains of Kansas to Wyoming at the age of five. He spent his childhood exploring the great outdoors; whether catching buckets full of sunfish at Cooks Lake in the Black Hills or tracking the progress of the frogs that inhabited the mud puddles surrounding his hometown of Gillette. When Eric is not inspecting boats or surveying for AIS, you will find him working in his garden or using his photography skills.

Aquatic Invasive Species Program Update Clean Drain Dry all boats and equipment

The AIS program in the Casper Region continued to work with the public and other agencies to help combat the spread of aquatic invasive species in our waterways in 2018. Watercraft Inspection Stations were operated at two permanent locations in the region (Torrington Port of Entry and Glendo Reservoir) and at other waters on a rotating basis (Seminoe Reservoir, Pathfinder Reservoir, Alcova Reservoir and Gray Reef access area on the North Platte River). Inspection stations were staffed from April 21st until Sept. 15th. A total of 6,585 inspections were conducted. Of those inspected, 112 were considered a high risk and 32 required decontamination before launching. Boats traveling from Lake Powell in Utah and Arizona continued to pose a great risk of transporting Zebra and Quagga Mussels.

Along with education and watercraft inspections, a priority of the AIS program is to monitor waters for introduced invasive species. Monitoring comes in different forms and includes plankton net tow sampling of lakes and reservoirs, water quality testing to assess risk parameters, and visual and tactile sampling of substrates, in creeks and rivers. Sites are chosen based off of risk and usage with monitoring locations expanding every season. If suspected AIS are found, a sample is taken and shipped to a coordinating laboratory for positive identification. Once identified, more sampling is done in adjacent areas to formulate a greater understanding of distribution and threat.





In the Casper region there are established populations of Curly Pondweed, Brook Stickleback, Asian Clams, Rusty Crayfish, and newly discovered New Zealand Mud Snail. Curly Pondweed is well established in the North Platte River at the Miracle Mile access point. It has since moved downstream and gained a footing in Pathfinder Reservoir as far North as Canyon Creek. To date, no Curly Pondweed has been discovered below Pathfinder Dam. Brook Stickleback were introduced illegally as bait fish and have since spread throughout the North Platte River drainage.

Asian Clams were discovered in Guernsey Reservoir in 2017 and have since spread below the dam to the Nebraska state line. Another invasive invertebrate is the Rusty Crayfish, which were introduced illegally into Wagonhound creek in 2006. This population of crayfish has been chemically treated twice since having been introduced, and so far has not spread downstream. In 2018, New Zealand Mud Snails were discovered in three locations of the North Platte River, including: the Cardwell Access area, below the dam at Alcova, and at Gray Reef Access Area. Their establishment solely at high usage areas, despite monitoring throughout the river, makes it extremely likely that New Zealand Mud Snails were transported by an unclean drift boat or on waders by anglers traveling from infested waters. More monitoring will be conducted along North Platte River access points this season to get a better idea of the scope of this new infestation.



The threat of aquatic invasive species in Wyoming is an ever-evolving issue, which requires diligence not only from our state agencies but also from the public as a whole. It is paramount that everyone who uses our wonderful states resources be an advocate of preserving and protecting our waters for future generations use and enjoyment. It is everyone's duty to remain steadfast in procedures for moving from one body of water to another. **CLEAN** all equipment after every use. **DRAIN** any standing water from any and all water holding compartments, and allow to thoroughly **DRY** before using again. Performing these three simple tasks will help ensure that the wealth of enjoyment we all get from Wyoming's waters will continue to thrive for many generations to come.



CLEANDRAIN DRY

WYOMING



Regional Fisheries Updates



Seminole Reservoir

The number of Walleye in Seminole Reservoir has continued to remain relatively unchanged since 2014. The size and number of fish sampled during the fall netting, however, suggest that the appearance of stability in Walleye abundance results from a balanced shift from a population comprised of mostly older fish to mostly younger fish. More specifically, there are currently a particularly high number of one to three-year-old fish in Seminole that are offsetting a reduction in the abundance of fish that are four-years-old and greater (fish over 15 inches). This has resulted in an average Walleye from Seminole tipping the scales at 14.4 inches and 1.36 pound, which is perfect for the frying pan. While the number of large Walleye is slightly below where we would like it to be, there is no reason to abandon Seminole if you are interested in pursuing a trophy fish. In 2018, the largest Walleye we found from this slow-growing population was an individual measuring 31.4 inches and 10.7 pounds!

Trout fishing in Seminole Reservoir continued to be very good in 2018. Rainbow Trout sampled during our spring gillnetting efforts averaged 16.2 inches and 1.77 pounds. The largest rainbow we captured was 20.5 inches and 3.22 pounds. Unfor-



tunately, our netting shows less than average survival of the Rainbow Trout stocked in fall 2017. This will result in a fairly sharp reduction in the number of 2 year-old rainbows (14 – 16 inch fish) for anglers to catch in 2019. Despite this, excellent survival of a larger stocking of fish in 2016 will translate into good availability of three-year-olds (16 – 20 inch fish). In addition to rainbows, Seminole Reservoir is home to quite a few wild Brown Trout that come from the upstream reaches of the North Platte River. Although less numerous, browns in Seminole tend to grow larger than the other trout species in the reservoir; with some browns larger than 22 inches present.





North Platte River - Miracle Mile

The Miracle Mile is a tailwater fishery that includes about six miles of the North Platte River between Kortes Dam and the confluence of Sage Creek, just upstream of Pathfinder Reservoir. Fish population surveys conducted at the Miracle Mile in July 2018 showed substantial decreases in the number of both Rainbow Trout and Brown Trout. The population estimate for all trout in 2018 (1,974 fish/mile) is well below the recent average despite experiencing a 20-year record high in 2016 (6,824 fish/mile). This sudden decline over the past two years is the result of losing 72% of Rainbow Trout since 2016, particularly age-1 fish, in addition to Brown Trout estimates that are already the lowest on record (124 fish/mile).



In opposition to what has been observed with the number of trout at the Miracle Mile, the weight of trout per mile has increased since last sampled in 2016. This pattern, where a reduced number of trout result in higher estimated biomass, is typically observed in an aging population. Poor production and survival of fish spawned in spring 2016 and 2017 are most likely the driving force behind why the population is being carried by the now four-year-old fish that were spawned in 2015.

On a slightly more optimistic note, the average fish size has recently increased to 15.2 inches and 1.9 pounds with the largest fish sampled measuring 26.4 inches for Brown Trout, 24.5 inches for Rainbow Trout, and 18.6 inches for Snake River Cutthroat. Furthermore, there was a healthy number of age-1 Rainbow Trout (6 – 12 inches) observed during the 2018 sampling, stemming from a combination of natural production and annual stocking of roughly 93,000 fish, which will help support the fishery into the future.





Pathfinder Reservoir

In early May of last year the Casper Fisheries Management Crew wrapped up the first half of the annual netting efforts in Pathfinder Reservoir to track trends in the health and abundance of the local trout populations. Rainbow Trout from the spring sampling averaged an astounding 17.6 inches and 2.35 pounds; the largest of which approached 22 inches and 3.9 pounds. Similarly, Brown Trout and Snake River Cutthroat, which only make up a small percentage of the Pathfinder trout population, both averaged roughly 18 inches and 2.4 pounds. While anglers may currently enjoy the increased size and plumpness of trout currently being caught at Pathfinder, gillnetting surveys suggest that these fish will be harder to find for at least the next couple years. Unfortunately, very low survival of the nearly 90,000 Rainbow Trout stocked at 10 inches in both 2016 and 2017 (down from 120,000 fish at 9 inches), is the cause of



precipitously declining trout populations in Pathfinder Reservoir. Having learned that the stocking of a smaller number of fish at a larger size was an ineffective means of boosting the Pathfinder trout population spurred a return to the previous method and 110,000 trout were stocked in the fall of 2018.

Following their positive response in the neighboring Alcova Reservoir, roughly 32,000 Kokanee Salmon were stocked into Pathfinder. These fish were planted at a very small size, but typical growth rates for this species suggest that Pathfinder Kokanee will likely grow to a size that is increasingly available to anglers by 2020.

The annual Walleye netting wrapped up the Pathfinder fish population monitoring in September of 2018. Based on the results of this sampling, it appears as though the Walleye population has been in a state of decline since 2016. In addition to the declining trend in abundance, there are other indicators that show conditions in Pathfinder Reservoir are no

longer conducive to the unsustainably high population growth seen between 2011 and 2016; this includes waning recruitment, decreased survival, and falling condition (i.e., plumpness) across multiple year groups. Overall average relative condition for Walleye has declined significantly since 2014; seemingly brought about by a broad reduction in prey items for smaller fish. This is supported by a very noticeable decline in the individual condition of Walleye less than 20 inches. Perhaps more striking than the general reduction in fish condition is the pattern in growth rate. In 2013 and 2014, Pathfinder Walleye were found to be growing faster than Glendo Walleye, but information collected last year showed a substantial reduction in growth rate. Lastly, netting data collected in 2018 shows the rapid decrease of Walleye from 15-20 inches since 2016, which is most likely the result of the increase in the popularity of Walleye fishing at Pathfinder Reservoir.



North Platte River - Cardwell Reach

The Cardwell access site of the North Platte River can be found just downstream of Pathfinder Dam and is easily one of the most popular fisheries in the Casper Region. Anglers travel from all over the country, regardless of the weather, to enjoy this blue-ribbon tailwater where they can typically expect to find abundant numbers of trout and the chance of catching a real trophy. Every fall your local fisheries management crew spends the day sampling this portion of the river to track trends in the abundance, size structure, and condition of the trout population. While the number of trout in this reach, roughly 750 fish per mile, stayed relatively consistent with that of the previous year, the overall biomass fell substantially from 1,523 to 1,053 pounds of trout per mile in 2018. This decrease in biomass was expected, however, as the population continues to feel the impact of poor spawning success in 2016 and the more recent loss of older (and heavier) individuals that were already near the end of their natural lifespan when sampled in 2017. Don't worry though; over 41% of the Rainbow Trout in the Cardwell reach were above 17.5-inches long with an average weight of 2.5 pounds and we even lucked in to a Brown Trout measuring 27-inches and 7-pounds! The other good news is that strong year-classes from the 2017 and 2018 spawning events will most likely lead to a more balanced composition of age groups of fish for the foreseeable future.





Alcova Reservoir

Although typically thought of as more of a play lake, Alcova Reservoir is on track to provide excellent fishing within a 30 minute drive from Casper. In particular, annual fall sampling showed that the number of Walleye in Alcova remained very high from 2017 to 2018. The recent increase in the Alcova Walleye population is being driven by particularly high numbers of age-1 fish (9.0 – 11.5 inches) joining the population over the past two years. This follows a period of very poor recruitment that lasted from 2013 to 2015, which resulted in a population full of older and larger individuals that are particularly difficult to catch. Although the number of walleye is higher than we would like to see in Alcova Reservoir, the addition of two consecutive years of excellent recruitment to an already aged population has brought a level of balance to the size groupings found in this Walleye population; one that now includes everything from pan-sized Walleye to trophy-sized fish. That said, the average sized Walleye in Alcova is now 15.1 inches and 1.6 pounds, with the largest sampled individual measuring 30.1 inches and 10.4 pounds!

Last November marked the third year under the new trout stocking program; consisting of 30,000 Rainbow Trout, 15,000 Snake River Cutthroat Trout, 15,000 Bear River Cutthroat, and 15,000 Kokanee. Our multiyear evaluation has, so far, shown that Bear River Cutthroat are better able to survive in the predator rich waters of Alcova despite being stocked at lower density and at a slightly smaller size than that of the Rainbow or Snake River Cutthroat Trout. Because of the balance that has been achieved through differing rates of survival between the stocked species, trout fishing in Alcova Reservoir is expected to be nearly identical in quality to what we saw in 2018. That said, four-year-old cutthroat trout from the fall 2015 stocking should be approaching a size that is more desirable to anglers as these slower growing trout species reach 18 – 20 inches.





North Platte River - Gray Reef to Lusby

In October 2018, the Casper Fisheries Management Crew completed the biennial population estimate sampling to monitor the abundance and condition of trout in this high-profile area. Over the course of four days, trout were collected using boat-mounted electro-fishing gear and measured before being released back into the river. In addition to length and weight measurements, the proportion of each day's catch that consists of new and recaptured fish allows for the overall number of trout in the river to be estimated.

Gray Reef population surveys showed substantial decreases in the number and size of both Rainbow Trout and Brown Trout since last sampled in 2016. More specifically, the current Rainbow Trout population estimates represent a decrease of 48% in abundance and 50% in biomass over the past two years. Consequently, the average length of rainbow Trout has increased to 16.4 inches and 1.7 pounds and includes fish upwards of 21.2 inches.

Although far less numerous than the rainbows, the Gray Reef section of the Platte is home to naturally spawned Brown Trout as well as Bear River and Snake River Cutthroat Trout that wash downstream from Alcova Reservoir. Low numbers of fish and a surplus of food in this tailwater fishery have resulted in average fish sizes increasing to an astounding 20.2 inches Brown Trout, 18.8 inches for Bear River Cutthroat, and 16.6 inches of Snake River Cutthroat Trout.





North Platte River – Sechrist to Bessemer

Similar to efforts used in the Miracle Mile and at Gray Reef, biennial sampling of the North Platte was conducted in 2018 between the Sechrist and Bessemer access areas. Unfortunately, the current population estimate for this portion of the North Platte River (1,649 trout per mile) has fallen well below the abundance objective of 2,700 trout per mile for the first time since 2010. This decline is at least partially explained by a substantial reduction in the number of Rainbow Trout – which comprise 95% of the population – since 2016 and is most likely being caused by poor spawning success. Despite the heavy decrease in abundance, the current level for pounds of trout per mile has remained very high. This can be attributed to a 72% decrease in the number of age-2 Rainbow Trout (13.0 – 15.9 inches) and a 364% increase in the number of age-3 and older RBT (≥ 16.0 inches) since 2016. Anglers visiting the section of the Platte should, consequently, expect average fish sizes to be around 13.9 inches for Rainbow Trout and 16.7 inches Brown Trout. That said, the high number of older fish found swimming near Bessemer Bend has resulted in rainbows upwards of 21 inches long and the largest Brown Trout being 27.4 inches and 8.1 pounds!





Glendo Reservoir

The outlook for Glendo Reservoir Walleye fishing in 2019 is excellent as the abundance of this species continues to increase since falling to a low in 2015. This increase in Walleye density is due to the presence of particularly high numbers of one-year-old and three-year-old fish that were evident in the 2018 sampling. Conversely, age data collected from sampled Walleye show that the cohort of two-year-old fish in 2018 was one of the smallest measured in the last decade despite the attempt to bolster this group through the stocking of more than 9.3 million fry from North Dakota. While the exact ratio of stocked to wild Walleye in the 2016 cohort is unknown, it is evident from the netting data that even large scale stocking failed to contribute meaningful gains to the Glendo Walleye population.

Annual sampling of Glendo has allowed us to track the progress of a single large year-class of Crappie (both black and white) since they first showed up as age-1 fish in 2016. It is believed that the excellent level of Crappie survival that occurred in 2015 came as a direct response to the concurrent reduction in the Glendo Walleye population. This is further supported by the complete lack of subsequent year-class production of Crappie as Walleye numbers have trended upwards. Regardless of the reason behind the burgeoning Crappie population, reports from anglers suggest that these fish are providing an exceptional fishery for those who are targeting them, especially ice anglers.

Due to the importance of Gizzard Shad as a forage species for many of the game fish in Glendo, the Casper Fisheries Management Crew conducts electrofishing surveys for shad each spring. This is done to verify the overwinter survival of this cold-sensitive species. Should mature Gizzard Shad not be found, of which only a small number are needed to repopulate the whole reservoir, a transplant of this species is arranged with Nebraska.



Bryan Stock Trail Pond

Bryan Stock Trail Pond, also known as Lake McKenzie, is a small gravel pit pond located immediately north of downtown Casper near the Knife River quarry. This popular urban fishery supports a wide variety of game fish species that are primarily maintained by



a combination of stocking (e.g., Channel Catfish, Cutthroat Trout, Rainbow Trout, and Grayling) and natural spawning (e.g., Largemouth Bass, Black Crappie, Bluegill, and Green Sunfish). After experiencing a great deal of difficulty sampling this pond with conventional gear, new electrofishing equipment allowed the Casper Fisheries Management Crew to get a better grasp on the population levels and sizes of fish that anglers can expect to catch. Most notably, some very large fish were found in Bryan Stock Trail, including: Channel Catfish upwards of 28.6 inches and 12.9 pounds, Largemouth Bass over 19.5 inches and 6.4 pounds, and Black Crappie exceeding 11 inches and 0.7 pounds. Additionally, the new state record Green

Sunfish, measuring 12.3 inches and 1.3 pounds, was caught in this small pond in 2019.

Dome Rock Reservoir

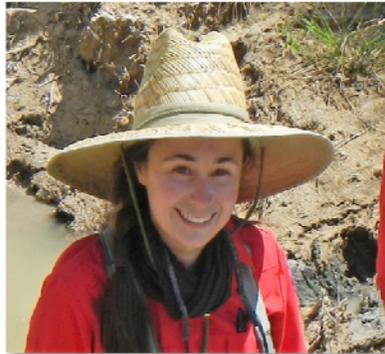
Dome Rock is a small (9-acre) reservoir with a permanent fishing easement on private land that is found immediately east of the Kortez Road roughly 20.1-miles south of HWY-220 in Alcova, WY. This reservoir has been stocked with trout since the mid 1980s and has carried a reputation for trophy trout for much of that time. While typically only stocked with Snake River Cutthroat, Dome Rock has recently seen the addition of Grayling in an effort to diversify this cool-water fishery. While the average trout in Dome Rock is around 15-inches, gillnetting surveys from last year show that anglers traveling to this remote fishing hole will have the opportunity to catch cutthroat approaching 20-inches and 2.4-pounds. And though the Grayling are still relatively young, at just over a year old, some fish already exceeded 13.5-inches in length. If you decide to fish Dome Rock Reservoir, a helpful tip would be to take some kind of portable watercraft such as a kayak, canoe, or belly-boat to help get past the shoreline vegetation that grows thick during the summer months. Also remember, the reservoir is managed under a special regulation where you can only fish with artificial flies or lures, and all trout less than 20 inches have to be released.



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