

Lower Clark Fork River Drainage

Physical Description

The lower Clark Fork drainage begins at its confluence with the Flathead River and terminates at the inlet to Lake Pend Oreille in Bonner County, Idaho. In Montana, this drainage falls almost entirely within Sanders County. The river flows for 94 miles through a drainage of 1.4 million acres before exiting the state. Elevations range between 2,191 and 8,735 feet. Approximately 83% of the land within the drainage is managed by the Lolo National Forest and Kootenai National Forest. Privately owned land is primarily confined to the valley floor and the Thompson River drainage. Primary land uses include agriculture, hydropower generation, forest products, recreation, and wilderness.

There are 49 lakes or reservoirs in the drainage, totaling 14,483 surface acres. Numerous, natural headwater lakes are found at higher elevations. The largest of these lakes, Wanless Lake, lies within the Cabinet Mountains Wilderness area. The Thompson, Bull and Vermilion rivers are the largest tributaries to the lower Clark Fork River. Approximately 62 miles of the lower Clark Fork River is inundated by three dams: Thompson Falls, Noxon Rapids, and Cabinet Gorge (completed in 1915, 1959 and 1952 respectively). Noxon Rapids Dam creates the largest reservoir, impounding an area of 8,000 surface acres at full pool, followed by Cabinet Gorge (3,000 acres) and Thompson Falls (1,000 acres).

Fisheries Management

Diverse habitat types throughout the lower Clark Fork drainage provide numerous fishing opportunities, including warm, cool, and cold-water sport fisheries and important habitat for native species. Largemouth and smallmouth bass, northern pike, yellow perch, and several trout species are the primary species targeted by fishermen.

Native species within the drainage include bull trout, westslope cutthroat trout, mountain whitefish, longnose sucker, largescale sucker, northern pikeminnow, peamouth, longnose dace, redside shiner, and several sculpin species. Native species management is focused on salmonids with an emphasis on bull trout recovery and westslope cutthroat trout conservation. The lower Clark Fork River and several of its tributaries are designated as bull trout critical habitat. Bull trout in the drainage exhibit both resident and migratory life histories with some fish moving to mainstem rivers, reservoirs, or Lake Pend Oreille to mature. Primary limiting factors for bull trout include dams (passage barriers and altered habitat), habitat degradation in tributaries, warm water temperatures, and introduced species. These impacts are partially addressed through the Avista and NorthWestern Energy hydro-mitigation programs, which are required by the Federal Energy Regulatory Commission and stipulated in their operating licenses. Fish passage at Thompson Falls Dam, owned and operated by NorthWestern Energy, is facilitated by a fish ladder that began operation in spring 2011. Upstream passage at Cabinet Gorge Dam, owned and operated by Avista, is facilitated by a capture and transport program that returns adult bull trout to their natal tributaries based on genetic assignments. Beginning operation in 2022 the Cabinet Gorge Dam Fish Passage Facility, a permanent fish trap designed to capture adult migrating bull trout, will become the primary capture method for the program. Currently, juvenile bull trout are captured in Graves Creek, Vermilion River, and the East Fork Bull River and are transported downstream via truck to Lake Pend Oreille in Idaho as means to bypass lower Clark Fork Reservoirs that offer poorquality salmonid habitat and abundant predators. A downstream trap and haul program for juvenile bull trout transport to reconnect the Clark Fork River and Lake Pend Oreille ecosystem will likely occur in the Thompson River tributaries following the relicensing of Thompson Falls Dam in 2025. Both utilities also contribute to habitat restoration and acquisition. Enhanced bull trout education and enforcement is also a priority of FWP and Avista.

Native trout populations in many tributary streams are at risk due to competition and displacement by nonnative species and hybridization with nonnative species. Hybridization between westslope cutthroat trout and rainbow trout appears to be increasing and expanding into reaches where hybrids have not previously been found. Some populations contain hybridized and nonhybridized individuals, ultimately creating a population comprised of all hybridized individuals, and therefore represents the loss of unique populations adapted over many generations to specific local environmental conditions. Brown trout and brook trout have also expanded their distribution and abundance in many tributary streams and also pose a threat to native trout populations. Brown trout and brook trout outcompete and displace native trout, but brook trout can also hybridize with bull trout. Proactive measures will be required to conserve many of these tributary populations including non-native fish removal and the construction of fish passage barriers. Translocation to suitable, unoccupied habitat can also be used to protect some populations from local extirpation or to expand species distribution. For example, a 5-year project is currently underway to establish westslope cutthroat trout populations above natural barriers in three tributary streams in the Thompson River drainage.

The lower Clark Fork drainage contains numerous high elevation ponds and lakes in tributary headwaters. Many of these waters contain fish that are supported by natural reproduction or stocking. Westslope cutthroat trout are the primary species found in most of these habitats, however, some waters have historically been stocked with Yellowstone cutthroat trout, rainbow trout, or brook trout. Access to many of these lakes is by foot with a few accessible by vehicle. Where feasible, non-native fish may be replaced with westslope cutthroat trout to reduce threats on downstream populations of native trout and to increase angler opportunity. A five-year study on fish distribution, genetics, and abundance in mountain lakes within the lower Clark Fork River drainage was initiated in 2016. This data is currently being evaluated and will help guide future stocking rates and management. Beginning in 2022, genetic swamping of westslope-Yellowstone cutthroat trout hybrids will be initiated in three mountain lakes (Cabin Lake, Terrace Lake, and Snowshoe Lake) by stocking high densities of westslope cutthroat trout to reduce the prevalence of hybrid fish in headwater lakes that threaten populations downstream. Some lakes are intentionally left fishless to conserve amphibians and other aquatic species.

Tributary streams to the lower Clark Fork River provide angling opportunities for various trout species. The Thompson River is the most popular trout fishery in the area with up to 13,000 estimated angler days per year. The Thompson River remains open year-round, providing fishing opportunity for mountain whitefish and trout anglers. Other local tributaries that receive angling pressure include Prospect Creek, Vermilion River, and Bull River. All tributaries are closed to angling between November 30 and the third Saturday in May to protect spawning westslope cutthroat trout, except for the Thompson River.

Portions of the Thompson Chain of Lakes including Upper, Middle and Lower Thompson and McGregor Lake are located at the headwaters of the Thompson River drainage. The Thompson Lakes are popular fisheries for a wide range of species. Yellow perch, northern pike, kokanee salmon, and occasional trout

provide year-round opportunities while largemouth bass are targeted during open water periods. Illegal introductions of smallmouth bass and black crappie have become established and are also sought by anglers. McGregor Lake contains a robust population of lake trout and provides some angling opportunities for rainbow trout and kokanee salmon. A putative native crayfish population with abundant, large individuals draws heavy public interest and is monitored and managed to avoid overharvest while assessing the impacts of an expanding, illegally introduced smallmouth bass population. Fishing contests are popular on all these lakes during both summer and winter months.

Riverine portions of the Clark Fork River (downstream of Flathead River confluence) provide angling opportunities for smallmouth bass and northern pike. Native suckers, minnows, and whitefish dominate the fish community in this reach of the river, while trout occur at low densities.

Reservoirs on the lower Clark Fork River are popular warm and cool-water fisheries. Yellow perch, northern pike, and walleye are pursued by anglers year-round and largemouth bass and smallmouth bass are popular from spring through fall. Noxon Reservoir hosts up to seven bass fishing tournaments annually and has historically held the state record for largemouth bass. A recent <u>creel survey</u> during the open water period found that 80% of anglers targeted either species of bass, northern pike, or yellow perch. Noxon also holds the state record for northern pikeminnow, although native suckers and minnows have declined dramatically in recent years in Noxon and Cabinet Gorge reservoirs. Introduced yellow perch and pumpkinseed have maintained relatively high abundances and likely serve as an important forage base for sport fish, especially since the decline of soft-rayed native suckers and minnows. Spring walleye fishing in upper Noxon Reservoir is popular during years when conditions permit.

Walleye were illegally introduced into Noxon Reservoir in the late-1980s or early-1990s and multiple introductions were reported throughout the 1990s. The population did not reach catchable numbers until the mid-2000s, at which time FWP conducted a radio telemetry project that identified a primary spawning location at the upper end of the reservoir. Over the past decade, the major fish community change in Noxon and Cabinet Gorge reservoirs has been the continued increase in abundance of walleye. Concurrently, abundance of native sucker and minnow species has declined. Recent declines in condition of walleye, northern pike, and smallmouth bass also indicate that the increase in predator abundance has resulted in a shortage of forage fishes. If trends in condition, growth, and prey abundance continue this trajectory both the native species and quality of angling for non-native predators could suffer.

FWP will continue to monitor walleye in Noxon Reservoir through fall gillnetting and spring electrofishing to track year class strength, run time, and relative abundance of spawning walleye. Typically, walleye comprised less than 5% of species captured by gillnets in Noxon Reservoir. In 2021, walleye comprised over 10% of the fish community captured during fall gillnetting, the species highest recorded abundance to date. Walleye recruitment is extremely variable due to low water residence time in these run-of-the-river reservoirs and is likely dictated by the timing, intensity, and duration of spring run-off. To prevent upstream spread, FWP will continue to prohibit NorthWestern Energy from operating the fish ladder at Thompson Falls Dam in volitional mode (i.e., every fish which ascends the ladder will be inspected by fisheries staff to ensure no walleye pass the dam).

Currently the lower Clark Fork drainage has three family fishing ponds which are stocked annually. Triangle Pond near Noxon provides a quality family fishery for stocked rainbow trout and burbot. Near

Trout Creek, the Frog Pond provides a fishery for stocked rainbow trout and multiple warm-water species. Finally, a recently expanded pond at Thompson Falls State Park provides a fishery for stocked rainbow trout and other warmwater species. The Frog Pond and Thompson Falls State Park Pond are stocked with triploid (sterile) rainbow trout to reduce the risk of hybridization with westslope cutthroat trout present in the Clark Fork River and local tributaries.

Habitat

Tributary habitat in the lower Clark Fork drainage has been shaped by numerous natural and mancaused conditions. The Thompson River is the area's most popular stream fishery and is unique in that the lower river has colder summer water temperatures than the upper river. The headwaters of the Thompson River begin at the outlet of the Thompson Chain of Lakes and slowly meanders through a gentle landscape with sparse large vegetation. It is not until the additions of Fishtrap Creek and West Fork Thompson River that the river picks up cold water, steeper gradient, and a more favorable temperature regime for native trout. The primary habitat concern in the Thompson River is the abundance and/or redundancy of road systems throughout the drainage. Grazing and timber harvest also cause localized concerns in several areas of the Thompson River. In warmer years stream temperature may also be a concern, therefore temperature is closely monitored around river mile 8. Hoot owl-owl restrictions that limit daily angling to the coolest periods would be instituted should the river reach 73 F for three consecutive days.

A unique feature of many lower Clark Fork River tributaries are sections of streams which are seasonally intermittent due to coarse sediment deposits left behind by Glacial Lake Missoula. These intermittent stream reaches have partially isolated some headwater fish populations, which in some cases has resulted in entirely native species assemblages with mostly resident life histories.

Historic land use has also shaped habitat in many tributaries. Major impacts to certain tributaries are caused by the construction and maintenance of roads, transmission lines, and petroleum pipelines, as well as mining and grazing. Localized habitat problems include sedimentation, unstable banks, simplification of habitat, and thermal impacts. Mining impacts are limited to only a couple of tributaries (including the Vermilion River) where some small scale mine claims are still in place. Proposed copper and silver mines near the Cabinet Mountain Wilderness areas could significantly alter habitat in the Rock Creek and Bull River drainages through reduced base flows.

Approximately 66% of the lower Clark Fork River has been converted from riverine to reservoir habitat by Cabinet Gorge, Noxon, and Thompson Falls dams. All three reservoirs are run-of-the-river which have minimal water storage capacity and experience little thermal stratification. Reservoir drawdowns are limited to ten feet in Noxon and seven feet in Cabinet Gorge annually to benefit the sport fisheries. Mainstem habitat created by the dams is unfavorable for native trout due to warmwater temperatures, blocked fish passage, and abundance of non-native predators. Currently, Avista and NorthWestern Energy are attempting mitigation for blocked migrations of bull trout through the implementation of fish passage programs at Thompson Falls and Cabinet Gorge dams. Thompson Falls Dam was outfitted with a fish passage ladder that has been in operation since spring 2011. Bull trout passage at the Cabinet Gorge Dam has been facilitated by active capture techniques from 2000-2021. The Cabinet Gorge Dam Fish Passage Facility, a permanent fish trap designed to capture adult migrating bull trout, will become the primary capture method for the program beginning operations in 2022. Captured bull trout are

transported upstream to the fish's tributary of origin based on genetic assignment. Experimental passage of westslope cutthroat trout from below Cabinet Gorge Dam in Idaho into Montana (Cabinet Gorge Reservoir) will also occur from 2022 to 2024. During this time FWP will work with Avista and collaborating partners to investigate the genetic contribution of cutthroat trout that were selectively passed over the dam between 2015 and 2021, as well as fish passed upstream from 2022 to 2024. Fish passed upstream into Cabinet Gorge Reservoir will be floy tagged to evaluate their contribution to the fishery in the Bull River, the reservoir's largest tributary and most popular lotic fishery.

Water quality in the lower Clark Fork River is highly impacted by mercury, PCBs, and dioxin/furans. Fish consumption advisories exist for popular sportfish with walleye, smallmouth bass, and northern pike being the most restrictive. Recently, consumption guidelines were updated for the Clark Fork River and recommend not consuming fish of any species or size from the in the drainage from the confluence of the Bitterroot River downstream to the Flathead River confluence. Downstream of the Thompson River confluence, each of three lower Clark Fork Reservoirs have their own consumption advisories. The source of the excess mercury is primarily from past mining activities upstream. The source of PCBs and dioxin/furans is from an upstream pulp mill which shut down in 2010. A future study is planned to collect more in-depth data on fish tissue and containments in the middle and lower reaches of the Clark Fork River and reservoirs.

Hydropower Mitigation Projects

Avista

The Clark Fork Settlement Agreement (CFSA) was signed on January 1999 by 27 parties consisting of Montana, Idaho, U.S. Fish & Wildlife Service, U.S. Forest Service, 5 Native American Tribes, Sanders County, and numerous nongovernmental organizations. The development of the CFSA was a multiyear endeavor to identify resource needs and develop protection, mitigation, and enhancement measures to be implemented during the term on the new FERC License (45 years) for both Cabinet Gorge and Noxon Rapids Dams. The agreement outlines how Avista provides funds for protection, mitigation and enhancement to offset ongoing effects from the operation of hydropower facilities on both native and recreational fisheries. Implementation of the CFSA is based on appendices.

For the state of Montana, the aquatic protection, mitigation, and enhancement measures of interest are Appendix B: Montana Tributary Acquisition and Recreational Fishery Enhancement Program, Appendix C: Fish Passage/Native Salmonid Restoration Plan, Appendix D: Bull Trout Protection and Public Education Project, Appendix F2: Monitoring of Noxon Reservoir Stratification and Mobilization of Sediment Nutrients/Metals, and F3: Aquatic Organism Tissue Analysis. Through these appendices many projects have been completed and are ongoing to the benefit of fisheries of the Clark Fork River, Cabinet Gorge Reservoir, Noxon Rapids Reservoir, and their tributaries. Project plans address, but are not limited to, the following areas of interest: native fish monitoring/enhancement/research, habitat restoration, land acquisition, recreational fisheries monitoring/enhancement/research, boat ramp and fishing access site improvement and development, aquatic invasive species monitoring and control, upstream and downstream passage of bull trout and westslope cutthroat trout, and outreach and educational efforts. The signatories of the CFSA continue to meet twice a year to review and approve annually proposed projects, the most recent can be found here.

NorthWestern Energy

NorthWestern Energy oversees the Thompson Falls Bull Trout Adaptive Management Plan to provide mitigation funding for the impacts of Thompson Falls Dam on bull trout. This fund provides support for bull trout focused work in Prospect Creek, the Thompson River and the middle Clark Fork drainage. Thompson Falls Dam will be relicensed by FERC by the end of 2025 and there may be additional mitigation opportunities to benefit other native fish species and recreational fisheries. FWP will work with NorthWestern Energy through the FERC relicensing process to develop agreed upon mitigation measures similar to programs the company has in place on the Madison and Missouri rivers. While these mitigation measures have not yet been formally negotiated, they may include native trout conservation efforts (i.e., non-native removal and/or native reintroductions, translocation, barrier construction, juvenile bull trout downstream transport), restoration efforts that directly benefit recreational fisheries or native trout, continued passage at Thompson Falls Dam of trout and native nongame fish species, as well as projects that improve public access or provide long-term conservation of aquatic resources. Some of these potential projects are listed below under Special Management Issues.

SPECIAL MANAGEMENT ISSUES

Thompson River Conservation Easement

FWP is working with Green Diamond Resource Company and the Trust for Public Land to secure a perceptual conservation easement for 48,000 acres of corporate timber land in the Thompson River drainage. This conservation easement would secure eternal fishing, hunting, and outdoor reactional opportunities for the public while also protecting critical fish and wildlife habitat. The area would remain a working landscape and continue support local economies through timber harvest and management. This proposed easement compliments the 2003 Thompson-Fisher Conservation Easement that provided similar protection of perpetual access and public recreational opportunities on 90,000 acres of adjoining timber land in northwest Montana. A request for funding has been made to the USFS Forest Legacy Program to fund the project but nonfederal matching funds will need to be acquired. The 2022 funds have been acquired and the project ranked number one in the country of all Forest Legacy Program applications, which is promising for acquiring the second portion of funding in 2023. NorthWestern Energy's Thompson Falls Bull Trout Adaptive Management Fund will provide financial support towards the nonfederal match portion of the project. Additional nonfederal match funds will be required to fund this project. Public scoping is expected to occur in 2023 or 2024, after funding is in place.

Noxon Reservoir Monitoring

Noxon Reservoir has among the most diverse fish species assemblages west of the Continental Divide in Montana, with over 20 species present. FWP will continue to monitor the fishery through annual surveys to determine population trends and predator/prey interactions, but additional data collection and analysis will help inform fishery management. Additional data priorities for the next four years include: characterize the food web using stable isotope analyses to better understand predator/prey interactions; identify opportunities to better monitor bass population trends, including monitoring at tournaments; and additional age and growth analysis from gillnetting surveys.

Westslope Cutthroat Trout Conservation Opportunities

Collect updated genetic information from known westslope cutthroat trout populations and identify potential long-term conservation strategies for nonhybridized populations where feasible across the lower Clark Fork River drainage. In recent years, hybridization with rainbow trout and/or Yellowstone cutthroat trout has been documented in populations where hybridization has not been previously identified. Additionally, introduced trout species such as brown trout and brook trout appear to be colonizing or becoming more abundant in tributary stream reaches that were historically only occupied by native trout, and most often only westslope cutthroat trout. The species has been extirpated throughout much of its historic distribution, and a proactive approach will be needed to conserve local and uniquely adapted populations within the Clark Fork basin. Potential conservation or enhancement opportunities in tributary streams include barrier construction, non-native fish removal, and establishment of novel populations by translocation of nonhybridized fish into suitable and unoccupied habitats. Thompson River tributaries such as Chippy Creek, Little Rock Creek, North Fork Little Thompson, Fishtrap Creek, and West Fork Thompson River have valuable conservation populations of westslope cutthroat trout that are threatened by encroachment from non-native trout species. These streams may be the subject of future removal efforts. Cataract Creek, a Vermilion River tributary, was historically stocked with Yellowstone cutthroat trout above a natural barrier falls. This stream may hold promise as refuge for Vermilion River westslope cutthroat trout, following the removal of all Yellowstone cutthroat trout from the system. The natural stream intermittency that is present in many lower Clark Fork tributaries, along with unique geological features likely provide additional areas and undiscovered conservation opportunities for westslope cutthroat trout that will be investigated in the coming years.

Westslope Cutthroat Trout Translocation in Thompson River

In 2020, FWP initiated a 5 year project to translocate nonhybridized westslope cutthroat trout within the Thompson River drainage into fishless stream reaches above natural barriers. In 2020, 290 fish from Big Rock Creek and Chippy Creek were translocated into Bear Creek. In 2021, 131 fish were translocated into South Fork Murr Creek and 215 fish into Shroder Creek which were collected from populations in Four Lakes Creek, North Fork Little Thompson River, and Chippy Creek. In 2022, an additional 101 fish were translocated into Bear Creek and 124 fish into Shroder Creek which were collected from populations in Alder Creek, Big Rock Creek and North Fork Little Thompson River. Westslope cutthroat trout from other nonhybridized populations will be translocated in 2023 and 2024 into these three donor streams which represent 10 to 12 miles of secure, high-quality habitat. Monitoring efforts to assess the effectiveness of this project and additional opportunities to protect nonhybridized populations through translocation into other secure habitats will be investigated in the Thompson River drainage as well as within other drainages in the lower Clark Fork. Monitoring efforts in Bear Creek in the summer of 2022 documented natural reproduction, with fish successfully spawning in the spring of 2021 and 2022. Big Hole Creek, which represents an additional three miles of secure headwater habitat, will be a priority stream for additional translocation.

Experimental Westslope Cutthroat Trout Passage into Bull River

From 2022 through 2024, FWP will work with Avista to evaluate current and past experimental upstream passage (2015-2021) of westslope cutthroat trout into the Bull River from the Clark Fork River below Cabinet Gorge Dam in Idaho. This project will entail describing the landscape genetic structure of westslope cutthroat trout in the Bull River drainage including the mainstem and tributaries, using parentage based genetic evaluation to determine the contribution of fish passed over the dam to the population, and the prevalence at which these fish are caught by anglers.

Big Rock Creek Non-native Fish Removal and Barrier Construction

Big Rock Creek is the third largest tributary to the Thompson River and harbors one of three remaining bull trout populations in the drainage. Evidence suggests this bull trout population exclusively exhibits a stream resident life history, where fish carryout their entire life cycle in their natal stream. Big Rock Creek is also a stronghold for westslope cutthroat trout, including nonhybridized fish which occur over many miles of stream. In recent years brown trout have been found moving upstream into Big Rock Creek, including in areas that were recently only occupied by native trout. For instance, at river mile (RM) 2.4 in 2018 only westslope cutthroat trout were captured, however in 2021 brown trout comprised 15% of the fish community. Much of this drainage burned intensely in 2007, and the high productivity and elevated water temperature have made ideal conditions for brown trout expansion, and ultimately the displacement of native trout species. In the coming years FWP will work with partners to assess and construct a fish passage barrier to prevent further colonization by non-native trout. The barrier would be coupled with non-native trout suppression project to reduce displacement and competition and reduce hybridization risk. The location of the barrier and the form of non-native trout removal has yet to be determined. Future discussion between FWP, USFWS, USFS, and Green Diamond Resource Company will better focus the location of the barrier and initial method of non-native suppression. FWP has received funding from NorthWestern Energy's Thompson Falls Bull Trout Adaptive Management Fund for an initial feasibility study and preliminary engineering design, bull trout genetic sampling, and to prepare an Environmental Assessment. The feasibility/preliminary design work for the barrier will be completed in 2023.

Dry Creek Fish Barrier

Dry Creek is the largest tributary to Prospect Creek and enters at RM 0.6, just upstream from its confluence with the Clark Fork River. A lengthy intermittent section occurs on Dry Creek from around RM 0.6 upstream to just above the confluence of the West and East Forks around RM 4.2. In 2019, 40 westslope cutthroat trout genetic samples, were collected from perennial reaches in West Fork Dry Creek, Knox Creek, East Fork Dry Creek, and Gold Rush Creek. All fish were nonhybridized and analyses indicates the samples come from one randomly mating population. Over 10 miles of perennial stream occur among these streams in the upper Dry Creek watershed, making it one of the largest nonhybridized populations in the lower Clark Fork drainage. FWP will work with the USFS on potential fish barrier options for the lower intermittent section of Dry Creek. Within the Prospect Creek drainage, hybridization has been documented upstream of intermittent stream reaches implying these seasonally dry stream reaches are not absolute barriers to upstream conization by non-native trout species.

Ashely Creek Brook Trout Removal

Ashely Creek is a small tributary that flows through USFS land and FWP's Mount Silcox WMA. In its lower reaches on the WMA, the stream's entire flow is diverted for irrigation. It is unclear if this stream ever naturally reached the Clark Fork River and if it was historically occupied by native fish. Limited sampling has occurred in this stream, and the most recent sampling in 2018 documented brook trout as the only species present. In the coming years, FWP will the evaluate the potential to use piscicide to remove brook trout and introduced westslope cutthroat trout. The stream has good quality habitat that is suitable for westslope cutthroat trout the species and could be re-established from nearby populations. This project would require collaboration and coordination with the USFS, water users, and the city of Thompson Falls.

Murr Creek Westslope Cutthroat Trout Introduction

Murr Creek is a tributary to the upper Thompson River and enters the river at RM 40.9. Murr Creek has two natural fish barriers, one on the mainstem at RM 1.2 and one on the South Fork at RM 3.8. Westslope cutthroat trout were translocated above the barrier in the South Fork Murr in 2021. The remainder of the stream network is dominated by brook trout. A potential piscicide treatment could remove brook trout from approximately 8 miles of stream; 6 miles in the North Fork and 2.6 miles in the mainstem and lower South Fork. Westslope cutthroat trout from translocated populations (South Fork Murr, Shroder, Bear) and other nonhybridized populations within the Thompson River drainage could be used to establish a native trout fishery. FWP will investigate the potential to carry out this project with various partners including the USFS and Green Diamond Resource Company.

Evans Lake Brook Trout Removal

In 2009, FWP used piscicide to remove non-native brook trout from Upper Blossom Lake and Lower Blossom Lake in the headwaters of the Prospect Creek drainage. Brook trout were removed from these lakes as they posed a direct threat to the native fish assemblage that occurs downstream in upper Prospect Creek and its tributaries. Brook trout still occur in Evans Lake, in the headwaters of Evans Gulch which is significant tributary to upper Prospect Creek. This six acre lake is the only lake left in the drainage that contains non-native trout and is a direct threat to the downstream native fish community. Evans Lake currently provides a poor quality fishery from stunted brook trout that rarely exceed 8 inches. FWP will work with the USFS, Avista, and NorthWestern Energy to develop a strategy to remove brook trout from this lake and to restock with westslope cutthroat trout.

Upper Vermilion River Brook Trout Removal

The Vermilion River can be divided into three sections based on natural barriers to fish movement and the fish community present. The lower Vermilion River from its mouth upstream to China Gorge (at RM 5.0) is comprised of a mixture of native and non-native fish species including bull trout, westslope cutthroat trout, rainbow trout, westslope cutthroat trout x rainbow trout hybrids, brook trout, brown trout, and mountain whitefish. China Gorge, a series of natural bedrock chutes and cascades, has precluded brown trout and rainbow trout from colonizing upstream reaches in the Vermilion River. The reach between China Gorge and Vermilion Falls (5.1 RM to RM 11.6) is considered a native species

stronghold as the community is comprised of bull trout, westslope cutthroat trout, brook trout, and sculpin. Above Vermilion Falls, another series of natural bedrock cascades at RM 11.6, westslope cutthroat trout and brook trout are the only two fish species present. Brook trout occur at high densities and are more abundant than native cutthroat trout up to at least RM 20 above Vermilion Falls. Brook trout are also increasing in abundance between Vermilion Falls and China Gorge, as bull trout abundance rapidly declines. In the coming years FWP will work with the USFS and Avista to develop a strategy to remove brook trout from above Vermilion Falls using piscicide. If feasible, the aboriginal westslope cutthroat trout above the falls would be salvaged and reintroduced once brook trout removal is complete.

Non-native Trout Translocation from Fishtrap Creek and West Fork Thompson River

Non-native salmonids occur in the lower portions of West Fork Thompson River and Fishtrap Creek, and these tributaries represent the majority of remaining spawning and rearing habitat occupied by bull trout in the Thompson River drainage. Westslope cutthroat trout also occur over many miles of habitat within these drainage networks. Recent monitoring has shown that non-native trout are expanding their distribution in both tributaries. In the coming years while conducting routine population monitoring, some non-native trout captured will be translocated downstream to the Clark Fork River. All fish will be implanted with a PIT tag and external floy tag. This project will help determine if non-native trout moved downstream will move back to the tributary they were removed from and at what rate they are captured by anglers. Ultimately, this will help determine if removal and transport downstream will be an effective means of reducing non-native trout abundance in core native trout habitat within the Thompson River drainage. The potential to opportunistically remove and euthanize non-native trout in core native trout spawning and rearing habitat in these drainages will also be investigated.

Bull Trout Expansion Into Suitable Habitats

The decline of bull trout in the lower Clark Fork River drainage associated with impacts of mainstem dams, climate change and non-native species in tributary streams continues to occur as the species abundance and spawning surveys have documented historically low levels in many local streams. To combat the species decline and local extirpation, collaborative efforts may be initiated to collect information on suitable and unoccupied habitats to assess the possibility of founding of new or extinct populations. Historical accounts suggest that since impoundment of the Clark Fork River, some local populations have been extirpated. Adequate habitat conditions may exist for the species in several currently unoccupied stream reaches including upper Graves Creek, upper Vermilion River, North Fork Bull River, Dry Creek and Bear Creek in Thompson River.

Crow Creek Stream Nutrient Enhancement

A recent study evaluated the influence of stream habitat conditions on bull trout and westslope cutthroat trout in neighboring headwaters streams in the upper Prospect Creek watershed. Both streams have significant anthropogenic impairments and are only occupied by native fish species. The study found that abundance for both native trout species is considerably higher in Cooper Gulch where

on average bull trout were six times more abundant and westslope cutthroat trout five times more abundant when compared to Crow Creek, even though measured habitat conditions were quite similar between the streams. Macroinvertebrate species diversity and overall abundance was considerably higher in Cooper Gulch when compared to Crow Creek. The fish and aquatic insect data suggest Cooper Gulch is considerably more productive. Given the importance of these streams to native fish conservation, FWP may in the coming years work with Department of Environmental Quality, USFS, and Avista to determine if stream nutrient supplementation could ultimately increase the carrying capacity of native trout in Crow Creek.

Stream Habitat Restoration

Stream habitat restoration opportunities exist within several tributary stream reaches including in upper Prospect Creek and its major tributary streams such as Crow Creek and Cooper Gulch, Vermilion River, mainstem Thompson River and tributaries that may benefit native trout and recreation fisheries. FWP will continue to work with local partners to find creative solutions to address habitat impairments that limit fish populations.

Rock Creek Mine

A major copper and silver mine is proposed in the Rock Creek drainage. The mine would develop adits that would run beneath the Cabinet Mountains Wilderness area and would include portals in the West Fork of Rock Creek with a tailings facility near the mouth of Rock Creek. The mine is still undergoing environmental review and permitting. Potential negative impacts would be decreased groundwater inputs in both the Rock Creek and the Bull River drainages as well as impacts to water levels in mountain lakes above the adits. Increased road usage and maintenance in the West Fork Rock Creek will have negative impacts on that tributary as well. Disturbance from mine development and ore removal along with tailings and wastewater disposal is expected to impact Rock Creek and possibly the lower Clark Fork River from Noxon Rapids Reservoir downstream.

McGregor Lake Crayfish

Signal crayfish in McGregor Lake have provided a historically popular fishery. This putative native population draws high levels of interest and fishing effort due to the abundance and large individual size of the crayfish. Concerns about alleged illegal commercial harvest, wanton waste of smaller crayfish, decreased abundance and individual size, and the presence of an expanding illegally introduced smallmouth bass population prompted FWP to initiate a targeted monitoring strategy for crayfish in McGregor Lake in 2019. Beginning in 2021, FWP instated a special regulation for crayfish limiting harvest to 20 daily and requiring that females with eggs be released to prevent overharvest while assessing the impacts of the evolving aquatic community. Continued monitoring will be used to evaluate the McGregor Lake crayfish population and the appropriateness and effectiveness of the special regulation.

Priority Drought Waters

The majority of westslope cutthroat and bull trout populations in tributaries of the Lower Clark Fork and associated reservoirs are located in upstream areas that have not historically required restrictions or closures due to low flows and high-water temperatures. Thompson River has historically had sporadic angling restrictions applied, although the majority of angling pressure is typically in late spring to early summer when temperature criteria are not met. If necessary, restrictions would be applied to these areas if conditions reach levels that could negatively impact cutthroat or bull trout.

FISHERIES MANAGEMENT DIRECTION FOR LOWER CLARK FORK RIVER DRAINAGE

| Water | Miles/acres | Species | Recruitment Source | Management Type | Management Direction |
|---|-------------|---|--------------------|-----------------|--|
| All Lower Clark Fork Drainage (see listed waterbodies for exceptions) | | Bull trout (N) | Wild | Conservation | Continue yearlong closure on angling for bull trout. Educate anglers on fish identification and catchand-release techniques to reduce bycatch mortality. Continue to monitor population trends. Continue Avista trap and haul program to reestablish fish connectivity. Seek opportunities to improve habitat in core areas and to introduce into suitable, unoccupied habitats. |
| | | Westslope cutthroat trout (N) | Wild | Conservation | Maintain current angling opportunity and harvest level in tributaries. Continue to monitor distribution, abundance, and genetic status. Explore opportunities to translocate local nonhybridized populations into suitable fishless habitat above natural barriers. Where feasible, protect nonhybridized populations and restore genetic integrity to hybridized populations. |
| | | Northern pikeminnow, Largescale sucker, Longnose sucker, Peamouth (N) | Wild | General | Maintain current angling and harvest opportunity. Continue to work with NorthWestern Energy to pass these species above Thompson Falls Dam. |
| | | Mountain whitefish (N) | Wild | General | Maintain current angling and harvest opportunity. |
| | | Rainbow Trout | Wild | General | Maintain current angling and harvest opportunity. |

| Water | Miles/acres | Species | Recruitment Source | Management Type | Management Direction |
|-----------------------------|-------------|----------------------------------|--------------------|------------------------------------|---|
| | | Brown Trout | Wild | General | Maintain current angling and harvest opportunity. |
| | | Brook Trout | Wild | General /Liberal Regulations | Provide liberal harvest opportunities to meet native species and other recreational fishery goals. Maintain current angling opportunity and harvest level where appropriate. |
| | | Largemouth bass | Wild | General/Restrictive Regulations | Maintain later spawning time restriction to protect spawning bass in lower Clark Fork reservoirs. Maintain current angling and harvest opportunity. |
| | | Smallmouth bass | Wild | General/Liberal Regulations | Adjust angling and harvest opportunity to match authorized vs. unauthorized introduced populations. |
| | | Northern pike | Wild | General/Liberal Regulations | Provide liberal harvest opportunities to decrease predation on native and recreational fisheries. Maintain current angling opportunity and harvest level. |
| | | Yellow perch | Wild | General | Maintain recreational angling and harvest opportunity. |
| Thompson Falls Reservoir | 969 acres | Trout and native nongame species | Wild | General | Maintain current angling and harvest opportunity (except bull trout and westslope cutthroat trout). Continue to work with NorthWestern Energy to pass these species above Thompson Falls Dam. |
| | | Smallmouth bass | Wild | General/Liberal Regulations | Provide liberal harvest opportunity to decrease predation by this unauthorized introduction on native and recreational fisheries. Do not pass over Thompson Falls Dam. |

| Water | Miles/acres | Species | Recruitment Source | Management Type | Management Direction |
|---------------|-------------|-------------------|--------------------|------------------------|---|
| | | Northern pike | Wild | General/Liberal | Provide liberal harvest opportunities to decrease |
| | | | | Regulations | predation on native and recreational fisheries. |
| | | | | | Maintain current angling opportunity and harvest |
| | | | | | level. Do not pass them over Thompson Falls Dam |
| | | All other species | Wild | Drainage standard | Continue to monitor population trends. See |
| | | · | | | drainage wide species management at top of table. |
| McGregor Lake | 1,522 acres | Lake trout | Wild | General | Maintain harvest to support angling opportunity |
| | | | | | while reducing numbers to improve size and |
| | | | | | benefit other put and take fisheries. |
| | | Rainbow trout | Hatchery | Put-Grow-and-Take | Provide harvest and recreational opportunity for |
| | | | , | | occasional 1 – 5 pound rainbows. Continue to boat |
| | | | | | stock year-old trout throughout the lake to |
| | | | | | minimize predation by lake trout. |
| | | Kokanee salmon | Hatchery | Put-Grow-and-Take | Provide harvest and recreational opportunity for occasional salmon up to 15 inches. Identify if continued stocking is warranted based on predatory lake trout population. |
| | | Smallmouth bass | Wild | Suppression | Recent illegal introduction. Provide liberal harvest and if feasible eliminate population to preserve local rainbow trout fishery and protect native crayfish population. |
| | | Crayfish | Wild | Restrictive Regulation | Putative native species. Through special regulation, protect population from overharvest while assessing the impacts of expanding smallmouth bass population. |

| Water | Miles/acres | Species | Recruitment Source | Management Type | Management Direction |
|--|-------------|--|--------------------|-------------------------|---|
| Little McGregor Lake | 33 acres | Rainbow trout | Hatchery | Put-Grow-and-Take | Provide harvest and recreational opportunity for 1+ pound rainbow trout. Identify if stocking is warranted based on competition with stunted yellow perch population. |
| | | Brook trout | Hatchery | Put-Grow-and-Take | Maintain current angling opportunity and harvest level. |
| | | Yellow perch | Wild | Drainage standard | See drainage wide species management at top of table. |
| Main Thompson Chain Lakes: Upper Middle | 294 acres | Northern pike, Yellow perch, Brown trout, Brook trout | Wild | Drainage standard | See drainage wide species management at top of table. |
| Lower | 240 acres | Largemouth bass | Wild | Quality | Maintain current angling opportunity and harvest level. Through regulation, enhance opportunities for trophy sizes and juvenile recruitment. |
| | | Kokanee salmon | Wild / Hatchery | Restrictive Regulations | Maintain current angling opportunity and harvest level. Through regulations, promote protection of naturally reproducing population with opportunity for larger size. |
| | | Rainbow trout | Hatchery | Put-Grow-and-Take | Provide opportunity for occasional large rainbow trout. Continue stocking each lake on a three-year rotation. |
| | | Smallmouth bass, Black crappie | Wild | Suppression | Illegal introductions. Provide liberal harvest and if feasible eliminate population to help protect other recreational fisheries. |
| | | Walleye | Wild | Suppression | Illegal introduction. Mandatory kill and report. |

| Water | Miles/acres | Species | Recruitment Source | Management Type | Management Direction |
|--------------------------------|-------------|----------------------------------|--------------------|---|---|
| Thompson River and tributaries | 380 miles | All species | Wild | Restrictive Regulations | Continue to prohibit bait fishing for anglers over age 14 to reduce hooking mortality. |
| | | Westslope cutthroat trout (N) | Wild | Conservation/ Restrictive Regulations/ Transfer | Continue catch-and-release in regulation in mainstem. Continue to monitor wild populations in tributaries. Transfer up to 1,500 nonhybridized fish into Bear, Shroder and North Fork Murr Creeks into fishless reaches for long-term species conservation through 2024. Investigate potential for additional translocation (see Special Management Issue section). |
| | | Bull trout (N) | Wild | Conservation | Monitor population abundance and distribution. Evaluate experimental downstream transport and fish movement patterns on mainstem and tributary PIT tag arrays. Continue Avista upstream bull trout transport program for fish from below Cabinet Gorge Dam. Seek opportunities to remove encroaching non-native competitors in critical spawning and rearing habitat. Determine if suitable, non-occupied habitat exists where the species could be introduced. Continue to prohibit bait fishing in West Fork Thompson River and Fishtrap Creek drainages to reduce hooking mortality. |
| | | Rainbow trout | Wild | Restrictive Regulations | Continue catch-and-release regulations to provide angling opportunity for larger trout. |
| | | Brown trout | Wild | General/Suppression | Maintain recreational angling and harvest opportunity in mainstem. Investigate potential to suppress brown trout in Big Rock Creek, Fishtrap Creek, West Fork Thompson River and Chippy |

| Water | Miles/acres | Species | Recruitment Source | Management Type | Management Direction |
|---|-------------------|---|----------------------------|---------------------------|---|
| | | Mountain | Wild | Drainage standard | Creek and other tributaries where the species threaten to displace native species (see Special Management section). See drainage wide species management at top of |
| | | whitefish (N), Brook trout, All other species | | | table. |
| Habitat needs and | activities: Suppo | ort work to secure per | petual conservation easem | ent on private timber con | npany lands (i.e., Green Diamond Resource |
| | | _ | | • | pank instability through instream and riparian habitat to address road redundancy issues on mainstem and |
| Little Thompson | 85 miles | Westslope | Wild | General/Conservation/ | Maintain recreational angling and harvest |
| River and tributaries | | cutthroat trout (N) | | Transfer | opportunity. Continue to monitor distribution and status throughout the drainage. Identify habitat restoration projects which may improve water quality and temperature to benefit wild population. Identify populations to translocate and protect from non-native species encroachment. |
| | | Brook trout, Brown trout, Rainbow trout | Wild | General/Suppression | Maintain recreational angling and harvest opportunity. Monitor species distribution and abundance and identify locations and methods to remove or reduce threats to co-occurring westslope cutthroat trout populations. |
| Habitat needs and habitat complexity | | fy leading causes of h | abitat degradation and det | ermine if restoration wou | ld benefit water temperature and quality as well as |
| Fishtrap Creek (Thompson River tributary) | 73 miles | Bull trout (N) | Wild | Conservation | Monitor population abundance and distribution. Seek opportunities to remove encroaching non- native competitors in critical spawning and rearing habitat. Continue to prohibit bait fishing to reduce hooking mortality. Investigate potential for |

| Water | Miles/acres | Species | Recruitment Source | Management Type | Management Direction |
|---|-------------|---|-----------------------------|-------------------------------------|--|
| | | Westslope cutthroat trout (N) | Wild | Conservation/Transfer | downstream transport of juvenile fish to Lake Pend Oreille. Continue to monitor distribution and status throughout the drainage. Identify populations to translocate and protect from non-native species encroachment. Continue to preclude harvest of |
| | | Brown trout, Brook trout, Rainbow trout | Wild | General/Translocate/ Suppression | fish >10 inches. Maintain recreational angling and harvest opportunity. Continue to monitor distribution and status throughout the drainage. Determine ways to prevent advancement into or remove from important bull trout and cutthroat trout spawning and rearing areas. Monitor translocation to Clark Fork River (see Special Management Issue section). |
| | | Mountain whitefish (N), All other species | Wild | Drainage standard | See drainage wide species management at top of table. |
| | | • | gic conditions. Restore hab | • | |
| West Fork Thompson River and tributaries (Thompson River tributary) | 22 miles | Bull trout (N) | Wild | Conservation | Monitor population abundance and distribution. Seek opportunities to remove encroaching non- native competitors in critical spawning and rearing habitat. Continue to prohibit bait fishing to reduce hooking mortality. Investigate potential for downstream transport of juvenile fish to Lake Pend Oreille. |
| | | Westslope cutthroat trout (N) | Wild | Conservation/Transfer | Continue to monitor distribution and status throughout the drainage. Identify populations to translocate and protect from non-native species |

| Water | Miles/acres | Species | Recruitment Source | Management Type | Management Direction |
|-----------------------------------|-------------------|---|-----------------------------|-------------------------------------|--|
| | | Brown trout, Brook trout, Rainbow trout | Wild | General/Translocate/ Suppression | encroachment. Continue to preclude harvest of fish >10 inches. Maintain recreational angling and harvest opportunity. Continue to monitor distribution and status throughout the drainage. Determine ways to prevent advancement into or remove from important bull and cutthroat trout spawning and rearing areas. Monitor translocation to Clark Fork River (see Special Management Issue section). |
| | | Mountain whitefish (N), All other species | Wild | Drainage standard | See drainage wide species management at top of table. |
| Habitat needs and | activities: Asses | s habitat and hydrolo | gic conditions. Restore hab | itat where necessary. | |
| Prospect Creek and tributaries | 129 miles | Bull trout (N) | Wild | Conservation | Continue to monitor populations in Crow Creek, Cooper Gulch and upper mainstem. Continue Avista upstream bull trout transport program for fish from below Cabinet Gorge Dam. Continue capture of stranded fish from ephemeral stream reaches and move to Crow Creek, evaluate success. Assess habitat conditions and look for opportunities for improvement, including upper mainstem highway crossing and lower West Fork Crow Creek connectivity issue. Continue yearlong closure on angling for bull trout. |
| | | Westslope cutthroat trout (N) | Wild | Conservation | Maintain recreational angling and harvest opportunity. Continue to monitor distribution and status throughout the drainage. Continue capture of stranded fish from ephemeral stream reaches and move to lower mainstem. Assess potential for fish passage barrier in ephemeral section of Dry |

| Water | Miles/acres | Species | Recruitment Source | Management Type | Management Direction |
|------------------------------|-------------|---|--------------------|-----------------------------|---|
| | | | | | Creek to protect upstream metapopulation (see Special Management Issue section). |
| | | Brown trout, Brook trout, Rainbow trout | Wild | General/Suppression | Maintain recreational angling and harvest opportunity. Continue to monitor distribution and status throughout the drainage and determine ways to prevent advancement into bull and cutthroat trout spawning and rearing areas. Where feasible reduce/eliminate in upper watershed to meet native species goals. |
| | | Mountain whitefish (N), Cedar sculpin (N), All other species | Wild | Drainage standard | See drainage wide species management at top of table. |
| | | ify potential habitat ro sly conducted habitat | • | rojects. Restore habitat de | egraded by land use, roads, pipelines, and power |
| Graves Creek and tributaries | 19 Miles | Bull trout (N) | Wild | Conservation | Continue to monitor distribution and status throughout the drainage. Continue Avista downstream and upstream bull trout transport program. Investigate feasibility of introducing the species above Graves Creek Falls (see Special Management Issue section). Assess habitat conditions and look for opportunities for improvement. Continue yearlong closure on angling for bull trout. |
| | | Westslope cutthroat trout (N) | Wild | Conservation | Maintain recreational angling and harvest opportunity. Continue to monitor distribution and status throughout the drainage. |

| Water | Miles/acres | Species | Recruitment Source | Management Type | Management Direction |
|---------------------------------|-------------------|---|------------------------------|--------------------------|--|
| | | Brown trout, Brook trout, Rainbow trout | Wild | General/Suppression | Maintain recreational angling and harvest opportunity. Continue to monitor distribution and status throughout the drainage and determine ways to prevent advancement into important bull trout and cutthroat trout spawning and rearing areas. Where feasible reduce/eliminate to meet native species goals. |
| | | Mountain whitefish (N), All other species | Wild | Drainage standard | See drainage wide species management at top of table. |
| Habitat needs and | l activities: Mon | itor drainage for pote | ntial habitat threats and re | storation opportunities. | |
| Vermilion River and tributaries | 84 Miles | Bull trout (N) | Wild | Conservation | Continue to monitor population trends. Continue Avista downstream and upstream bull trout transport program. Evaluate potential to introduced above Vermilion Falls (see Special Management Issue section). Assess habitat conditions and look for opportunities for improvement. Continue yearlong closure on angling for bull trout. |
| | | Westslope cutthroat trout (N) | Wild | Conservation | Maintain recreational angling opportunity. Continue to monitor distribution and status throughout the drainage. |
| | | Brown trout, Brook trout, Rainbow trout | Wild | General/Suppression | Maintain recreational angling and harvest opportunity. Continue to monitor distribution and status throughout the drainage and determine ways to prevent advancement into bull trout and cutthroat trout spawning and rearing areas. Investigate potential to remove brook trout from the upper drainage (see Special Management Issue section). |

| Water | Miles/acres | Species | Recruitment Source | Management Type | Management Direction | | | | | |
|---------------------------|---|---|--------------------|-------------------------|--|--|--|--|--|--|
| | | Mountain whitefish (N), All other species | Wild | Drainage standard | See drainage wide species management at top of table. | | | | | |
| | Habitat needs and activities: Continue to reduce sediment sources by stabilizing stream bank, connectivity river with floodplain, and enhance riparian habitat Focal area for habitat restoration is from China Gorge to Vermilion Falls. | | | | | | | | | |
| Noxon Rapids Reservoir | 7,940 Acres | Bull trout (N), | Wild | Conservation | Continue yearlong closure on angling for bull trout. Educate anglers on fish identification and catchand-release techniques to reduce bycatch mortality. Continue to monitor population trends. Continue Avista trap and haul program to reestablish fish connectivity. Seek opportunities to improve habitat in core areas and to introduce into suitable, unoccupied habitats. | | | | | |
| | | Westslope cutthroat trout (N) | Wild | Conservation | Maintain current angling opportunity. Continue to monitor distribution, abundance, and genetic status. Explore opportunities to translocate local nonhybridized populations into suitable fishless habitat above natural barriers. Where feasible, protect nonhybridized populations and restore genetic integrity to hybridized populations. | | | | | |
| | | Largemouth bass, Smallmouth bass | Wild | Restrictive Regulations | Maintain later spawning time restriction to protect spawning bass. Continue to monitor/permit 2-3 bass tournaments per year. Investigate additional sampling methods as a tool to monitor adults. | | | | | |
| | | Walleye | Wild | Liberal Regulations | Continue to monitor illegal introduction through spring and fall sampling. Maintain "no-limit" regulation for angler harvest. | | | | | |

| Water | Miles/acres | Species | Recruitment Source | Management Type | Management Direction |
|--------------------------------|-----------------|--|------------------------------|---------------------------|--|
| | | Northern pike, Yellow perch, Pumpkinseed, Lake whitefish, Yellow bullhead, Northern pikeminnow (N), Largescale sucker (N), Peamouth (N), all other species | Wild | General | Maintain recreational angling and harvest opportunity. Continue to monitor population trends. Add additional fish species to monitor population dynamics. Investigate potential to use stable isotopic analyses over time to describe food web (see Special Management Issue section). |
| Trout Creek and tributaries | 43 Miles | Bull trout (N) | Wild | Conservation | Continue to monitor population trends. Continue yearlong closure on angling for bull trout. Assess habitat conditions and look for opportunities for improvement. |
| | | Westslope cutthroat trout (N) | Wild | Conservation | Maintain recreational angling and harvest opportunity. Continue to monitor distribution and status throughout the drainage. |
| | | Brown trout, Brook trout, Rainbow trout | Wild | General/Suppression | Maintain recreational angling and harvest opportunity. Continue to monitor distribution and status throughout the drainage and determine ways to prevent advancement into bull trout and cutthroat trout spawning and rearing areas. |
| Habitat needs and | activities: Mon | itor drainage for pote | ntial habitat threats and re | estoration opportunities. | |
| Swamp Creek and tributaries | 19 Miles | Bull trout (N) | Wild | Conservation | Continue to monitor population trends. Continue Avista upstream bull trout transport program. Continue yearlong closure on angling for bull trout. |

| Water | Miles/acres | Species | Recruitment Source | Management Type | Management Direction |
|-------------------|------------------|------------------------|-------------------------------|---------------------------|--|
| | | Westslope | Wild | Conservation | Maintain recreational angling and harvest |
| | | cutthroat trout (N) | | | opportunity. Continue to monitor distribution and |
| | | | | | status throughout the drainage. |
| | | | | | |
| | | Brown trout, | Wild | General/Suppression | Maintain recreational angling and harvest |
| | | Brook trout, | | | opportunity. Continue to monitor distribution and |
| | | Rainbow trout | | | status throughout the drainage and determine |
| | | | | | ways to prevent advancement into bull trout and |
| | | | | | cutthroat trout spawning and rearing areas. |
| Habitat needs and | activities: Moni | itor drainage for pote | ntial habitat threats and re | storation opportunities. | |
| Rock Creek and | 23 Miles | Bull trout (N) | Wild | Conservation | Continue to monitor population trends. Continue |
| tributaries | | | | | Avista upstream bull trout transport program for |
| | | | | | fish from below Cabinet Gorge Dam. Continue |
| | | | | | yearlong closure on angling for bull trout. |
| | | Westslope | Wild | Conservation | Maintain recreational angling and harvest |
| | | cutthroat trout (N) | | | opportunity. Continue to monitor distribution and |
| | | | | | status throughout the drainage. |
| | | Brown trout, | Wild | General/Suppression | Maintain recreational angling and harvest |
| | | Brook trout, | | | opportunity. Continue to monitor distribution and |
| | | Rainbow trout | | | status throughout the drainage and determine |
| | | | | | ways to prevent advancement into bull trout and |
| | | | | | cutthroat trout spawning and rearing areas. |
| Habitat needs and | activities: Moni | tor drainage for poter | ntial habitat threats and res | toration opportunities. W | ork with partners to minimize effects of reduced |
| | | • • | d mines in the headwaters. | | · |
| Cabinet Gorge | 3,200 Acres | Bull trout (N) | Wild | Conservation | Continue yearlong closure on angling for bull trout. |
| Reservoir | | | | | Educate anglers on fish identification and catch- |
| | | | | | and-release techniques to reduce bycatch |
| | | | | | mortality. Continue to monitor population trends. |
| | | | | | Continue Avista trap and haul program to |
| | | | | | reestablish fish connectivity. Seek opportunities to |
| | | | | | |

| Water | Miles/acres | Species | Recruitment Source | Management Type | Management Direction |
|------------|-------------|--|--------------------|-------------------------|--|
| | | Westslope cutthroat trout (N) | Wild | Conservation | improve habitat in core areas and to introduce into suitable, unoccupied habitats. Work with Idaho Fish and Game Department and Avista to continue experimental passage of westslope cutthroat from Lake Pend Oreille-Clark River into Cabinet Gorge Reservoir. Assess the genetic and recreational contribution of cutthroat trout passage over Cabinet Gorge Dam. |
| | | Largemouth bass, Smallmouth bass | Wild | Restrictive Regulations | Maintain recreational angling and harvest opportunity. Maintain later spawning-time restriction to protect spawning bass. |
| | | Northern pike, Yellow perch, Pumpkinseed, Lake whitefish, Yellow bullhead, Northern pikeminnow (N), Largescale sucker (N), Peamouth (N), All other species | Wild | General | Maintain recreational angling and harvest opportunity. Continue to monitor population trends. See drainage wide species management at top of table. |
| Bull River | 106 Miles | Bull trout (N) | Wild | Conservation | Continue to monitor population trends. Continue Avista downstream and upstream bull trout transport program. Continue yearlong closure on angling for bull trout. |
| | | Westslope cutthroat trout (N) | Wild | Conservation | Maintain recreational angling opportunity. Assess the genetic and recreational contribution of cutthroat trout passage over Cabinet Gorge Dam |

| Water | Miles/acres | Species | Recruitment Source | Management Type | Management Direction |
|--|--------------------|---|------------------------------|-----------------------------------|--|
| | | | | | on the Bull River fishery (see Special Management Issue section). |
| Habitat poods and | activities: Conti | Mountain whitefish (N), Brown trout, Brook trout, Rainbow trout, All other species | Wild | General Rull Bivor Watershod Ass | Maintain recreational angling and harvest opportunity. Continue to monitor distribution and status throughout the drainage. Continue to exclude non-native salmonids (rainbow, brown, brook trout) from the East Fork Bull River. |
| potential to impro | | _ | ied nabitat identined in the | Dull River Watershed Ass | essiment. Monitor potential mine impacts. Assess |
| Mountain Lakes- Approximately 25 fish bearing lakes in Cabinet and Bitterroot Mountains | 381 acres total | Westslope cutthroat trout (N) | Wild/ Hatchery | Put-Grow-and-Take/ General | Maintain recreational angling and harvest opportunity. Utilize data collected during 2016 to 2020 monitoring project to adjust stocking rates, assess threats to native species, and determine areas of natural reproduction. Determine one of three potential management/stocking strategies for each lake; put-grow-and-take, natural reproduction, and quality. |
| | | Hybrid trout (mixture of hybrids between westslope cutthroat, Yellowstone cutthroat and/or rainbow trout) | Wild | General/Suppression | Determine lakes where hybrids occur and potential strategies for removal or genetic swamping. Future genetic monitoring of swamping efforts in Snowshoe Lake, Terrace Lake and Cabin Lake. |
| | | Brook trout | Wild | General/Suppression | Work with partners to plan removal of the species from Evans Lake in Prospect Creek drainage. Restock with westslope cutthroat trout (see Special Management Issue section). |

| Water | Miles/acres | Species | Recruitment Source | Management Type | Management Direction |
|--|--------------------------------|---|--------------------|--|---|
| Family Fishing Ponds: Triangle Pond Frog Pond Thompson Park Pond | 15 acres 11 acres 1 acre | Rainbow trout Northern pike, Largemouth bass, Smallmouth bass, Yellow perch, Pumpkinseed, Northern pikeminnow, | Hatchery | Put-Grow-and- Take/General General | Maintain recreational angling and harvest opportunity. Continue to restrict harvest at Thompson Park Pond to one fish by anglers 14 years old and younger, one rod per angler. Maintain harvest to reduce abundance to improve conditions for stocked rainbow trout. |
| Other Clark Fork Tributary Streams | | All other species All | Wild | General | Survey previously unsampled streams to determine the distribution and status of fish. Monitor previously surveyed populations. Determine connection to and contribution to Clark Fork River fisheries. |

Habitat needs and activities: Protect sections of nigh-quality habitat where necessary and restore habitat when beneficial to hative species.