

Bitterroot River drainage

Physical Description

The Bitterroot River is in the southwestern part of the state and originates at the confluence of the East and West Forks of the Bitterroot River near Conner. From here, it flows northward over 80 miles through Ravalli and Missoula counties, draining the 1,891 square-mile basin to Missoula, where it joins the Clark Fork River. The Bitterroot River watershed is topographically diverse with elevations ranging from 10,157 feet at Trapper Peak to 3,209 feet near Missoula. The headwaters of most tributaries originate on the Bitterroot and Lolo National Forests. Additionally, the East Fork of the Bitterroot River begins in the Anaconda-Pintler Wilderness, while many tributaries from the west originate in the Selway-Bitterroot Wilderness.

There are 83 natural lakes and reservoirs in the drainage, totaling 3,070 surface acres. Most natural lakes are mountain lakes in the headwaters of the Anaconda-Pintler and Selway-Bitterroot Wilderness areas. Two large reservoirs in the drainage include Lake Como and Painted Rocks Reservoir. Lake Como supports considerable recreational use including fishing. It also contributes about 3,000 acre-feet of water to the Bitterroot River each year for instream flow. Painted Rocks Reservoir supplies 25,000 acrefeet of water to the Bitterroot River for instream flows (15,000 acre-feet) and irrigation (10,000 acrefeet). Both Lake Como and Painted Rocks Reservoir experience considerable drawdown on an annual basis.

Fisheries Management

The Bitterroot River is a very popular destination for angling and other forms of water-based recreation. The river's outstanding natural resource values and diversity of recreational opportunities, combined with its proximity to Missoula, contribute to its popularity. The Bitterroot River and tributaries are managed as a wild trout fishery, relying on natural reproduction of both native and non-native trout to sustain fish populations.

The Bitterroot River drainage is home to ten native and nine non-native fish species. Native fish species include bull trout, westslope cutthroat trout, mountain whitefish, northern pike minnow, longnose sucker, largescale sucker, longnose dace, redside shiner, peamouth, and Columbia slimy sculpin. Nonnative fish species inhabiting the drainage include rainbow trout, brown trout, brook trout, northern pike, largemouth bass, pumpkinseed, yellow perch, black bullhead, and brook stickleback. Dominant sportfish species vary by location in the drainage. Westslope cutthroat trout are abundant in many headwater tributaries and mountain lakes and are also common in the mainstem Bitterroot River above Hamilton. Rainbow trout, brown trout, and mountain whitefish are common throughout the entire length of the Bitterroot River as well as in the lower reaches of larger tributaries such as the East and West Forks. Brook trout are present in many smaller tributaries to the Bitterroot but are rare in the main river. Like the mainstem Bitterroot River, Lolo Creek, a large tributary to the lower Bitterroot River, is dominated by brown trout and rainbow trout in the lower portion of the drainage, but transitions into brook trout and westslope cutthroat trout populations in most headwater areas. Northern pike, an illegally introduced and highly predatory species, occur in the mainstem Bitterroot River downstream from Hamilton, but are most abundant in reaches downstream of Stevensville. Further information on the impact of this invasive species on trout and native fish in the Bitterroot drainage is needed.

Information is limited on the abundance and life histories of non-game native fishes in the Bitterroot drainage. Efforts are needed to describe these species and monitor trends in abundance and distribution.

Portions of the Bitterroot basin are focus areas for native fish recovery efforts. Genetic data for westslope cutthroat trout upstream of Painted Rocks Reservoir in the upper West Fork indicates that genetic hybridization with rainbow trout and Yellowstone cutthroat trout is rare. This area of the basin is managed as a genetic stronghold for unaltered westslope cutthroat trout. Other stream systems, such as the South Fork of Lolo Creek and Threemile Creek represent smaller isolated strongholds of nonhybridized westslope cutthroat trout. Bull trout are rare in the mainstem of the Bitterroot River. Fluvial (river dwelling) forms exist in the East and West Forks but are uncommon. Adfluvial (lake dwelling) lifeforms exist primarily in Painted Rocks Reservoir in the upper West Fork but can also be found in Burnt Fork Lake. Resident lifeforms exist in many smaller tributary systems throughout the drainage. Skalkaho Creek and the South Fork of Lolo Creek support two of the largest viable bull trout populations in the Bitterroot drainage. Restoration efforts that favor native trout in the Bitterroot River drainage are most effective upstream of Hamilton and in the upper Lolo Creek drainage.

A variety of standard sampling methods are used to monitor the status of fish populations and determine if management initiatives are meeting fisheries goals (see Part I, 1.4.3) or discussion of sampling methods). These efforts are used to monitor fish abundance, assess genetic structure, and track the expansion of non-native fish introductions, as well as to determine the effectiveness of fishing regulation changes or habitat restoration projects. Tributary surveys are conducted as needed from spring through fall, with most sampling occurring July through October. Many long-term sites have been established throughout the drainage and are sampled with varying frequency to assess long-term population status and trends. The mainstem Bitterroot River and lower West Fork are the primary fisheries in drainage. Currently, three long-term sections are monitored for trout abundance on the Bitterroot River, as well as one on the lower West Fork. The reaches vary from 2.9 to 5.0 miles in length. The sections on the Bitterroot River are located near Stevensville, Hamilton, and Darby. The section on the West Fork is located near Conner. Prior to 2019, electrofishing estimates were completed at these sections every four to five years. Currently, sampling frequency has been increased to every other year. Electrofishing surveys on the Bitterroot River and West Fork typically occur in spring and/or fall when flows are relatively low and when water temperatures are less stressful to fish. Spring surveys look at relative abundance of fish species, whereas fall surveys typically focus on abundance estimates for trout. The lake and reservoir sampling program includes periodic monitoring of fisheries at a range of elevations from mountain lakes to larger water bodies near the valley floor. Lake surveys are conducted as needed from spring through fall and are implemented more frequently on lakes that have higher angler use and stocking frequency (e.g., Lake Como). Lake fisheries are generally sampled using experimental gill nets to assess species composition, size structure, and relative abundance.

Angling opportunity is abundant in the Bitterroot drainage. Angling occurs year-round on the Bitterroot River and portions of the upper forks and is most popular from early spring through fall. Opportunities exist for both wade and float angling and while fly fishing is particularly popular, angling with artificial lures and bait, where allowed, also occurs. Lake Como and Painted Rocks Reservoir offer the most accessible lake angling opportunities in the Bitterroot River drainage. Lake Como is stocked annually with rainbow trout and westslope cutthroat trout. Due to the significant drawdowns and low productivity, fishing is only fair in each reservoir. Some mountain lakes are stocked with westslope

cutthroat trout to support angling whereas others have wild populations of cutthroat trout, rainbow trout, or brook trout. Many lakes are not stocked and remain fishless to help conserve other native fauna (e.g., amphibian populations). Unstocked lakes comprise a wide geographic distribution and range of sizes and depths thought to help maintain the natural integrity of native aquatic communities.

The Bitterroot River and West Fork Bitterroot River, below Painted Rocks Dam, are the primary recreational fisheries in the Bitterroot drainage. Together these streams support some of the highest angling pressure recorded in the state and see the most angler days of any river system in FWP Region 2. Annual pressure estimates from statewide angler surveys indicate that the Bitterroot River together with the lower West Fork routinely exceed 100,000 angler days per year (Lindstrom, 2022).

Due to increasing fishing pressure and observed declines in some fish species, harvest regulations became more restrictive in the Bitterroot River and the West Fork beginning around 1990. Native westslope cutthroat trout, which were susceptible to high angling harvest prior to this time, were protected under catch-and-release regulations throughout the Bitterroot River and the upper forks. Rainbow trout harvest opportunity was also eliminated in the lower West Fork and East Fork around 2012 in response to declining populations possibly related to the impacts of whirling disease in the upper Bitterroot drainage. Catch-and-release sections for all trout were established in the upper and lower reaches of the Bitterroot River in 1992. While it appeared that rainbow trout numbers increased in the lower catch-and-release section between Stevensville and Florence as a result of the regulation, no apparent change was detected in the upper section near Darby, and it was eliminated around 2012. Currently, only one catch-and-release section for all trout species exists on the Bitterroot River. This section runs between the Florence Bridge FAS near Florence upstream to the Woodside Bridge FAS near Corvallis. This reach of the river appears to be recruitment limited and sees low flows and warm temperatures during periods of drought. In addition to being catch-and-release for all trout, this reach also limits tackle to artificial lures only. The remainder of the Bitterroot River and lower West Fork are open to the use of bait.

Total trout abundance in the upper Bitterroot River and lower West Fork has generally been increasing over the last three decades (Lindstrom, 2022). Westslope cutthroat trout showed a strong, positive response to river wide harvest restrictions put in place in 1990 but in recent years appear to be on a declining trend (Lindstrom, 2022). Rainbow trout densities were highest in the upper Bitterroot in the early to mid-1990s but declined in the early 2000s related to the discovery of whirling disease in the upper Bitterroot drainage around the same time. Since the initial decline, rainbow trout numbers have been stable or slightly increasing over the last two decades (Lindstrom, 2022). Brown trout in the upper Bitterroot River and lower West Fork have generally been on an increasing trend although recent population estimates obtained from the long-term monitoring sections at Hannon (upper Bitterroot River) and Conner (lower West Fork) indicate populations are down from previous highs (Lindstrom, 2022).

Total trout densities over the last 30 years at the Hamilton and Stevensville sections of the Bitterroot River have been on a stable to slightly increasing trend, respectively (<u>Lindstrom, 2022</u>). Rainbow trout comprise much of the trout community in these reaches and drive total trout density. At both the Hamilton and Stevensville sections, there has been a fair amount of variability in rainbow trout densities over that last three decades (<u>Lindstrom, 2022</u>). The most recent estimates obtained at the Stevensville section in 2020 and 2022, indicate that rainbow trout densities are currently in decline in this reach.

Fishing regulations are catch-and-release for rainbow trout in the Stevensville section where numbers are declining, whereas in the stable population in the Hamilton section, fishing regulations are three rainbow trout with only one over 14-inches. Brown trout occur at both the Hamilton and Stevensville sections in low densities, and populations have been relatively stable since the sections were first established (<u>Lindstrom, 2022</u>). Westslope cutthroat trout are rare in these sections of the Bitterroot River and make up a very small portion of the population (<u>Lindstrom, 2022</u>).

Angling pressure has increased significantly in the Bitterroot drainage since 1989 (<u>Lindstrom, 2022</u>). Total annual fishing pressure on the Bitterroot River and the West Fork increased from 45,227 angler days per year in 1989 to 157,494 angler days per year in 2020 (<u>Lindstrom, 2022</u>). Much of the pressure is focused on the upper Bitterroot River where native westslope cutthroat trout are most abundant and make up a high proportion of the catch. Westslope cutthroat trout are protected from harvest by catchand-release regulations in the mainstem Bitterroot River and the forks.

Westslope cutthroat trout provide a useful index to the overall health of the fishery because they are the most likely to be impacted by angling due to their susceptibility to angling compared to other trout species. In the upper Bitterroot and lower West Fork, westslope cutthroat trout abundance has generally increased while angling pressure has also increased. However, within the last five years at both long-term sites (Bitterroot at Hannon and West Fork at Conner) declining trends in westslope cutthroat trout abundance have been observed. It is possible that this is related to drought conditions that have impacted the region during this time, resulting in depressed recruitment. However, it is also possible that record angling pressure and high catchability of westslope cutthroat trout could be having an impact as well (Lindstrom, 2022). Further evaluation into the impact of high angling pressure and catchand-release related mortality on westslope cutthroat trout is needed.

In general, harvest of trout by anglers in the Bitterroot River and lower West Fork currently appears to be very low. Few anglers report keeping fish from informal surveys. Most of the anglers encountered are using fly fishing gear, with a small percentage using spinning gear with artificial lures. It is uncommon to encounter anglers in the field using bait. Regional creel data from other rivers including the Blackfoot River and Rock Creek have demonstrated a pronounced shift in the recreational fishery from harvest-oriented bait fishing towards artificial lures with little harvest component (Liermann, 2022; Uthe, 2022). The use of spinning tackle has significantly decreased as well, creating a recreational fishery comprised primarily of fly anglers or anglers using both fly and spin tackle. Unpublished creel data from the West Fork of the Bitterroot River collected in conjunction with the 2016 senior thesis of Benjamin Rich suggests the following: "Of my survey participants, 93.6% used fly gear as their primary gear type and of those anglers 71.7% voluntarily used barbless or debarbed hooks. Only anglers from three boats in the survey were primarily using spinning gear (6.4% of total)."

Overall, long-term monitoring of the abundance and size structure of trout in the Bitterroot River and lower West Fork indicate that the current management strategy has been largely compatible with maintaining diverse fishing opportunities, the quality of the fishery and protecting native species. The current level of harvest appears to be very low and is not expected to be significant from a population-level standpoint. However, further investigation regarding encounter rates and cumulative catch-and-release mortality of westslope cutthroat trout is needed to inform management strategies in the upper Bitterroot River and lower West Fork as they continue to experience unprecedented levels of angling

pressure. Ongoing monitoring is essential to assessing population status and trends, especially as angler pressure is expected to continue to increase.

Habitat

The Bitterroot River, particularly downstream of Hamilton, has been subject to dewatering. Prior to the early 1980s, irrigation demands significantly depleted stream flows during midsummer. Based on fisheries studies from the early 1980s and an agreement with local irrigators and the Department of Natural Resources & Conservation, water from Painted Rocks Reservoir on the upper West Fork is released during midsummer to supplement flows in the mainstem of the river. Additionally, a Bitterroot River water commissioner has been appointed each year to manage releases and withdrawals from the river to maintain minimum stream flows targeted at Bell Crossing. The FWP currently has contracts for 15,000 acre-ft of water stored in Painted Rocks Reservoir. This water is generally released between mid-July and the end of September but is dependent on river conditions and water availability. The target minimum flow of 400 cfs at Bell Crossing is typically met during wet years, but not during very dry years. During drought, it is possible for stream flows to drop below 200 cfs. In addition to water stored in Painted Rocks Reservoir, the department also has access to water stored in Lake Como to supplement Bitterroot River flows. In the early 1990s the dam at Lake Como was rehabilitated and raised 3 feet, which increased the capacity of the reservoir. This extra stored water is now released into the Bitterroot River after Labor Day each year.

Many of the tributaries of the Bitterroot River are also subject to midsummer dewatering. Efforts to restore stream flows to these streams have been difficult. Dewatering of tributaries remains one of the most serious issues for the fishery in the Bitterroot River. Rainbow trout and brown trout spawn and rear in the lower ends of many of these tributaries. Native trout typically spawn in higher elevation stream reaches on U.S. Forest Service lands. Tributaries are where many of the trout in the Bitterroot River are hatched and spend their early life before moving to the mainstem to become a part of the fishery.

Water temperature in the Bitterroot River often exceeds 73 F in the lower reaches. During particularly warm summers, fishing restrictions have been implemented until water temperatures drop to more tolerable levels for trout that enhance survival when anglers are fishing.

Homes and agricultural development along the Bitterroot River have led to extensive streambank stabilization. The Bitterroot River migrates laterally for long distances in some years, which endangers or sometimes damages homes and other developments that are near the river. Consequently, about 12.5% of the streambanks on the river have been stabilized, mostly to protect residential development. This is an ongoing issue since streambank stabilization is usually disruptive of recreational uses and alters some of the natural functions and attributes of the river. More stringent regulations in recent years have slowed home-building within the floodplain and have reduced riverfront home construction that impedes natural lateral migration of the river.

Lolo Creek also has been heavily impacted by bank stabilization. Much of the mainstem channel was relocated or altered during the construction of U.S. Highway 12. Recent conservation efforts have focused on tributaries and the upper watershed. In 2010-2021, thousands of acres of corporate timberlands in the upper basin were converted to public ownership (managed by USFS) as part of the

"Montana Legacy Project" and other cooperative, public land acquisitions. These parcels are now the focus of watershed restoration efforts in the basin.

Water quality in the Bitterroot is high with some indication of high nutrient levels in the lower river. Suspended sediment in the river is generally low, except during spring runoff when the river experiences increased turbidity. Montana Department of Environmental Quality classifies the Bitterroot as a B-1 stream, meaning the river should be maintained for activities such as drinking and municipal uses, swimming and recreation, growth and propagation of trout and associated aquatic life, and as an agricultural and industrial water supply.

Special Management Issues

Bitterroot River Instream Flows

The department currently has contracts for 15,000 acre-ft of water stored in Painted Rocks Reservoir and 3,000 acre-ft of water stored in Lake Como. The water is used to supplement late summer flows in the Bitterroot River for fishery conservation. Management of this water requires close coordination with the Bitterroot River water commissioner (Painted Rocks) and the Bitter Root Irrigation District (Lake Como). Painted Rocks water is generally released between mid-July and the end of September but is dependent on river conditions and water availability. Lake Como water is generally released to the river after Labor Day each year. The target minimum flow for the Bitterroot River of 400 cfs at Bell Crossing is typically met during wet years, but not during very dry years. During drought, it is possible for stream flows to drop below 200 cfs. Painted Rocks Dam needs maintenance and FWP will continue to work with DNRC and other interests to develop funding and maintenance strategies.

Woody Debris Task Force

The Woody Debris Task Force was formed by the Bitterroot Conservation District and FWP to better manage woody debris in the Bitterroot River and its tributaries. Wood is abundant in the river and is important for fish habitat as well as river and floodplain function, but also affects float access and public safety. The Task Force consists of members from local, State, and Federal government as well as the outfitting community, non-governmental organizations, and the general public.

High and Mid-elevation Mountain Lake Fishery Monitoring and Evaluations

Monitoring of mountain lakes occurs periodically to assess the status of stocked and self-sustaining fisheries, determine if stocking rates and frequencies are adequate to achieve specific waterbody management goals, and evaluate angler use and preferences. For instance, lakes reliant on natural reproduction are monitored to determine if supplemental stocking is needed and stocking prescriptions at currently planted lakes are evaluated to determine if program adjustments are warranted. Fishless lakes are also monitored to ensure maintenance of natural aquatic communities and to evaluate the suitability of some lakes for establishment of new recreational fisheries. Monitoring and evaluations will continue, and fisheries will be developed if appropriate.

Watershed Restoration in the Lolo Creek Watershed

Over the past decade, a series of public land acquisitions has converted large tracts of former corporate timber lands to public ownership. Tributary streams and watersheds within many of these parcels were heavily impacted by past land management activities, such as road encroachment and excessive sediment inputs. A large restoration program, in conjunction with Federal land managers and private conservation groups, is underway to mitigate these impacts and improve productivity and habitat conditions for wild trout.

Priority Drought Waters

Bitterroot River mainstem and tributary stream reaches traditionally affected by drought restrictions are identified below (Table 2.08-1). Trout populations in these river and tributary reaches have been affected by high water temperatures and low flow levels during drought periods over the past two decades and are likely to be impacted in the future. Classification, criteria, and measurement apply to the entire reach; however, implementation of restrictions may occur in all or parts of a reach depending on specific temperature, flow, and angling pressure at that time. Furthermore, there are times and locations that cutthroat trout and bull trout congregate within a fishery designated as non-native trout, such as when they are seeking cold water refuge in springs or at tributary mouths during warmer months. In these instances, a cutthroat or bull trout criteria may be applied to these areas.

Table 2.08-1: Designated hoot owl reaches where drought related fishing restrictions and closures due to fishing pressure, high water temperatures, and/or low flows are expected to be implemented. Drought related restrictions and closures may also be placed on waterbodies not listed here.

Waterbody	Reach	Classification	Criteria
Lower Bitterroot River	Confluence with Clark Fork River to Veterans Bridge at Hamilton (RM 0.0 to 54.9)	Non-native salmonid fishery	 Daily maximum water temperatures reach or exceed 73°F for three consecutive days or stream levels fall below the 5th percentile of daily mean values for the date. Measurements for relevant criteria will be measured at U.S. Geological Survey (USGS) gage 12352500 near Missoula and site-specific temperature monitoring with portable recorders.
Upper Bitterroot River	Veterans Bridge at Hamilton to the confluence of the East and West Forks (RM 54.9 to 83.0)	Cutthroat trout fishery	 Daily maximum water temperatures reach or exceed 66°F for three consecutive days or stream flow falls below 5th percentile of the daily mean value for the date. Measurements for relevant criteria will be measured at USGS gage 12344000 at Darby and site-specific temperature monitoring with portable recorders.
West Fork Bitterroot River	Confluence with the East Fork to Painted Rocks	Cutthroat trout fishery	Daily maximum water temperatures reach or exceed 66°F for three consecutive days.

	Dam (RM 0 to 22.7)		 Measurement for relevant criteria with site-specific temperature monitoring with portable recorders.
Lower East Fork Bitterroot River	Confluence with the West Fork to Hwy 93 crossing at Sula (RM 0 to 13.8)	Non-native salmonid fishery	 Daily maximum water temperatures reach or exceed 73°F for three consecutive days. Measurement for relevant criteria with site-specific temperature monitoring with portable recorders.
Upper East Fork Bitterroot River	Hwy 93 crossing at Sula to Star Falls (RM 13.8 to 37.9)	Cutthroat trout fishery	 Daily maximum water temperatures reach or exceed 66°F for three consecutive days. Measurement for relevant criteria with site-specific temperature monitoring with portable recorders.
Lower Lolo Creek	Confluence with Bitterroot River to South Fork Lolo Creek (RM 0 to 11.8)	Non-native salmonid fishery	 Daily maximum water temperatures reach or exceed 73°F for three consecutive days. Measurement for relevant criteria with site-specific temperature monitoring with portable recorders.
Upper Lolo Creek	Confluence with South Fork Lolo Creek to headwaters (RM 11.8 to 30.1)	Cutthroat trout fishery	 Daily maximum water temperatures reach or exceed 66°F for three consecutive days. Measurement for relevant criteria with site-specific temperature monitoring with portable recorders.

FISHERIES MANAGEMENT DIRECTION FOR BITTERROOT RIVER DRAINAGE

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
West Fork Bitterroot River and Tributaries above and	655 acres of reservoir and 42 miles of mainstem	Bull trout (N)	Wild	Conservation	Continue year-long closure on angling for bull trout and enhance migratory populations for conservation.
including Painted Rocks Reservoir		Westslope cutthroat trout (N)	Wild	Conservation	Maintain or enhance numbers above present levels for conservation and angling. Manage as a refuge for a strain of genetically unaltered westslope cutthroat trout.
		Brook trout	Wild	General	Maintain liberal harvest regulations to lessen competition and hybridization and help meet native trout goals.
Habitat needs and	activities: Contir	nue to manage connectivity to favo	or native fishes	and support USFS and ot	her partners to address passage issues.
East Fork Bitterroot River and West Fork Bitterroot River below Painted	56 miles	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Continue yearlong closure on angling for bull trout and enhance migratory populations for conservation and westslope cutthroat trout angling.
Rocks Reservoir		Brown trout	Wild	Liberal Regulations	Maintain liberal harvest regulations to allow for opportunity to harvest brown trout and reduce competition with and predation on native trout. Consider management that reduces numbers and distribution if it would improve native trout numbers and westslope cutthroat trout angling opportunities.

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
		Rainbow trout	Wild	Restrictive Regulations	Maintain catch-and-release regulations in attempt to improve fishery while recognizing that whirling disease is likely the primary limiting factor.
Habitat needs and	activities: Contir	nue to manage connectivity to favo	or native fishes	and support USFS and ot	ner partners to address passage issues.
Tributary streams to the East Fork Bitterroot River and West Fork Bitterroot River below Painted Rocks Reservoir	>100 miles	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Enhance migratory and resident populations. Continue year-long closure on angling for bull trout. Consider isolation of westslope cutthroat trout populations if hybridization is a threat and habitat and numbers are sufficient to allow persistence.
		Brown trout, Rainbow trout, Brook trout	Wild	General	Maintain liberal harvest opportunity. In native species strongholds, consider management that reduces numbers and distribution if it would improve native trout numbers and angling opportunities.
Bitterroot River - Confluence of East and West Forks downstream to	30 miles	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Continue year-long closure on angling for bull trout. Enhance fluvial populations of westslope cutthroat trout for conservation and angling.
Blodgett Creek near Hamilton		Rainbow trout, Brown trout	Wild	Restrictive Regulations	Maintain present numbers and sizes. Consider management that reduces numbers and distribution if it would improve native trout numbers and westslope cutthroat trout angling opportunities.

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction			
Rocks Dam and en	Habitat needs and activities: Enhance habitat to favor native trout and whitefish. Continue to work with DNRC to address dam maintenance at Painted Rocks Dam and ensure water to maintain late season river flow. Continue participation in the Woody Debris Task Force. Identify options to screen water diversions to reduce fish entrainment.							
Skalkaho Creek	24 miles	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Enhance numbers of fish. Continue year-long closure on angling for bull trout. Enhance fluvial populations of westslope cutthroat trout for conservation and angling.			
		Rainbow trout, Brown trout, Brook trout	Wild	General	Maintain liberal harvest opportunity. Consider management that reduces numbers and distribution if it would improve native trout numbers and angling opportunities.			
Tributary streams to Bitterroot River (other than Skalkaho Creek) from Confluence of East and West Forks	>100 miles	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Enhance migratory and resident populations. Continue year-long closure on angling for bull trout. Consider isolation of westslope cutthroat trout populations if hybridization is a threat and habitat and numbers are sufficient to allow persistence.			
downstream to Blodgett Creek near Hamilton		Rainbow trout, Brown trout, Brook trout,	Wild	General	Maintain liberal harvest and consider measures that reduce the abundance in reaches protected by a barrier or in reaches considered native species strongholds if it would improve native fish numbers.			
Lake Como	911 acres	Rainbow trout, Westslope cutthroat trout (N)	Hatchery	Put-Grow-and-Take	Provide liberal harvest opportunity			

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
Bitterroot River - Blodgett Creek near Hamilton to confluence with Clark Fork	50 miles	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Continue year-long closure on angling for bull trout and enhance fluvial westslope cutthroat trout populations for conservation and angling.
Clark FOIK		Rainbow trout, Brown trout	Wild	Quality	Manage trout harvest to support quality angling opportunity.
		Northern Pike	Wild	Liberal Regulations	Maintain liberal harvest opportunity. Consider management that reduces numbers and distribution if it would improve trout or native fish numbers and angling opportunities

Habitat needs and activities: Improve habitat to support ecosystem function and production of trout and whitefish. Manage water from Painted Rocks Reservoir to maintain fishery with the goal of 400 cfs to Bell Crossing. Obtain better information on the impact of northern pike on trout fishery and native fish assemblage.

Lolo Creek and tributaries	>100 miles	Bull trout (N), Westslope cutthroat trout (N)	Wild	Conservation	Enhance migratory and resident populations. Continue year-long closure on angling for bull trout and enhance westslope cutthroat trout fishery. Consider isolation of westslope cutthroat trout populations if hybridization is a threat and habitat and numbers are sufficient to allow
		Rainbow trout, Brown trout, Brook trout,	Wild	General	Maintain liberal harvest regulations and consider measures that reduce impacts on native trout species in reaches considered native species

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction	
					strongholds if it would improve native fish numbers.	
natural function ar	Habitat needs and activities: Implement habitat restoration and enhancement program on tributaries to mitigate past land management to improve natural function and enhance production of wild trout and whitefish. Support ongoing road decommissioning and habitat work in East Fork, West Fork, and Granite creeks and expand into other recent USFS acquisitions. Mitigate habitat impacts of Hwy 12 construction where possible.					
Tributary streams To Bitterroot River (other than Lolo Creek) from Blodgett Creek to the confluence with Clark Fork River	>100 miles	Bull trout (N), Westslope cutthroat trout (N) Rainbow trout,	Wild	Conservation	Enhance migratory and resident populations. Continue year-long closure on angling for bull trout. Consider isolation of westslope cutthroat trout populations if hybridization is a threat and habitat and numbers are sufficient to allow persistence. Maintain liberal harvest on and	
		Brown trout, Brook trout			consider measures that reduce the abundance in reaches protected by a barrier or in reaches considered native species strongholds if it would improve native fish numbers. Enhance rainbow and brown trout to provide recruitment to the mainstem if not located in reaches with abundant native trout.	
Hieronymus Pond	3.5 acres	Rainbow trout	Hatchery	Family Fishing Water	Family fishing pond. Facilitate high catch rates and quality opportunity for kids and handicapped.	
		Yellow perch, Largemouth bass, Pumpkinseed	Wild	General	Provide additional family fishing opportunity.	