### **Flathead River Drainage**

# MONTANA FWP



# Flathead River Drainage

#### **Physical Description**

The includes Flathead Lake, the Flathead River and its tributaries, including the North Fork and Middle Fork of the Flathead River (the South Fork of the Flathead River is not included in this management area), the Whitefish River Drainage, the Stillwater River Drainage and the numerous small drainages on the westside of the Flathead Valley, draining over 7,000 square miles. The North Fork of the Flathead River begins in British Columbia, Canada and the Middle Fork in the Great Bear and Bob Marshall Wilderness areas of the Flathead National Forest. Glacier National Park lies between the two forks. Flathead Lake is bisected by the northern boundary of the Flathead Indian Reservation of the Confederated Salish and Kootenai Tribes. This management area is located in Flathead and Lake counties. The Flathead watershed includes 10,000-foot peaks in the headwaters and heavily forested slopes, agricultural lands and wetlands on the valley floor.

There are 183 lakes in the drainage, totaling 156,966 surface acres. Numerous large lakes exist in the drainage, including Flathead Lake, Whitefish Lake, Upper and Lower Stillwater Lakes, Tally Lake, Ashley Lake, Little Bitterroot Lake, Hubbart Reservoir, Lake Mary Ronan, Lake Blaine, and many small valley and mountain lakes of less than 350 surface acres. There are three general types of lake settings that provide a wide diversity of fishing opportunity; high elevation alpine lakes that are ice-free for less than half of the year which provide summer trout fishing; moderate elevation mountain setting lakes that are accessible most of the year and provide a mix of fish species and recreation opportunity; and valley floor lakes that are very accessible and provide opportunity for both warm and coldwater fish species.

#### **Fisheries Management**

Flathead Lake is the most popular fishery in the drainage and ranked at fourteenth for fishing effort in Montana. Flathead Lake is large at about 123,000 surface acres. The lake's outstanding natural resources and diversity of recreational opportunities, combined with its proximity to Kalispell, Polson, and Missoula contribute to its popularity. It is a destination vacation site for out-of-state and foreign visitors.

Flathead Lake and river are managed as a wild trout fishery, emphasizing natural reproduction and native fish. Fishing regulations across the drainage are very restrictive for native species and very liberal for harvest of non-native fish species. The basin is also a focus for native fish recovery efforts. Flathead Lake is home to eleven native fish species including bull trout, westslope cutthroat trout, mountain whitefish, pygmy whitefish, northern pike minnow, peamouth, longnose sucker, largescale sucker, redside shiner, and two species of sculpin. Numerous non-native fish species inhabit the Flathead drainage including lake trout, lake whitefish, brook trout, rainbow trout, northern pike, brook stickleback, black bullhead, largemouth bass, smallmouth bass, black crappie, pumpkinseed sunfish, and yellow perch. Dominant fish species vary from westslope cutthroat trout, bull trout and brook trout in the headwaters, to a mixture of warm and coldwater species at lower elevations. Angling on Flathead Lake occurs year-round and is most popular in the early spring, summer and fall. Lake trout, lake whitefish and yellow perch comprise most of the catch. Winter ice fishing occurs annually on bays as ice conditions allow.

The Flathead River is the most popular stream fishery in the drainage. The mainstem reach on the valley floor upstream of the lake is the most popular section providing summer fishing for westslope cutthroat trout and rainbow trout and a fall run of lake whitefish. The connected sloughs near Flathead Lake provide a mixed fishery primarily for warm water species. The North and Middle forks of the Flathead River provide diverse recreational activities and popular westslope cutthroat trout fishing.

Bull trout in the exhibit two life forms, with adults residing in lake (adfluvial) or river (fluvial) habitats and spawning in upstream tributaries. Juveniles rear in the tributaries for one to three years before migrating to adult habitats downstream. Fish move freely throughout the entire Flathead system, including all major river tributaries and lakes. The one exception is Hungry Horse Dam in the South Fork which cut off about 40% of the Flathead drainage. The dam prevents Flathead Lake bull trout from migrating into the South Fork of the Flathead River. The North and Middle forks provide spawning and rearing habitat for the Flathead Lake and river population. There are other bull trout populations in lakes and tributary systems in the Flathead drainage, including Whitefish Lake, Upper Stillwater Lake, Cyclone and Frozen Lakes, and lakes in Glacier National Park. Fishing for bull trout in the Flathead drainage is not allowed. Major spawning tributaries; Big, Coal, Whale, Trail, Granite, Lodgepole, Morrison, and Long creeks, are also closed to angling. In addition, stream mouth fishing closures are in place on some spawning streams to protect staging, pre-spawn bull trout.

The larger lakes in the area contain mixed non-native recreational fisheries. Ashley Lake, Little Bitterroot Lake and Lake Mary Ronan provide popular kokanee salmon fisheries during both summer and winter months. Lake Mary Ronan is the kokanee egg source for the State hatchery stocking program. Echo Lake and Lake Blaine provide popular largemouth bass fisheries. Apart from Lake Mary Ronan kokanee, these are wild self-sustaining fish populations.

Numerous small mid to high elevation lakes are stocked with westslope cutthroat trout, rainbow trout or Arctic grayling providing popular put-grow-and-take fisheries. These lakes are stocked on a one to four-year rotation to maximize fish growth or catch rates. Lakes with native fish interests nearby are only stocked with westslope cutthroat trout.

The Flathead drainage contains several community fishing ponds that are stocked with catchable sized rainbow and westslope cutthroat trout. These ponds are heavily used by anglers and non-anglers alike and provide a venue for educational events.

#### Habitat

Water quality is very important to Flathead valley residents. Water quality in the Flathead Lake and river system is very good, providing for drinking and municipal uses, swimming and recreation, growth and propagation of fish and associated aquatic life, and as an agricultural and industrial water supply. FWP works to protect high water quality in many ways. FWP provides input to permitting for stream protection laws to minimize aquatic habitat impacts and water degradation associated with human development. Biologists administer over one hundred such permits a year in the Flathead drainage.

In the North Fork of the there are several large coal deposits. Over the last four decades, there has been exploration of mining reserves and attempts to begin open-pit coal mining--activities that threaten water quality in the river and Flathead Lake. A cooperative effort between British Columbia, Montana and numerous government agencies and non-governmental groups resulted in a prohibition to mining in

the North Fork of the Flathead River. This prevents future degradation of water quality and fish habitat from coal mining and other resource development.

The U.S. Forest Service and FWP have completed stream habitat restoration improvements in bull trout spawning and rearing habitat. For example, large trees have been added to several miles of Hallowat and Coal creeks to provide complex habitat to impacted stream reaches. These and other projects have resulted in measured improvements to bull trout and westslope cutthroat trout habitat and population numbers in these streams.

Land acquisitions in the Flathead drainage are designed to protect both terrestrial and aquatic species. Important bull trout and westslope cutthroat trout habitat are on these lands. FWP and partners have completed numerous private land conservation easements along the Flathead River, protecting miles of stream bank and many acres of riparian vegetation. This activity will help protect water quality in the Flathead drainage and important habitat and migratory routes for fish and wildlife.

The Bonneville Power Administration (BPA) is required to mitigate for the construction and operation of Hungry Horse Dam on the South Fork of the Flathead River and accomplishes much of this by funding the FWP mitigation program. For example, FWP, BPA and Bureau of Reclamation, constructed a selective withdrawal structure on Hungry Horse Dam in 1995. This structure pulls water from various depths in the reservoir to release more natural water temperatures to the Flathead River downstream. Before 1995, the dam released cold water from the bottom of the reservoir that significantly reduced stream temperatures in the Flathead River for 49 miles downstream. Restoring natural temperatures improved growth and production conditions for fish and aquatic insects. This group of agencies also implemented a dam water release strategy to mimic the natural river flow regime, which also directly improved aquatic productivity. The dam is now operated to not only provide flood protection and energy production but also maintain temperatures and flows in the river downstream similar to those prior to dam construction.

#### **Special Management Issues**

#### Flathead Lake and River Fisheries Co-Management

The Confederated Salish and Kootenai Tribes (CSKT) and FWP share fisheries management authority on Flathead Lake. The CSKT has jurisdiction over the south half of the lake and FWP manages the north half. The two groups cooperate on fisheries monitoring, management, education, and other resource issues as they arise. Currently, lake trout regulations differ between the north and south half. In the northern waters fish between 30 and 36 inches cannot be harvested and only one fish over 36 inches. No slot limit exists on the south half of the lake. This issue has created confusion among anglers and challenges for enforcement. Both FWP and CSKT have an interest in consistent lake wide regulations.

#### Westslope Cutthroat Trout Hybridization

The greatest threat to genetically unaltered westslope cutthroat trout populations within the interconnected Flathead drainage is hybridization with rainbow trout. Hybrids have shown both increased abundance and distribution in recent decades. Thus, FWP is proactively reducing that threat by manually removing and relocating fish (typically to nearby family fishing ponds such as Pine Grove

pond near Kalispell) in order to reduce key sources of spread, and replacing hybridized populations with nearby cutthroat trout sources, as well as investigating opportunities for fish barrier construction to isolate and protect unaltered cutthroat trout populations. Hybrid cutthroat trout and rainbow trout will be captured by electrofishing from the mouths Abbot, Ivy, Sekokini, Rabe, and Third creeks. Trapping will be used at Abbot, Ivy, and Rabe creeks to remove and relocate hybrid cutthroat trout and rainbow trout. Potential waterbodies to use piscicides to replace hybridized populations with nearby cutthroat trout sources include Chain Lakes, Marion Lake, Tranquil Basin Lakes, and McGuiness creek. Fish passage barriers to protect cutthroat trout populations may be constructed on Moose Creek and possibly Hay Creek. See the Fisheries Management Direction table for further explanation.

#### Illegal Fish Introductions

Illegal fish introductions are a continuing problem in Montana with more than half of the documented 600+ introductions occurring in northwest Montana. Illegal introductions impact both native and recreational fisheries, reduce fishing opportunity, and increase management costs. As a disincentive to further illegal introductions, fishery managers will look to potential alternatives such as prohibiting harvest on illegally stocked species, or not provide management such as fishing limits on game fish such as pike, bass, and walleye in selected waters, depending on the situation and species involved.

Lake Mary Ronan: In June 2014 an angler on Lake Mary Ronan reported catching an 18-inch northern pike on the south side of the lake. In response, FWP changed fishing regulations to require anglers to kill and submit any northern pike caught in the lake and modified regulations to allow for spear fishing. Since the initial report, FWP has confirmed that northern pike are established and the population is increasing. Habitat in Lake Mary Ronan is favorable to northern pike with a maximum depth of 48 feet and abundant aquatic plants. Two species, kokanee salmon and rainbow trout, are likely to be impacted by expanding populations of northern pike. Both are popular fisheries among anglers and these kokanee salmon are also the sole brood source for hatchery reared kokanee salmon. Each year approximately 2.5 million fertilized eggs are collected and reared in local hatcheries. The potential loss of this brood stock has prompted FWP to investigate back up sources. This resulted in disease and abundance surveys at Little Bitterroot Lake and Ashley Lake in 2022.

<u>Shady Lane Pond</u>: In the fall of 2020 northern pike were reported in Shady Lane pond, a 3.5-acre community fishing pond in Evergreen. In the spring of 2021 four pike estimated to be age 1 were observed in the pond indicating that successful reproduction had likely occurred the previous year. Stocked, catchable size rainbow trout and westslope cutthroat trout are very vulnerable to northern pike predation. Predation rates can be very high and moderate densities of northern pike would likely impact catch rates of trout. Currently northern pike abundance is low and trout fishing does not seem to be impacted. FWP will continue to monitor northern pike and rainbow trout abundance to determine impacts of this illegally introduced species. Suppression efforts of northern pike will be pursued if current harvest is not sufficient to suppress the population.

#### **Priority Drought Waters**

Flathead River (North Fork, Middle Fork) and tributary stream reaches contain both westslope cutthroat and bull trout populations that can be affected by drought and restrictions are identified below (Table 2.04-1). Trout populations in these river and tributary reaches were affected by high water temperatures and low flow levels during a historic drought period in 2023 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. Additionally, there are times and locations that bull trout congregate within a fishery designated as westslope cutthroat trout, such as when they are seeking cold water refuge in springs or at tributary mouths during warmer months. In these instances, bull trout criteria may be applied to these areas.

Table 2.04-1: 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
North Fork Flathead River	Canadian Border to Confluence with Middle Fork Flathead River (RM 216.8 to 158.4)	Bull Trout fishery Westslope Cutthroat Trout fishery	<ul> <li>Daily maximum water temperatures reach or exceed 60°F for 3 consecutive days or stream flow falls below 5<sup>th</sup> percentile of the daily mean value for the date.</li> <li>Measurements for relevant flow and temperature criteria will be measured at USGS gauge 12355500 near Columbia Falls MT</li> <li>Angling restrictions would likely include, but are not limited to, closures around the creek mouths on bull trout spawning tributaries (Big Creek, Coal Creek, Red Meadow Creek, Whale Creek, and Trail Creek)</li> <li>Daily maximum water temperatures reach or exceed 66°F for 3 consecutive days or stream flow falls below 5<sup>th</sup> percentile of the daily mean value for the date.</li> <li>Measurements for relevant flow and temperature criteria will be measured at USGS gauge 12355500 near Columbia Falls MT</li> </ul>
Middle Fork Flathead River	Confluence with Bear Creek to Confluence with South Fork Flathead River	Bull Trout fishery	<ul> <li>Daily maximum water temperatures reach or exceed 60°F for 3 consecutive days or stream flow falls below 5<sup>th</sup> percentile of the daily mean value for the date.</li> </ul>

	(RM 45.3 to 0.0)	Westslope Cutthroat Trout fishery	<ul> <li>Measurements for relevant criteria will be measured at USGS gauge 12358500 near West Glacier, MT and site-specific temperature monitoring with portable recorders.</li> <li>Angling restrictions would likely include, but are not limited to, closures around the creek mouths on bull trout spawning tributaries (Nyack Creek, Park Creek, Ole Creek, Bear Creek, Charlie Creek, Long Creek, Granite Creek, Morrison Creek, Schafer Creek, Clack Creek, Bowl Creek, and Strawberry Creek)</li> <li>Daily maximum water temperatures reach or exceed 66°F for 3 consecutive days or stream flow falls below 5<sup>th</sup> percentile of the daily mean value for the date.</li> <li>Measurements for relevant criteria will be measured at USGS gauge 12358500 near West Glacier, MT and site-specific temperature monitoring with portable</li> </ul>
			temperature monitoring with portable recorders.
Flathead River	Confluence of Middle Fork and South Fork Rivers to Pressentine FAS (RM 148.7 to 137.0)	Westslope Cutthroat Trout fishery	<ul> <li>Daily maximum water temperatures reach or exceed 66°F for 3 consecutive days or stream flow falls below 5<sup>th</sup> percentile of the daily mean value for the date.</li> <li>Measurements for relevant flow and temperature criteria will be measured at USGS gauge 12363000 near Columbia Falls, MT.</li> </ul>

## FISHERIES MANAGEMENT DIRECTION FOR FLATHEAD RIVER DRAINAGE

Water	Miles/acres	Species	Recruitment	Management Type	Management Direction
			Source		
Flathead River - Headwaters downstream to confluence with Flathead Lake	198 miles	Bull trout (N)	Wild	Conservation	Continue yearlong angling closures for all fish on primary bull trout spawning streams and closure on angling for bull trout in the Flathead River and North and Middle Forks.
including the North and Middle Forks, and Sloughs.		Westslope cutthroat trout (N)	Wild	Conservation	Eliminate harvest and maintain or expand populations for conservation and catch and release westslope cutthroat trout angling. Consider isolation of westslope cutthroat trout populations if hybridization is a threat and habitat is sufficient to allow persistence.
		Mountain whitefish (N)	Wild	General	Maintain current abundance. Continue to monitor population size and trend.
		Lake whitefish, Northern pike, Yellow perch, Lake trout, Brook trout, Rainbow trout, Black crappie	Wild	General/ Suppression	Provide angling harvest opportunity to reduce numbers to help meet native species goals. Investigate removal of rainbow-cutthroat trout hybrids and rainbow trout to reduce future hybridization.
Moose Creek Hay Creek	70 miles	Westslope cutthroat trout	Wild	Conservation	Fish passage barrier construction to protect upstream cutthroat trout populations. See Barriers folder in appendix.
Abbot Creek Ivy Creek Sekokini Springs	¾ mile of total	Westslope cutthroat trout x Rainbow trout hybrids	Wild	Suppression	Remove hybrid and rainbow trout and relocate to a local community fishing pond, as is feasible.

Water	Miles/acres	Species	Recruitment	Management Type	Management Direction		
			Source				
Rabe Creek	impacted						
Тпіга Стеек	stream						
Chain Lakes	8 030 ac/ft	Westslone cutthroat trout x	Wild	Suppression	Eliminate hybrid trout with niscicides		
Marion Lake	0,000 00,10	Rainbow trout hybrids	VVIIG	Suppression			
Tranquil Basin							
Lakes							
McGuiness creek							
Habitat needs and	activities: Resto	re habitat to favor native bull tro	ut, westslope cut	throat trout, and mountai	in whitefish in headwater stream reaches.		
Stillwater River,	75 miles,	Bull trout (N)	Wild	Conservation	Continue yearlong closure on angling for bull		
Ashley Creek and	47 miles plus				trout.		
Tributaries,	tributaries,						
Whitefish River	23 miles	Westslope cutthroat trout (N)	Wild	Conservation/	Maintain or expand populations of westslope		
				General	cutthroat trout. Consider isolation of		
					populations if hybridization is a threat and		
					habitat is sufficient to allow persistence.		
					Provide angling opportunity including harvest		
					for westslope cutthroat trout where possible.		
		Rainbow trout.	Wild	General	Maintain current levels of angling harvest.		
		Brook trout,					
		Northern pike					
		Mountain whitefish (N)	Wild	General	Maintain numbers. Begin to understand		
					population size and trend.		
Habitat needs and activities: Continue to manage connectivity to favor native fishes.							
Whitefish Lake,	3,315 acres,	Bull trout (N)	Wild	Conservation	Continue yearlong closure on angling for bull		
Tally Lake,	1,211 acres,				trout.		
Upper Stillwater	592 acres,						
Lake,		Westslope cutthroat trout	Wild	General	Maintain or expand populations of westslope		
Lower Stillwater	252 acres				cutthroat trout. Provide angling opportunity		
Lake							

Water	Miles/acres	Species	Recruitment	Management Type	Management Direction
			Source		
		Lake trout, Northern pike, Yellow perch, Rainbow trout, Lake whitefish	Wild	General/ Restrictive Regulations	including harvest for westslope cutthroat trout where possible. Provide angling harvest opportunity.
Little Bitterroot Lake, Ashley Lake	2,970 acres 2,850 acres	Kokanee salmon	Wild	General/ Liberal Regulations	Evaluate harvest limits to increase the average size at harvest without noticeably reducing catch rates in Ashley Lake. Maintain Little Bitterroot Lake and Ashley Lake as backup brood sources.
		Rainbow trout, Rainbow x cutthroat trout hybrid, Westslope cutthroat trout (N)	Hatchery/ Wild	Put-Grow-and-Take/ Quality	Evaluate stocking and/or harvest limits to produce trophy size fish and improved angler catch rates. Continue stocking triploid Gerrard rainbow trout in Little Bitterroot Lake to produce a trophy fishery. Continue hybrid trout hatchery stocking on Ashley Lake to increase abundance.
		Yellow perch	Wild	General	Provide angling harvest opportunity
Small valley floor lakes	Each less than 350 acres	Largemouth bass, Yellow perch, Northern pike	Wild	General	Provide angling harvest opportunity.
		Westslope cutthroat trout (N), Rainbow trout, Brook trout, Arctic grayling	Hatchery/ Wild	General/ Put-Grow-and-Take	Evaluate stocking and/or harvest limits to optimize angler catch rate.

Water	Miles/acres	Species	Recruitment	Management Type	Management Direction
			Source		
Small mountain lakes	Each less than 350 acres	Westslope cutthroat trout (N), Rainbow trout, Brook trout, Arctic grayling	Hatchery/ Wild	Put-Grow-and-Take/ General	Stock at a basic rate of 100 westslope cutthroat trout fingerlings every 3 years. Adjust stocking rates based on natural reproduction and fishing pressure to provide a range of fish sizes and catch rates. Replace non-native fish with westslope cutthroat trout when they threaten downstream native fish populations. Potential lakes for restoration include Chain Lakes, Marion Lake, Tranquil Basin Lakes. Leave some Lakes intentionally fishless.
Family Fishing Ponds - Pine Grove, Shady Lane, Dry Bridge, Buffalohead,	Each less than 5 acres	Westslope cutthroat trout (N), Rainbow trout Northern Pike	Hatchery	Put-and-Take/ Family Fishing Water	Provide angling harvest opportunity for youths and fishing opportunities for families and beginning anglers emphasizing high catch rates and safe, convenient access to urban areas.
Rivers Edge Pond			Wild	Suppression	Evaluate illegally introduced northern pike in Shady Lane Pond and suppress or eradicate the population if necessary to maintain trout angling.
Flathead Lake	123,000 acres	Bull trout (N)	Wild	Conservation	Continue yearlong closure on angling for bull trout.
		Westslope cutthroat trout (N)	Wild	Conservation	Eliminate harvest and maintain or expand populations for conservation and catch-and- release cutthroat trout angling.
		Lake whitefish, Northern pike, Yellow perch, Lake trout,	Wild	General/ Suppression	Provide angling harvest opportunity to reduce numbers to help meet native species goals. Coordinate with CSKT on lake management.

Water	Miles/acres	Species	Recruitment Source	Management Type	Management Direction
		Rainbow trout			
Habitat needs and	activities: Conti	nue to work with CSKT to address	s fisheries manage	ement and resource issue	s for Flathead Lake.
Lake Mary Ronan, Hubbart	1,513 acres,	Westslope cutthroat trout (N), Rainbow trout	Hatchery	Put, Grow and Take	Evaluate stocking and/or harvest limits to improve angler catch rate.
Reservoir		Northern Pike	Wild	Suppression	Provide angling harvest opportunity to reduce numbers to help meet management goals. Evaluate additional management tools if salmonid populations are negatively impacted.
		Kokanee salmon	Hatchery	Put-Grow-and-Take/ Restrictive Regulations	Evaluate stocking and/or harvest limits to optimize size of fish and angler catch rate. Maintain wild brood population in Lake Mary Ronan to provide kokanee salmon for Montana waters.
		Yellow perch	Wild	General	Provide angling harvest opportunity and reduce impacts on other game fish.