



## **BLACKFOOT RIVER DRAINAGE**

### **PHYSICAL DESCRIPTION**

The Blackfoot River begins at the junction of Beartrap and Anaconda Creeks, located near the Continental Divide between Rogers Pass and Flesher Pass. From its headwaters, the river flows westward for 132 miles through Lewis and Clark, Powell, and Missoula Counties, draining a 2,290 square mile basin to Bonner, where it joins the Clark Fork River. The Blackfoot watershed includes 9,000-foot peaks in the headwaters, flows through heavily forested slopes, montane foothills before entering rangelands and prairie pothole topography on the valley floor. Major tributary drainages include the North Fork of the Blackfoot River and Clearwater River. The North Fork begins in the Scapegoat Wilderness, flowing much of its length through a glaciated mountain valley and a steep confined canyon within the USFS boundary. As it enters the floor of the Blackfoot valley, the North Fork flows through a more agricultural setting, bordered by private land, before entering the Blackfoot River at river-mile 54. The Clearwater watershed is comprised of a peripheral network of forested freestone, coldwater streams which lie primarily on public lands and enter an interconnected chain of glacial lakes on the valley floor. Land ownership is mixed along the valley floor, with private lands concentrated near the town of Seeley Lake.

There are 59 natural lakes totaling 5,720 acres and one large reservoir of 350 acres within the Blackfoot Drainage. Most natural lakes are mid- and high elevation “mountain” lakes that lie in remnant glacial cirques and troughs within public land holdings in backcountry settings. However, many of the larger natural lakes make up the Clearwater River chain and glacial potholes in the Ovando area. Large natural lakes include Salmon, Placid, Seeley, Alva, Inez, Rainy, Browns and Upsata Lakes. All of the larger valley floor lakes receive considerable angling pressure as well as other recreational activities. The only major reservoir is Nevada Reservoir near Helmville, which is managed primarily for irrigation purposes. Nevada Reservoir experiences considerable drawdown during dry years.

### **FISHERIES MANAGEMENT**

Located in the west-central part of the state, the Blackfoot River is one of twelve renowned “Blue Ribbon” rivers in Montana with an instream flow (Murphy) water right and is one of Montana’s most popular rivers for recreation. The river’s outstanding natural resources and diversity of recreational opportunities, combined with its proximity to Missoula, contribute to its popularity. The Clearwater River watershed is the largest tributary to the Blackfoot River in terms of drainage area and is often treated as a separate system with its own unique natural resource values.

The Blackfoot River is managed as a wild trout fishery, emphasizing natural reproduction of free-ranging and naturalized nonnative trout. The basin is also a focus for native trout recovery efforts. The Blackfoot River basin is home to eleven native fish species including bull trout, westslope cutthroat trout, mountain whitefish, pygmy whitefish, peamouth, northern pikeminnow, longnose dace, redbside shiner, longnose and largescale suckers, and two species of sculpin. Fourteen nonnative fish species inhabit the Blackfoot Basin including brown trout, brook trout, rainbow trout, Yellowstone cutthroat trout, Arctic grayling, kokanee salmon, northern pike, fathead minnow, brook stickleback, central mudminnow, pumpkinseed,

largemouth bass, yellow perch and white sucker. Dominant fish species and species composition vary greatly among headwater reaches, lakes and mainstem river sections. During the last 20 years westslope cutthroat trout have increased from <3% of the trout community to over one-third of the mainstem river trout community. Much of this increase has occurred since 1990, when basin-wide catch-and-release regulations were instituted and major aquatic restoration activities began. Information is lacking on the abundance and life histories of non-game native fishes. Efforts are needed to describe these and monitor trends.

Bull trout are found throughout the drainage, and particularly within the larger, coldest stream systems. Migratory bull trout move freely throughout the entire Blackfoot mainstem and rely on the larger colder tributaries including the North Fork Blackfoot, Monture and Copper Creeks for reproduction and rearing. Similarly, adfluvial (lake-dwelling) bull trout occupy the chain of lakes in the Clearwater system and spawn in tributaries such as Morrell Creek and East and West forks of the Clearwater River. Juvenile bull trout also occupy many of the smaller, colder tributaries throughout the Blackfoot drainage, where these streams are connected to larger bull trout strongholds. Both westslope cutthroat trout and bull trout have been the focus of basin-wide protection and restoration activities for over 20 years. Protection activities include special fishing regulations (e.g., stream mouth closures, gear restrictions), as well as public land acquisitions and conservation easements in native trout habitat. Restoration projects, such as instream improvements, fish passage enhancements, fish screening, and water leases have been undertaken throughout the basin in order to help recover bull trout, westslope cutthroat trout and other species. This work has occurred on both private and public land.

Angling occurs year-round on the Blackfoot River, but is most popular in the early spring, summer and fall. Opportunities exist for both wade and float angling and while fly-fishing is particularly popular, artificial lures and bait fishing are also common. Angling restrictions and habitat improvement have significantly improved native trout numbers in the Blackfoot basin. Long-term studies show native trout recovery has been most effective in the mid- to upper Blackfoot basin upstream of the Clearwater River. Because of this, habitat improvements in the Blackfoot River drainage below the Clearwater River should emphasize ecosystem function for all salmonids, including bull trout in streams like Gold and Belmont creeks. Native salmonids in the lower Blackfoot basin should be protected, or enhanced where possible.

Natural lakes in the Clearwater Valley offer diverse fishing opportunities and strongholds for native fish. Upper drainage lakes, including Clearwater, Rainy, Alva, Marshall, and Inez, support coldwater fisheries for westslope cutthroat trout, kokanee, and whitefish. Although brown trout, brook trout and small populations of warmwater fish are also present in these waters, management emphasizes native trout and kokanee. Lower drainage lakes in the Clearwater chain (Seeley, Placid and Salmon Lakes) provide mixed fisheries. Although illegally introduced northern pike are abundant in Seeley and Salmon lakes, these lakes still provide viable salmonid fisheries and important habitat for migratory bull trout populations. Placid Lake, the warmest and most productive lake in the area, supports nonnative salmonids, largemouth bass and yellow perch fisheries. Bull trout in Placid Lake are not present or are in extremely low numbers.

Lowland lakes such as Harpers, Upsata, Coopers and Browns Lake also provide valuable recreational fisheries. Harpers and Browns Lakes are stocked annually with rainbow trout and both support heavily used put-and-grow fisheries. Rainbow trout in Browns Lake exhibit outstanding growth and this lake supports one of the few trophy rainbow trout fisheries in the

region. Upstata Lake is prone to periodic fish kills and is managed as a warmwater bass fishery partially supported by the stocking of largemouth bass. Coopers Lake is a low elevation oligotrophic lake managed as a put-and-grow cutthroat trout fishery.

Mountain lakes largely support self-sustaining trout populations or are stocked with westslope cutthroat trout in some instances. An exception is Heart Lake, which is stocked with both Arctic grayling and westslope cutthroat trout. Several lakes in the backcountry support self-sustaining, naturalized rainbow trout and these include Parker, Twin, Otatsy and Camp Lakes. Canyon Lake, located in the upper North Fork drainage, supports genetically pure adfluvial native westslope cutthroat trout. Several high elevation lakes, as well as glacial potholes on the Blackfoot valley floor are managed as fishless and thereby emphasize the conservation of other native species (e.g., amphibians).

## **HABITAT**

The Blackfoot River Basin has a long history of habitat protection, river restoration and riparian habitat conservation emphasizing native fish. These activities occur basin-wide and typically focus on altered tributary streams. To date, riparian habitat improvements have occurred on more than 50 tributaries. Projects typically involve livestock management changes, fish passage enhancement, augmenting instream flows, screening irrigation ditches and planting riparian vegetation. These types of activities usually involve cooperating private landowners, conservation groups (e.g., Trout Unlimited) and natural resource agencies.

The Blackfoot River basin contains about 165 miles of dewatered stream on 46 tributaries, most of which is the result of irrigation. A drought plan was developed for the Blackfoot River beginning in 2000 to help offset low-flow impacts to fisheries. This plan calls for angler restrictions and river closures in the summer when flows drop below 700 cfs at Bonner, which corresponds with FWP's 1973 Murphy Water right. If junior water users have a cooperative and effective water conservation plan, their junior water right is not subject to call.

Recent and ongoing land acquisitions and conservation easements have been completed throughout the Blackfoot drainage. The most recent acquisition and easement actives are part of the "Montana Working Forests Project", which includes large transfers of former Plum Creek Land to conservation-minded private landowners, FWP and other natural resource agencies. Two recent examples include the North Chamberlain Project and the Marshall Creek Wildlife Management Area, both of which are specifically designed to protect both fish and wildlife species. In addition, prior conservation easements have been placed on private lands throughout the Blackfoot valley in areas that support critical bull and westslope cutthroat trout habitat. These easements focus on the Ovando Valley but are expanding into the Nevada, Clearwater and Lincoln valleys as well. As of 2012, over 125,000 acres of private land are protected from development pressure under perpetual conservation easements. Where possible, FWP will continue to promote landscape protections in native fish habitat.

Low flows can limit floating opportunities above the confluence of the mainstem and North Fork during certain times of the year. Below the confluence, opportunities for float recreation are available most of the year during normal flows.

The Montana Department of Environmental Quality classifies the Blackfoot 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.

Water quality in the Blackfoot watershed is generally high with only slight or no impairment. However, lower Nevada Creek (located in the middle basin) and the Mike Horse Mine area (located in the very headwaters of the Blackfoot River) are exceptions. Nevada Creek is prone to dewatering and water quality problems due to intensive agricultural activities. The Mike Horse area is contaminated by elevated metals concentrations due to the release of mine wastes from the adits and tailings and the 1974 failure of the Mike Horse tailing dam, which further contaminated the upper Blackfoot River with toxic waste. Water quality degradation is also a concern in the Clearwater chain-of-lakes area due to human development and intensive land use. Elevated nutrient levels and eutrophication are a concern in Seeley, Salmon and Placid Lakes at the lower end of the system where impacts of human use are magnified.

### **FISHING ACCESS**

There are more than 30 publicly owned or managed access sites along the Blackfoot River and numerous others at lakes and streams across the watershed. Some access sites are located near local communities and, in addition to river or lake access, provide convenient land-based recreation opportunities. Public access sites on lakes are largely managed by either FWP or the USFS, depending on land ownership. Within the Blackfoot River Recreation Corridor (27 miles from Russell Gates FAS to Johnsrud Park FAS), the public is allowed to access the lower Blackfoot River via private land (up to 50 ft above the ordinary high water mark) through a cooperative agreement with private landowners. This access agreement supplements existing public access sites within the corridor. FWP also manages BLM sites along the Blackfoot River through a cooperative management agreement. The FAS program also must consider how location, development and use of access sites affect recreational use on the water and the social experience under guidance from the Blackfoot River Recreation Management Plan of 2010. Another priority is to pursue opportunities for extended float trips using existing access sites for boat camps.

### **SPECIAL MANAGEMENT ISSUES**

#### *Social Conflicts on the Blackfoot River*

A recreation management plan was developed for the Blackfoot River in 2010 for the purpose of addressing social conflicts on the river and at access sites. The plan guides management of conflicts between user groups, congestion on the water and at access sites, littering and other resource impacts associated with high concentrations and volume of use, and behavior of users.

## FISHERIES MANAGEMENT DIRECTION FOR BLACKFOOT RIVER DRAINAGE

Water	Miles/acres	Species	Origin	Management Type	Management Direction
Blackfoot River and Tributaries (Headwaters Downstream to Confluence with Clearwater River)	90 miles of mainstem and Connected Tributaries	Bull trout, Westslope cutthroat trout	Wild	Conservation/ Special Regulations	Continue to manage for no harvest of riverine populations of native trout and manage for a high quality WCT angling opportunity. Consider isolation of WCT populations only if hybridization or competitive displacement clearly threatens the persistence of local populations.
		Rainbow trout, Brown trout	Wild	Special Regulations	Allow liberal harvest. Consider management that reduces numbers and distribution if it would improve native trout numbers and WCT angling opportunities.
		Other introduced game fish (e.g., Yellow perch, Northern pike, Brook trout)	Wild	General/ Special Regulations	Manage for liberal harvest and contain distribution where possible.
Critical habitat needs: Clean-up of Mike Horse Mine area in headwaters of the Blackfoot River. Restore habitat to favor native salmonids based on established native trout priority streams.					
Nevada Reservoir	350 acres	Westslope cutthroat trout	Hatchery	Put-Grow-Take/ Quality	Manage for high catch rates and quality-sized fish
		Yellow perch	Wild	General	Liberalize harvest and contain distribution
Coopers Lake	200 acres	Westslope cutthroat trout	Hatchery	Put-Grow-Take/ Quality	Manage for high catch rates and quality sized fish.
Browns Lake	530 acres	Rainbow trout	Hatchery	Put-Grow-Take	Manage for trophy rainbow trout and quality harvest opportunities with high catch rates

Water	Miles/acres	Species	Origin	Management Type	Management Direction
North Fork Blackfoot River, Monture and Copper/Landers Fork Drainages	70 miles	Bull trout, Westslope cutthroat trout	Wild	Conservation/ Special Regulations	Continue closure for intentional angling of bull trout and enhancement of angling opportunity for WCT. Consider reintroductions of native WCT in the streams and lakes in the Wilderness area of the North Fork upstream of the North Fork Falls. Consider converting Yellowstone cutthroat trout to westslope cutthroat trout in Big Horn Lake in the Landers Fork drainage.
		Brown trout	Wild	Special regulations	Maintain liberal harvest opportunity to reduce expansion and impacts on other trout. Consider management that reduces numbers and distribution if it would improve native trout numbers and angling opportunities.
		Rainbow trout	Wild	Special regulations	Maintain numbers at present levels.
Lake Upsata	91 acres	Largemouth bass	Hatchery	Quality	Provide for a high quality largemouth bass angling though stocking and restrictive regulations.
Clearwater River and Tributaries	50 miles	Bull trout, Westslope cutthroat trout	Wild	Conservation/Special Regulations	Conserve and enhance migratory and stream-resident populations. Continue protective regulations to prohibit bull trout harvest and limit WCT harvest.
		Brown trout Brook trout	Wild	Special Regulations	Provide liberal harvest opportunities. Consider management that reduces numbers and distribution if it would improve native trout numbers and WCT angling opportunities.
		Kokanee salmon	Hatchery/ Wild	General	Manage for quality harvest opportunities with high catch rates; evaluate relative contribution of wild & stocked fish
		Yellow perch, Largemouth bass, Northern pike, Pumpkinseed	Wild	General/ Special regulations	Provide liberal harvest opportunity and reduce numbers where possible to reduce competition with and predation on trout and salmon.
Continued on next page					

Water	Miles/acres	Species	Origin	Management Type	Management Direction
Habitat needs and activities: continue to manage connectivity to benefit native fishes. Improve quality of tributary habitat.					
Clearwater, Rainy, Alva, Marshall and Inez Lakes	878 acres	Bull trout	Wild	Conservation	Conserve and enhance migratory populations. Continue protective regulations to prohibit angler harvest.
		Westslope cutthroat trout	Wild	Put-Grow-Take/ Quality	Manage for quality sized fish and high catch rates. Evaluate relative contributions of wild and stocked fish; evaluate performance and feasibility of sterile stocked fish.
		Kokanee salmon	Wild/ Hatchery	Put-Grow-Take/ Special Regulations	Evaluate stocking to optimize number stocked, size of fish, and catch rates; evaluate relative contribution of wild & stocked fish.
		Brook trout, Brown trout	Wild	General	Provide liberal harvest opportunity and reduce numbers where possible to reduce predation on and competition and hybridization with native trout.
		Yellow perch, Largemouth bass, Pumpkinseed	Wild	General/ Special Regulations	Provide liberal harvest opportunity and reduce numbers where possible to reduce competition with and predation on trout and salmon.
		Northern pike	Wild	Special Regulations/ Suppression	Emphasize harvest to reduce predation on trout; derbies are required to harvest fish. Explore other harvest means such as angler incentives and commercial methods that would need legislative approval.
Seeley Lake and Salmon Lakes	1,707 acres	Westslope cutthroat trout	Hatchery/ Wild	Put-Grow-Take	Evaluate stocking to determine success to creel and effects on endemic populations of westslope cutthroat trout. Consider stocking sterile fish after evaluation of performance.
		Kokanee salmon	Wild/ Hatchery	Put-Grow-Take/ Special Regulations	Evaluate stocking to optimize number stocked, size of fish and angler catch rate; evaluate relative contribution of wild & stocked fish.
		Bull trout	Wild	Conservation	Conserve and enhance migratory populations. Continue protective regulations to prohibit angler harvest.
Continued on next page					

Water	Miles/acres	Species	Origin	Management Type	Management Direction
		Brown trout Brook trout	Wild	General	Provide liberal harvest opportunity to reduce competition and hybridization with and predation on native trout. Consider measures to reduce number if native trout numbers and angling opportunity would increase.
		Largemouth bass	Wild	Special Regulations	Maintain existing fishery but consider liberalizing harvest opportunity
		Yellow perch, Pumpkinseed	Wild	General	Provide liberal harvest opportunity and reduce numbers where possible to reduce competition with trout.
		Northern pike	Wild	Special Regulations/ Suppression	Emphasize harvest to reduce predation on trout; derbies must harvest fish. Explore other harvest means such as angler incentives and commercial methods that would need legislative approval.
Placid Lake	1,300 acres	Bull trout	Wild	Conservation	Protect and enhance any remnant population.
		Westslope cutthroat trout	Wild/ Hatchery	Put-Grow-Take/ Special Regulations	Evaluate stocking to optimize number stocked, size of fish, and catch rates; evaluate relative contribution of wild & stocked fish
		Kokanee salmon	Hatchery/ Wild	Put-Grow-Take/ Special Regulations	Evaluate stocking to optimize number stocked, size of fish, and catch rates; evaluate relative contribution of wild & stocked fish
		Brook trout Brown trout	Wild	General	Provide harvest opportunity for anglers with liberal regulations.
		Yellow perch, Pumpkinseed	Wild	General	Provide quality harvest opportunity.
		Largemouth bass	Wild	Quality	Maintain and enhance quality of fishery through restrictive regulations.
Harpers Lake	15 acres	Rainbow trout, Westslope cutthroat trout	Hatchery	Put-Grow-Take	Manage as a quality trout harvest opportunity with high angler catch rates.
Continued on next page					

Water	Miles/acres	Species	Origin	Management Type	Management Direction
		Yellow perch	Wild	General	Maintain liberal harvest limits and reduce numbers if possible to reduce competition with trout.
Habitat needs and activities: Monitor lake water quality and eutrophication with Clearwater Resource Council. Manage lake water levels to balance instream flow needs of outlet streams.					
Blackfoot River and Tributaries (Clearwater River to Confluence with Clark Fork River)	35 miles	Bull trout, Westslope cutthroat trout	Wild	Conservation/ Special Regulations	Continue with no harvest regulations in order to enhance fluvial populations for conservation and westslope cutthroat trout angling. Continue to maintain and enhance bull trout where practical. Continue to manage for genetically pure westslope cutthroat trout.
		Rainbow trout, Brown trout	Wild	Quality/Special Regulations	Maintain present numbers and sizes.
		Other introduced game fish (e.g., Yellow perch, Northern pike, Brook trout)	Wild	General/Special Regulations	Manage for liberal harvest and contain distribution where possible.
Habitat needs and activities: Improve habitat to support ecosystem function and production of wild trout and whitefish.					

