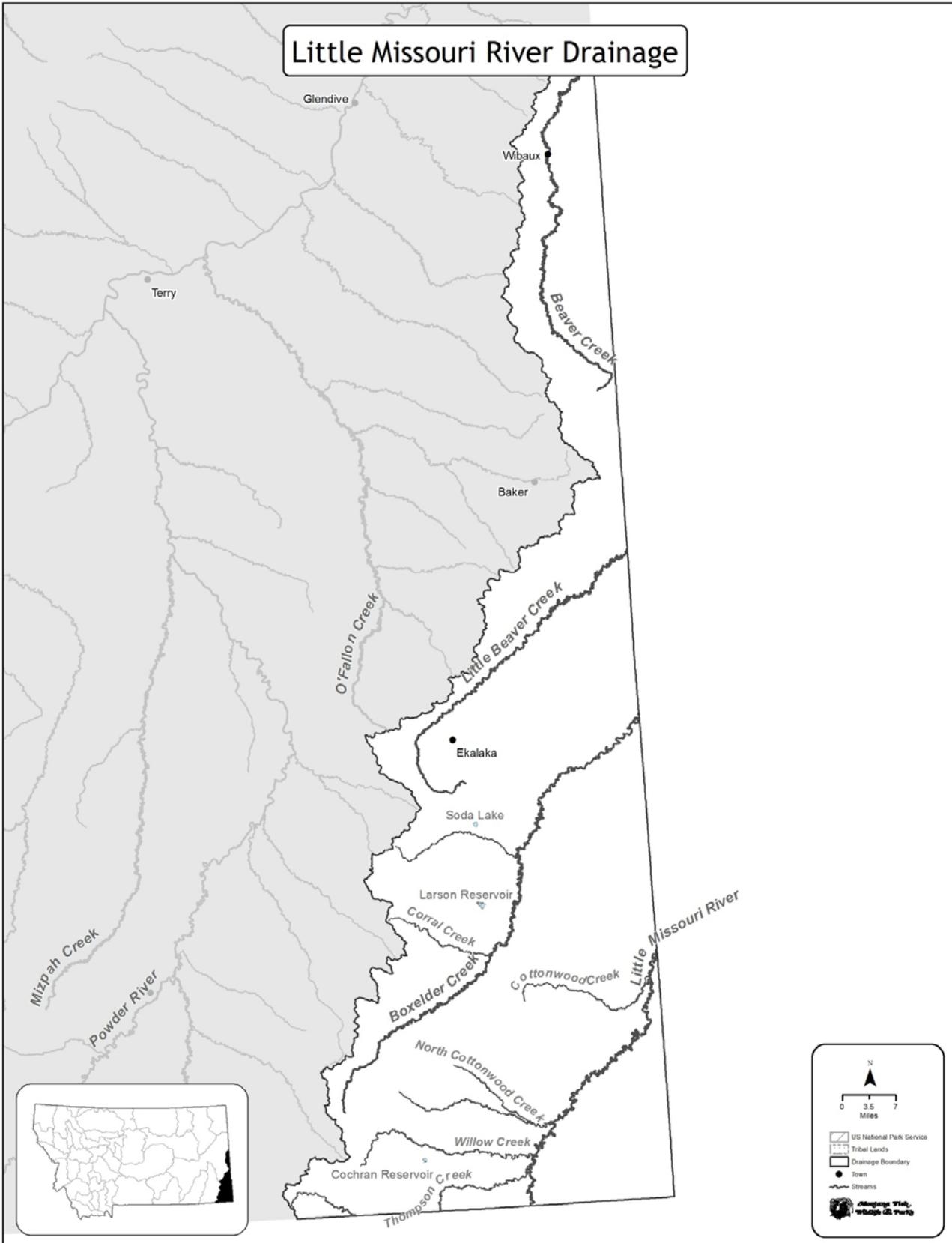


Little Missouri River Drainage



LITTLE MISSOURI RIVER DRAINAGE

PHYSICAL DESCRIPTION

The Little Missouri River drainage includes the Little Missouri River and two perennial tributaries (Box Elder Creek and Beaver Creek) and drains portions of Carter, Fallon and Wibaux counties. Only a small segment of each tributary exists in Montana and all are tributaries of the Missouri River in North Dakota. The headwater of the Little Missouri River is located in Wyoming and only 104 miles exist in Montana before crossing into North Dakota. The headwaters for the other three tributaries occur in Montana and converge with the Little Missouri River in North Dakota.

The drainage is located in a rural setting which includes three small communities: Ekalaka, Baker and Wibaux. The landscape is dominated by plains grassland complex but includes a large area of shrub grassland and a smaller area of plains forest called the Custer National Forest. Land ownership includes state and federal lands but is dominated by private property. Agriculture, primarily ranching and secondarily dry land farming dominate the land use. Industrial exploration and development of the following natural resources is also occurring: coal and bentonite mining, natural gas and oil drilling, and wind turbines.

No natural lakes are located in the drainage, however, numerous stock ponds exist and many are managed as fisheries with public access. In addition to the creeks mentioned above, there are numerous warm water prairie streams throughout the drainage. Some hold game fish and many host a considerable number of native and introduced fish species.

FISHERIES MANAGEMENT

The Little Missouri River and tributaries are managed primarily as a general/conservation fishery. Walleye are stocked in Beaver Creek and is the only species currently being stocked in any of the creeks/streams in the drainage. However, past and current stocking practices in Montana and North Dakota have influenced the fish assemblage. The primary management focus for the entire drainage is to improve fish passage at existing restrictions (culverts, fords, dams) and ensure future structures provide for adequate stream function and fish passage.

Fish sampling within the drainage has been limited to sporadic and infrequent seining activities associated with a larger-scale prairie fish sampling effort and specific educational activities for school programs. Most of the fisheries data in the drainage has been collected in the last decade. Because fishing pressure is very low, there are no specific management goals or fishing regulations for the drainage.

Like other prairie stream systems, the fish assemblage in the Little Missouri drainage is broad and dominated by native species. The Little Missouri River hosts eleven native fish species, five introduced fish species and only one game species (channel catfish). Box Elder Creek supports sixteen native fish species, five introduced fish species, and three game species (northern pike, channel catfish and sauger). Sauger are classified as a Species of Concern in Montana. Little Beaver Creek contains seven native fish species, three introduced fish species, and two game

species (northern pike and channel catfish). Beaver Creek hosts eleven native fish species, six introduced fish species, and two game species (northern pike and walleye).

The Little Missouri River drainage does not include any large lakes or reservoirs but does have eleven private ponds and thirteen public ponds that are managed as fisheries in the Regional Pond Fishing Program. The program is offered to landowners as a public relations opportunity to provide a fishery for the surrounding community. As long as the landowner allows free public access to the pond FWP will stock and manage the fishery. Anglers are required to obtain landowner permission each time they want to access the fishery. Rainbow trout, largemouth bass, yellow perch, northern pike and crappie dominate the species available in these systems. The fisheries are sampled at least once every three years to examine population densities and size structures. Populations are established or supplemented when needed through stocking from a state hatchery or by wild fish transfers from another fishery within the region.

HABITAT

Although the drainage is predominately rural and major changes have not occurred, habitat changes have impacted the system since human settlement. Developments include the construction of railroads, as well as numerous roads to accommodate vehicle travel (county roads, state highways and a federal interstate highway). All of these developments have impacted the ability of rivers and streams to migrate laterally and interact with their historic floodplain. The use of rock or concrete rip rap to protect city infrastructure, roads, bridges, homes, and farmland/ranchland has restricted the natural function of the rivers and streams in this drainage. The installation of culverts, fords and dams impact the function of the waterways and upstream migration of fish.

The vast majority of private and public ponds in the drainage are limited by water depth. Most have a maximum depth of 10-11 feet which is marginal for overwintering fish during winters with sustained snow accumulations. The significance and prevalence of winterkills has been and can be reduced by installing windmill aerators. Some landowners and the BLM have installed aerators at their expense in order to reduce winterkill occurrences at ponds they own. FWP has refrained from installing aerators because of the time and expenses required to service and maintain the structures .

FISHING ACCESS

Considering the rural nature of the drainage and limited game species in the streams, fishing pressure is extremely low and demand for a fishing access site has not occurred. Consequently development of a fishing access site is a low priority within the drainage. Access for fishing in the streams is probably met through private property access, county road crossings and public land.

SPECIAL MANAGEMENT ISSUES

There are no special management issues in the Little Missouri River drainage considering the low fishing pressure experienced and limited game species available.

FISHERIES MANAGEMENT DIRECTION FOR LITTLE MISSOURI RIVER DRAINAGE

Water	Miles/acres	Species	Origin	Management Type	Management Direction
Beaver Creek	120 miles	Walleye	Hatchery	General	Annual stocking of walleye for increased angler opportunities.
		Multi species	Wild	General/Conservation	Manage for recreational fishing opportunity where applicable. Monitor non-game fish species for native fish assemblage and overall ecosystem health.
Habitat needs and activities: improve fish passage at current restrictions (culverts, fords, dams) and ensure future structures provide for adequate creek flow and fish passage.					
Perennial Streams: Little Missouri, Box Elder Creek	106 miles 151 miles	Multi species	Wild	General/Conservation	Manage for recreational fishing opportunity where applicable. Monitor non-game fish species for native fish assemblage and overall ecosystem health.
Intermittent Streams: Little Beaver	12 miles				
Ephemeral Streams: 28 with documented fish populations					
Habitat needs and activities: improve fish passage at current restrictions (culverts, fords, dams) and ensure future structures provide for adequate creek flow and fish passage.					
Small Private Ponds/Reservoirs	Numerous	Trout	Hatchery	Put-Grow-Take	Public relations opportunity with landowners to provide local fishing opportunity for rural community. Maintain fishery through regulations and annual stocking.
		Bass, Walleye, Northern pike,	Wild/ Hatchery	General/Put-Grow-Take	Promote opportunity with landowners to provide local fishing opportunity for rural community. Maintain fishery through regulations and stocking when necessary.
		Crappie, Yellow perch, Bluegill	Wild/ Transfer	General	Promote opportunity with landowners to provide local fishing opportunity for rural community. Provide panfish angling opportunity, supplement population through wild fish transfers when necessary.
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Water	Miles/acres	Species	Origin	Management Type	Management Direction
Habitat needs and activities: water depth (ponds less than 12 feet deep) is a common limitation that leads to frequent winterkills; limitation offset by frequent sampling and stocking or wild fish transfers.					

