

# Transboundary Flathead

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Source: Erin Sexton, 2009



*North Fork Flathead Headwaters*

## **A Transboundary Watershed**

The North Fork of the Flathead River originates in southeast British Columbia and flows south across the border into northwest Montana, where it forms the western boundary of Glacier National Park. It is truly a transboundary watershed, forming a physical link between the United States and Canada, Montana and British Columbia.

The Transboundary Flathead is one of North America's wildest rivers; home to native fisheries of pure westslope cutthroat and bull trout, as well as the complete suite of large and mid-size carnivores found in North America, including the grizzly bear, wolverine, Canada lynx and Grey wolf. The British Columbia portion of the Transboundary Flathead flows through the last wide, low-elevation valley in southern Canada with no permanent human settlements. The Montana portion of the watershed is federally protected under the Wild and Scenic River Act, and is part of Waterton-Glacier International Peace Park, a UNESCO World Heritage Site and a designated Biosphere Reserve.

## **The Ecological Core of the Crown of the Continent**

The Flathead River valley lies in the heart of the Crown of the Continent Ecosystem, a nearly 10 million-acre ecosystem straddling the Rocky Mountains of Southern Alberta, British Columbia and Northwestern Montana. The Crown of the Continent is a biologically rich, ecologically diverse and visually stunning landscape set apart by its glacially carved peaks and valleys, vast prairies, iconic wildlife, mountain lakes and wild rivers. The Transboundary Flathead is a headwaters river of the Crown of the Continent, and provides a vital low elevation movement corridor for wide-ranging wildlife to move north and south along the Rockies between the US and Canada, providing critical connectivity for bears, moose, elk, lynx and other species that literally must have room to roam.

## **A Critical River for Native Fish**

The water of the Transboundary Flathead is cold year-round and is renowned for its clear, glacial-fed streams. The free-flowing, cold, clear waters enable the Flathead to support healthy populations of bull and westslope cutthroat trout, both of which are transboundary populations with individu-

als traveling up to 250 km from Flathead Lake in Montana to spawn in selected tributaries throughout the B.C. Flathead. Bull trout have highly specialized habitat requirements, and are very sensitive to changes in water temperature and any form of habitat degradation. Westslope cutthroat are likewise vulnerable, due to a significant decline in genetically pure westslope species across their range. The Transboundary Flathead represents one of the last strongholds for genetically pure westslope cutthroat, with the entire B.C. portion of the Flathead supporting pure westslope. In addition to native fish species, the Flathead supports a population of tailed frogs, the most primitive frog in the world. Like the native fish, the tailed frog is sensitive to habitat degradation and is the only stream-dwelling frog in Canada.

## **The Transboundary Flathead at a Crossroads**

Massive coal deposits, hard rock, minerals and coalbed gas lie beneath the headwaters, and throughout the B.C. portion of the Transboundary Flathead. Initiatives to develop the underground resources for industrial energy production and shipment overseas have resulted in nearly forty years of cross-border discussions around the present and future of the transboundary watershed. In particular, initiatives for coalbed methane and open-pit coal mining in the B.C. Flathead have invoked international law under the Boundary Waters Treaty of 1909 and have spurred dialogue between the federal, state and provincial governments.

To date, no commercial mining, gas or mineral production projects have been successful, and the unique watershed maintains its ecological integrity. In February, 2010, the Province of British Columbia and the State of Montana signed a Memorandum of Understanding and Cooperation on Environmental Protection, Climate Action and Energy, agreeing to remove mining, oil and gas development

and coal development as permissible land uses in the Flathead River Basin.

Building on the Memorandum of Understanding, Montana Senators Max Baucus and Jon Tester introduced the North Fork Watershed Protection Act, legislation that proposes to withdraw all federal land in the Montana portion of the North Fork of the Flathead from any future mining

and drilling. These are tremendous steps toward a long-term solution for the Transboundary Flathead. It is a critical time for both countries and the state and the province to work together across the border in recognition of the shared heritage and world-class biological richness of the landscape.

Source: Erin Sexton, 2009



*Canadian Flathead*

### **TRANSBOUNDARY FLATHEAD FAST FACTS**

- Estimated coal resource underlying the Flathead River, B.C.: 8 billion tons
- Estimated CBM resource underlying the Flathead River, B.C.: 4 trillion cubic feet
- Number of km that bull trout and westslope cutthroat trout migrate from Flathead Lake to the headwaters of the Flathead in B.C. to spawn: 250 km
- Percentage of bull trout redds in the B.C. Flathead portion of the transboundary North Fork in 2003: 54%
- Tons of coal mine waste rock produced from the proposed Cline Mine in the Flathead headwaters: 16 million/year
- Number of hours it would take for pollution from mines in the B.C. Flathead to reach Flathead Lake: 48
- Depth of the coalfields underlying the Flathead River in B.C.: 4000 meters
- Number of bull trout spawning redds in the B.C. Flathead in 2008: 104
- Number of carnivore species in the Flathead: 16
- Percentage of the North Fork (Transboundary Flathead) that is in B.C.: 38%
- Age of sedimentary rocks in the B.C. Flathead: 1.4 billion years old
- Number of wildflower species in the Flathead: Over 1000
- Number of CBM wells that may be drilled in the B.C. Flathead: up to 600
- Average home range of a male grizzly bear in the Rocky Mountains: 463 km<sup>2</sup>
- Number of bird species that nest in the Flathead River floodplain: 110
- Amount of coalbed methane wastewater that can be produced from one coalbed methane well: 200 gallons per minute