PRIEST RIVER BASIN
Component of the
COMPREHENSIVE STATE WATER PLAN

EXECUTIVE SUMMARY

The Priest River Basin component of the Comprehensive State Water Plan was adopted by the Idaho Water Resource Board in 1990 and approved by the Idaho Legislature in 1991. Actions of the Board included designation of State protected river reaches, application for minimum stream flows, and a request for a management study of the Priest Lake outlet structure. In 1994-95 the Water Resource Board reviewed and reevaluated the Comprehensive State Water Plan for the Priest River Basin as required by law [Idaho Code 42-1734B(7)]. The Priest River Basin plan as amended, protects three additional streams with State designations and seeks a more gradual autumn draw-down of Priest Lake to protect Priest River fishery habitat and reduce erosion.

The Priest River Basin plan describes and evaluates water resources and related economic, cultural, and natural resources of the basin. Prepared at a reconnaissance level with public participation, the plan provides a general assessment of water management and current issues. Goals, objectives, actions, and recommendations of the Water Resource Board are designed to improve, develop, and conserve the water resources of the Priest River Basin in the public interest.

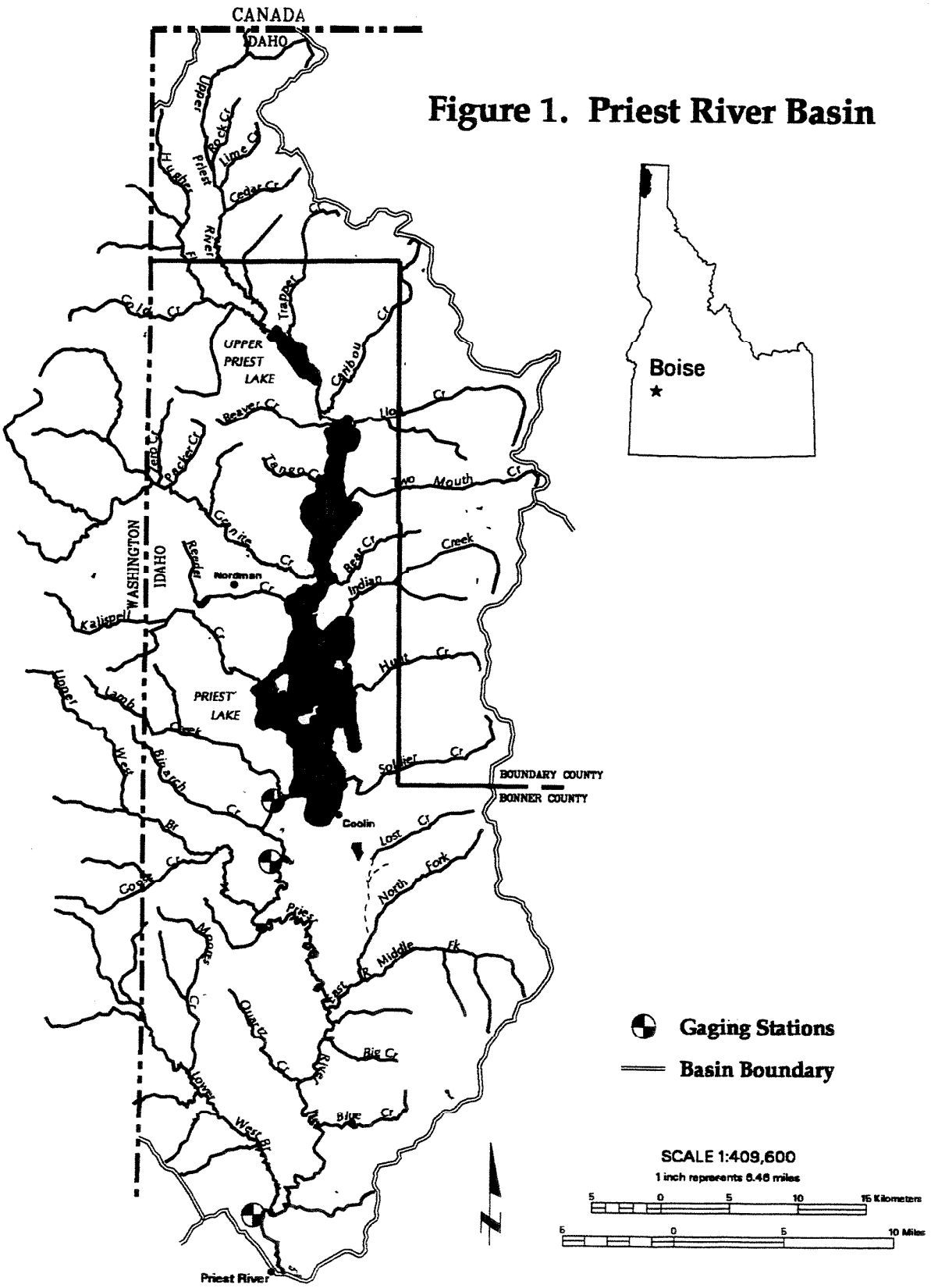
River segments with outstanding fish and wildlife, recreational, aesthetic or geologic value are identified and assessed for State protection in the plan. This involves an evaluation of the existing and potential water constraints and the issues for each stream reach, including: (1) water allocations and projected uses; (2) water quality; (3) power development; (4) flood control; and, (5) water and energy conservation. If the Board decides that the values of preserving the waterway in its existing state outweigh the values of continued development, it can, subject to legislative approval, prohibit several activities from occurring within the stream channel to protect existing values and uses.

The Priest River Basin is 913 square miles in area; 761 square miles are in Idaho (Fig. 1). The northeast corner of Washington state contains 137 square miles along the west side of the basin, and the northernmost fifteen square miles of the drainage are within British Columbia, Canada. Approximately 90 percent of the basin is publicly owned land.

An estimated two million acre-feet of water falls on the basin each year as precipitation. The amount leaving the basin, as the annual flow volume of the Priest River, is 1.2 million acre-feet. The 800,000 acre-feet difference is lost primarily through evapotranspiration, although approximately 20,000 acre-feet are withdrawn annually for consumptive uses.

Water quality from both ground and surface sources within the Priest River Basin is generally good. The chemical quality of the Priest River meets the criteria for salmonid spawning and cold-water life forms, although the water temperature is high during summer months. Recent sampling and analysis show that both Priest and Upper Priest Lakes have excellent water quality. Ground-water quality is reported as suitable for domestic purposes. Some tributaries to Priest Lake and the lower Priest River, however, were evaluated as not fully supporting salmonid spawning or cold-water life forms.

Figure 1. Priest River Basin



The 1990 population of the Priest River Basin was just under 4,500. Nearly 40 percent of that population resided in the city of Priest River. The two major industries within the Priest River Basin are timber and tourism. Current estimates suggest basin forests can provide a sustained yield approaching 35 million board-feet. The tourism industry focuses on the scenic and recreational values of the basin. Tourists spend over two million visitor-days in the Priest River Basin annually, with about 75 percent of the activity centered on Priest Lake.

Water appropriations in the Priest River Basin equal the average annual runoff, but are markedly nonconsumptive. Water rights for recreation, aesthetics, fish, and wildlife, held by the State of Idaho, comprise the largest appropriations. Based on Department of Water Resources records, approximately 20,000 acre-feet of water are appropriated annually within the Priest River Basin for consumptive purposes. This is one percent of the annual volume of the Priest River. The major consumptive uses are irrigation and domestic water supplies. Surface water is the principal water source in the basin. Less than one percent of the basin's dedicated water is from ground water, but it is relied on heavily for domestic supplies.

Total water supplies are adequate to meet all current beneficial uses, and to support additional economic growth. However, diminished Priest River flows during the late summer and early fall, due to management practices and seasonal variability, jeopardize fishery habitat and recreation. Development options for water use in the basin were not suggested or discussed in the course of public review. Improvement opportunities focused on antidegradation options to protect stream and lake water quality and increase flows in the lower Priest River. Goals and objectives support continued use of the basin's natural resources for outdoor recreation and long-term sustainable timber harvest. The Board promotes critical fish and wildlife habitat protection, management and monitoring programs to maintain and enhance water quality in the basin, and encourages local land use planning to foster orderly development and preserve the basin's outstanding natural resources.

Concern for maintaining the outstanding aesthetic quality of the basin, fish habitat, and maximizing recreational opportunities, led to protected river designations and application for minimum stream flow appropriations on basin rivers and streams. Waterways within the Priest River Basin designated as a State Natural or Recreational River are listed in Table 1 and shown in Figure 2. Actions and recommendations of the Idaho Water Resource Board are consistent with Idaho Code, private property rights, local and state management plans, and reflect public comment.

The Board will not pursue legislation authorizing an alternate summer operating scheme for the Priest Lake outlet structure. The Board will work with Washington Water Power to implement an autumn operating scheme to protect Priest River fishery habitat and reduce erosion. Releases should not exceed 1,000 cfs through the end of October; changes in discharge downstream of the outlet structure should be gradual but still meet the 0.0 foot level by December 31.

New State protected-river designations protect and preserve valuable fish and wildlife habitat in Lion, Two-Mouth, and Indian Creek (Fig. 2). The Recreational River designations allow streambed alteration for construction and maintenance of bridges and culverts, cleaning, maintenance, and replacement of water diversion works, and installation of fisheries enhancement structures. The plan further recommends modifications to the Northwest Power Planning Council's protected areas designations, and continued utilization of the basin's timber resources.

Table 1. State Protected River Designations — Priest River Basin.

River Reach	Length	Values	Designation	Conditions
Upper Priest River, Canadian border to Upper Priest Lake (1990)	19.6 miles	Species of Concern Spawning Recreation Use Scenic Area	Natural River	***Prohibits*** — Construction or expansion of: dams or impoundments, hydropower projects, or water diversion works; new dredge or placer mining; new mineral or sand and gravel extraction within the stream bed; stream bed alteration.
Upper Priest Lake and The Thorofare (1990)	5.9 miles	Species of Concern Boating opportunity Scenic Area Geologic Features	Natural River	Same as above
Hughes Fork (1990)	14.1 miles	Species of Concern Spawning Recreation Use Scenic Area	Recreational River	Same as above **except:** allows for alteration of the stream bed for maintenance and construction of bridges and culverts, cleaning, maintenance, and replacement of water diversion works, and installation of fisheries enhancement structures.
Rock Creek (1990)	3.8 miles	Same as above	Recreational River	Same as above
Lime Creek (1990)	3.9 miles	Same as above	Recreational River	Same as above
Cedar Creek (1990)	4.2 miles	Same as above	Recreational River	Same as above
Trapper Creek (1990)	7.9 miles	Same as above	Recreational River	Same as above
Granite Creek (1990)	11.1 miles	Same as above	Recreational River	Same as above
Priest River, Priest Lake outlet structure to McAbee Falls (1990)	43.7 miles	Wildlife Boating opportunity	Recreational River	Same as above
Lion Creek (1995)	11.1 miles	Species of Concern Spawning Recreation Use Scenic Area	Recreational River	Same as above
Two-Mouth Creek (1995)	10.6 miles	Same as above	Recreational River	Same as above
Indian Creek (1995)	10.5 miles	Same as above	Recreational River	Same as above

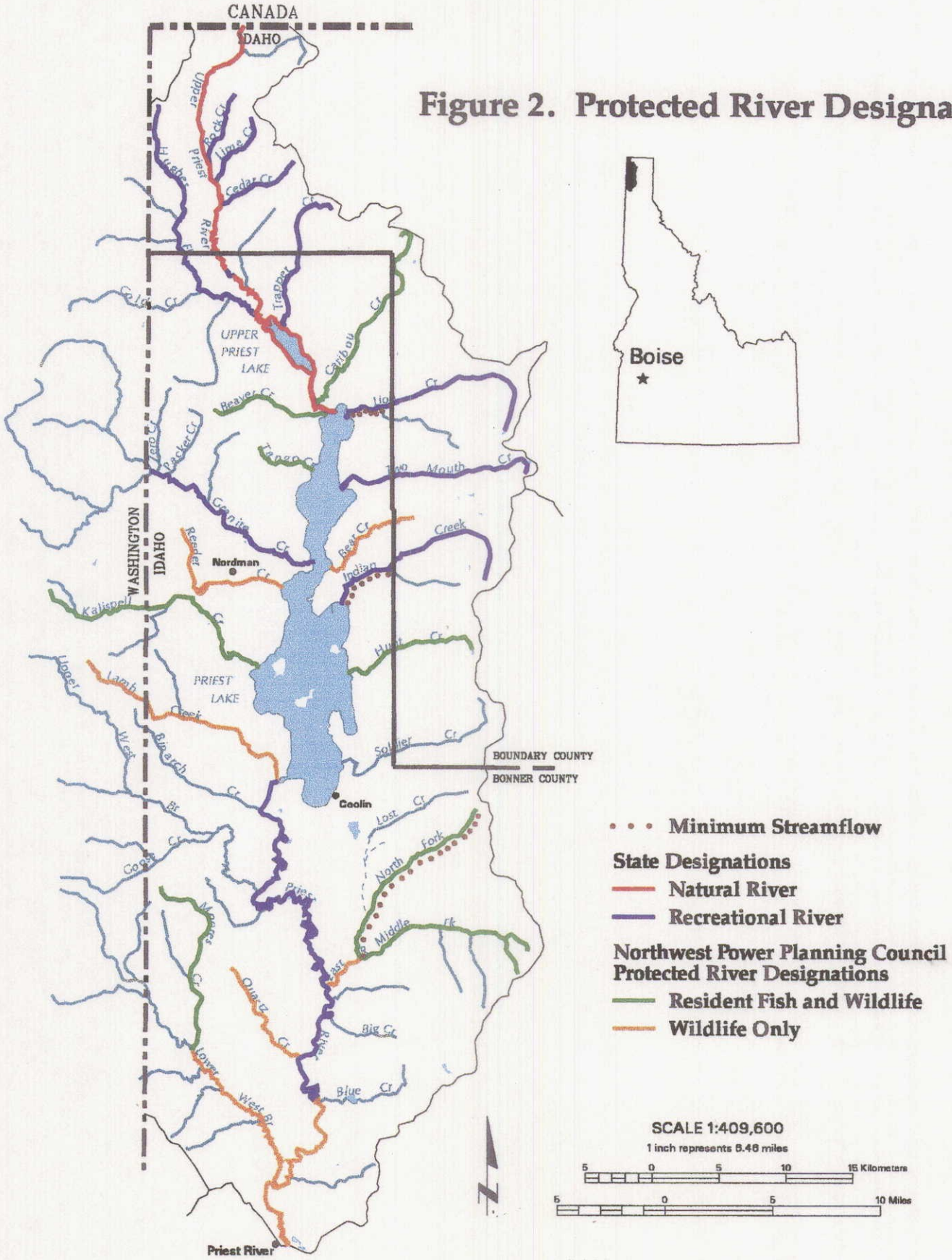



Figure 2. Protected River Designations