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## Burbot Restoration in the Kootenai River Basin: Using Agency, Tribal, and Community Collaboration to Develop and Implement a Conservation Strategy

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ABSTRACT.-Native burbot Lota lota in the transboundary Kootenai basin (spelled Kootenay in Canada) were once abundant and provided an important subsistence, social, sport, and commercial fishery for people in the states of Idaho and Montana, USA and the province of British Columbia, Canada. However, due to changes in the ecosystem over the last half century (dam and levee construction, habitat alteration, nutrient loss, and fish community composition shift), the burbot population in the Kootenai basin collapsed. Through the Kootenai Valley Resource Initiative, the Kootenai Tribe of Idaho facilitated a collaborative process to prepare and implement a conservation strategy to restore the burbot population. The Kootenai Valley Resource Initiative includes representation from the county, municipal, and tribal governments, as well as a diverse group of individuals representing business, agricultural, social, cultural, and conservation interests and federal and state agency participants. By building consensus through the development of the conservation strategy, actions have been identified and agreed upon that will guide rehabilitation of the burbot population and the habitat upon which it depends, while maintaining a strong level of community support.

The Kootenai River and Kootenay Lake once provided popular and important sport, subsistence, and commercial burbot *Lota lota* fisheries and may have provided one of the most robust burbot fisheries in North America (Paragamian and Hoyle 2003). Kootenai tribal elders report that burbot (also known as ling) were extremely abundant in the Kootenai River and were a main staple in the late winter/early spring months. Tribes and First Nations relied heavily upon this important subsistence fishery.

Burbot in the Idaho, USA and British Columbia, Canada, portion of the Kootenai River drainage are at risk of becoming extinct (Paragamian et al. 1996; KVRI Burbot

Committee 2005). Overexploitation of burbot in Kootenay Lake and Kootenai River was a concern for fish managers when it became evident that the fishery was at risk of failing. Measures were taken to reduce exploitation by reduction in creel limits and fishery closures, but none of these measures restored the fishery (Paragamian 2000; Ahrens and Korman 2002). Examples of burbot stock recovery in overexploited populations have been documented with fishery restrictions or closures, although habitat was generally intact in such cases (Paragamian et al. 2000). The Idaho Department of Fish and Game (IDFG) has been monitoring the movement, habitat use, and spawning behavior of burbot since 1993 and has not found evidence of successful spawning or recruitment in Idaho.

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