
Bonneville Cutthroat Trout

Oncorhynchus clarki utah

Actinopterygii — Salmoniformes — Salmonidae

CONSERVATION STATUS / CLASSIFICATION

Rangewide: Apparently secure subspecies (G4T4)
Statewide: Vulnerable (S3)
ESA: No status
USFS: Region 1: No status; Region 4: Sensitive
BLM: Rangewide/Globally imperiled (Type 2)
IDFG: Game fish

BASIS FOR INCLUSION

Low populations and limited distribution in Idaho.

TAXONOMY

According to Behnke (2002), the Bonneville cutthroat trout is 1 of 14 subspecies of cutthroat trout in western North America. The Bonneville cutthroat trout in the Bear River is genetically similar to the Yellowstone cutthroat trout. Behnke (2002) classified all cutthroat trout in the Bonneville Basin as 1 subspecies.

DISTRIBUTION AND ABUNDANCE

The native distribution of Bonneville cutthroat trout includes the Bonneville Basin of Utah, Idaho, Wyoming and Nevada. The Idaho distribution primarily includes the Bear River drainage and headwater tributaries of small streams entering the Great Salt Lake from the north (Behnke 2002). Additionally a lake form is found in Bear Lake. Current population estimates in Idaho are not available, but a recent status review found that about 65% of available habitat is occupied (IDFG 2005b).

POPULATION TREND

The Bonneville cutthroat trout occupies most of the available tributary habitat in the Bear River Drainage. The most abundant and well distributed populations occur in the Logan, Cub, and Thomas Fork River tributaries, and many of the remaining tributaries support relatively low-density populations and most populations are isolated. Localized extirpations appear to have occurred in 5 tributaries of the Bear River (IDFG 2005b).

HABITAT AND ECOLOGY

Salmonid habitat needs in general appear to generally represent those of Bonneville cutthroat trout. They normally require well-oxygenated water; clean, well-sorted gravels with minimal fine sediments for successful spawning; temperatures <21 C (<70 F), and a complexity of instream habitat structure such as large woody debris and overhanging banks for cover. Bonneville cutthroat trout populations are found at high, moderate and low elevations in small headwater streams, larger mainstem rivers, and lake systems. Bonneville cutthroat trout have also been found to survive in what is considered marginal salmonid habitat conditions (e.g., turbid water, fine sediments,

warmer temperatures up to 27 C (80 F) for short periods of time) (IDFG 2005b). Bonneville cutthroat trout in Bear Lake can attain sizes of 8 kg (18 lbs) and live 10–11 years. Maturity is attained at 56–61 cm (22–24 in). In stream populations, maturity can range from 18–46 cm (7–18 in) depending on stream size and growth rates. Bonneville cutthroat trout feed primarily on aquatic insects and invertebrates until reaching 41 cm (16 in) or so when they begin eating fish.

ISSUES

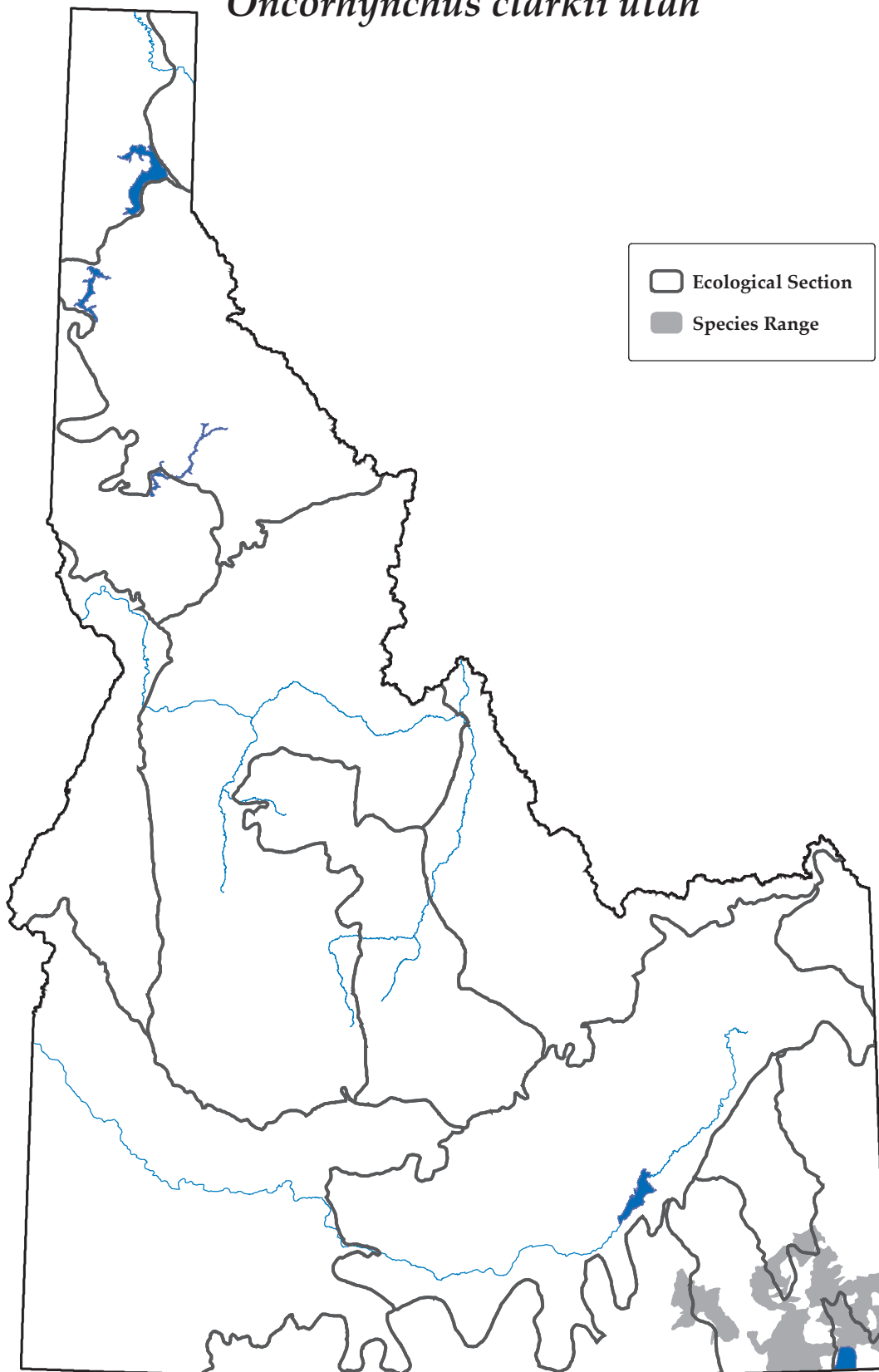
Bonneville cutthroat trout occupy most of the available tributary habitat in the Bear River drainage in Idaho, however, populations are at low densities and some local extirpations have occurred (IDFG 2005b). Populations of fluvial Bonneville cutthroat trout in the larger streams of the Bear River drainage are depressed (IDFG, 2005). Bonneville cutthroat trout in Bear Lake are supported by hatchery production as a result of limited natural reproduction (IDFG 2005b). Threats to persistence were identified as water management, livestock grazing, non–native fish interactions including hybridization, and angler harvest (IDFG 2005b).

RECOMMENDED ACTIONS

Potential conservation actions include (1) reintroduce Bonneville cutthroat trout in historical habitats where it has been extirpated; (2) reduce impacts of non–native fish species through angler harvest and chemical renovation; (3) continue to ensure Bonneville cutthroat trout angler harvest opportunity is consistent with long term health of resident, fluvial, and adfluvial populations; (4) identify migration barriers; (5) improve watershed habitat; (6) ensure persistence of genetically pure Bonneville cutthroat trout populations; (7) develop a standardized statewide monitoring program; and (8) maintain the existing Bonneville cutthroat database (IDFG 2005b). Additional details are reviewed in the Draft Management Plan for conservation of Bonneville cutthroat trout in Idaho (IDFG 2005b). In 2002, as part of a comprehensive settlement agreement between PacifiCorp and numerous parties funds were provided to enhance and restore habitat and increase abundance and distribution of this species within its historic range. An Environmental Coordination Committee is working with the private utility to determine actions to benefit this species.

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Fish information is from Idaho Fish and Wildlife Information System, Idaho Department of Fish and Game and displayed at the 6th code hydrologic unit.

