
Lake Chub

Couesius plumbeus

Actinopterygii — Cypriniformes — Cyprinidae

CONSERVATION STATUS / CLASSIFICATION

Rangewide: Secure (G5)
Statewide: Unranked (SNR)
ESA: No status
USFS: Region 1: No status; Region 4: No status
BLM: No status
IDFG: Unprotected wildlife

BASIS FOR INCLUSION

Lack of essential information pertaining to status; habitat degradation and restricted distribution.

TAXONOMY

This species was originally described as *Gobio plumbeus* by Agassiz in 1850 from Lake Superior. The species went through several nomenclatural changes in the late 1800s and was renamed *Couesius plumbeus* in 1970 (Bailey et al. 1970).

DISTRIBUTION AND ABUNDANCE

This species is restricted to the Kootenai River drainage in Idaho. Partridge (1981) and Simpson and Wallace (1982) documented the lake chub in Deep Creek, a tributary to the Kootenai River. Elsewhere, the lake chub is found throughout Canada and in the upper Missouri River drainage and in association with the Great Lakes of the U. S.

POPULATION TREND

The population trend is unknown since there has not been a recent survey in the Deep Creek drainage.

HABITAT AND ECOLOGY

This species is found in a variety of habitats in lakes and streams, but in Idaho occurs only in the Kootenai River system. Lake populations generally undergo a spawning migration to tributaries in early spring. The species is a broadcast spawner, and spawning occurs over gravel and rubble substrates. Spawning has been observed when water temperature is between 14–19 C (57–66 F) (Scott and Crossman 1973). In British Columbia, fish mature during their third or fourth year and probably seldom survive beyond 5 years. Size of adults ranged from 102–227 mm (4–9 in).

The species is mainly insectivorous, feeding on insect larvae, but individuals occasionally eat zooplankton and algae.

ISSUES

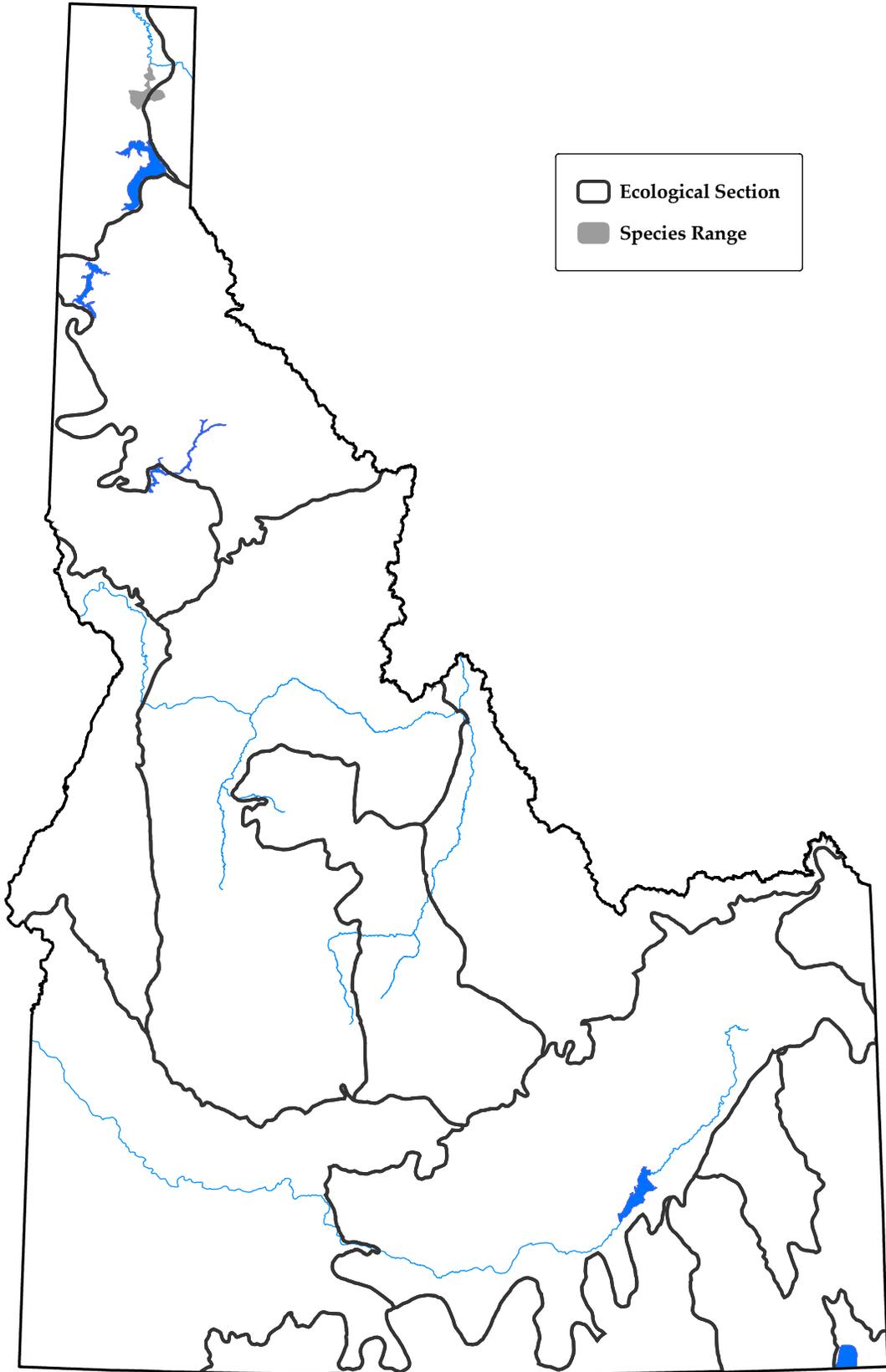
Habitat loss and fragmentation are the primary issues affecting lake chub populations. Potential sources of decreased water quality and aquatic habitat degradation include: (1) sedimentation to spawning and rearing areas arising from timber harvest, mining, road maintenance and improvements, trail construction, and recreational activities; (2) habitat fragmentation and migration impediments due to road crossings, dams and diversion structures; (3) flow alteration caused by water diversion or impoundment; (4) chemical pollution arising from mining, pesticide application, or road maintenance (e.g., application of substances used for dust control or road surfacing). Introduction of nonnative piscivorous fish could also be a potential issue. However, the lake chub has evolved with piscivorous fish species from the Midwest and Canada.

RECOMMENDED ACTIONS

Population and habitat data are needed. A monitoring program to evaluate habitat and population trend in the Kootenai River drainage is needed. Efforts are needed to assess and improve water quality and instream habitat, to identify and address migration barriers, and to identify and assess unoccupied habitat for potential reintroduction.

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10 August 2005
Fish information is from Idaho Fish and Wildlife Information System, Idaho Department of Fish and Game and displayed at the 6th code hydrologic unit.

