Northern Leopard Frog
Rana pipiens

Amphibia — Anura — Ranidae

CONSERVATION STATUS / CLASSIFICATION

Rangewide:	Secure (G5)
Statewide:	Imperiled (S2)
ESA:	No status
USFS:	Region 1: No status; Region 4: No status
BLM:	Rangewide/Globally imperiled (Type 2)
IDFG:	Protected nongame

BASIS FOR INCLUSION
Reduced distribution and declining population trends.

TAXONOMY
No subspecies is currently recognized.

DISTRIBUTION AND ABUNDANCE
The northern leopard frog is widely distributed across much of northern and central North America, but populations are sparsely distributed in the western portion of its range. In northern Idaho, the species was found in the Kootenai, Pend Oreille, and Clark Fork rivers prior to 1955, but populations may no longer persist in this region. In southern Idaho, populations have been reported in the Snake River and its tributaries, including the Boise, Payette, and Weiser rivers in the southwest, and the Portneuf River, Bear River, and Marsh Valley in the southeast. The distribution along the mainstem Snake River extends discontinuously as far downstream as southern Washington County.

POPULATION TREND
Populations have declined from historical levels (Groves and Peterson 1992). The lack of recent sightings in northern Idaho suggests a population decline and the possible extirpation of the species in this region. Declines have also been documented at neighboring sites in eastern Washington and western Montana; populations may have been lost there by the late 1970s (Leonard and McAllister 1996, Maxwell 2000).

Data regarding population trend in southern Idaho are limited, but localized declines are suspected. For example, the northern leopard frog was at one time the most commonly encountered amphibian in Twin Falls County, however surveys during 1994 and 1995 failed to detect populations at historical locations (McDonald 1996). Another survey, revealed previously undetected populations in southern Idaho (Makela 1998).

HABITAT AND ECOLOGY

The northern leopard frog is associated with permanent water sources during all life stages. Populations occur in a variety of wetland situations, including marshes, pond margins, and slow moving sections of streams and rivers (e.g., Makela 1998).

Breeding occurs in the early spring. Females lay eggs in shallow water, often 7 to 25cm in depth. The aquatic larvae usually transform during the first summer, but metamorphosis does not occur until the following year under some environmental conditions. Transformed juveniles can disperse several kilometers from their natal ponds. Adults overwinter in sites protected from freezing, often submerged in soft sediments at the bottoms of deeper pools.

ISSUES

As with most amphibians, the loss and degradation of wetland and riparian habitat is thought to be the most prevalent threat to populations. Urban and agricultural development, pollution from agricultural runoff, mining and mineral processing, water withdrawal and diversion, and livestock wastes and trampling of habitat are the most pervasive stressors to wetland systems.

Introduced competitors and predators, such as bullfrogs and sport fishes, can cause amphibian population declines and losses. Disease is also a concern, particularly the chytrid fungus, *Batrachochytrium dendrobatidis*.

RECOMMENDED ACTIONS

A comprehensive understanding of population status throughout the state is needed. Investigation of the cause of declines may be warranted and would be a priority if regional or state–wide declines are demonstrated.

Wetland protection and restoration of degraded sites may be needed.

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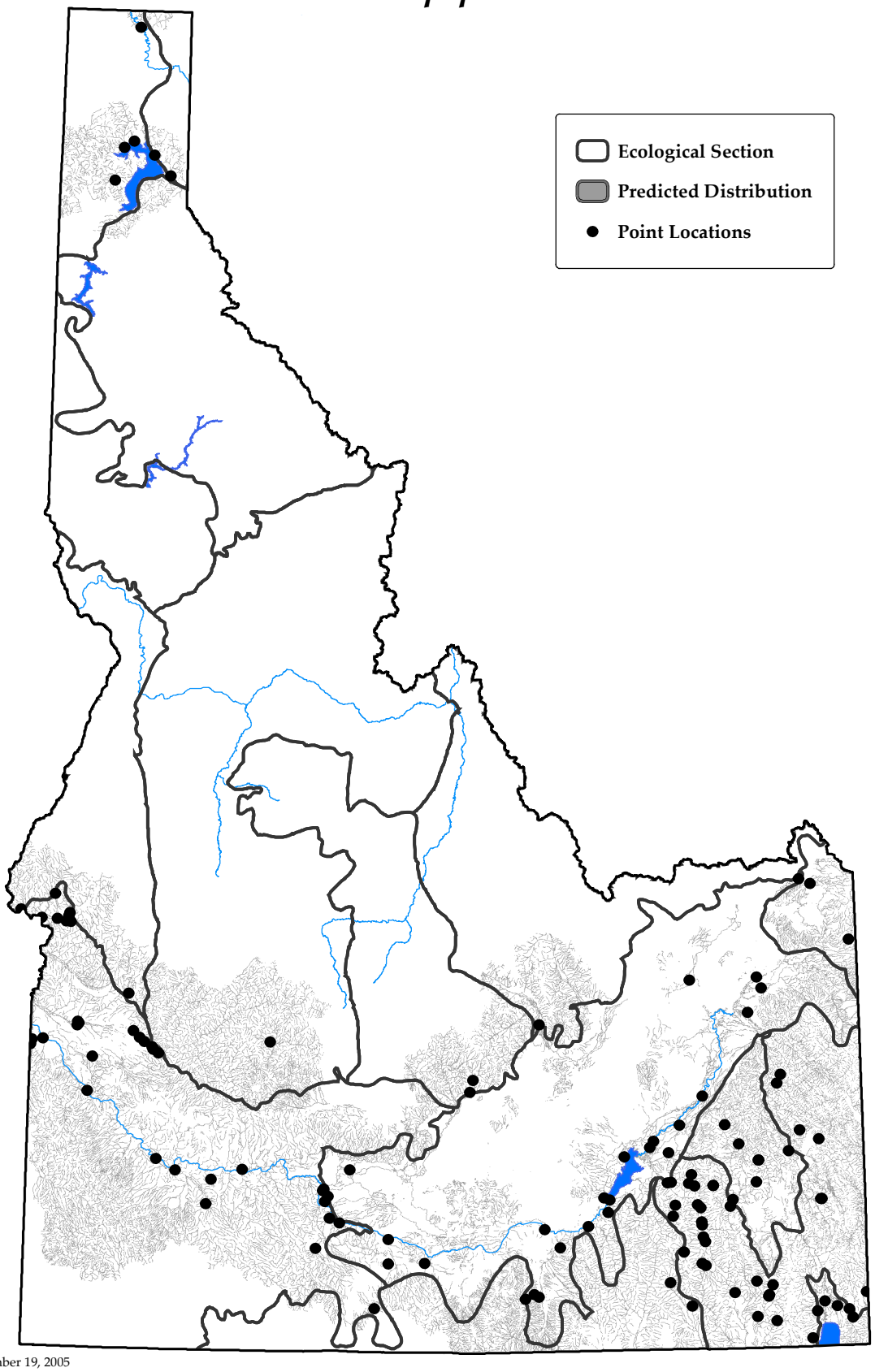

Map created on September 19, 2005
and prepared by Idaho Conservation Data Center.
Sources: Point data are from Idaho Conservation Data Center, Idaho Department of Fish and Game (2005). Predicted distribution is from the Wildlife Habitat Relationships Models (WHR), A Gap Analysis of Idaho: Final Report. Idaho Cooperative Fish and Wildlife Research Unit, Moscow, ID (Scott et al. 2002). Predicted distribution is approximate (for more information, go to http://www.wildlife.uidaho.edu/idgap/idgap_report.asp).

0 20 40 80 Kilometers

0 20 40 80 Miles