

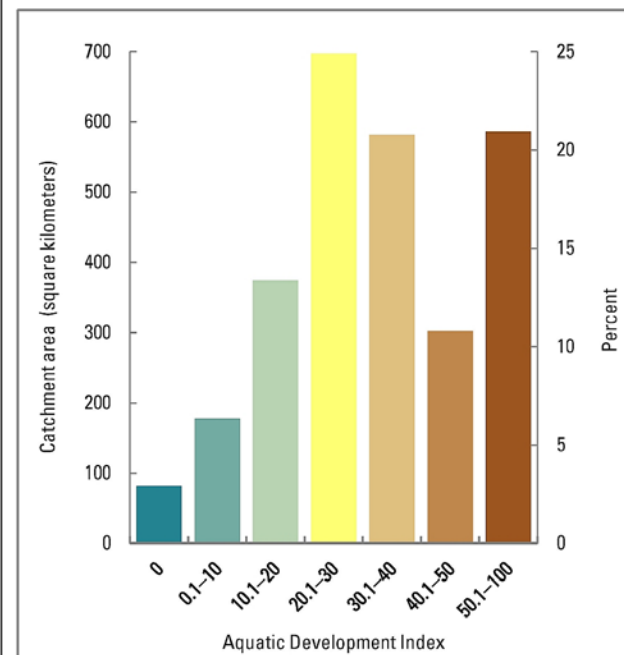
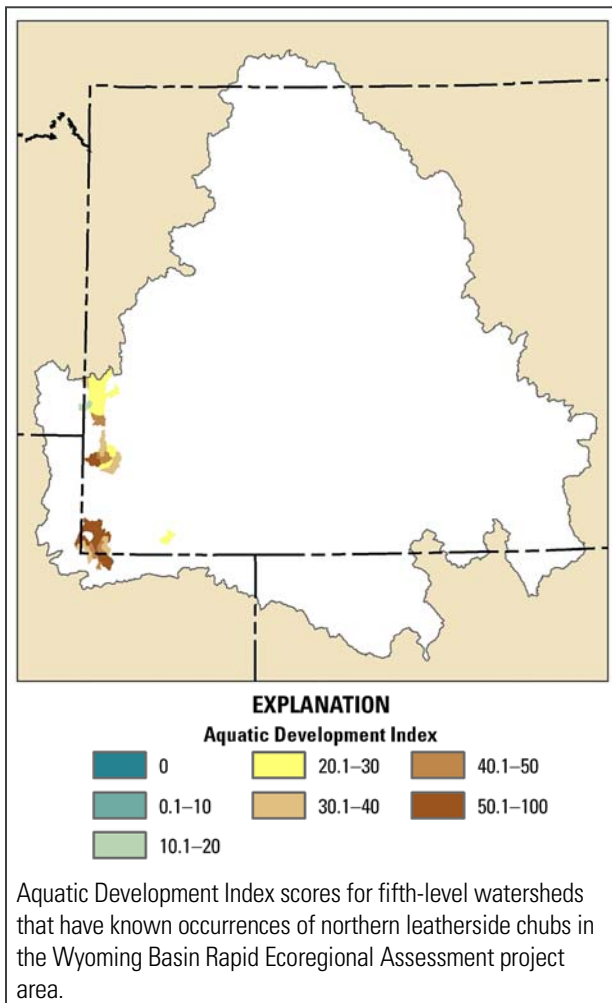
Northern Leatherside Chub

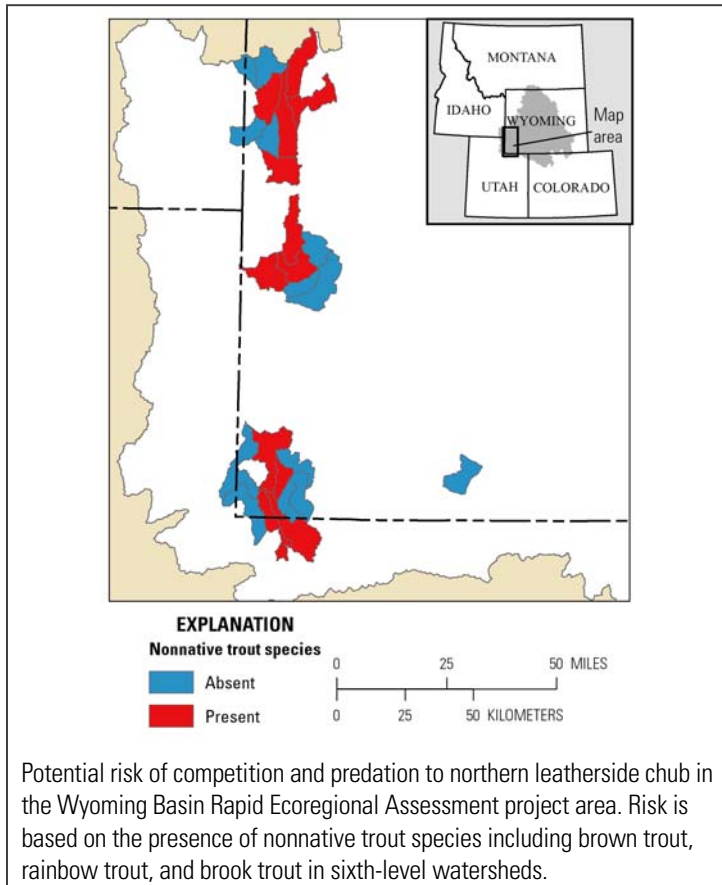


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Management Questions

- Where is baseline occupied northern leatherside chub habitat?
- Where does development pose the greatest threat to northern leatherside chub habitat? (Left map below)
- Where do dams, diversions, and stream-road crossings pose potential barriers to northern leatherside chub movements, and where are watersheds with the highest structural connectivity?
- Where are northern leatherside chub populations at risk of competition and predation by nonnative salmonid species? (Top left map following page)
- How does risk from development vary by land ownership or jurisdiction for northern leatherside chub habitat?
- Where are the fifth-level watersheds with the greatest landscape-level ecological values? (Top right map following page)
- Where are the fifth-level watersheds with the greatest landscape-level risks? (Center right map following page)
- Where are the fifth-level watersheds with the greatest conservation potential? (Bottom right map following page)

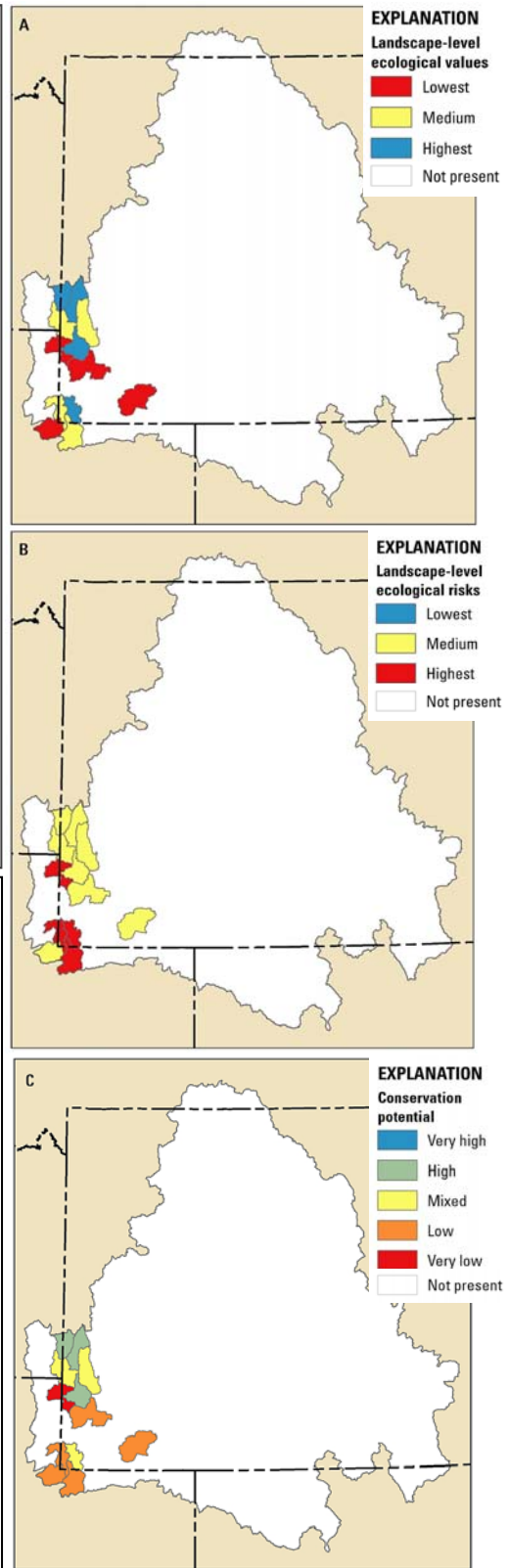




Summary

The Wyoming Basin includes most of the extant populations of northern leatherside chub, and these are limited to the far southwestern portion of the Basin, specifically the Bear River drainage, including the mainstem and its major tributaries. A potential introduced population may exist in the Green River drainage. Watersheds occupied by this chub are heavily developed for agricultural use, particularly in the southwestern part of their range where there are more than 200 potential barriers (dams, diversions, road crossings) per watershed. Effects of these barriers likely vary; reservoirs are typically impassible to chub, while road-crossing effects depend on culvert design. Diversions pose a risk by trapping chub in canals once water flow is shut off.

Highest conservation potential areas are in the northern part of the chub's range. This includes healthy populations in Dry Fork Creek, which has low levels of development and occurs largely on public land. The southern range has higher levels of development but supports some of the largest chub populations; the high development levels, low structural connectivity, and private land ownership in these areas present significant management challenges. Wyoming Game and Fish Department classified northern and southern sites as "...crucial to conserving and maintaining populations of terrestrial and aquatic wildlife for the present and future," and "...habitats where enhancement activities can be opportunistically performed."



(A) Landscape-level ecological values, (B) ecological risks, and (C) conservation potential of northern leatherside chub habitat summarized by fifth-level watershed.