

HUMPBACK CHUB

(GILA CYPHA)

Navajo/Federal Statuses: NESL G2 / listed endangered on 11 MAR 1967 (32FR:4001) with designated Critical Habitat 21 MAR 1994 (59FR:13374).

Distribution: Restricted to the Colorado River and a few of its narrow, canyon-bound tributaries in AZ, UT and CO. The largest population is found at the confluence of the Little Colorado (LCR) and Colorado Rivers; nearly all successful spawning downstream of the Glen Canyon Dam occurs within the lower 14 km of the LCR.

Habitat: First-year chubs (<65 mm in length) are found in shallow waters along edges of deeper waters. Adults use a variety of habitats including pools, riffles, and eddies; they seem to prefer whitewater reaches with deep, swirling eddies and the turbulent waters near boulders and submerged rocks. Spawning in LCR is thought to occur over gravel beds in swift water.

Similar Species: Adult razorback suckers have keel-shaped hump, and large, fleshy mouth. Young chubs may be confused with many other minnows.

Phenology:

JAN-FEB: staging at mouth of LCR by adult chubs

MAR-APR: adult chubs move upstream into LCR

MAY-JUL: spawning occurs after peak spring flows in $\approx 20^{\circ}\text{C}$ water

AUG-JAN: some adults move downstream to Colorado River, others remain in LCR through the year

Formal Survey Protocol: Evaluations may be based on the presence of habitat or Federally designated Critical Habitat. Electrofishing or seine surveys may be required if the proposed action may result in an adverse effect to the species. Federal permit required for survey and collection.

Avoidance: Near occupied habitat, no surface disturbance year-round within 60 m of top of stream bank, and prevent changes to water chemistry or quantity upstream. Within federally designated critical habitat, no modification of constituent habitat elements within 100-year floodplain.

References:

Douglas, M.E. and P.C. Marsh. 1996. Population estimates/ population movements of *Gila cypha*, an endangered cyprinid fish in the Grand Canyon region of Arizona. *Copeia* 1996:15-28.

Minckley, W.L. 1973. Fishes of Arizona. Arizona Game and Fish Dept., Sims Printing Co., Inc. Phoenix, AZ. (description p.98)

U.S. Fish & Wildlife Service. 1990. [Humpback chub recovery plan](#). U.S. Fish & Wildlife Service, Denver, Co.