

Razorback Sucker (*Xyrauchen texanus*)

Species Status Statement.

Distribution

Razorback sucker is a long-lived fish, endemic to the warm waters of the Colorado River Basin. The species still occurs in many reaches of the Colorado River and its tributaries. In Utah, razorback sucker lives in the Colorado and Green Rivers and their tributaries, as well as in Lake Powell. Individuals have been documented moving hundreds of miles between sub-basins and through Lake Powell.

Table 1. Utah counties currently occupied by this species.

| Razorback Sucker | |
|-------------------------|----------|
| CARBON | GRAND |
| DAGGETT | SAN JUAN |
| EMERY | UINTAH |
| GARFIELD | WAYNE |

Abundance and Trends

Once widespread throughout the basin, razorback sucker experienced dramatic declines due to the habitat loss and fragmentation, and the altered flow and temperature regimes associated with dam building and water use during the last century. By the 1990's the Upper Colorado Basin populations had dwindled to a few older adults, and lacked any evidence of wild reproduction. Augmentation through hatchery propagation and stocking has dramatically restored the number of adults in the Upper Colorado Basin. Managers there have recently documented reproduction and limited recruitment, in the Green, Colorado and San Juan Rivers as well as in Lake Powell. The Lower Colorado Basin experienced a similar decline and augmentation, but was able to maintain a reduced level of wild reproduction in Lake Mead.

Statement of Habitat Needs and Threats to the Species.

Habitat Needs

Throughout the Colorado River Basin, these fish live in both riverine and lentic habitats. While tolerant of a wide range of flows, high turbidity and reduced water quality, this species prefers rocky substrate for spawning, and warm, nutrient rich, low-velocity habitats such as floodplains, free from nonnative fish for rearing (USFWS 2018). Such habitats are now exceedingly rare. Adults have been documented migrating hundreds of miles between sub-basins but tend to prefer low velocity reaches.

Threats to the Species

Loss of habitat and habitat connectivity, persistent drought, and the introduction of nonnative fishes have had profoundly negative effects on razorback sucker. Water development, with its resulting reduced water availability, changes in water temperature, and altered flow regimes, and the expanding presence of competitive and predatory nonnative fishes threaten the long-term viability of the species (USFWS 2018). Management actions such as stocking, floodplain restoration, nonnative fish removal and adaptive flow management have helped augment and stabilize adult populations, but wild recruitment remains a major hurdle for recovery and the species-scale effects of current and future threats remain uncertain.

Table 2. Summary of a Utah threat assessment and prioritization completed in 2014. This assessment applies to the species' entire distribution within Utah. For species that also occur elsewhere, this assessment applies only to the portion of their distribution within Utah. The full threat assessment provides more information including lower-ranked threats, crucial data gaps, methods, and definitions (UDWR 2015; Salafsky et al. 2008).

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| Razorback Sucker |
| Very High |
| Droughts |
| Invasive Wildlife Species - Non-native |
| High |
| Dam / Reservoir Operation |
| Hydro Power Facilities |
| Inappropriate Fire Frequency and Intensity |
| Oil Shale |
| Presence of Diversions |
| Spills and Production Water |
| Tar Sands |
| Water Allocation Policies |
| Medium |
| Agricultural / Municipal / Industrial Water Usage |
| Atmospheric Deposition |
| Channelization / Bank Alteration (direct, intentional) |
| Increasing Stream Temperatures |
| Invasive Plant Species – Non-native |
| Small Isolated Populations |
| Nuclear Power Facilities |
| Pipelines / Powerlines - Energy Development |
| Presence of Dams |
| Problematic Animal Species – Native |
| Sediment Transport Imbalance |
| Storms and Flooding |

Rationale for Designation.

In 1991 razorback sucker was listed under the Endangered Species Act. The current abundance of adults throughout the Colorado River Basin, and the recent documentation of wild reproduction and recruitment, have informed the 2018 recommendation by the USFWS to reclassify the species from Endangered to Threatened. However, except for the Lake Mead population, the species lacks adequate wild recruitment and depends entirely on hatchery augmentation (stocking) for its continued existence. This, coupled with the uncertain future of threats and their management, warrant its designation as a Sensitive Species. Measures to conserve razorback sucker would also benefit Colorado pikeminnow, humpback chub, bonytail, roundtail chub, flannelmouth sucker, and bluehead sucker.

Economic Impacts of Sensitive Species Designation.

Sensitive species designation is intended to facilitate management of this species, which is required to reverse Endangered Species Act Listing and lessen related economic impacts. Razorback sucker is currently listed as endangered under the Endangered Species Act. This listing has resulted in extensive costs to mitigate water development and manage water resources in the Colorado River Basin in Utah. It has also resulted in costly efforts to mitigate impacts from nonnative fish introductions and has impacted the management of recreational fisheries in the basin. There have also been increased costs of regulatory compliance for many land-use decisions including oil and gas development, especially due to habitat impacts from associated infrastructure and water use and potential contamination during production. These costs will remain as long as the species is listed under the Endangered Species Act. If the species is downlisted or delisted, continued efforts will be required to mitigate threats and maintain stronger populations.

Literature Cited.

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