Desert Sucker (*Catostomus clarkii*)

Species Status Statement.

Distribution

Desert sucker is native throughout Colorado River Basin streams, including the mainstem Colorado downstream from the Grand Canyon in south central and southern Arizona, and in western New Mexico (Sigler and Sigler 1996). In Utah, the species occupies the Virgin River mainstem and many of its tributaries, including the North Fork Virgin River, East Fork Virgin River, North Creek, La Verkin Creek, Ash Creek, Quail Creek, Leeds Creek, Santa Clara River, Magotsu Creek, Moody Wash, and Beaver Dam Wash.

Table 1. Utah counties currently occupied by this species.

Desert Sucker
KANE
WASHINGTON

Abundance and Trends

This species occupies much of its historic range, and population and distribution trends have remained stable.

Statement of Habitat Needs and Threats to the Species.

Habitat Needs

Desert sucker is a stream fish that prefers rapid waters (Sigler and Sigler 1996). These fish feed in gravel/cobble riffle habitat. Adults also spawn in such swift flowing areas, but will take refuge in pools during daylight hours (Sigler and Sigler 1996).

Threats to the Species

Primary threats to desert sucker include habitat loss and degradation caused by increased urban development, and water extraction and its effects including altered streamflow regimes, decreased turbidity, and loss of optimum spawning and rearing habitat. Additional factors include non-native species (i.e., fish, invertebrates, plants) and drought (Hardy et al. 2003; USFWS 2008; Huizinga and Fridell 2012). In addition, these stressors and perturbations may be further exacerbated by disease, extreme natural events (e.g., fire and floods), and changing climatic trends.

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).

Desert Sucker
Very High
Agricultural / Municipal / Industrial Water Usage
Droughts
Increasing Stream Temperatures
Invasive Wildlife Species - Non-native
Storms and Flooding
High
Commercial and Industrial Areas
Earthquakes
Housing and Urban Areas
Improper Grazing (current)
Inappropriate Fire Frequency and Intensity
Invasive Plant Species – Non-native
Presence of Diversions
Roads – Transportation Network
Sediment Transport Imbalance
Water Allocation Policies
Medium
Channelization / Bank Alteration (direct, intentional)
Dam / Reservoir Operation
Small Isolated Populations
OHV Motorized Recreation
Problematic Plant Species – Native Wetland
Thermal Alteration of Water (e.g., by power plant)

Rationale for Designation.

Although the species has been stable throughout much of its Utah distribution, habitat loss, fragmentation, and degradation are likely to increase due to urban development and stream flow depletion. These events could lead to a rapid decline in desert sucker populations. In 2002, the Virgin River Resource Management and Recovery Program (Program) was established to coordinate and implement conservation and recovery actions in the Virgin River Basin within Utah for the woundfin minnow (*Plagopterus argentissimus*) and Virgin River chub (*Gila seminuda*), as identified in the Virgin River Fishes Recovery Plan (USFWS 1994). Additionally, the Virgin Spinedace Conservation Agreement and Strategy (VSCAS) was developed in 1995 to

improve conditions that had resulted in the decline of Virgin spinedace (*Lepidomeda mollispinis*). The desert sucker will greatly benefit with the continued implementation of recovery actions outlined in the Program and the VSCAS. Measures to conserve desert sucker would also benefit woundfin, Virgin River chub, Virgin spinedace, and flannelmouth sucker.

Economic Impacts of Sensitive Species Designation.

Sensitive species designation is intended to facilitate management of this species, which is required to prevent Endangered Species Act listing and lessen related economic impacts. If desert sucker were listed under the ESA, it would add to the cost of mitigating water development, urban and industrial development, and nonnative species introductions in the Virgin River watershed in Kane and Washington Counties.

Literature Cited.

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