

Below Glen Canyon Dam, nonnative fish like smallmouth bass are threatening imperiled humpback chub in the Grand Canyon.

# Native Fish Recovery

## in the Grand Canyon

### The problem

The humpback chub is a native fish endemic to the Colorado River and its tributaries. Historically, Glen Canyon Dam served as a barrier, keeping nonnative fish out of the Grand Canyon. When water levels at Lake Powell were higher, the water released from the dam into the Colorado River was colder, making it harder for nonnative fish to reproduce. In 2022, Lake Powell shrank to only 1/4 full and nonnative fish were discovered in the Colorado River below the dam. There is evidence that they are now reproducing. The number of smallmouth bass captured in the Colorado River below the dam more than doubled from 2022 to 2023.

### The solution

- Prevent nonnative fish from passing through the dam
- Regulate the temperature of releases from the dam
- Stop nonnative species from spawning in the Colorado River below Glen Canyon Dam

### How to do it

- Create a barrier in Lake Powell to prevent nonnative fish passage
- Install a mechanism at the dam to regulate release temperatures
- Keep Lake Powell at higher elevations (3,575 feet or higher)
- Release cold water through Glen Canyon Dam's lowest river outlet bypass tubes

### Helping native fish recover

- 1988-2011 Upper Colorado River and San Juan River recovery programs have spent \$209 million on endangered species recovery actions and millions since.



Zuni do not necessarily make distinctions between native and nonnative life forms ... Strong stewardship is very much needed, a philosophy that recognizes and treats all nonhuman life forms as sentient beings.

—Arden Kucate, Zuni Tribal Council member, 2022



GRAND CANYON TRUST



JACK DYKINGA

**92%** of the **humpback chub** population lives in the Grand Canyon

### Facts & figures

**8** native fish species historically lived in the Colorado River in the Grand Canyon

**5** native fish species remain

- **Humpback chub** (*threatened*)
- **Razorback sucker** (*endangered*)
- **Bluehead sucker** (*species of concern in Arizona*)
- **Flannelmouth sucker**
- **Speckled dace**

**3** native fish species are no longer found in the Grand Canyon

- **Colorado pikeminnow**
- **Roundtail chub**
- **Bonytail**

### Honor tribal values

For decades, the Pueblo of Zuni, the Hopi Tribe, and other tribes have expressed significant ongoing concerns regarding taking of life in the Grand Canyon — considered a sacred cultural landscape — including efforts to kill, remove, poison, and cause the death of nonnative species.