

PERFORMANCE REPORT for the period ending September 30, 2021

November 12, 2021

Reclamation Grant Agreement No. R21AP10250

ASU Topminnow Holding for 2021-2026

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Gila topminnow *Poeciliopsis occidentalis* and Yaqui topminnow *P. sonoriensis* are two, federally-listed endangered fish species that are native to Arizona. Multiple stocks have been held in protective custody by Arizona State University (ASU) since the 1970s as part of on-going research, conservation, and recovery actions in the species' behalf. Stocks now are housed in facilities of the Department of Animal Care & Technologies (DACT) on the ASU Tempe campus, and DACT staff provides routine maintenance and care of these animals. Per instructions at GrantSolutions.gov this report summarizes performance under the subject agreement for the period May 1 to September 30, 2021.

All established project milestones for the reporting period were successfully met.

The following four stocks currently are being held at ASU: Gila topminnow: Cienega Creek, Parker Canyon, Red Rock Canyon; Yaqui topminnow: North Pond, Tule Spring, East 2PhD Pond (San Bernardino National Wildlife Refuge [SBNWR]) and House Pond (Slaughter Ranch) combined.

The following are the most recent augmentations to currently held stocks from wild populations: Cienega Creek (September 22, 2020), Parker Canyon (none), Red Rock Canyon (none), SBNWR (September 30-October 1, 2020). Augmentations in the past have been nominally schedule at two-year intervals, but there is no accommodation for this activity under the current agreement.

No transfers of Gila topminnow or Yaqui topminnow from ASU stocks were made during the reporting period.

Because of funding limitations this agreement will end on April 30, 2022, at which time all stocks will be removed from ASU. Tentative plans for the distribution of each stock have been developed by FWS, Reclamation, and Arizona Game and Fish Department (K. Moser, Reclamation, September 10, 2021).

Status of Gila topminnow (*Poeciliopsis occidentalis*) and Yaqui topminnow (*P. sonoriensis*) stocks held and maintained in protective captivity in the Animal Resources Center at Arizona State University, Tempe, as of September 30, 2021.

| <b>Wild Stock/Source</b> | <b>Original ASU Acquisition</b>   | <b>Most Recent Augmentation</b>   | <b>Next Augmentation</b> | <b>Comments</b>   |
|--------------------------|---|---|--------------------------|---|
| Bylas Springs            | June 24, 1994; N=20 Roper Lake State Park (via Bylas Springs in 1988)<br><br>May 1997; N=17 Bylas Springs     | Jul 12, 2017; N=45 mixed age/size/sex (coll. USFWS)<br><br>Aug 24, 2017; N=54 mixed age/size/sex (coll. USFWS)              | None planned             | ASU stock lost to disease winter 2020-2021                                |
| Cienega Creek            | June 20, 1994; N=20   | Sep 22, 2020; N=111 mixed age/size/sex (coll. PCM & RWC)  | None planned             |   |
| Monkey Spring            | September 1993; N=10 (not confirmed)<br>June 29, 1994; N=20   | Jun 4, 2018; 122 mixed age/size/sex (coll. PCM & PAW)   | None planned             | ASU stock determined hybridized by FWS and removed. Not replaced.         |
| Parker Canyon            | November 20, 2015; N=48 (not confirmed)   | None  | n/a                      | Temporary holding only; no future augmentations planned.                  |
| Red Rock Canyon          | May 25, 2006; N=166; 119F, 47M<br>From Desert Harbor Elementary School (via Red Rock Canyon in February 2002) | None  | Extirpated in the wild.  |   |
| Sharp Spring             | July 20, 1994; N=18   | None  | Extirpated in the wild.  | Stock lost to natural mortality in excess of recruitment winter 2020-2021 |
| Yaqui topminnow          | June 1998; N=39<br>Tule Spring and North Pond (SBNWR)   | September 30-October 1, 2018; 122 mixed age/size/sex (East 2PhD Pond SBNWR & House Pond (Slaughter Ranch); coll. PCM & PAW) | None planned             | Stock lost to natural mortality in excess of recruitment winter 2020-2021 |

**[EXTERNAL] Performance Report Reclamation grant agreement no. R21AP10250**

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Fri 11/12/2021 10:00 AM

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 1 attachments (75 KB)

R21AP10250 Performance Report May 1 -- Sep 30 2021.pdf;

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Good morning. Attached is my annual Performance Report for the period May 1 to September 30, 2021 in behalf of Reclamation grant agreement no. R21AP10250 with Arizona State University for "ASU Topminnow Holding 2021-2026." Please let me know if you have questions or comments or require additional information. With best regards, Paul/

Paul C. Marsh, Emeritus Faculty  
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