Proposed Restoration of Native Aquatic Species in the Redrock Canyon Watershed

U.S. Department of the Interior (DOI), Bureau of Reclamation
U.S. Department of Agriculture (USDA), Forest Service
Coronado National Forest
Sierra Vista Ranger District
Santa Cruz County, Arizona
Townships 21 and 22 South, Ranges 16 and 17 East

Background

This Scoping Notice/Opportunity to Comment is being offered to the public to allow early and meaningful participation in the National Environmental Policy Act (NEPA) review of a Federal action proposed by the DOI, Bureau of Reclamation (Reclamation), in cooperation with the USDA, Forest Service, Coronado National Forest (Coronado).

The Coronado Forest Supervisor is considering a proposal by Reclamation to construct a concrete fish barrier on National Forest System (NFS) land in lower Redrock Canyon on the Sierra Vista Ranger District in Santa Cruz County, Arizona. Redrock Canyon is located in the Canelo Hills, east of the town of Patagonia (see attached map). The proposed barrier would facilitate the Arizona Game and Fish Department’s (AGFD) plans to mechanically and/or chemically treat the watershed to remove nonnative fishes and bullfrogs that threaten native species, and to transplant and, hopefully, restore native aquatic species in the watershed, in cooperation with the U.S. Fish and Wildlife Service (FWS).

Redrock Canyon watershed supports three species listed as either threatened or endangered (T/E) by the FWS under the Endangered Species Act (ESA) of 1973: the endangered Gila topminnow (*Poeciliopsis occidentalis*), the endangered Sonora tiger salamander (*Ambystoma tigrinum stebbinsi*), and the threatened Chiricahua leopard frog (*Rana chiricahuensis*). Also, it may provide habitat suitable for the endangered Gila chub (*Gila intermedia*) and a Forest Service-designated sensitive species, the Mexican garter snake (*Thamnophis eques*). Since 2001, the population of the Gila topminnow has declined precipitously, and the Chiricahua leopard frog is reportedly confined to a single site within the watershed. These declines, which have occurred despite marked improvements in habitat, can largely be attributed to competition and predation by nonnative fishes and bullfrogs.

The proposed action to be considered by Reclamation and the Forest Service in the upcoming NEPA review is whether or not to construct the fish barrier in the Redrock Canyon watershed and facilitate the restoration of other native aquatic species. In addition to approving the barrier, the Forest Service has an action to approve the mechanical and/or chemical treatment of surface waters in the watershed by AGFD,
which may include (a) the application of piscicide (antimycin A and/or Rotenone) to cienega pools, stream sections, and stock tanks; and, (b) seining, netting, gigging, pumping, or other mechanical methods to remove bullfrogs from cienega pools, stream sections, and stock tanks. The AGFD would consider approval of all activities associated with native species capture, holding, and transplant.

The Coronado manages NFS land in the Redrock Canyon watershed in accordance with the Coronado National Forest Land and Resource Management Plan (LRMP; 1986, as amended) and other national policy and direction, including the ESA. The LRMP provides direction for the Coronado to allow the construction of fish habitat improvement structures as needed to support populations of threatened and endangered species. It also guides the transplanting of protected species into suitable habitat following guidelines or species recovery plans and memoranda of understanding. Concurrent with the NEPA review, the Forest Service will review elements of the proposed action for consistency with all applicable standards and guidelines in the LRMP. If an inconsistency is found, an amendment to the Forest Plan may be needed prior to project implementation, unless the inconsistency is addressed by modifications in project design.

Reclamation has proposed this project, in cooperation with the Forest Service, as a conservation measure responsive to ongoing Reclamation consultation with FWS on the impacts of transporting and delivering Central Arizona Project (CAP) water to the Gila River basin. Transportation and delivery of CAP water from the Colorado River at Lake Havasu, Arizona, has the potential to introduce and spread nonnative aquatic species within the Gila River basin and its sub-basin, the Santa Cruz River drainage, which includes Redrock Canyon. This proposed project would assist with recovery actions for Gila topminnow and Gila chub, as well as other unlisted native species.

**Project Description**

If the Forest Service authorizes the current proposal, Reclamation would construct a 12-foot-wide by 5-foot-high, reinforced-concrete fish barrier in Redrock Canyon on NFS land approximately 4.2 miles upstream from the confluence of the stream with Sonoita Creek, which lies northeast of the town of Patagonia, and approximately 1 mile upstream from the Forest boundary (see attached map). The barrier would reduce the potential for reinvasion of the watershed by nonnative fish following mechanical and/or chemical control treatments by AGFD to remove nonnatives. The Forest Service would be responsible for “first-line” inspection of the fish barrier following flood events and Reclamation would be responsible for long-term maintenance of the structure.

During nonnative removal operations, affected native fish, amphibians, and aquatic reptiles would be salvaged and held by AGFD until their release is possible. Following treatment, salvaged Gila topminnow would be released back into the drainage. Because Gila topminnow are rare, the population would likely need to be augmented with fish transplanted from existing captive and wild populations. Longfin dace, desert sucker, and speckled dace would be transplanted by AGFD into suitable habitat using salvaged individuals, captive stocks, or other appropriate genetic stocks (e.g., Sonoita Creek for
speckled dace). If suitable habitat is found to support Gila chub and Chiricahua leopard frog, transplants would be considered. Frog transplants would be consistent with goals, objectives and strategies identified in the FWS 2006 Chiricahua Leopard Frog Draft Recovery Plan. Mexican garter snakes would be transplanted if individuals or suitable habitat are found in the watershed. All nonnative species control and native species transplants would be conducted under the supervision of AGFD and FWS in cooperation with the Forest Service.

The fish barrier would be constructed by a contractor under the direct supervision of Reclamation and would require up to 2 months for completion. Treatments necessary to remove nonnative species would take approximately 1 month in total, but likely would consist of several 1-week sub-treatments. Transplant activities are anticipated to occur over a period of several years, with each discrete transplant taking only part of a day. The optimum time for construction of the barrier and removal of nonnatives would be in the early summer or autumn, when the likelihood of precipitation is at a minimum.

Section 7, ESA, consultation with FWS about the effects of the proposed action on Federal T/E species would be the responsibility of Reclamation and would be completed during the NEPA review. The Forest Service would review the potential effects of the proposed activities on FSS and management indicator species, in accordance with the direction of the LRMP.

How to Comment and Timeframe

We are about to begin the NEPA review process, during which we will analyze the potential environmental consequences of our proposed action. You are encouraged to offer comments on the scope of our NEPA analysis, including potential issues, concerns, and alternatives to the proposed action. Reclamation and the Forest Service will accept comments for 30 days following the distribution and/or newspaper publication of this notice. Comments related to advocacy of the project shall not be considered as part of the project scope unless they are based on or linked to a specific issue or concern.

You may submit written comments to us by U.S. mail, facsimile, or hand-delivery over the next 30 days. Please include your full name and address and project title (Redrock Canyon Fish Barrier) with your comments. Comments should be mailed to Mr. John McGlothlen, Bureau of Reclamation, 6150 W. Thunderbird Rd., Glendale, Arizona 85306. Facsimiles may be sent to Mr. McGlothlen at 623-773-6486. Hand-delivered written comments may be submitted to us at the above address, Monday through Friday, between 7:30 a.m. and 4:00 p.m., excluding Federal holidays. Electronic (email)

1 Please be advised that comments and personal information associated with them, such as names and addresses, become part of the Administrative Record for this NEPA review. As such, they may be made available to a third party upon request pursuant to the Freedom of Information Act (FOIA). If you do not wish for your personal information to be subject to FOIA, you may choose not to include it with your comments. Alternatively, you may request an exemption from FOIA with your comment submittal. Should you choose the latter, you will be informed by the Forest Service as to whether or not your request qualifies for an exemption. If it does not, you will be afforded the opportunity to resubmit your comments without personal information or to withhold them.
comments may be submitted to jwmcglothlen@lc.usbr.gov. You may submit email comments in any of the following formats: in the text of your email; in a word (.doc) attachment; or in rich-text format (.rtf), with the title of the project in the “Subject” line. Also, please include your full name and address with your email.

For additional information concerning the fish barrier proposal, removal of nonnative species, or transplant of native species, please feel free to contact Mr. John McGlothlen directly at the address on the letterhead, by telephone at 623-773-6256, or by electronic mail at jwmcglothlen@lc.usbr.gov.

Thank you for your interest and participation in the activities of the Coronado National Forest and the Bureau of Reclamation.