



United States Department of the Interior

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AESO/SE
02EAAZ00-2015-F-0030

October 3, 2016

Ms. Karla S. Petty, Division Administrator
U.S. Department of Transportation
Federal Highway Administration
4000 North Central Avenue, Suite 1500
Phoenix, Arizona 85012-3500

Re. SR 92 San Pedro River Bridge Project Reinitiation
FHWA File # 092-A(203)T
ADOT File # 092 CH 340 H8323 01C

Dear Ms. Petty:

Thank you for your correspondence of September 22, 2016, received in our office on the same day. This letter documents our review of your reinitiation and supplemental concurrence request for the above-referenced project, in compliance with section 7 of the Endangered Species Act of 1973 (ESA) as amended (16 U.S.C. 1531 *et seq.*). At issue are the potential effects of a bridge replacement project on State Route (SR) 92 and the San Pedro River, approximately 18 miles (mi) southeast of the City of Sierra Vista, Cochise County, Arizona. New information and changes to the project scope may result in effects to several species that were not considered in our consultation on this project.

In a biological and conference opinion (BO/CO) that we issued on February 8, 2016, we concluded that the project would not jeopardize the continued existence of the threatened western yellow-billed cuckoo (*Coccyzus americanus*) (cuckoo) or destroy or adversely modify proposed critical habitat for the cuckoo or threatened northern Mexican gartersnake (*Thamnophis eques megalops*) (gartersnake). In our concurrences issued on the same date, we concluded that the proposed bridge project would not likely adversely affect the endangered southwestern willow flycatcher (*Empidonax traillii extimus*) (flycatcher) or gartersnake.

Your letter of September 22, 2016, outlined plans by the Arizona Department of Transportation (ADOT) and Federal Highway Administration (FHWA) to expand the scope of the bridge replacement project to include treatment and control of noxious and invasive plants using manual, mechanical, and chemical methods. A description of the additional actions, potential effects, and measures to be taken to prevent harm to listed species was included in your

correspondence of September 22, 2016 as a supplement (incorporated herein by reference) to the biological evaluation (BE) previously provided for the project. You concluded that use of herbicides “may affect, but is not likely to adversely affect” the flycatcher, cuckoo, bat, or gartersnake. You also concluded that use of herbicides is not likely to destroy or adversely modify proposed critical habitat for the cuckoo or gartersnake.

Your letter of September 22, 2016, also informed us that the endangered lesser long-nosed bat (*Leptonycteris curasoae yerbabuena*) (bat) recently was documented roosting beneath the SR 92 bridge (the structure that is to be replaced). This species was not addressed in the BO/CO or concurrences we issued on February 8, 2016. Your correspondence included a memorandum with supplemental information regarding bat occurrence at the bridge and measures ADOT has taken to prevent harm to this listed species (incorporated herein by reference). You determined that with incorporation of these conservation measures, the bridge replacement project “may affect, but is not likely to adversely affect” the lesser long-nosed bat.

With the submittal of your letter and the supplemental analyses that we summarize below, FHWA has reinitiated consultation per 50 CFR § 402.16 for the referenced bridge replacement project. We concur with your determinations and provide our rationales below.

Description of the Proposed Action

FHWA and ADOT are planning to replace the existing bridge that crosses the San Pedro River with a new bridge. The existing bridge has been determined to be structurally deficient and vulnerable to scour because of the generally poor condition of the superstructure. There are numerous narrow-to medium-sized cracks across the bridge's decks, and concrete on the decks is generally deteriorated. In addition, the bridge foundations are unstable for the calculated scour, and overall the bridge does not meet current design criteria. The purpose of the project is to address the structural and overall condition of the bridge by replacing it to meet current design criteria.

Project activities (vegetation clearing, as described in the BE and BO/CO) began in September 2016. Complete replacement of the bridge is expected to take approximately 11 months.

Supplemental Project Activities: Herbicide Use

ADOT and FHWA have expanded the scope of the bridge replacement project to include treatment and control of noxious and invasive plants using manual, mechanical, and chemical methods, as described. The expanded scope of work will include the use of herbicides, specifically the aquatic formulation of glyphosate with Agri-Dex or Li-700 surfactant, for control of Johnsongrass (*Sorghum halepense*) and other noxious or invasive weeds. The proposed herbicide falls within Ecotoxicity Rating Class 0 (not toxic) to small avian species, terrestrial reptiles, terrestrial and aquatic amphibians, terrestrial and aquatic arthropods, and warm water fish (White 2007). Herbicide treatments would occur along access roads, staging areas, and work areas to control noxious and invasive plants as needed and to facilitate revegetation efforts. Herbicide use would occur within the project limits as described in our February 2016

consultation and would be applied according to label requirements during the appropriate growing period for the species being controlled..

Project Update: Lesser long-nosed Bat Use of the San Pedro River Bridge at SR 92

The BE for the project and subsequent BO/CO and concurrences did not address the lesser long-nosed bat because there were no documented occurrences of this species in the action area, forage resources (i.e., panniculate agaves and/or columnar cactus) are not present in the project limits (i.e., the construction footprint, the area of disturbance), and there was no physical evidence that this species occurred or was likely to occur in the project limits. However, bats were observed roosting beneath the SR 92 San Pedro River Bridge on September 8, 2016, by ADOT biologist, Joshua Fife, and HDR Engineering, Inc. biological monitor, Kurt Watzek. On three subsequent mornings, September 9-11, 2016, up to three bats were observed roosting under the bridge. Within a few days, Angie McIntire, Arizona Game and Fish Department bat specialist, and Scott Richardson, U.S. Fish and Wildlife Service (FWS) species lead for the lesser long-nosed bat, confirmed from photographs provided by ADOT that the bats roosting under the bridge were lesser long-nosed bats.

This bat species occurs seasonally in Arizona. Bats arrive from Central Mexico in April and move from the southwestern part of the state to the southeastern part of the state over the summer months (USFWS 2016). Roost sites typically include caves, mines, and abandoned buildings (USFWS 2001). They are found in desertscrub and grassland/oak transition habitats where they feed on nectar and pollen from the flowers of columnar cacti and agave. The species typically feeds on columnar cacti during the early summer and agaves from late summer into early fall. Typically, they have migrated back to Mexico by October 15 during any given year (Scott Richardson, personal communication to Robert Lehman, USFWS liaison to ADOT and FHWA, September 14, 2016).

On September 14, 2016, ADOT issued a stop work order until November 1, 2016. Up to that point, the only project activity that had occurred was the removal of vegetation near the bridge to create access and work space for heavy equipment and work crews at the bridge. Additional protection measures for the bat are listed below.

Conservation Measures: Herbicide Use

- Applicators would follow the recommended general protection measures outlined by FWS in White (2007).
- Within 200 feet of the ordinary high water mark of the San Pedro River, herbicide would be applied using hand-wand backpack equipment using either liquid streams or relatively coarse sprays to minimize spray drift.
- Herbicides would not be applied directly to flowing water within the San Pedro River.
- No herbicides with a toxicity rating over Class 0 for small avian species, reptiles, warm water fish, or aquatic amphibian species would be used, per Appendix C in White (2007).
- Herbicides would not be applied within 24 hours prior to forecasted rain.

Conservation Measures: Lesser Long-nosed Bats

- Work would occur within the project limits but would be limited to grading and earthwork on construction access roads and residential access driveways connecting to SR 92. Work would occur at a minimum 25 ft from the bridge structure and no work would occur beneath the bridge.
- Prior to any bridge demolition or construction activities, ADOT biologists would survey for the presence of bats.
- The contractor, sub-contractor(s), inspectors, supervisors, and any ADOT staff would not cause harm to or harass any bats that appear within the project limits.
- If bats are observed by the contractor during bridge construction activities, ADOT Environmental Planning Group biologist, Joshua Fife (602-622-9622 or 602-712-6819), would be notified to evaluate the situation.

Determination of Effects

Southwestern Willow Flycatcher and Western Yellow-billed Cuckoo

We concur with your determination that the proposed supplemental action may affect but is not likely to adversely affect the southwestern willow flycatcher or western yellow-billed cuckoo. The proposed supplemental action is also not likely to destroy or adversely modify the primary constituent elements (PCEs) of proposed critical habitat for the cuckoo (riparian woodlands, adequate prey base, or dynamic riverine processes; 79 FR 48548). We base our concurrence on the following:

- As noted in our February 2016 BO/CO for this project, flycatcher and cuckoo nesting habitat is not present within the project limits and will not be affected by the proposed supplemental action.
- Flycatcher and cuckoo migration and foraging habitat is present in the project limits; however, conservation measures as described above will assure that native riparian vegetation will not be harmed by the proposed supplemental action.
- Proposed reduction of noxious and invasive plants may promote growth of native riparian vegetation and improve habitat conditions for the flycatcher and cuckoo.
- As outlined in the original BE, the project includes a comprehensive re-vegetation plan that includes the planting of native trees and shrubs.
- Herbicides proposed for use are not toxic to small avian species; thus, potential direct effects of the treatments to flycatchers and cuckoos are discountable.
- Herbicides proposed for use are also not toxic to the cuckoo and flycatcher's collective forage base, including tree frogs and terrestrial and aquatic arthropods (insects).
- As we noted in our February 2016 BO/CO for this project, the bridge replacement project will occur within a very small area (<1 acre) of the 21,786-acre western yellow-billed cuckoo Upper San Pedro River Critical Habitat Unit, i.e., <0.000046% of proposed cuckoo critical habitat on the Upper San Pedro River and <0.000002% of proposed critical habitat rangewide. The proposed supplemental action will occur within the same small area and only minimally affect the PCEs of riparian woodlands and adequate prey

base and only minimally affect the PCEs of aquatic or riparian habitat and viable prey base; thus, proposed critical habitat will remain functional for conservation and recovery of the cuckoo.

Northern Mexican Gartersnake

We concur with your determination that the proposed supplemental action may affect but is not likely to adversely affect the Northern Mexican gartersnake, and is not likely to destroy or adversely modify the primary constituent elements of proposed critical habitat for the gartersnake (aquatic or riparian habitat, adequate terrestrial space, viable prey base, and absence of nonnative fish species; 78 FR 41550). We base our concurrence on the following:

- Gartersnakes are unlikely to occur in the action area during herbicide treatments, and herbicides proposed for use are not toxic to gartersnakes or their preferred prey species (native fish and leopard frogs); thus, potential effects of those treatments are discountable.
- As we noted in our February 2016 BO/CO for this project, the bridge replacement project will occur within a very small area (<1 acre) of the 22,669-acre northern Mexican gartersnake San Pedro River Critical Habitat Subunit, i.e., <0.000044% of proposed critical habitat on the San Pedro River and <0.000002% of proposed critical habitat rangewide. The proposed supplemental action will occur within the same small area; thus, proposed critical habitat will remain functional for conservation and recovery of the gartersnake.

Lesser Long-nosed Bat

We concur with your determination that the current action and proposed supplemental action may affect but is not likely to adversely affect the lesser long-nosed bat. We base our concurrence on the following:

- When construction activities at the bridge itself resume, no earlier than November 1, 2016, bats that were roosting under the bridge will have migrated; thus, effects of the project to the bats that were using the bridge are discountable.
- As noted in the ADOT memorandum regarding use of the bridge by bats, construction of the new bridge will extend into 2017; thus, bats will not be able to use the bridge as a transitory roost in the upcoming spring months. However, numerous bridges, culverts, and mountain caves occur within flying distance of the SR 92 San Pedro River Bridge that bats could use as temporary roosts.
- Once the bridge project is complete, the new bridge would again allow use by lesser long-nosed bats during migration.

In keeping with our trust responsibility to American Indian Tribes, by copy of this letter, are notifying the Tohono O'odham Nation, Pascua Yaqui Tribe, and San Carlos Apache Tribe, which may be affected by this proposed action, and encourage you to invite the Bureau of Indian Affairs to participate in the review of the proposed action. We also encourage you to coordinate the review of this project with the Arizona Game and Fish Department.

Thank you for your continued coordination. This letter concludes our consultation. No further section 7 consultation is required for this project at this time. Should project plans change, or if information on the distribution or abundance of listed species or critical habitat becomes available, this determination may need to be reconsidered. In all future correspondence on this project, please refer to consultation number 02EAAZ00-2015-F-0030. Should you require further assistance or if you have any questions, please contact Robert Lehman (602) 242-0210 or Brenda Smith (928) 556-2157.

Sincerely,



 Steven L. Spangle
Field Supervisor

cc: (electronic)

Assistant Field Supervisor, Fish and Wildlife Service, Tucson, AZ (Attn: Jean Calhoun)
Fish and Wildlife Biologists, Fish and Wildlife Service, Phoenix, Tucson, AZ

(Attn: Jeff Servoss, Jason Douglas, Susan Sferra, Greg Beatty, Scott Richardson)

Chief, Habitat Branch, Arizona Game and Fish Department, Phoenix, AZ

(Attn: Joyce Francis)

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Environmental Planning Group, Arizona Department of Transportation, Phoenix, AZ

(Attn: Joshua Fife, Kris Gade, Justin White, Audrey Navarro)

Environmental Coordinator, Federal Highway Administration (Attn: Tremaine Wilson)

Manager, Cultural Affairs, Tohono O'odham Nation, Sells, AZ

Assistant Tribal Attorney General, Pascua Yaqui Tribe, Tucson, AZ

Director, San Carlos Tribal Historic Preservation and Archaeology Department, San Carlos, AZ

Environmental Specialist, Western Regional Office, Bureau of Indian Affairs, Phoenix, AZ

Archaeologist, Western Regional Office, Bureau of Indian Affairs, Phoenix, AZ

Literature Cited

Hughes, K. 2009. Observations on herbicide choices & amphibian conservation. Unpublished report available at hughesem@mindspring.com.

U.S. Fish and Wildlife Service. 2001. Lesser long-nosed bat (*Leptonycteris curasoae yerbabuena*) general species information. Arizona Ecological Services Field Office, Phoenix, Arizona. Accessed September 15, 2016. <https://www.fws.gov/southwest/es/arizona/Documents/Redbook/Lesser%20Long-nosed%20bat%20RB.pdf>.

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