



United States Department of the Interior



Fish and Wildlife Service

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In Reply Refer to:
AESO/SE
22410-2010-F-0258

March 4, 2010

Dennis Rankin
Environmental Protection Specialist
United States Department of Agriculture
Rural Development Utilities Programs
Engineering and Environmental Staff
Mail Stop 1571, Room 2244-S
1400 Independence Ave, SW
Washington, DC 20250

RE: Consultation on the Maintenance of the Apache-Hayden 4 Utility Line Crossing at the Gila River, Pinal and Gila Counties, Arizona

Dear Mr. Rankin:

Thank you for your request for formal consultation with the U.S. Fish and Wildlife Service (FWS) pursuant to section 7 of the Endangered Species Act of 1973 (16 U.S.C. 1531-1544), as amended (Act). Your request was dated August 24, 2009, and was received by us on August 26, 2009. At issue are the effects that may result from the proposed maintenance of the Southwest Transmission Cooperative, Inc. (SWTC) transmission lines at seven river crossings in Graham, Cochise, Pinal, and Mojave counties, Arizona. Your August 24, 2009, letter concluded that the proposed action may adversely affect the endangered southwestern willow flycatcher (*Empidonax traillii extimus*), the endangered razorback sucker (*Xyrauchen texanus*), and the species' respective critical habitat.

A revised request, dated February 22, 2010, and authored by Southwest Transmission Cooperative, Inc. (SWTC), your designated non-Federal representative, was received by us on February 24, 2010. At issue in SWTC's letter are the effects that may result from the proposed maintenance of the SWTC transmission lines at the Apache-Hayden 4 Crossing in Pinal and Gila counties, Arizona. The Apache-Hayden 4 crossing site is among those proposed in the larger project, but you have proposed for it to undergo separate consultation due to our delays in completing a biological opinion on the larger action. The February 22, 2010, letter pertains only to the southwestern willow flycatcher and its critical habitat.

This biological opinion pertains *only* to the Apache-Hayden 4 site, *not* the larger programmatic consultation, and is based on information provided in: (1) the August 2009 Biological Assessment (BA) transmitted with your letter; (2) verbal and written interactions between my staff, SWTC staff, and staff of WestLand Resources, Inc. (WestLand); the contents of your February 22, 2010, letter; and (4) other published and unpublished sources of information. Literature cited in this biological opinion is not a complete bibliography of all literature available on the species of concern, and its effects, or on other subjects considered in this opinion. A complete administrative record of this consultation is on file at this office.

Please note that this biological opinion does not rely on the regulatory definition of “destruction or adverse modification” of critical habitat at 50 CFR 402.02. Instead, we have relied upon the statute and the August 6, 2004, Ninth Circuit Court of Appeals decision in *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service* (No. 03-35279) to complete our analysis with respect to critical habitat.

Consultation History

August 26, 2009: We received SWTC’s August 24, 2009, letter transmitting the BA for the proposed action.

February 24, 2010: We received SWTC’s February 22, 2010, letter requesting that the critical right-of-way maintenance at the Apache-Hayden 4 crossing be permitted to proceed prior to completion of the programmatic consultation you requested in your August 24, 2009, letter.

February 25, 2010: We received clarification from SWTC, via electronic mail, that the eventual programmatic consultation initially requested on August 26, 2009, will also include the Apache-Hayden 4 site, thus superseding this biological opinion. We also transmitted a draft Description of the Proposed Action section to SWTC to ensure its accuracy and requested that a final biological opinion be transmitted without providing a draft in advance..

March 1, 2010: We received direction from SWTC to forego a draft biological opinion.

March 4, 2010: We received your March 4, 2010, letter requesting formal consultation on the proposed action and confirming that you are the Federal action agency of record for the proposed action.

BIOLOGICAL OPINION

Description of the Proposed Action

A complete description of the currently proposed action is found within the Programmatic BA transmitted with SWTC’s August 24, 2009, letter. In brief, the proposed action consists of right-of-way (ROW) maintenance at a single right-of-way crossing on the Gila River near Hayden.

The currently proposed action, the Apache-Hayden 4 crossing, consists of access road and ROW clearing, both with ongoing maintenance. Access road activities will include the clearing of an existing, but overgrown, 787-foot access road to a width of 14 feet. The BA estimates that an average of 11.2 feet of vegetation clearing will be required to create the desired width. The total effect to vegetated areas, all of which are critical habitat, is 0.41 acre. Clearing within the utility line ROW to the Vegetation Clearing Corridor (VCC) specifications (see Exhibit 8 on Page 58 of the BA) will range from 24 feet of complete, mechanical clearing to 100 feet of canopy clearance. The BA estimates the total clearing of ROW vegetation, all of which is critical habitat, to be 0.2 acre. The total areal extent of critical habitat to be affected is, therefore, 0.61 acre.

Description of the Proposed Conservation Measures

The proposed avoidance, minimization, and conservation measures are described in the Programmatic BA. The measures consist of:

1. Seasonal Restrictions: initial clearing and continuing maintenance will occur outside of the southwestern willow flycatcher breeding season (May 1 to August 30)
2. Mechanical vegetation clearing activities will not occur within flowing portions of the river.
3. Herbicides will be applied by certified applicators and according to Environmental Protection Agency registration limits and requirements.¹
4. SWTC will provide annual reports of ROW activities to FWS.
5. Documentation of unanticipated, emergency ROW maintenance activities will be provided to FWS within 24 hours of the occurrence.
6. SWTC will, upon issuance of the programmatic biological opinion, provide \$10,000 to the Arizona Game and Fish Department for habitat restoration along the lower San Pedro River.

Status of the Species

The rangewide status of the southwestern willow flycatcher was described in detail in our July 17, 2008, biological opinion on right-of-way maintenance within utility corridors on National Forests in Arizona (File number 22410-2007-F-0365), and is incorporated herein via reference. Additional information can be found in the species' Recovery Plan (FWS 2002).

Southwestern willow flycatcher critical habitat is described in the Final Rule (70 FR 60886: FWS 2005). The primary constituent elements (PCE) of critical habitat include the presence of riparian plant species in a dynamic (successional) riverine environment (for nesting, foraging, migration, dispersal, and shelter), a specific, suitable structure of this vegetation, and the presence of insect populations for food.

¹ Note that the Environmental Protection Agency is currently consulting on "label restrictions" and that the outcome of that consultation may alter the manner in which herbicides may be applied in habitat for threatened and endangered species.

Environmental Baseline

The environmental baseline includes past and present impacts of all Federal, State, or private actions in the action area, the anticipated impacts of all proposed Federal actions in the action area that have undergone formal or early section 7 consultation, and the impact of State and private actions which are contemporaneous with the consultation process. The environmental baseline defines the current status of the species and its habitat in the action area to provide a platform to assess the effects of the action now under consultation.

The action area for the Apache-Hayden 4 crossing appears in Figure 6 in the BA and includes 2,673 feet of ROW and road, encompassing an area of 4.8 acres that will be directly and indirectly affected by the proposed action. Of the 4.8-acre site, 0.83 acre is southwestern willow flycatcher critical habitat.

The action area thus delimited is within the Middle Gila/San Pedro Critical Habitat Unit as described in the Final Rule (FWS 2005).

Southwestern willow flycatchers are abundant at certain locations within the Gila/San Pedro Critical Habitat Unit, though the majority of the territories are in locations along the lower San Pedro River and the middle-to-upper reaches of the Gila River below Coolidge Dam. Coolidge Dam, which impounds the river to form San Carlos Reservoir, regulates flows in the middle Gila River to a great extent. The Bureau of Indian Affairs operates the reservoir to meet the agricultural water needs of downstream users such as the Gila River Indian Community and the San Carlos Irrigation and Drainage District (collectively, the San Carlos Irrigation Project) (USBR 2003). Water releases occur year-round with the highest generally occurring during summer months (FWS 2004).

The hydrology of the Gila River reach downstream of Coolidge Dam exhibits a highly altered magnitude, frequency, duration, and rate of change. These changes to the base and flood flow hydrographs have contributed to appreciable alterations in the riparian community within the critical habitat, which consists largely of tamarisk (FWS 2002, USBR 2003). The Arizona Game and Fish Department (AGFD) performed a long-term study (1996-2007) within an area located downstream of Coolidge Dam (Ellis *et al.* 2008). AGFD examined the influence of variation in streamflow on the abundance of flycatcher territories detected in the Gila River study area; all linear regressions showed a positive relationship between Gila River streamflow and the number of southwestern willow flycatcher territories (Ellis *et al.* 2008). The 1996-2007 territory abundance data (Ellis *et al.* 2008; Appendix I) represent the baseline status of southwestern willow flycatchers in the action area, and are incorporated herein via reference. In summary, the number of territories has varied from as low as 10 in 1996, when four sites were surveyed, to as high as 64 in 2007, when 22 sites were surveyed.

While the abundance of southwestern willow flycatcher territories is linked to the artificial hydrograph of Coolidge Dam, we hypothesize that longer-term riparian successional processes may also influence the abundance of territories over time. Regardless, hydrologic variability does account for variation in the numbers of territories and thus, the overall abundance of southwestern willow flycatchers on the Gila River within the action area is similarly variable. Southwestern willow flycatchers are not specifically surveyed within the Apache-Hayden 4 action

area, but have been detected both up- and downstream from the crossing. The closest survey sites are located at GRN004 and GRS003, approximately 3 river miles downstream and at the Dripping Springs Campground and Wash, approximately 3 to 4 river miles upstream (SWCA 2009). Three southwestern willow flycatcher pairs were detected at GRS003 and none at GRN004 (SWCA 2009). Eleven southwestern willow flycatcher pairs were detected at the Dripping Springs Campground site and 14 at Dripping Springs Wash site (SWCA 2009).

The SWCA (2009) report notes that brown-headed cowbird parasitism was not observed at any known nest site and also that middle Gila River southwestern willow flycatcher territories have been increasing, hypothetically in response to predictable river releases from Coolidge Dam.

The Gila River within the Apache-Hayden 4 action area exhibits all of the PCEs of southwestern willow flycatcher critical habitat in at least some locations, including the presence of riparian plant species in a dynamic riverine environment; a specific, suitable structure of this vegetation; and the presence of insect populations for food. The operations of Coolidge Dam, however, do affect the dynamism of the riparian ecosystem by altering the magnitude, frequency, duration, and rate of change of the middle Gila River hydrograph. The primary manifestation of this effect is that the middle Gila River has a relatively high proportion of tamarisk within its riparian community. Regardless, the critical habitat along the Gila River below Coolidge Dam is, and may continue to be utilized extensively for breeding (Ellis *et al.* 2008) and will continue to serve as a migration corridor for additional occupied reaches of the Gila River upstream.

We have completed three section 7 consultations that share the Apache-Hayden 4 action area and which may have affected southwestern willow flycatchers. On March 8, 2004, we completed formal consultation with the Bureau of Reclamation (BOR) on the approval of a water exchange by the San Carlos Apache Tribe for retention in San Carlos Reservoir (File number 02-02-04-F-0001). We anticipated incidental take of southwestern willow flycatchers in the form of increased nest failures, but the take was never realized; BOR withdrew the proposed action. On March 25, 2004, we completed informal consultation with the Bureau of Land Management (BLM) on a plan to authorize commercial, non-motorized rafting trips on the middle Gila River between Dripping Springs Wash and Winkelman (File numbers 02-21-04-I-0114 and 02-21-04-I-0065). We concurred with the BLM's determination that the action was not likely to adversely affect southwestern willow flycatchers. On March 10, 2008, we completed informal consultation with the Federal Highway Administration (FHWA) on proposed improvements to State Route 77 (File number 22410-2008-I-0183). We concurred with the Arizona Department of Transportation's (ADOT, FHWA's designated non-Federal representative) that blasting, disturbance, and water withdrawals near Dripping Springs Wash were not likely to adversely affect southwestern willow flycatchers.

Effects of the Proposed Action

We have determined that the proposed action at the Apache-Hayden 4 site, and its effects, are neither interrelated nor interdependent to the larger programmatic consultation requested on August 24, 2009. The numerous sites encompassed in the programmatic consultation were grouped for convenience and expediency, but each individual action has independent utility because it must be maintained, regardless of its connectedness to the other sites.

Vegetation clearing and ongoing maintenance of the cleared areas would occur along a river reach and within a critical habitat unit occupied by southwestern willow flycatchers. The proposed action is unlikely to directly affect individual southwestern willow flycatchers because much of the action area appears, at present, to lack suitable vegetative structure. Mixed broadleaf woodland and tamarisk are present in narrow stringers; much of the site is within a mesquite bosque.

The clearing of 0.61 acre of riparian vegetation (0.41 acre in road prism, 0.2 acre in power line ROW) within the action area is an appreciable effect on the amount of habitat available for the southwestern willow flycatcher within the 4.8-acre patch surrounding the clearing sites. The effect is, however, minimal at the critical habitat unit (23,949 acres) and rangewide (120,824 acres) scales. Furthermore, SWTC has proposed to conduct non-emergency clearing and maintenance activities between September 1 and April 30. Southwestern willow flycatchers may be migrating through the area from April 15-30 and again from September 15-30, but clearing is not anticipated to be a novel disturbance to these migrating birds. The action area is subject to disturbance from recreationists and noise from the adjacent State Route 77, with greater scopes and levels of disturbance along the entire migration route.

Cumulative Effects

Cumulative effects include the effects of future State, tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.

The primary cumulative effects affecting southwestern willow flycatchers in the action area are related to livestock grazing (on State and private lands) and off-highway-vehicle use within and adjacent to the Gila River. Cumulative effects resulting from upland, land-disturbing activities (livestock grazing, road use) will continue to deliver sediment to the action area. Impairments to water quality from past and present mining activities are also anticipated to continue.

Conclusion

After reviewing the current status of the southwestern willow flycatcher, the environmental baseline for the action area, the effects of the proposed clearing and maintenance activities at the Apache-Hayden 4 crossing, and the cumulative effects, it is our biological opinion that the action, as proposed, is neither likely to jeopardize the continued existence of the southwestern willow flycatcher, nor likely to destroy or adversely modify critical habitat for the species. We present these conclusions for the following reasons:

- Southwestern willow flycatchers are known to occur on the Gila River, but not within the patch of riparian vegetation in which the action area is situated.
- Implementation of the conservation measures (see the Description of the Proposed Conservation Measures section, above, and Section 2.4 in the BA) would greatly minimize negative impacts to nesting willow flycatchers, as well as occupied, suitable, and potential habitat, although flycatchers may still experience some minor residual effects from the proposed management activities.

- Overall, the clearing of 0.61 acre of vegetation (0.41 acre in road prism and 0.2 acre in power line ROW) is not expected to affect the numbers, reproduction, or distribution of the southwestern willow flycatcher in the Middle Gila/San Pedro Management Unit or rangewide.
- The proposed action is anticipated to reduce the threat of catastrophic wildfire along the middle Gila River by reducing the threat of wildfire from unmaintained ROWs.
- The effects to the PCEs within 0.61 acre of southwestern willow flycatcher critical habitat that may remain under full implementation of the conservation measures are small in scale and unlikely to result in the adverse modification or destruction of the critical habitat. These residual effects are immeasurably small relative to the amount of critical habitat available in the Middle Gila/San Pedro Management Unit (23,949 acres) and throughout the species' range (120,824 acres). The ability of the area to continue to contribute to the recovery of the southwestern willow flycatcher will not be reduced.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulations pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. "Take" is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. "Harm" is further defined (50 CFR 17.3) to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. "Harass" is defined (50 CFR 17.3) as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. "Incidental take" is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

Amount or Extent of Take – Southwestern Willow Flycatcher

As demonstrated in the Environmental Baseline and Effects of the Proposed Action sections, above, southwestern willow flycatchers are unlikely to be directly or indirectly affected by implementation of the Apache-Hayden 4 crossing vegetation management project. We, therefore, do not anticipate that implementation of the proposed action will result in the incidental take of any individuals of the species.

Conservation Recommendation

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

- We recommend that the Rural Utilities Service and its designated, non-Federal representative, SWTC, continue to implement the southwestern willow flycatcher recovery plan.

For us to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitat, we request notification of the implementation of any conservation recommendations.

Reporting Requirements/Disposition of Dead or Injured Listed Animals

Upon finding a dead or injured threatened or endangered animal, initial notification must be made to the FWS's Division of Law Enforcement, 2450 West Broadway, Mesa, Arizona (480-967-7900) within three working days of its finding. Written notification must be made within five calendar days and include the date, time, and location of the animal, a photograph, and any other pertinent information. Care must be taken in handling injured animals to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible condition. If feasible, the remains of intact specimens of listed animal species shall be submitted as soon as possible to the nearest FWS or Arizona Game and Fish Department office, educational, or research institutions (e.g., University of Arizona in Tucson) holding appropriate state and Federal permits.

Arrangements regarding proper disposition of potential museum specimens shall be made with the institution before implementation of the action. A qualified biologist should transport injured animals to a qualified veterinarian. Should any treated listed animal survive, the FWS should be contacted regarding the final disposition of the animal.

REINITIATION AND CLOSING STATEMENT

This concludes formal consultation on the Rural Utility Service's proposed implementation of clearing and maintenance activities at the Apache-Hayden 4 crossing. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may adversely affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to a listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by this action.

In keeping with our trust responsibilities to American Indian Tribes, we suggest you coordinate this consultation with the Gila River Indian Community, the San Carlos Apache Tribe, and any other entities that may be affected.

We appreciate the Rural Utility Service's efforts to identify and minimize effects to listed species from this project. For further information please contact Jason Douglas (520) 670-6150 (x226) or Sherry Barrett (520) 670-6150 (x223). Please refer to the consultation number, 22410-F-2010-0258 in future correspondence concerning this project.

Sincerely,


 Steven L. Spangle
Field Supervisor

cc (hard copy):

Field Supervisor, Fish and Wildlife Service, Tucson, Arizona (2)
Assistant Field Supervisor, Fish and Wildlife Service, Tucson, Arizona
Fish and Wildlife Service, Tucson, Arizona (Attn: Jason Douglas)

cc (electronic copy):

Chief, Habitat Branch, Arizona Game and Fish Department, Phoenix, Arizona
Regional Supervisor, Arizona Game and Fish Department, Tucson, Arizona
Kevin Barnes, Southwest Transmission Cooperative, Inc., Benson, Arizona

Literature Cited

- Ellis, L. 2009. Personal communication via electronic mail between Lisa Ellis of the Arizona Game and Fish Department and Greg Beatty of the U.S. Fish and Wildlife Service, including and transmittal of Southwestern Willow Flycatcher Surveys, Survey Periods 2 and 3 Summary, Gila River between Dripping Springs Wash to South Butte.
- Ellis, L. A., D. M. Weddle, S. D. Stump, H. C. English, and A. E. Graber. 2008. Southwestern willow flycatcher final survey and monitoring report. Arizona Game and Fish Department, Research Technical Guidance Bulletin #10, Phoenix, Arizona, USA.
- SWCA, Inc. 2009. Southwestern Willow Flycatcher Surveys and Nest Monitoring along the Gila River between Coolidge Dam and South Butte, 2008. Prepared for US Bureau of Reclamation, Phoenix Area Office. 25 pp. with appendices.
- U.S. Bureau of Reclamation (USBR). 2003. Biological assessment on proposed water exchange by San Carlos Apache Tribe to maintain minimum pool in San Carlos Reservoir in Gila and Pinal counties, Arizona. U.S. Bureau of Reclamation, Phoenix, Arizona.
- U.S. Bureau of Reclamation (USBR). 1992. Summary of Fish and Water Quality Sampling along the San Pedro River from Dudleyville to Hughes Ranch near Cascabel, Arizona, October 24 and 25, 1991, and the Gila River from Coolidge Dam to Ashurst/Hayden Diversion Dam, October 28-31, 1991. Unpublished trip memorandum. February 26, 1992. U.S. Bureau of Reclamation, Phoenix, Arizona.
- U.S. Fish and Wildlife Service (FWS). 2005. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Southwestern Willow Flycatcher (*Empidonax traillii extimus*); Final Rule. Federal Register 70(201): 60886-61009.
- U.S. Fish and Wildlife Service (FWS). 2004. Biological opinion on the Bureau of Reclamation's approval of water exchange by the San Carlos Apache Tribe for retention in San Carlos Reservoir. U.S. Fish and Wildlife Service, Albuquerque, New Mexico, USA.
- U.S. Fish and Wildlife Service (FWS). 2002. Southwestern Willow Flycatcher Recovery Plan, Region 2, Albuquerque, NM.