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In Reply Refer To:
AESO/SE
22410-2009-F-0354

April 5, 2010

Memorandum

To: Field Manager, Tucson Field Office, Bureau of Land Management, Tucson, Arizona

From: Field Supervisor

Subject: Biological Opinion on the Proposed San Manuel Interconnect Project in Pinal County, Arizona (File Codes 6840-AZG020 and 2850-AZA 34615)

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 May 22, 2009 and was received by us on the same date. At issue are effects that may result from the proposed implementation of the San Manuel Interconnect Project (proposed action) in Pinal County, Arizona. Your memorandum concluded that the proposed action will adversely affect the endangered southwestern willow flycatcher (*Empidonax traillii extimus*) and its critical habitat. Your memorandum also requested our concurrence that the proposed action may affect, but is not likely to adversely affect the endangered lesser long-nosed bat (*Leptonycteris curasoae*). We concur with your determination, and have provided our rationale in Appendix A.

This biological opinion is based on information provided in: (1) the May 2009 *Biological Assessment of Impacts to Southwestern Willow Flycatcher and Lesser Long-nosed Bat from the Proposed San Manuel Interconnect, Pinal County, Arizona* (BA) transmitted with your memorandum; (2) verbal and written interactions between our respective staffs as well as those of Southwest Transmission Cooperative, Inc. (SWTC; the proponent) and SWCA Environmental Consultants (SWCA; SWTC's consultant); and (3) other published and unpublished sources of information.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.

Consultation History

- May 22, 2009: We received your May 22, 2009, request for formal consultation on the proposed action.
- July 15, 2009: We transmitted a memorandum requesting a 60-day extension to the consultation to you.
- July 22, 2009: We received your July 21, 2009, memorandum granting our 60-day extension request.
- February 8, 2010: We requested, and received, the results of 2009 southwestern willow flycatcher surveys from SWTC.
- February 9, 2010: We submitted a second request for an extension to the consultation period to you.
- February 10, 2010: We transmitted a draft biological opinion to you
- March 31, 2010: We received your memorandum stating that you had no comments on the draft biological opinion.

BIOLOGICAL OPINION

Description of the Proposed Action

A complete description of the proposed action is found in the May 2009 BA with your May 22, 2009, memorandum. The proposed action consists of the granting of a right-of-way (ROW) across Public Lands for the construction of a 115 kilovolt (kV) power line within the San Pedro River Valley near San Manuel in Pinal County, Arizona.

Description of the Proposed Action

SWTC is applying to the Bureau of Land Management (BLM) for a ROW in order to construct the transmission line between the existing Apache to Hayden 115-kV line and the San Manuel Substation. The grant application is for a 100-foot-wide power line ROW and a 50-foot-wide access road ROW. The power line ROW will cross approximately 364 feet of BLM land, and the access road ROW on BLM land will extend approximately 700 feet. The proposed permanent ROW acquisition on BLM land will include the following: NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 13, Township 9 South, Range 17 East, Gila and Salt River Baseline and Meridian.

In addition, the project will be constructed with Federal funds provided by the Rural Utilities Service, an agency of the U.S. Department of Agriculture. BLM, as the lead Federal agency for the consultation, is required to assess the impacts of the proposed action to species listed or proposed for listing under the Act.

Pre-Construction Soil Boring

Prior to the initiation of construction, SWTC proposes to conduct soil boring at 9 sites in the project area (see BA Appendix A, Figures A.1 and A.2). At each soil boring site, a small 4 inch by 5 inch diameter hole will be drilled to a depth of approximately 40 feet using a medium-size truck and drill rig. The bore holes will be refilled and the sites regraded upon completion of the drilling.

Soil boring will be accomplished along existing roads or from areas that have already been cleared of vegetation; no additional ground clearing or road work will be required. Of the 9 soil boring locations, 8 will be on private Broken Hill Proprietary-Billiton (BHP) land at the west end of the project area, and one will be on State land at the east end of the project area. None of the boring locations are within flycatcher critical habitat.

Project Construction

The proposed new overhead transmission line will be a double-circuit 230-kV line (using 230-kV post insulators) initially energized at 115 kV. Applicable design standards indicate that an easement width of 100 feet is required. The proposed design meets or exceeds the requirements for raptor protection.

Approximately 33 structures will be required to complete the line. The majority of structures will extend between 70 and 115 feet above ground level, depending on the terrain; however, two structures, one on either side of the San Pedro River, will extend approximately 140 feet above ground level. The single structure located on BLM land will be approximately 90 feet above ground level, with a base measuring approximately 6 to 8 feet in diameter. Structure locations were selected to avoid sensitive features such as riparian areas, watercourses, and cultural resource sites, or to allow electric wire conductors to clearly span the features within the limits of standard structure design. The aboveground wire height will be approximately 25 feet at the point of maximum sag. Structure pads will be concrete and will measure approximately 50 × 50 feet.

In order to connect to the San Manuel Substation, SWTC will acquire two bays from APS. In addition, along approximately 3 miles of the 4.25-mile-long transmission line (from the pump house to the San Manuel Substation, all on BHP property on the west side of the San Pedro River), SWTC will install on the new structures a 46 kV-line built to 69-kV standards for BHP's use. SWTC will remove the existing BHP 46-kV line following installation of this new 46-kV line. The 46-kV line will be located entirely on BHP property and will therefore not require an additional permit from BLM. Installation of the new 230-kV transmission line will require access across Arizona State Land Department (ASLD), BLM, and BHP lands.

Three access roads will be required for project construction and future access and maintenance. All three roads will be needed for as long as the line is in use. The access roads will be designed to provide adequate drainage of surface water and will be constructed with appropriate ditch lines and water bars where needed. No explosives blasting will be used in access road construction. The locations of the access roads are shown in BA Figure 4. A cross section showing the extent of proposed mechanical and manual vegetation clearing along the westernmost access road is provided in Figure 5 in the BA.

- Access Road A. This 7,560-foot-long access road will extend east from River Road to the existing Apache to Hayden 115-kV transmission line, located in the foothills of the Galiuro Mountains. It will range in width from 20 to 50 feet. The road will not follow the proposed ROW corridor.

Approximately 700 feet of this access road will be located on BLM land. On BLM land, the disturbance footprint for the access road will consist of a cut on the uphill side of up to 20 feet, with approximately 20 feet or more of the material deposited on the fill side of the road, depending on the terrain. As mentioned previously, the total disturbance area may be up to 50 feet, but a more precise disturbance footprint for this access road will be determined during preparation of as-built plans as requested by BLM. Also, any road construction outside the 100-foot power line easement will be identified based on as-built plans. Water bars will be placed as needed. No drainage structures will be required on BLM land. Two pipe gates will be installed in the fence lines where the road enters and exits BLM land. The road surface will be composed of compacted natural soils; no surfacing will be required. However, surface rock may be used in areas where the existing material is too soft. SWTC will submit as-built drawings of the road plan to BLM at a future time. BLM has agreed to issue a notice to proceed prior to receiving details of the final road alignment. However, BLM's issuance of a ROW grant is contingent upon submittal by SWTC of a specific as-built or updated road plan, and upon SWTC receiving project approval from the Arizona Corporation Commission, Arizona Power Plant and Transmission Line Siting Committee.

- Access Road B. This 500-foot-long access road will be constructed from River Road west to an existing BHP farm road. It will be 14 feet wide, with an additional 5-foot-wide buffer on either side where vegetation will be manually trimmed. The road will be located entirely on BHP land and will follow the proposed transmission line ROW corridor.
- Access Road C. This 850-foot-long access road will extend from BHP land east to a proposed transmission structure location in the San Pedro River floodplain. This road also will be 14 feet wide, with an additional 5-foot-wide buffer on either side where vegetation will be manually trimmed, and will follow the proposed transmission line ROW corridor.

Project construction is expected to begin in the autumn of 2009 and last approximately 6 months. All construction staging will be from BHP property. SWTC will not request a temporary construction easement. The workforce will consist of approximately 30 to 50 construction personnel. Water for dust control will be provided by BHP and delivered by the contractor using a water truck. A storm water pollution prevention plan (SWPPP) will be prepared by the Road Contractor.

Prior to construction, a surveyor will flag and stake the pole locations and access roads. The construction process will begin by clearing vegetation and grading the access roads and structure pads. This will be accomplished using a bulldozer. Where necessary, the contractor will clear a narrow path along the proposed project centerline for the conductor wire pull line. This typically involves the use of a small bulldozer or other all-terrain vehicle and is needed in order to place the wire line on the structure pulleys and then to pull the main conductor wire in to place. Once the roads and pads are completed, the contractor will deliver the structure sections and hardware to each structure pad. The structure will then be erected on-site and buried in an augered hole; the hole will be backfilled with concrete slurry and any leftover excavation material. The concrete will be premixed off-site and trucked to the project area. After all the structures have been installed the conductor wires will be attached to the structure insulators. There will be six main conductor wires (aluminum conductor steel reinforced, 1272 size) and two $\frac{3}{4}$ -inch ground wires. Installation will involve the placement of wire-pulling equipment at intervals of approximately 15,000 feet (the length of wire in a conductor reel). No wire-pulling equipment will be placed on BLM land. The conductor wire

will be manually carried over the San Pedro River and, where necessary, around archaeological sites. There are currently no plans to use helicopters in the construction of the line; however, a final decision will be made after the contractor is selected.

SWTC will compact the road surface material and stabilize all graded areas. In order to preserve the natural landform to near preconstruction conditions, no ground leveling will be done where the slopes are within appropriate limits for the safe operation of the construction equipment. Vegetation from the access roads and pad sites will be scattered along the easement, and any large debris will be removed and hauled to an off-site landfill. SWTC does not propose to reclaim or reseed any of the road beds or pad sites. Vegetation along the edge of the access roads may be pruned back to reduce damage during construction operations.

Description of the Proposed Conservation Measures

Southwestern Willow Flycatcher

SWTC has proposed to situate the transmission line structures and access roads to avoid southwestern willow flycatcher habitat, including areas designated as, and exhibiting the primary constituent elements of, the species' critical habitat (see pages 10-11 in the BA).

The proposed action also includes the implementation of a variety of additional measures to further avoid and minimize potential impacts to southwestern willow flycatchers and the species' critical habitat. These measures include the following: (1) prevent unauthorized off-road vehicle access to Critical Habitat by installing locked gates on new access roads; (2) conduct all construction activities within the San Pedro River floodplain between September 1 and April 15, the species' non-breeding season; (3) continue to conduct "project-related" clearance surveys for southwestern willow flycatcher (see FWS 2000); (4) avoid changes to river morphology by placing roads outside the main channel of the San Pedro River and by using a cement base and small disturbance footprint for the installation of the transmission structure near the main channel; and (5) manually carry the conductor wire across the San Pedro River during project construction.

Lesser Long-nosed Bat

SWTC has proposed to minimize the limits of access road disturbance in areas containing saguaro cactus, the densest concentrations of which are on the southwest-facing foothills of the Galiuro Mountains. Access road disturbance limits have been reduced to 50 feet or less (typical engineering width is 100 feet). Examination of aerial photographs resulted in shifts of the road alignment to minimize the greatest saguaro concentrations.

The new access road alignment was surveyed for saguaro cacti in spring 2008. Data recorded for each cactus included the height of the main stem, number of arms, total linear feet (including arms), and general viability (health). Following the survey, maps were created that displayed the following: (1) the locations of saguaro cacti within the disturbance footprints of the original and new access road alignments (BA Figure 6); (2) the locations of saguaro cacti by size class (>5 feet tall and ≤5 feet tall), including those that will be avoided (based on field survey), within the alignment of Access Road A (BA Figure 7); and (3) the locations of saguaro cacti within a study area that includes the new access road alignment and surrounding area (BA Figure 8).

The aforementioned maps and associated saguaro density information were provided to FWS staff. Following discussions with FWS, SWTC adopted the following additional measures to mitigate

potential impacts to lesser long-nosed bats and the species' habitat: (1) provide a monitor during road construction to avoid unnecessary impacts to saguaros; (2) pay an in-lieu fee to the Arizona Game and Fish Department for future research benefiting the lesser long-nosed bat; and (3) transplant along the road alignment all saguaros ≤ 5 feet tall that are impacted by the project. Transplantation will be accomplished according to the cactus transplantation methodology provided by the University of Arizona (2009). The in-lieu fee will be paid prior to road construction, with the fee based on the stumpage value (calculated according to Arizona State Land Department guidelines) of all saguaros that will be impacted by the project. According to information collected during the field survey, and SWTC's estimate that up to five additional saguaros (all over 25 feet tall) will be removed during transmission line construction, the project will impact 2,964.5 linear feet of saguaro at a stumpage value of \$3.00 per linear foot, for a total of \$8,893.50, payable to AGFD. AGFD prepared a letter providing assurances that the in-lieu funds can be accepted by AGFD and that the funds will be used for future research benefiting LLNB (see BA Appendix C).

Please note that we have concurred with your determination that the proposed action may affect, but is not likely to adversely affect, the lesser long-nosed bat. The rationale for our concurrence, as well as condensed Status of the Species and Environmental Baseline information, appear in Appendix A.

Status of the Species – Southwestern Willow Flycatcher

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.

Environmental Baseline - Southwestern Willow Flycatcher

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 proposed action includes the ROW and associated access roads between the existing Apache to Hayden 115-kV transmission line and the eastern toe of the San Manuel tailings piles situated west of the San Pedro River (see BA Figure 2). The power line alignment was surveyed in 2007, 2008, and 2009 by Westland Resources, Inc. (WestLand Resources, Inc. 2007, 2008, and 2009); no southwestern willow flycatchers were detected. The action area is within a 5-kilometer (km) reach of river on BHP Billiton property between San Manuel and Mammoth. Stump *et al.* (2008) reported the results of surveys for southwestern willow flycatchers in this 5-km reach of the San Pedro River between San Manuel and Mammoth. This surveyed reach includes the

action area. These authors documented 158 southwestern willow flycatchers (86 territories, 72 pairs, 11 lone males, and a single migrant) during protocol-level surveys in 2008. Surveys conducted in the 5-km reach between 1993 and 2005 documented a maximum of 55 territories in 2005, with the additional 27 territories located in 2008 being attributed to increases in habitat during the non-survey years 2006 through 2007 (Stump *et al.* 2008).

We have conducted no prior formal and informal consultations within the action area, but we did transmit a Technical Assistance letter to a consultant for BHP Billiton on October 20, 2009, (File number AESO/SE: 22410-2010-TA-0008) in which we found that construction of fencing within and adjacent to the river will have no effect on southwestern willow flycatchers. The documentation submitted with the request for Technical Assistance indicated that the fencing project, and thus the action area for the proposed action, is situated approximately 5 km downstream from the nearest, know-to-be occupied southwestern willow flycatcher territories.

Both the fencing project and the currently-proposed action are within southwestern willow flycatcher critical habitat. The critical habitat within the action area contains the PCEs related to the presence of riparian plant species in a dynamic (successional) riverine environment, but the vegetation present is currently but lacks the size structure that would make it suitable for nesting. SWTC also specifically routed the proposed power lines to avoid riparian vegetation and the remaining PCEs of critical habitat. The site is, however, a corridor and stopover site for migrating southwestern willow flycatchers. We also note that the fencing project will protect the site from trespass livestock and contribute to the maintenance of fluvial and successional processes, thus rendering the action area increasingly likely to contain breeding habitat, including PCEs, in the future.

Effects of the Proposed Action – Southwestern Willow Flycatcher

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.

Implementation of the proposed action will result in the permanent removal of approximately 0.80 acre of mesquite woodland vegetation and 0.18 acre of sparsely vegetated former agricultural land along the San Pedro River floodplain. No currently existing cottonwood-willow riparian vegetation will be affected. Effects to mesquite woodland and agricultural land are summarized in Table 5 of the BA.

As stated in the Environmental Baseline section, above, it is unlikely that southwestern willow flycatchers currently nest within the action area (Stump *et al.* 2008; WestLand Resources, Inc. 2007, 2008, and 2009). Vegetation structure in the project area is currently unsuitable for use by the species. The proposed future removal of mesquites is also unlikely to directly affect nesting southwestern willow flycatchers.

The proposed action has the potential to increase edge effects between dense patches of vegetation and newly-cleared areas. Southwestern willow flycatcher nests built near a patch edge are more susceptible to parasitism by brown-headed cowbirds than are nests placed within the core of large patches, although the insulating effect apparently is not evident in small and medium-sized patches (Brodhead *et al.* 2007). In California, we have recommended the creation of biological buffers of at least 100 feet adjacent to breeding southwestern willow flycatcher habitat, measured from the outer

edge of riparian vegetation, to protect southwestern willow flycatchers from nest parasitism (FWS 2005).

None of the access roads proposed by SWTC will be within 200 feet of the mesic riparian vegetation in which southwestern willow flycatchers typically establish territories (e.g., cottonwood, willow, and tamarisk). Consequently, it is not anticipated that access road construction associated with this project will contribute to increased parasitism of southwestern willow flycatcher nests by brown-headed cowbirds.

The proposed action will result in the immediate alteration of approximately 0.62 acre of southwestern willow flycatcher critical habitat (see BE Table 6). This represents a long-term negative impact. The river reach within which the action area is situated appears to be geomorphically active and capable of channel avulsion (see BE Figure 2). The age and density of the mesquite trees in the eastern and western limits of the channel, however, will appear to indicate that meandering is not actively occurring at great distances from the thalweg at this time. A more likely scenario is that the river could migrate into the former agricultural land to the east of the proposed alignment, as this area is adjacent to the active channel and appears to already be subject to lateral channel migration processes, as potentially evidenced by the light chroma bed material immediate east of active channel in BE Figure 2. We therefore have determined that the reasonably foreseeable effects of the proposed action are that it will result in the immediate and permanent loss of 0.03 acre of critical habitat. While this agricultural land presently lacks the PCEs of critical habitat, it has the potential, through geomorphic and successional processes, to develop the characteristics required to support breeding by southwestern willow flycatchers over the longer term.

This modest areal extent of permanent habitat loss amounts to a measurable, but small effects to southwestern willow flycatcher habitat. The affected area represents 0.0001 percent of critical habitat within the 23,959-acre Middle Gila/San Pedro unit and 0.00002 percent of the 120,824 acres of critical habitat rangewide. This loss of PCEs is of such small magnitude that it is unlikely to affect the survival and recovery of the southwestern willow flycatcher.

The proposed action also includes conservation measures intended to avoid and minimize the effects of the action. Construction activities will be phased to avoid working within critical habitat during the southwestern willow flycatcher's non-breeding season (April 15 to September 15). The wire will be manually strung over the river to avoid the need to clear vegetation from and/or excessively traverse critical habitat with vehicles. We anticipate that the proposed installation of locked gates on all access roads and the placing of those roads outside of the floodplain will reduce the potential for trespass off-highway vehicle use. The use of a small disturbance pad and cement base will minimize habitat disturbance and post-construction erosion at the single tower site located within the floodplain. Ongoing protocol-level southwestern willow flycatcher surveys will allow SWTC to verify the efficacy of these conservation measures and adjust the proposed action's implementation if necessary.

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.

Within the action area, cumulative effects result from activities on Private, State, and Federal (BLM) lands. The primary cumulative effects affecting southwestern willow flycatchers in the action area are related to livestock grazing and off highway vehicle use within and adjacent to the San Pedro River on BHP lands. We note, however, that BHP's efforts to fence their private lands from trespass uses, such as at San Manuel Crossing (located upstream) are beginning to prove effective (author observation). We also anticipate BHP's livestock fencing will further protect the riparian area.

Cumulative effects resulting from upland, land-disturbing activities (livestock grazing, road use) will continue to deliver sediment to the action area. Water withdrawals for agricultural, industrial, and residential use will continue to reduce baseflows, and impairments to water quality from past and present mining activities are also anticipated to continue.

Conclusion – Southwestern Willow Flycatcher

After reviewing the current status of the southwestern willow flycatcher, the environmental baseline for the action area, the effects of the San Manuel Interconnect Project, 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:

- Implementing the Conservation Measures (see the Description of the Proposed Conservation Measures and Effects of the Proposed Action sections, above) will avoid and minimize negative impacts to habitat, including critical habitat.
- The action area is not presently known to be occupied by breeding southwestern willow flycatchers. Limiting construction within southwestern willow flycatcher habitat to between September 15 and April 15 will avoid affecting individual flycatchers that may be migrating through the action area.
- The proposed action is unlikely to appreciably alter the fluvial function or successional processes of the San Pedro River within the action area with the exception of 0.03 acre of critical habitat, presently lacking PCEs, which will be cleared and paved. This residual effect is small in scale and unlikely to result in the adverse modification or destruction of the critical habitat. The acreage of this effect is small relative to the amount of critical habitat available in the Middle Gila/San Pedro Management Unit (0.0001 percent of 23,949 acres) and throughout the species' range (0.00002 of 120,824 acres). The ability of the area to continue to contribute to the recovery of the southwestern willow flycatcher will not be reduced.
- Overall, the proposed activities are not expected to affect the numbers, reproduction, or distribution of the southwestern willow flycatcher.
- Ongoing protocol-level surveys will allow the efficacy of the conservation measures to be evaluated as well as facilitating running changes to the proposed action should the species be encountered during implementation.

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 construction of the San Manuel Interconnect. We, therefore, do not anticipate that implementation of the proposed action will result in the incidental take of any individuals of the species.

Conservation Recommendations

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.

- The Bureau of Land Management should continue to assist in the implementation of the Southwestern Willow Flycatcher Recovery Plan.

For us to be kept informed of actions minimizing or avoiding adverse effects benefiting 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 proposed San Manuel Interconnect project. 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.

We appreciate the Bureau of Land Management'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, 22410-2009-F-0354 in future correspondence concerning this project.

/s/Sherry Barrett for

Field Supervisor

cc (hard copy):

Assistant Field Supervisor, U.S. Fish and Wildlife Service, Tucson, AZ

cc (electronic copy)

Greg Beatty, U.S. Fish and Wildlife Service, Phoenix, AZ

cc (electronic copy):

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

Regional Supervisor, Arizona Game and Fish Department, Tucson, AZ

Kevin Barnes, Southwest Transmission Cooperative, Benson, AZ

Appendix A – Concurrences

Lesser Long-nosed Bat

The greatest densities of lesser long-nosed bats are located in northern Mexico and in southern Arizona (FWS 1994). Known major roost sites include 16 large roosts in Arizona and Mexico. According to surveys conducted in 1992 and 1993, the number of bats estimated to occupy these sites was greater than 200,000. Twelve major maternity roost sites are known from Arizona and Mexico. According to the same surveys, the maternity roosts are occupied by over 150,000 lesser long-nosed bats. The numbers above indicate that although a relatively large number of these bats are known to exist, the relative number of known large roosts is small. Disturbance of these roosts and the food plants associated with them could lead to the loss of the roosts. Limited numbers of maternity roosts may be the critical factor in the survival of this species.

Status of Lesser Long-nosed Bat in the Action Area

Records of the lesser long-nosed bat within the action area and within foraging distance (approximately 40 miles) include a suspected roost in Redfield Canyon and known roosts in Youtcy Canyon (A7 Ranch), Wildhorse Mountain, Hot Springs Canyon, and the west side of the Rincon Mountains. Of the San Pedro Valley roosts (which excludes only the western Rincon Mountains), the species seem to be used in the late summer or fall and so, agaves are the most likely target of foraging activities. This could be partially due to that being the time when survey efforts are conducted and so, the potential for lesser long-nosed bats to be foraging on saguaro cactus cannot be ruled out.

Effects of the Proposed Action to Lesser Long-nosed Bat

The primary indirect effects to the lesser long-nosed bat from implementation of the San Manuel Interconnect will be the removal of 101 saguaro cacti (96 within 8.98 acres to be cleared for Access Road A and five within 0.12 acre to be cleared at four transmission tower sites) between the existing Apache to Hayden 115-kV transmission line and River Road, adjacent to the San Pedro River. These impacts are described in greater detail in section 5.2.1 in the BA.

Destruction of these 101 saguaro cacti will reduce food available to lesser long-nosed bats. To better evaluate the significance of this impact, SWTC, at the request of FWS, determined the relative impacts of the project on the local saguaro population. Based on current available aerial photography, SWTC estimated a population of 1,437 saguaros within a 106-acre study area that includes the alignments for Access Road A and the transmission line (see BA Figure 8). Project construction will affect 97 saguaros, or 7.0% of the saguaros present in this 106-acre area. Although it is impossible to evaluate the significance of the loss of foraging habitat to lesser long-nosed bats, the loss is considered minimal compared with the large amount of potential foraging habitat available to the species in the San Pedro River Valley. Also, it is currently thought that the majority of adult female lesser long-nosed bats gather in maternity colonies in the spring (when saguaros and other columnar cacti are blooming) in the southwestern portion of the state. The majority of roosts in the vicinity of the proposed action are likely used in late summer or autumn when bats are feeding on paniculate agaves (which will not be affected by the proposed action).

Conclusion – Lesser Long-nosed Bat

After reviewing the current status of the lesser long-nosed bat, the environmental baseline for the action area, and the effects of the action, we concur with your determination that the proposed action is not likely to adversely affect the species for the following reasons:

- The location of the project in that portion of the Arizona range is believed to be used from mid- to late summer when agaves (not saguaros) are the primary food source.
- The proposed action will result in the removal of a small percentage of the total number of saguaros in the lower San Pedro River valley, and will affect no agaves.
- SWTC will provide a monitor during road construction activities to ensure unnecessary impacts to saguaros are avoided.
- SWTC will pay an in-lieu fee to the Arizona Game and Fish Department for future research benefiting lesser long-nosed bats (see BA Appendix C)
- SWTC will transplant all affected saguaros ≤ 5 feet tall impacted according to the cactus transplantation methodology provided by the University of Arizona (2009).

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