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In Reply Refer To:
AESO/SE
02-21-05-F-0582
02-21-03-F-0210

August 26, 2005

Memorandum

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

From: Field Supervisor

Subject: Biological Opinion for the Proposed Upper San Pedro Riparian Firebreaks, Tiered to the Programmatic Biological Opinion for BLM Arizona Statewide RMP Amendment for Fire, Fuels, and Air Quality Management (02-21-03-F-0210)

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 April 28, 2005, and received by us on May 10, 2005. At issue are impacts that may result from the proposed Upper San Pedro Riparian Firebreaks located along the upper San Pedro River in Cochise County, Arizona. The proposed action may affect the endangered southwestern willow flycatcher (*Empidonax traillii extimus*, WIFL) and the endangered Huachuca water umbel (*Lilaeopsis schaffneriana* ssp. *recurva*, HWU).

In your memorandum, you requested our concurrence that the proposed action was not likely to adversely affect the HWU. We concur with your determination for this species. Rationale for our concurrence is detailed in Appendix A. Critical habitat for the WIFL was proposed on October 12, 2004. The proposed critical habitat does not include the San Pedro RNCA or any part of the proposed action area, and is not addressed further in this biological opinion.

This BO is based on information provided in your April 28, 2005, memorandum and biological assessment (BA); telephone conversations with Mark Fredlake of your staff; field investigations; and other sources of information. Literature cited in this BO is not a complete bibliography of all literature available on the species of concern, fire and fuels reduction and their effects, or on other subjects considered in this opinion. A complete administrative record of this consultation is on file at this office.

General effects to WIFL and HWU were considered in our September 3, 2004, BO for Bureau of Land Management's (BLM) statewide fire, fuels, and air quality management program (file number 02-21-03-F-0210). This BO is tiered to and references information from that programmatic BO.

CONSULTATION HISTORY

The September 3, 2004, BO contains the consultation history for all events prior to and including that BO. The following details the history of the consultation pertaining to this project:

- May 12, 2004: We began discussions with BLM regarding the proposed firebreaks along the upper San Pedro River.
- June 22, 2004: We conducted a site visit with BLM to look at the proposed action area and discuss the proposed action in more detail.
- May 10, 2005: We received BLM's request for initiation for formal consultation.
- August 10, 2005: We provided a draft biological opinion to the BLM.
- August 22, 2005: We received comments on the draft biological opinion from the BLM.

BIOLOGICAL OPINION

We refer the reader to our September 3, 2004, BO and associated documents for a description of proposed and ongoing fire, fuels reduction, and air quality management activities on BLM lands throughout Arizona (see CONSULTATION HISTORY).

Description of the Proposed Action

Under the proposed action, BLM crews, authorized permittees, or contractors will remove live vegetation and dead fuel on BLM and private lands to create two firebreaks across the riparian zone of the San Pedro River. The first is a 2.9-acre strip of riparian habitat along Escalante Crossing road (T18S R21E Sections 16, 17 & 21), as shown on Map 1 of the BA. This is a portion (approximately 900 feet) of a proposed firebreak that begins at State Highway 80 and extends due west for 2,700 feet (Map 2 of the BA) and is 100 feet wide. The second firebreak consists of a 0.7-acre strip along the international border approximately 100 feet wide by 300 feet long (T24S R22E Section 19; Map 3 of the BA). This is a part of a longer fire break (9,500 feet long) which extends along the northern side of international border within the boundary of the San Pedro Riparian National Conservation Area (RNCA, Map 4 of the BA). A combined total of 3.6 acres will be treated under this proposed action. The result will be a continuous firebreak across property boundaries.

All vegetation clearing and associated project work will be done between November 1 and March 31, when fire danger is low to moderate. This time period is also outside of the nesting and migration period for the WIFL. Vegetation will be cut, dug up, removed, scattered, or chipped as described below using mowers, weed eaters, hand saws, chain saws, and hand winches.

Live vegetation with basal diameters (four inch stump height) less than eight inches may be removed, without authorization from the San Pedro RNCA Manager. Larger trees may be

removed on a case by case basis (hazard trees for example) with authorization from the San Pedro RNCA Manager. Shrub and tree trunks will be severed four inches or less from the ground. Tree spacing will focus on maintaining 15-foot spacing among remaining trees.

Live cottonwood and willow trees will not be deliberately cut or removed from the project site. Emphasis will be placed on maintaining Arizona walnut, Arizona ash, net-leaf hackberry, buttonwillow, and Mexican elderberry. When possible, graythorn, condalia, wolfberry, sumac, Anisacanthus, seepwillow, willow-leafed groundsel, and saltbush will not be removed. Emphasis will be placed on removing tamarisk, mesquite, catclaw acacia, snakeweed, burroweed, burro brush, rabbitbrush, and thread-leafed groundsel. Mesquite and tamarisk stumps will be removed with a tractor-mounted back hoe or similar equipment. If feasible, Fremont cottonwood, Goodding willow, or mesquite will be replanted in areas where salt cedar has been removed. Grasses and forbs will be cut with a mower, to a stubble height of four inches.

Dead vegetation less than eight inches in diameter will be removed. All dead vegetation in the firebreaks will be cut and removed. Ladder fuels (dead limbs or branches) will be removed by pruning trees and shrubs up to a maximum of eight feet above ground level. All severed material from private property (except grasses and forbs) will be disposed of on private property.

Wheelbarrows and small all terrain vehicles (ATVs) with trailers may be used to remove cut debris. An effort to minimize visual effects of ATV tracks will be made as crews pull out ATV equipment from project area. Chain saws and ATVs will only be used by Federal employees or contracted crews. All mechanized equipment must meet Arizona State Land Department (ASLD) standards, and permittees must have an ASLD operations permit for approved spark arresters. Permittees must comply with all ASLD fire restriction requirements. Fire suppression tools (ax, shovel, water, bucket, etc.) must be kept at hand in the event a fire starts as a result of a faulty spark arrestor on power equipment, sparks from a chainsaw hitting a rock, etc. Burning on BLM land is not proposed

Every reasonable measure to minimize erosion, soil disturbances, disturbance to live desirable vegetation, ground disturbing activity, and the introduction of noxious weeds will be taken. All applicable conservation measures from the September 3, 2004 Programmatic BO will be applied to this proposed action. The conservation measures being applied to this project include those related to fire suppression (in the event a fire is accidentally started), fuels treatments, and rehabilitation and restoration in riparian and aquatic habitats. Additionally, species-specific conservation measures referring to WIFLs and flowering plants (HWU) are being applied. The applicable conservation measures are listed in detail in the appendix of the BA and are summarized here. Fire suppression, fuels treatment, and restoration and rehabilitation in riparian and aquatic habitat conservation measures include Minimum Impact Suppression Tactics (M.I.S.T.), use of designated Resource Advisors, personnel briefing of sensitive resource issues, rehabilitation of all roads created (no permanent roads), pre-project surveys for listed species, spark arrestors on all motorized equipment, sediment traps, placement of crew camps, and the use of containment systems for portable pumps to avoid fuel spills. Species-specific conservation measures include following all of the above mentioned conservation measures in addition to the project being conducted when WIFLs are not present (October 1 - March 31),

minimizing the use of mechanized equipment (chainsaws, pumps, etc.), and designating buffers around plant populations.

Additionally, check dams will be placed along the firebreak, as necessary, to reduce soil erosion. Use of herbicides and pesticides will not be permitted. Clearing or cutting of material within 10 feet of any stream on BLM land is prohibited, to prevent the risk of accelerating erosion. Cutting of dead limbs, up to eight feet above ground level, is authorized within this zone. Fuels from these projects will not be sold as firewood.

Firebreaks will be monitored by Safford/Tucson Fire Management Zone (STFMZ) staff, at least once a year following fuels treatment, and cleared as needed.

Southwestern Willow Flycatcher

STATUS OF THE SPECIES

Changes in the status of the species have occurred since our September 3, 2004, Programmatic BO (the status from that BO is included herein by reference). Winter runoff from the Salt River and Tonto Creek nearly filled Roosevelt Lake, substantially decreasing the amount of potential nesting habitat there. A total of 90 territories and 39 nests were recorded there in 2005, whereas in 2004, 176 territories and 154 nests were found (Munzer *et al.* 2005, USFWS files). In addition to the status of WIFLs documented in the aforementioned BO, within the Gila River Recovery Unit (including the entire San Pedro River), 186 WIFL territories were documented by AGFD in the Winkelman Study Area in 2004 (Munzer *et al.* 2005). This is an increase from 165 territories documented in 2003. At the end of the third survey period this year (July 17, 2005), 136 territories with 124 pairs and 79 nests were found along the San Pedro River in the Winkelman Study Area. The Winkelman Study Area includes the San Pedro River from Bingham Cienega downstream to the confluence with the Gila River, and on the Gila River from Dripping Springs Wash (upstream of Winkelman) to the Florence-Kelvin Highway bridge. A fire on the San Pedro Preserve at Dudleyville in 2005 burned through about 10 territories, likely destroying at least some nests.

Since 2005, we have completed or have in draft form a total of two formal consultations for specific projects, including this one, under the September 3, 2004, programmatic consultation on BLM's statewide fire, fuels, and air quality program (file number 02-21-03-F-0210 and subsequent reinitiations). The other addressed effects to Yuma clapper rail (*Rallus longirostris yumanensis*).

ENVIRONMENTAL BASELINE

The environmental baseline is similar to that described in the September 3, 2004, Programmatic BO and is included herein by reference. However, one male WIFL was documented in 2004 singing approximately one-half mile south of the Highway 80 Bridge crossing the San Pedro River near Saint David, Arizona. This sighting is approximately 3.5 miles northwest of the Escalante Crossing firebreak and more than 50 miles north of the firebreak along the international boundary firebreak. In addition to the preliminary 2005 data mentioned above, one

nesting pair of WIFLs has been documented along the San Pedro RNCA since the September 3, 2004, BO was issued. A graduate student conducting bird density surveys along the RNCA during the 2005 breeding season noted a pair of WIFLs with a nest just south of the Hereford Road crossing. This site is approximately eight miles north of the international border and the associated proposed firebreak and approximately 30 miles south of the proposed Escalante Crossing firebreak.

Surveys for WIFLs along the San Pedro RNCA over the last five years have documented possible migrating willow flycatchers. Three birds were observed in 2002 and two were sighted in 2003; however, these five birds could not be confirmed as the southwestern subspecies since none of the birds vocalized. These birds were apparently migrants as no territories were documented during those surveys. Until the 2005 pair was documented, no nesting by WIFLs had been observed along the San Pedro RNCA since 1997, when a single unsuccessful nest was found. In addition to the general surveys conducted along the San Pedro RNCA, surveys for the WIFL were conducted at each proposed firebreak site during the 2005 breeding season with negative results.

EFFECTS OF THE PROPOSED ACTION

Effects of the proposed action to WIFL remain similar to those described in the September 3, 2004, Programmatic BO. The proposed firebreaks will be maintained in perpetuity resulting in a net loss of WIFL habitat along the upper San Pedro River; however, this will only result in a loss of 3.6 acres of habitat that is marginal, at best. Our site visit on June 22, 2004, indicated that WIFLs would not likely use the area for nesting or establishing territories. While there is habitat in the vicinity of the proposed firebreaks, the habitat within the areas proposed for vegetation removal are not ideal nesting habitat. Furthermore, all vegetation removal will occur from November to March, which is outside the breeding season of WIFLs. Southwestern willow flycatchers are on their wintering grounds in Latin America during the time when initial and any subsequent maintenance vegetation clearing will occur.

Although a nesting pair of WIFLs was documented along the San Pedro RNCA during 2005 surveys, it is approximately eight miles north of the southern proposed fire break and more than 30 miles south of the northern proposed firebreak in habitat that is denser and better suited for WIFL nesting. Surveys conducted in 2005 at the two proposed firebreaks have indicated that no WIFLs were nesting in or near the proposed action areas. Therefore, no occupied territories will be affected as a result of the proposed firebreaks and any future maintenance of those firebreaks. Although it is possible for habitat adjacent to the fire breaks to develop into suitable WIFL habitat, future vegetation removal will be for maintenance purposes and much less extensive than the initial clearing.

As previously mentioned, in the last five years, five willow flycatchers of unconfirmed subspecies were observed along the San Pedro RNCA, and one lone WIFL male was confirmed singing just south of the Highway 80 Bridge crossing the San Pedro River. This lack of territorial WIFLs further indicates that the upper San Pedro River is primarily a migratory corridor between breeding and wintering grounds.

The proposed project specifically emphasizes the removal of non-native salt cedar, which is used heavily by WIFLs for nesting at lower-elevation sites in Arizona. Other plant species targeted for removal (including mesquite, catclaw acacia, rabbit bush, etc.) may provide foraging or resting cover for WIFLs during migration. As previously mentioned, these firebreaks will be maintained on a yearly basis and this habitat will not be allowed to regenerate. Although the project will result in a permanent decrease in understory cover for WIFLs, it is only 3.6 total acres and, therefore, constitutes only a small amount of the remaining habitat available for use by WIFLs. Furthermore, no WIFLs were documented nesting in either of the proposed firebreak sites or adjacent to them.

Although adverse effects cannot be completely avoided, the proposed conservation measures are designed to minimize the effects of the proposed firebreaks. The conservation measures will help reduce adverse effects by minimizing the amount of vegetation impacted, the amount of sedimentation, and direct effects to listed species. Additionally, the proposed firebreaks are likely to reduce the risk of catastrophic wildfires impacting the remaining riparian habitat along the San Pedro River.

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. Analysis of cumulative effects remains similar to that described in the September 3, 2004, Programmatic BO.

CONCLUSION

After reviewing the anticipated effects of the proposed action, including conservation measures incorporated into the Upper San Pedro Riparian Firebreaks Project, the environmental baseline for the action area, the current status of the WIFL, and the cumulative effects, we affirm our previous conclusion that the proposed action is not likely to jeopardize the continued existence of the WIFL. We base this determination on our rationale from the September 3, 2004, Programmatic BO and the following:

- 1) A total of only 3.6 acres of WIFL habitat will be impacted as a result of this project. Much of this habitat is considered marginal and not typically associated with WIFL breeding.
- 2) Recent surveys indicate that no WIFLs have been observed in or near the two proposed firebreaks. All vegetation removal will be conducted between November 1 and March 31, when fire danger is low to moderate. This is also outside of the breeding and migration period for WIFLs.
- 3) These two proposed firebreaks are consistent with the effects analysis of the September 3, 2004, Programmatic BO.
- 4) The proposed firebreaks are anticipated to reduce the risk of catastrophic wildfires impacting the remaining riparian habitat along the San Pedro River.

- 5) Proposed conservation measures are sufficient to minimize the effects to WIFLs in the vicinity of the proposed firebreaks.
- 6) No proposed critical habitat occurs in the action area.

INCIDENTAL TAKE STATEMENT

Section 9 of the ESA and Federal regulation pursuant to section 4(d) of the ESA prohibit the take of endangered and threatened species, 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 defined 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 (50 CFR 17.3). "Harass" is defined 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 (50 CFR 17.3). "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 ESA provided that such taking is in compliance with the terms and conditions of this incidental take statement.

AMOUNT OR EXTENT OF TAKE ANTICIPATED

Because the proposed firebreaks are relatively small (3.6 total acres) and no WIFLs have been documented breeding in or near the proposed fire breaks, we do not anticipate incidental take of WIFLs as a result of the proposed action.

CONSERVATION RECOMMENDATIONS

No additional conservation recommendations are recommended beyond those described in the September 3, 2004, Programmatic BO.

DISPOSITION OF DEAD OR INJURED LISTED ANIMALS

Upon locating a dead, injured, or sick listed species initial notification must be made to the FWS's Law Enforcement Office, 2450 West Broadway Road #113, Mesa, Arizona [telephone: (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 if possible, and any other pertinent information. The notification shall be sent to the Law Enforcement Office with a copy to this office. 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 to educational or research institutions holding appropriate State

and Federal permits. If such institutions are not available, the information noted above shall be obtained and the carcass left in place.

Arrangements regarding proper disposition of potential museum specimens shall be made with the institution prior to implementation of the action. Injured animals should be transported to a qualified veterinarian by a qualified biologist. Should any treated listed animal survive, the Service should be contacted regarding the final disposition of the animal.

REINITIATION NOTICE

This concludes reinitiation of formal consultation and conferencing on BLM's proposed firebreaks on the San Pedro RNCA. 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 retained (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 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 not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation. If conservation measures or other aspects of the proposed action are not implemented as anticipated herein, including schedules for implementation, reinitiation may be warranted pursuant to 50 CFR 402.16(b).

Thank you and your staff for helping us complete this reinitiation of consultation and conferencing. Any questions or comments should be directed to Brian Wooldridge (520) 670-6150 (x235) or Jim Rorabaugh (602) 242-0524 (x238) of my staff.

/s/ Steven L. Spangle

cc: Assistant Field Supervisor, Fish and Wildlife Service, Flagstaff, AZ
Assistant Field Supervisor, Fish and Wildlife Service, Tucson, AZ
State Director, Bureau of Land Management, Phoenix, AZ
Chief, Habitat Branch, Arizona Game and Fish Department, Phoenix, AZ

References Cited

Munzer, O.M., H.C. English, A.B. Smith, A.A. Tudor. 2005. Southwestern willow flycatcher 2004 survey and nest monitoring report. Nongame and Endangered Wildlife Program Technical Report 244. Arizona Game and Fish Department, Phoenix, Arizona.

Appendix A

CONCURRENCE

Huachuca Water Umbel

Refer to the September 3, 2004, Programmatic BO for a review of the status of the species and environmental baseline for the HWU, which has not changed since that time. No critical habitat has been designated in either proposed firebreak areas. Two surveys for HWU have been conducted during the spring and summer at both proposed firebreaks, both with negative results. A third survey is planned for late March or early October

After reviewing the current status of the HWU, the environmental baseline for the action area, and the effects of the proposed action, we concur with the BLM's determination that the proposed action may affect, but is not likely to adversely affect, the HWU. Our concurrence is based on the following:

- 1) No disturbance will be allowed within ten feet of the stream bank.
- 2) All vegetation clearing activities will be conducted from November to March 31, when HWU is typically dormant.
- 3) No burning is proposed as part of these two firebreaks.
- 4) Current conservation measures are sufficient to minimize the effects to HWU in the vicinity of the proposed firebreaks.
- 5) These two proposed firebreaks are consistent with the effects analysis of the September 3, 2004, Programmatic BO.
- 6) No critical habitat occurs in the action area.
- 7) Survey results for HWU in the action area were negative.