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In Reply Refer To:
AESO/SE
22410-2006-F-0360
02-21-01-I-0383 August 23, 2006

Mr. Carlos Peña
Acting Division Engineer
Environmental Management Division
International Boundary and Water Commission
The Commons, Building C, Suite 100
4171 North Mesa Street
El Paso, Texas 79902

RE: Morelos Diversion Dam Channel Capacity Restoration Project

Dear Mr. Peña:

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 March 23, 2006, and received by us on March 27, 2006. At issue are impacts that may result from the proposed Morelos Diversion Dam Channel Capacity Restoration Project located in Yuma County, Arizona. The proposed action may affect the endangered southwestern willow flycatcher (*Empidonax traillii extimus*) and the candidate yellow-billed cuckoo (*Coccyzus americanus*). Consultation is not required for candidate species; however, we appreciate your consideration of effects to this species from your proposed action.

This biological opinion is based on information provided in the March 2006 biological assessment, the request for a Clean Water Act section 404 permit and associated documents, additional materials provided by the U.S. International Boundary and Water Commission (USIBWC), documents in our files, and other sources of information. Literature cited in this biological opinion is not a complete bibliography of all literature available on the species of concern, dredging of rivers, vegetation clearing 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

The USIBWC first contacted the Fish and Wildlife Service (FWS) with a request for a species list on July 31, 2001 (consultation file number 02-21-01-I-0383). A list was sent on August 8, 2001. The proposed action under consultation in 2001 was separate from the larger Lower Colorado River Capacity and Boundary Preservation Project also under development by USIBWC. The FWS received no further communications from USIBWC concerning the Morelos Dam project.

The USIBWC again contacted the FWS on September 22, 2005 to discuss this proposed action. A species list for Yuma County, Arizona was obtained by the USIBWC for use in developing the biological assessment (BA). We received the BA on March 27, 2006. Portions of the description of the proposed action and conservation measures from the 2001 project description remained the same for the 2006 project. After our review of the BA and accompanying documents, we determined that the BA contained the information needed to initiate formal consultation. Our determination was provided to USIBWC in a letter dated April 17, 2006. Additional information on the purpose of the proposed action was provided by USIBWC in a letter dated May 16, 2006. On June 16, 2006, Ms. Lesley Fitzpatrick of my staff sent an email to Mr. Steve Fox of your staff requesting other information on the effects of the proposed action on flows, the opportunity to restore flycatcher habitat on the site, and other issues. Ms. Fitzpatrick and Mr. Fox discussed our questions and the information USIBWC could provide to address the questions on June 27, 2006. We determined that the information was inadequate to address our concerns for the loss of flycatcher habitat and sent a letter to Mr. Gilbert G. Anaya of your staff on June 29, 2006. We requested additional information regarding projected flows as related to the floodway and levee capacities, the effects of the project on the ability to pass flows through Morelos Diversion Dam, and opportunities to restore flycatcher habitat on the project site.

Ms. Fitzpatrick and members of your staff discussed the information needs from the June 29, 2006, letter and identified a portion of sites A and B for restoration of habitats adversely impacted by the proposed action. The need for additional restoration areas away from the project area was also confirmed. Your written confirmation for the restoration program was dated July 25, 2006, and officially received by us on July 27, 2006.

The consultation period was suspended on July 26, 2006, with the transmittal of a draft biological opinion to USIBWC. Your comments were incorporated into this final. Additional confirmation of the restoration program is contained in your letter dated August 17, 2006, and received by us on August 21, 2006.

BIOLOGICAL OPINION

DESCRIPTION OF THE PROPOSED ACTION

The proposed action is described in detail in the USIBWC BA, wetlands delineation for the Clean Water Act section 404 permit, and the 404 permit request to the Corps of Engineers. Please refer to those documents for the detailed project description. A summary of the project is provided here.

The proposed action is located on the Colorado River immediately upstream and downstream of the existing Morelos Diversion Dam at river mile 22.1. The project area is in Yuma County, Arizona; however, some activities involving disposal of dredge spoil will occur on the Mexican side of the Colorado River in Baja California North.

The proposed action involves the clearing of 38.4 acres of brush and trees in two areas (Site A above the Dam and Site B below the Dam) and excavation of 3.4 feet of sediment from Site A and 2.4 feet of sediment from Site B to drop the surface elevation of the sites to 107.6 feet mean sea level. The third phase of the project would remove additional sediment overlying existing

bank protection to areas at the eastern side of the dam along the length of the spillway. All vegetation in these areas would be removed. Sediment would be removed to 103.0 feet mean sea level in the five-acre area shown in the BA as Sites A1 and B1.

The proposed action area extends from the upper end of the project area at approximately river mile 23 to river mile 21.

The proposed action contains several conservation measures that would minimize the adverse effects to the flycatcher and cuckoo. These are listed in the BA; however some measures were modified as a result of further discussions between USIBWC. The conservation measures are:

- Willows and cottonwood trees will not be removed from Site A and Site B if the trees' location will not disrupt the passage of flood waters over the sites.

- Construction activities such as vegetation removal and dredging/excavating would be performed between October 1 and March 1 to be outside the migration and breeding season of the flycatcher and cuckoo on the lower Colorado River.

- Fencing and signage will protect sensitive habitats outside of the construction area.

- A biological monitor will document construction activities and advise field crews of biological mitigation measures.

- Work will be performed using best management practices to avoid storm water pollution issues and erosion.

- Staging areas will be sited to avoid sensitive habitats.

- The proposed action also contains a draft replacement plan for the loss of southwestern willow flycatcher habitats due to the clearing of sites A and B as provided in your letter of July 25, 2006. The draft mitigation identifies almost 12 acres of replacement cottonwood-willow vegetation communities on the western portions of sites A (10.26 acres) and B (1.55 acres). Additional cottonwood-willow replacement habitat in the amount of 17 acres will be developed at other locations within four years of the date of this biological opinion. The agreement by USIBWC to complete this replacement habitat is contained in your letter of August 17, 2006. If the mitigation is not completed within the time period provided in the letter, additional consultation may be required.

STATUS OF THE SPECIES

Southwestern willow flycatcher

Description

The southwestern willow flycatcher is a small grayish-green passerine bird (Family Tyrannidae) measuring approximately 5.75 inches. It has a grayish-green back and wings, whitish throat, light gray-olive breast, and pale yellowish belly. Two white wingbars are visible (juveniles have buffy wingbars). The eye ring is faint or absent. The upper mandible is dark, and the lower is light yellow grading to black at the tip.

Listing and critical habitat

The southwestern willow flycatcher was listed as endangered, without critical habitat on February 27, 1995 (U.S. Fish and Wildlife Service 1995). Critical habitat was later designated on July 22, 1997 (U.S. Fish and Wildlife Service 1997a). A correction notice was published in the Federal Register on August 20, 1997, to clarify the lateral extent of the designation (U.S. Fish and Wildlife Service 1997b).

On May 11, 2001, the 10th circuit court of appeals set aside designated critical habitat in those states under the 10th circuit's jurisdiction (New Mexico). The Fish and Wildlife Service decided to set aside critical habitat designated for the southwestern willow flycatcher in all other states (California and Arizona) until it could re-assess the economic analysis.

On October 19, 2005, the Fish and Wildlife Service re-designated critical habitat for the southwestern willow flycatcher (U.S. Fish and Wildlife Service 2005). A total of 737 river miles across southern California, Arizona, New Mexico, southern Nevada, and southern Utah were included in the final designation. The lateral extent of critical habitat includes areas within the 100-year floodplain. The primary constituent elements of critical habitat include riparian plant species in a successional riverine environment (for nesting, foraging, migration, dispersal, and shelter), specific structure of this vegetation, and insect populations for food. A variety of river features such as broad floodplains, water, saturated soil, hydrologic regimes, elevated groundwater, fine sediments, etc., help develop and maintain these constituent elements (U.S. Fish and Wildlife Service 2005). There is no designated critical habitat within the action area for this consultation.

A final recovery plan for the southwestern willow flycatcher was signed by the U.S. Fish and Wildlife Service's Region 2 Director on August 30, 2002, and was released to the public in 2002 (U.S. Fish and Wildlife Service 2002). The Plan describes the reasons for endangerment, current status of the flycatcher, addresses important recovery actions, includes detailed issue papers on management issues, and provides recovery goals. Recovery is based on reaching numerical and habitat-related goals for each specific Management Unit established throughout the subspecies range and establishing long-term conservation plans (U.S. Fish and Wildlife Service 2002). Extensive information on the species, its life history, habitat, and other relevant information is available in the recovery plan.

Reasons for endangerment

Reasons for decline have been attributed to primarily loss, modification, and fragmentation of riparian breeding habitat, along with a host of other factors including loss of wintering habitat and brood parasitism by the brown-headed cowbird (*Molothrus ater*) (Sogge *et al.* 1997, McCarthey *et al.* 1998). Habitat loss and degradation are caused by a variety of factors, including urban, recreational, and agricultural development, water diversion and groundwater pumping, channelization, dams, and livestock grazing. Fire is an increasing threat to willow flycatcher habitat (Paxton *et al.* 1996), especially in monotypic saltcedar vegetation (DeLoach 1991) and where water diversions and/or groundwater pumping desiccates riparian vegetation (Sogge *et al.* 1997). Willow flycatcher nests are parasitized by brown-headed cowbirds, which lay their eggs in the host's nest. Feeding sites for cowbirds are enhanced by the presence of livestock and range improvements such as waters and corrals; agriculture; urban areas; golf courses; bird feeders; and trash areas. When these feeding areas are in close proximity to

flycatcher breeding habitat, especially coupled with habitat fragmentation, cowbird parasitism of flycatcher nests may increase (Hanna 1928, Mayfield 1977a,b, Tibbitts *et al.* 1994).

Habitat

The southwestern willow flycatcher breeds in dense riparian habitats from sea level in California to approximately 8500 feet in Arizona and southwestern Colorado. Historical egg/nest collections and species descriptions throughout its range describe the southwestern willow flycatcher's widespread use of willow (*Salix* spp.) for nesting (Phillips 1948, Phillips *et al.* 1964, Hubbard 1987, Unitt 1987, San Diego Natural History Museum 1995). Currently, southwestern willow flycatchers primarily use Geyer willow (*Salix geyeriana*), coyote willow (*Salix exigua*), Goodding's willow (*Salix gooddingii*), boxelder (*Acer negundo*), saltcedar (tamarisk; *Tamarix* sp.), Russian olive (*Elaeagnus angustifolio*), and live oak (*Quercus agrifolia*) for nesting. Other plant species less commonly used for nesting include: buttonbush (*Cephalanthus* sp.), black twinberry (*Lonicera involucrata*), cottonwood (*Populus* spp.), white alder (*Alnus rhombifolia*), blackberry (*Rubus ursinus*), and stinging nettle (*Urtica* spp.). Based on the diversity of plant species composition and complexity of habitat structure, four basic habitat types can be described for the southwestern willow flycatcher: monotypic willow, monotypic exotic, native broadleaf dominated, and mixed native/exotic (Sogge *et al.*1997).

Tamarisk is an important component of the flycatchers's nesting and foraging habitat in Arizona and other parts of the bird's range. In 2001 in Arizona, 323 of the 404 (80 percent) known flycatcher nests (in 346 territories) were built in a tamarisk tree (Smith *et al.* 2002). Tamarisk had been believed by some to be a habitat type of lesser quality for the southwestern willow flycatcher, however comparisons of reproductive performance (U.S. Fish and Wildlife Service 2002), prey populations (Durst 2004), and physiological conditions (Owen and Sogge 2002) of flycatchers breeding in native and exotic vegetation has revealed no difference.

Open water, cienegas, marshy seeps, or saturated soil are typically in the vicinity of flycatcher territories and nests; flycatchers sometimes nest in areas where nesting substrates were in standing water (Maynard 1995, Sferra *et al.* 1995, 1997). However, hydrological conditions at a particular site can vary remarkably in the arid Southwest within a season and among years. At some locations, particularly during drier years, water or saturated soil is only present early in the breeding season (i.e., May and part of June). However, the total absence of water or visibly saturated soil has been documented at several sites where the river channel has been modified (e.g. creation of pilot channels), where modification of subsurface flows has occurred (e.g. agricultural runoff), or as a result of changes in river channel configuration after flood events (Spencer *et al.* 1996).

The flycatcher's habitat is dynamic and can change rapidly: nesting habitat can grow out of suitability; saltcedar habitat can develop from seeds to suitability in five years; heavy runoff can remove/reduce habitat suitability in a day; or river channels, floodplain width, location, and vegetation density may change over time. The flycatcher's use of habitat in different successional stages may also be dynamic. For example, over-mature or young habitat not suitable for nest placement can be occupied and used for foraging and shelter by migrating, breeding, dispersing, or non-territorial southwestern willow flycatchers (McLeod *et al.* 2005, Cardinal and Paxton 2005). That same habitat may subsequently grow or cycle into habitat used for nest placement. Because of those changes, flycatcher "nesting habitat" is often described as occupied, suitable, or potential (U.S. Fish and Wildlife Service 2002). Areas other than locations

where nests are located (foraging, sheltering, territory defense, singing, etc.) can also be "occupied flycatcher habitat," and as a result, essential to the survival and recovery of the flycatcher (U.S. Fish and Wildlife Service 2002). The development of flycatcher habitat is a dynamic process involving maintenance, recycling, and regeneration of habitat. Flycatcher habitat can quickly change and vary in suitability, location, use, and occupancy over time (Finch and Stoleson 2000).

Past Consultations

Since listing in 1995 to 2005, at least 146 Federal agency actions have undergone (or are currently under) formal section 7 consultation throughout the flycatcher's range. Since critical habitat was finalized in October 2005, one formal opinion has been issued for southwestern willow flycatcher critical habitat in Arizona. While many opinions were issued for the previous critical habitat designation, the stream reaches and constituent elements have changed. Many activities continue to adversely affect the distribution and extent of all stages of flycatcher habitat throughout its range (development, urbanization, grazing, recreation, native and non-native habitat removal, dam operations, river crossings, ground and surface water extraction, etc.). Stochastic events also continue to change the distribution, quality, and extent of flycatcher habitat.

Yellow-billed cuckoo

Description

The yellow-billed cuckoo is a slender, long-tailed bird of approximately 11 inches in length of the Family Cuculidae. The head, upper body, wings and tail are plain grayish-brown with the underparts dull white with shadings of bluish gray or pale buff. The tail is long and black below with bright white on the outer rectrices. The species' common name comes from the yellow-orange lower mandible (Hughes 1999).

Listing

The yellow-billed cuckoo is a candidate for listing under the Act and is a wildlife species of special concern in Arizona.

Reasons for endangerment

Yellow-billed cuckoos were fairly common and widespread in riparian systems throughout the western United States until the early 1990's. The loss of riparian habitats as discussed for the flycatcher similarly eliminated habitat for the cuckoo throughout its range in western North America.

Habitat

The habitat for the cuckoo is characterized by different components in different areas of its range. The presence of water, in terms of rivers, streams, marshes, or other wetlands is a generally unifying factor. Vegetation components may be open woodlands with a dense, shrubby under- and mid-story, denser riparian areas with a mature canopy, and other types of successional forest lands (Hughes 1999). In the desert southwest, mature riparian forests

dominated by native trees with habitat patch sizes over 25 acres are preferred for nesting (LCR MSCP 2004).

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.

A. STATUS OF THE SPECIES WITHIN THE ACTION AREA

Southwestern willow flycatcher

Nesting habitat for the southwestern willow flycatcher along the lower Colorado River is defined both by the vegetation community structure and the presence of moist soils or adjacent water that contributes to the desired microclimate. Height of the canopy and density of the vegetation, particularly in the ground to mid-story are important physical components for nesting habitats. Nest territories need not be uniformly dense; however, the more open the overall area, the less likely the structural and microclimate conditions are to be met. Mixed native-exotic communities like those in the project area contain cottonwoods willows, and salt cedar in the appropriate physical structure to support flycatchers. Other areas within and adjacent to the project area contain vegetative communities that provide areas used by migratory flycatchers and other neo-tropical migrants. The size of the cottonwood-willow and salt cedar communities in the action area is sufficiently large (over 10 acres [LCR MSCP 2004]) to support a nesting territory, and some structural classes of salt cedar are those most usually occupied by nesting pairs. Migrating flycatchers use a wider variety of sites, but the primary communities used are cottonwood, willow, and salt cedar.

The action area has a documented history of use by flycatchers. Survey data (Table 1) show recent results from annual surveys along the Colorado River in the vicinity of the action area. Surveys at the project area are intermittent, and the available information is also provided in the table. Except for the possibility that a pair of flycatchers bred in 1998 at the Gadsden survey site, all records are for birds counted during migration. Information for 2006 is based on only the first survey period, with a total of 69 birds recorded (data not broken out by site except for Gadsden/Gadsden Bend)

During surveys in 1999, McKernan and Braden (2001) documented four birds at two sites in the action area and determined that there were 19 acres of suitable breeding habitat present within an overall area of 45 acres. As described earlier, most of the habitat burned in the fire during 2001 (approximately 40 acres). The habitat present until 2001 had developed in response to the 1993 high-water event and conditions after the fire were less conducive to native riparian tree establishment due to a greater depth to the water table after the high flows subsided. Currently on the project area there are 28.1 acres of suitable flycatcher habitat, as based on land cover types known to be used along the LCR (LCR MSCP 2004). An additional 3.6 acres of currently marginal habitat may develop into suitability over time.

The 1993 high water events flooded the action area and provided suitable conditions for recruitment of native cottonwoods and willows that developed into the suitable breeding habitat seen in 1999. Flows reached over 10,000 cfs in December 1998 and January 1999 (USGS 2000) and may have assisted in the maintenance of the cottonwood-willow habitats. High flows in the future could contribute to the development of this habitat area.

Yellow-billed cuckoo

Yellow-billed cuckoos require structurally complex riparian habitats with a significant canopy layer and dense woody understory. Cottonwood-willow type I, II, and III (vegetation types are from Anderson and Ohmart 1984) are the most-used communities for nesting. The action area may not at this time contain suitable nesting habitat (largely due to the fire of 2001), but 20.7 acres of type III habitat is present on the site. As noted in LCR MSCP 2004, cuckoos prefer to nest in patches of habitat of 25 acres or more, so the opportunity for developing nesting habitat over time on the project area alone may be limited. There is documented use of the site in 2005, when a cuckoo was recorded southeast of Site B during the first breeding season survey; however, no nest was found (Johnson *et al*. 2005). The overall vicinity of the project area may be able to support a suitable nesting area if the vegetation continues to develop.

B. FACTORS AFFECTING SPECIES ENVIRONMENT WITHIN THE ACTION AREA

The action area (defined as the area affected by the proposed action) for the proposed project consists of the project area as discussed under the Description of the Proposed Action. However, our jeopardy analysis must consider the removal of vegetation communities on the project area in terms of overall value of the river corridor for breeding and migration of flycatchers and cuckoos.

Because the proposed action follows on, and is related to, past channel dredging and vegetation clearing and restoration projects in the action area, the present conditions on the site were influenced by these activities (Table 2). The current proposed action was originally proposed by USIBWC in 1993 to address sediment inflows from floods in that year. An expanded project area proposed by the Bureau of Reclamation (Reclamation) in 1997 to address the 1993 sediment deposition was also not implemented. However, Reclamation did remove 250,000 cy of sediment from above the Dam on the Mexico side of the river in 1994. Reclamation did implement portions of their Phase II project in 2001, which provided for a new sediment basin above the Dam and cleared sediment from in front of the easternmost radial gates but not in front of the spillway. Also in 2001, USIBWC first proposed the project which is now the proposed action.

The current channel capacity above the Dam is 18,000-21,000 cubic feet per second (cfs) and was achieved by Reclamation's sediment removal project in 2001. The current levee capacity is 90,000 cfs above and below the Dam.

For the construction of the Dam, the river channel was cleared of sediment at the construction site. In photographs taken in 1953, sand bars were visible in the middle of the channel upstream and downstream of the Dam, and aggradations, the locations of what would become Site A and Site B by the spillway, are clearly visible (USIBWC 2001). The vegetation community on the

depositional area developed over the next 40 years. By 1997, most of the area of Site A was a mix of cottonwood-willow communities that included a component of non-native salt cedar, and Site B a mix of riparian types (LCR MSCP 2004). Most of this community was established after the 1993 floods. In June, 2001, a wildfire destroyed 40 acres of mostly this cottonwood-willow community at Morelos Dam. Subsequently, the Bureau of Land Management (BLM) revegetated approximately 17 acres with cottonwood and willow poles to mitigate for the loss of trees due to the fire. This revegetation had limited success (15%) largely because the depth to the water table was too deep across most of the area for the planted poles to reach (Repass 2006). In 2005, BLM cleared a limited amount of vegetation in the action area as part of a program to create fire breaks in the Limitrophe and Yuma Divisions to assist in wildfire management. Three of these fire breaks were in the action area.

The removal of sediment from the channel and the sandbar did not have an effect on the riparian habitats on Site A, since the water levels at the Dam are maintained by Reclamation at the levels needed to provide for diversion to Mexico via the Alamo Canal. Wildfires are a continual threat to riparian plant communities along the LCR and, with the dominance of salt cedar in several areas, fires move quickly and often burn native vegetation communities. Regeneration of native trees post-fire can be very difficult unless soils and groundwater levels are suitable for seedling establishment or rooting of pole plantings.

The BLM fuel break project removed approximately one acre of vegetation within the action area from the total of two acres for the entire project. This was not a significant effect, and may assist in controlling future wildfires.

Recently, other vegetation clearing projects by the Cocopah Tribe and law enforcement officials removed several hundred acres of mostly salt cedar in the Limitrophe Division. While native trees are retained during these projects, the open savannah-like conditions created lack the density of vegetation to provide suitable habitat conditions for many migratory bird species including the flycatcher and cuckoo.

Overall, the availability and condition of suitable habitat for the flycatcher and cuckoo in the action area and the surrounding Limitrophe Division of the LCR is likely to decline over the short term during which the proposed action would occur.

EFFECTS OF THE ACTION

Effects of the action refer to the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated and interdependent with that action that will be added to the environmental baseline. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration. Indirect effects are those that are caused by the proposed action and are later in time, but are still reasonably certain to occur.

As discussed in the conservation measures included in the proposed action, clearing of the vegetation at the project site would not occur during the normal breeding season for the flycatcher and cuckoo on the LCR. Some disruption of migration habitat used in August and September would occur if clearing operations occur during this period. Undisturbed areas in the

vicinity of the proposed clearing can provide alternative roosting and foraging areas during this time.

The proposed action would result in the elimination of 28.1 acres of existing flycatcher habitat on Sites A and B and 3.6 acres of potential habitat. The potential for the existing vegetation communities to develop into cuckoo habitat would be eliminated. With the replacement habitat included in the proposed action, 11.71 acres of flycatcher habitat would be developed on site, a portion of which will have the potential to be used by cuckoos; the net adverse effect from loss of habitat should be minimized. The location of the remainder of the replacement habitat has not been determined; however, the preference is to provide this area within the LCR corridor where the local flycatcher and cuckoo populations would have use of it.

No interrelated or interdependent effects were identified for this proposed action.

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 unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.

The action area is largely Federal lands, either under management by USIBWC, BLM, or Reclamation. All future Federal actions will undergo section 7 consultations as needed. However, the action area is part of the international boundary between the United States and Mexico, and there is considerable activity from illegal border crossing throughout the area. The area around the Dam has been identified as a high crime area by Yuma County (Doles 2006). Currently, the Border Patrol is working with county and local law enforcement entities and the Cocopah Tribe to clear dense vegetation from trouble spots between the Southerly and Northerly International Boundaries (NIB and SIB). Several such projects have been completed near San Luis, Gadsden Bend, County 13th Street, and County 14 ½ th Street. BLM, Border Patrol, and local entities are considering additional clearings. These clearings involve the removal of all vegetation except native trees to provide lines-of-sight for law enforcement personnel to observe illegal activity. Some form of native plant restoration is contemplated for at least those sites on the Cocopah Reservation that were cleared, but the type and extent of such restoration has not been defined. In cases where Federal funding is used, or on Federal lands, ESA consultation will be accomplished that would provide conservation for the loss of listed species habitats. Where there is no Federal nexus, that conservation may not be obtainable.

CONCLUSION

After reviewing the current status of the southwestern willow flycatcher, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is the FWS's biological opinion that the Morelos Diversion Dam Channel Capacity Restoration Project, including the proposed conservation measures, as proposed, is not likely to jeopardize the continued existence of the flycatcher. No critical habitat has been designated for this species in the action area; therefore, none will be affected. There is no nesting habitat on the action area for the yellow-billed cuckoo, and effects to this species do not compromise the overall use of the LCR for migration.

We present these conclusions for the following reasons:

1. The proposed action will not remove flycatcher habitat that is currently known to support nesting pairs.

2. Clearing of the action area will avoid the migration and breeding seasons for the flycatcher and cuckoo.

3. The amount of habitat being lost to the proposed action will be replaced with restored habitat for the flycatcher that will be managed and protected.

The conclusions of this biological opinion are based on full implementation of the project as described in the Description of the Proposed Action section of this document, including any Conservation Measures that were incorporated into the project design or committed to in written communications between USIBWC and FWS.

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 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

The FWS does not anticipate the proposed action will incidentally take any southwestern willow flycatchers**.** Existing habitat in the amount of 28.1 acres would be removed from the project area; however, replacement habitat on the project area and within the region would be provided to offset the loss. During the time between vegetation clearing and establishment of the newly created habitat, the disruption of flycatcher behavior is not expected to kill or injure individuals, nor create the likelihood of injury. Avoidance of the spring migration and breeding season for land clearing operations significantly avoids harassment and harm to individuals of the species. Further, the FWS concludes that the beneficial effects associated with the Conservation Measures being implemented as a part of this action will minimize any possible take.

EFFECT OF THE TAKE

In this biological opinion, the FWS determines that this level of anticipated take is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat.

REASONABLE AND PRUDENT MEASURES AND TERMS AND CONDITIONS

There are no reasonable and prudent measures and terms and conditions identified for the proposed action.

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.

We recommend that the Arizona Game and Fish Department (AGFD) be invited to participate in the process to identify and select sites for the 17 acres of flycatcher and cuckoo replacement habitat. The AGFD has considerable experience in identifying opportunities and providing constructive insights into this type of process.

In order for the FWS to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the FWS requests notification of the implementation of any conservation recommendations.

REINITIATION NOTICE

This concludes formal consultation on the action(s) outlined in the (request/reinitiation request). 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 the 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.

Because the conservation measure to replace the flycatcher habitat has not been fully developed as of the date of this biological opinion, reinitiation of consultation will be required if the replacement plan is not developed and implemented within four years of the date of this biological opinion. This reinitiation is related to items (1) and (3) in the above paragraph.

The FWS appreciates the USIBWC's efforts to identify and minimize effects to listed species from this project. For further information please contact me at (602) 242-0210 (x244) or Lesley

Fitzpatrick at (x236). Please refer to consultation number 22410-2006-F-0360 in future correspondence concerning this project.

Sincerely,

/s/ Steven L. Spangle
Field Supervisor

cc: Director, U.S Fish and Wildlife Service, Arlington, VA (ES)

Director, Arizona Game and Fish Department, Phoenix, AZ (Attn: Bob Broscheid)

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TABLES AND FIGURES

Table 1: Survey records for southwestern willow flycatchers in the vicinity of Morelos Dam (data from USFWS and AGFD files). Figures for 2006 are incomplete.

Survey Location	1999	2000	2001	2002	2003	2004	2005	2006
Hunters Hole	16	9	17	12	30	46	12	
Gadsden Ponds	5	ns	ns	ns	30	29	19	44
Gadsden Bend	18	22	17	19	27	20	12	44
County 11-12	13	2	1	0	1	ns	ns	ns
County 12-13	7	1	4	1	2	ns	ns	ns
Morelos Dam	4	0	0	ns	ns	ns	0	

Table 2. Past Consultations on Sediment Removal, Vegetation Clearing, and Other Projects Relevant to the Environmental Baseline.

Consultation Number	Lead agency	Date Request	Project Name	Description	Status
02-21-94-I-0127	USIBWC	12/27/93	Removal of Sediment from Gila Confluence to Morelos Dam	Removal of ~500,000 cubic yards of sediment resulting from 1993 flood from this 12 mile reach of river	
same	USBR	6/6/97	Removal of Sediment from Gila Confluence to 6 miles south of Morelos Dam	Removal of un-stated amount of sediment resulting from 1993 flood from this 18 mile reach of river	Not Done
02-21-98-I-0040	USBR	12/8/98	Colorado River Sediment Removal Project	Multi-phase project of which only two parts completed; the dredging of a 2,500,000 cy sediment basin from Morelos Dam to the Araz Drain and removal of 30,000 cy of sediment from a sandbar on the eastern upstream side of the dam. Eliminated sediments from 1993 flood event.	Done 2001
02-21-01-I-0383	USIBWC	8/01	Morelos Dam Channel Capacity Restoration Plan	Proposed action to open spillway areas and reduce elevation riparian areas north and south of the spillway. Same project as proposed action	Not Done
02-21-05-I-0817	BLM	9/27/05	North Limitrophe Fuel Breaks	Clearing of 2 acres of land to widen and improve 7 fuel breaks along the Colorado River. Three of these are in the project area	Yes
	BLM	2004	Post-2001 Wildfire Rehabilitation	Planting of native riparian vegetation north and south of Morelos Dam to replace losses due to fire. Northern planting area is within the project area.	Yes