



United States Department of the Interior

U.S Fish and Wildlife Service Arizona Ecological Services Field Office



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April 9, 2008

Memorandum

To: Regional Director, Fish and Wildlife Service, Albuquerque, New Mexico
(ARD-ES)(Attn: Luella Roberts)

From: Field Supervisor

Subject: Updated Intra-Service Biological Opinion Regarding the Proposed Issuance of an Incidental Permit (TE-133286-0) and Approval of a Safe Harbor Agreement with the City of Tempe for the Rio Salado Project, Maricopa County, Arizona

This memorandum represents our Biological Opinion (BO), pursuant to section 7 of the Endangered Species Act of 1973 (Act) (16 U.S.C. 1531-1544), as amended, on the issuance of a Section 10(a)(1)(A) permit (Permit) authorizing incidental take of the Yuma clapper rail (*Rallus longirostris yumanensis*), southwestern willow flycatcher (*Empidonax traillii extimus*), and bald eagle (*Haliaeetus leucocephalus*) to the City of Tempe (Permittee). Along with the permit application, the City of Tempe submitted a draft Safe Harbor Agreement (Agreement) for measures benefiting the Yuma clapper rail, southwestern willow flycatcher, and bald eagle that was available for public review for 30 days (71 FR 55007). The Agreement would cover lands owned by the Permittee and the proposed operation and maintenance of the Rio Salado habitat restoration project. This BO analyzes the potential effects of the issuance of the Permit and implementation of the Agreement. We have determined that this action may affect the Yuma clapper rail, southwestern willow flycatcher, and bald eagle. The Federal action under consideration is the issuance of a permit covering environmental restoration activities on the 159 acres of land within the Salt River from approximately McClintock Drive to Priest Drive (excluding Tempe Town Lake), Tempe, Maricopa County, Arizona.

This BO is based on information provided in the Agreement, telephone conversations, 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, activities covered in the SHA and their effects, or on other subjects considered in this BO. A complete administrative record of this consultation is on file at the Arizona Ecological Services Field Office.

CONSULTATION HISTORY

- July 18, 2006: City of Tempe submits application for a section 10(a)(1)(A) enhancement of survival permit associated with the draft Safe Harbor Agreement for the Rio Salado Ecosystem Restoration Project.
- September 20, 2006: U.S. Fish and Wildlife Service (FWS) issues Notice of Availability; receipt of application; request for comments on the Draft Safe Harbor Agreement and Application for an Enhancement of Survival Permit for the Tempe Reach of the Rio Salado Environmental Restoration Project (71 FR 55007).
- November 6, 2006: Received comments from the Flood Control District (District) of Maricopa County (District), dated November 2, indicating that some of the lands proposed for coverage are owned by the District.
- January 19, 2007: Meeting held between FWS, Tempe, and District to discuss issues related to District's comments.
- March 16, 2007: District request that lands under its ownership be removed from the Agreement.
- October 15, 2007: FWS and Tempe agree on final language and revisions for the Agreement.
- December 26, 2007: FWS receives original copy of Agreement signed by the Mayor of the City of Tempe.
- February 4, 2008: Draft BO reviewed by the Arizona Game and Fish Department.
- February 19, 2008: Initial Final BO submitted to Regional Office.
- March 5, 2008: Sonoran desert population of the bald eagle returned to threatened status due to court ruling.
- March 12, 2008: Tempe requests bald eagle be included as a covered species under the Agreement, via phone conference. FWS agrees and reissues an updated BO since proposed action not yet implemented.

BIOLOGICAL OPINION

DESCRIPTION OF THE PROPOSED ACTION

The proposed action is the issuance of a Section 10(a)(1)(A) of the City of Tempe for a Safe Harbor Agreement. The purpose of the Agreement is to provide and maintain environmental restoration along the Salt River and within the Rio Salado Project Area for direct and indirect benefits of biological resources including, but not limited to, threatened and endangered species.

The Agreement follows the FWS Safe Harbor Agreement final policy (64 FR 32717) and final regulations (64 FR 32706), and implements the intent of the Permittee to follow the procedural and substantive requirements of section 10(a)(1)(A) of the Act.

The Agreement covers proposed management activities affecting lands owned or otherwise controlled by the Permittee, and covers Yuma clapper rail, southwestern willow flycatcher, and bald eagle. Under the Agreement, the Permittee will restore/enhance/maintain 159 acres of the covered species habitat for a period of 50 years by enhancing the Salt River from approximately McClintock Drive to Priest Drive (excluding Tempe Town Lake). Enhancements will include planting and maintaining native vegetation. The action area for purposes of this consultation includes the 159 acres of covered lands within the Salt River from approximately McClintock Drive to Priest Drive (excluding Tempe Town Lake).

The Safe Harbor program encourages proactive conservation efforts by non-Federal landowners while providing them certainty that future property-use restrictions will not be imposed if those efforts attract listed species to their enrolled property or result in increased numbers or distributions of listed species already present. In return for voluntary conservation commitments, the Agreement will extend to the Permittee assurances allowing future alteration or modification of the enrolled property back to its original baseline conditions. Without this cooperative government/private effort, the enrolled lands would not otherwise be protected and managed for the benefit of the covered species in the foreseeable future.

The Agreement will serve as the basis for the FWS issuance of a Permit for incidental take of covered species associated with the potential future return of the Permittee's enrolled lands to baseline conditions. The Permit will authorize the Permittee to incidentally take all individuals of the covered species, and their progeny, that are found on the enrolled lands or have increased in numbers and/or distribution on those lands, as a result of the Permittee's voluntary conservation activities. Permit issuance will not preclude the need for the Permittee to abide by all other applicable Federal, State, and local laws and regulations that may apply.

In addition to the following stipulations, the FWS and the Permittee will work cooperatively on related issues as necessary to further the purposes of the Agreement. Nothing in this Agreement shall limit the ability of Federal and State conservation authorities to perform their lawful duties, and conduct investigations as authorized by statute and by court guidance and direction.

As further described in the Agreement, the Permittee has agreed to implement the following management actions:

1. Carry out adaptive management actions to maintain the habitat value established by the Rio Salado Environmental Restoration Project, in accordance with the implementation schedule in Appendix A of the Agreement.
2. Provide an Annual Monitoring Report to the FWS in the format provided in Appendix B of the Agreement for the enrolled lands.
3. Notify the FWS at least 60 days in advance of any planned land management activity (i.e. controlled burn, fencing, construction, tilling, and hay operation) that the Permittee

reasonably anticipates will result in incidental take of the species on the enrolled lands; and provide the FWS the opportunity to capture and/or relocate any potentially affected covered species.

4. Notify the FWS of any change to the enrolled property's management, including prior notification for returning the enrolled property to baseline conditions; and identify the actions that would result in changed management or return to baseline.
5. Be responsible for monitoring and reporting on the implementation of the Agreement and fulfilling its provisions, including agreed-upon conservation measures and take authorized by the Permit.
6. Allow access by the FWS, or another agreed-upon party to the enrolled lands for the purpose of carrying out monitoring and management activities. In the event of an emergency, the FWS may enter the premises to care for and protect covered species at any time.

As further described in the Agreement, the FWS has agreed to:

1. Verify whether the Permittee is implementing the terms and conditions of the Agreement and fulfilling its provisions, including agreed-upon conservation measures and take authorized by the Permit, either through review of reports or after reasonable prior notice to the Permittee, entering the covered area to ascertain compliance with the Agreement.

STATUS OF THE SPECIES

Yuma clapper rail

The Yuma clapper rail was listed as endangered without critical habitat on March 11, 1967 (32 FR 4001) under Federal endangered species legislation enacted in 1966 (Public Law 89-669) due to low numbers of birds and loss of breeding habitat along the lower Colorado River.

The Yuma clapper rail is a medium sized marsh bird with a long, down-curved beak. The species' range extends from the Colorado River Delta in Mexico north along the Colorado River to Laughlin Bay, Nevada, and along the Gila and Salt Rivers east to Picacho Reservoir in central Arizona. New information suggests the Yuma clapper rail is extending its range north along the Colorado River, east along the Bill Williams/Big Sandy River drainage, and north along the Salt River. Habitat requirements of the Yuma clapper rail include freshwater or brackish stream sides and marshlands associated with heavy riparian and wetland vegetation, especially cattail and bulrush (Grinnell and Miller 1944). Openings within the wetland, especially channels with flowing water are also important. Habitat edges between marshes and terrestrial vegetation are important, but the main factors determining habitat use are the annual range of water depth and the existence of residual mats of marsh vegetation (Eddleman 1989). The most productive Yuma clapper rail areas consist of a mosaic of uneven-aged marsh vegetation interspersed with open water of variable depth (Conway *et al.* 1993).

Nesting behavior begins in February with nesting commencing in mid-March and running through early July. Nests are primarily built in mature cattail/bulrush stands, which provide nest building material and cover. Most hatching occurs during the first week of June and it is thought that young rails fledge within 63-70 days. The preferred prey of the Yuma clapper rail is the non-native crayfish *Procambarus clarki* (Todd 1986), although Yuma clapper rails will also feed on isopods, aquatic and terrestrial beetles, damselfly and dragonfly nymphs, earwigs, grasshoppers, spiders, freshwater shrimp, freshwater clams, leeches, plant seeds, and small fish.

Annual survey data compiled by the FWS for the period 1990 through 2002 documented between 464 and 1076 rails observed (via calls or visual observation) at survey sites. Surveys in 2002 documented 610 birds. These figures are of actual birds and are not extrapolated to provide a population estimate. The unlisted Yuma clapper rail population in Mexico was estimated to contain 6300 birds (Hinojosa-Huerta *et al.* 2000), and the amount of movement between the two populations is unknown.

The Yuma Clapper Rail Recovery Plan (USFWS 1983) calls for consideration of delisting when: (1) breeding and wintering status in Mexico is clarified and evaluated; (2) surveys for the species and its habitat are established; (3) management plans are developed for important Federal and State controlled breeding areas; and (4) written agreements are established with agencies having control or responsibility over Yuma clapper rail habitat in the United States and Mexico, to protect sufficient wintering and breeding habitat to support a population of 700-1,000 breeding birds in the United States.

Southwestern willow flycatcher

The southwestern willow flycatcher was listed as endangered, without critical habitat on February 27, 1995 (60 FR 10693). Critical habitat was designated on July 22, 1997 (62 FR 39129), and a correction notice was published on August 20, 1997 to clarify the lateral extent of the designation (62 FR 44228). On May 11, 2001, the Tenth Circuit Court of Appeals set aside critical habitat for the southwestern willow flycatcher. The final rule regarding critical habitat designation was published on October 19, 2005 (70 FR 630886). No critical habitat occurs in the project area.

The southwestern willow flycatcher is a small passerine bird. The sub-species is a neotropical migrant that breeds in the southwestern United States and winters in Mexico, Central America, and northern South America (Phillips 1948, Stiles and Skutch 1989, Peterson 1990, Ridgely and Tudor 1994, Howell and Webb 1995). The southwestern willow flycatcher breeds in dense riparian environments. Four basic habitat types have been described for the southwestern willow flycatcher: monotypic willow, monotypic exotic, native broadleaf dominated, and mixed native/exotic (Sogge *et al.* 1997).

The species primarily nests in willow, although other plants such as salt cedar are commonly used. Open water, marshes, or saturated soil are typical of southwestern willow flycatcher territories. The southwestern willow flycatcher arrives on breeding grounds in late April and May (Sogge and Tibbitts 1992, Sogge and Tibbitts 1994, Muiznieks *et al.* 1994, Maynard 1995, Sferra *et al.* 1995, 1997) and nesting begins in late May and early June. Young fledge from late June through mid-August (Willard 1912, Ligon 1961, Brown 1988a,b, Whitfield 1990, 1994).

Brown-headed cowbird parasitism has been implicated in southwestern willow flycatcher population declines or, at a minimum, has resulted in reduced or complete nesting failure (Muiznieks *et al.* 1994, Whitfield 1994, Maynard 1995, Sferra *et al.* 1995, Sogge 1995a,b,c, Whitfield and Strong 1995, Brown 1988a,b, Whitfield 1990, Hull and Parker 1995). The southwestern willow flycatcher is an insectivore, foraging primarily on true flies (Diptera); ants, bees, and wasps (Hymenoptera); and true bugs (Hemiptera) (Drost *et al.* 1998), although other insect prey are probably taken.

While numbers have significantly increased in Arizona (145 to 495 territories from 1996 to 2005) (English *et al.* 2006), overall distribution of flycatchers throughout the state has not changed very much. Currently, population stability in Arizona is believed to be largely dependent on the presence of two large populations (Roosevelt Lake and San Pedro/Gila River confluence). Therefore, the result of catastrophic events or losses of significant populations either in size or location could greatly change the status and survival of the species. Conversely, expansion into new habitats or discovery of other populations will improve the known stability and status of the flycatcher.

Bald eagle

The bald eagle (*Haliaeetus leucocephalus*) is a large bird of prey that was listed as endangered south of the 40th parallel on March 11, 1967 (32 FR 4001), and reclassified to threatened status on July 12, 1995 (60 FR 35999). No critical habitat was designated, and the bald eagle was proposed for delisting on July 6, 1999 (64 FR 36453). The final rule removing the bald eagle in the lower forty-eight states from the list of threatened and endangered wildlife was published on July 9, 2007, with an effective date of August 8, 2007 (72 FR 37346). On March 5, 2008, US District Court enjoined the final delisting rule to the Sonoran Desert population of bald eagles pending the outcome of a status review and 12-month petition finding. The order requires the temporary reinstatement of the listing of the bald eagle as threatened in the Sonoran Desert area of central Arizona, including Gila, Graham, Pinal, and Maricopa Counties in their entirety; and southern Mohave County, eastern LaPaz County, and northern Yuma County.

The bald eagle continues to be protected by the Bald and Golden Eagle Protection Act (Eagle Act). The Eagle Act prohibits anyone, without a permit issued by the Secretary of the Interior, from taking eagles, including their parts, nests, or eggs. "Take" is defined under the Eagle Act as "to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb" eagles. "Disturb" means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior (72 FR 31132-31140).

Declines in the number of waterfowl and shorebirds, loss of nesting habitat, and the widespread use of dichloro-diphenyl-trichloroethane (DDT) and other organochlorine compounds in the 1940s resulting in reproductive failure all contributed to declines in the bald eagle population. Threats persist largely due to the proximity of bald eagle breeding areas to major human population centers and recreation areas, and include entanglement in monofilament fishing line; overgrazing of riparian vegetation; malicious and accidental harassment such as shooting, off-

road vehicle use, watercraft use, and low-level aircraft overflights; alteration of aquatic and riparian systems for water distribution systems; collisions with transmission lines; poisoning; and electrocution. As a whole, the Service believes the bald eagle is doing well across its range.

The bald eagle historically ranged throughout North America except extreme northern Alaska, Canada, and central and southern Mexico. The species occurs in association with aquatic ecosystems such as estuaries, lakes, reservoirs, major riverine systems, and some seacoast areas. All breeding areas in Arizona are located in close proximity to aquatic habitats. Southwestern bald eagles establish breeding territories in December or January and lay eggs in January or February. Young bald eagles remain in the vicinity of the nest until June (Hunt *et al.* 1992). Arizona also provides habitat for wintering bald eagles, which migrate through the state between October and April each year. The most concentrated population of wintering bald eagles is found at Lake Mary and Mormon Lake, Coconino County (Beatty and Driscoll 1996). Their primary food is fish, but also includes waterfowl and carrion.

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.

STATUS OF THE SPECIES WITHIN THE ACTION AREA

Southwestern willow flycatchers are not known to occur in the project area, and vegetation communities structurally suitable for nesting are generally lacking. Southwestern willow flycatchers require dense stands of riparian vegetation, such as cottonwood-willow or salt cedar, in close proximity to permanent water for nesting and foraging. Although territorial flycatchers were detected along the Gila River downstream of the action area near Dysart Road in 2002, nests were not located (Arizona Game and Fish Department 2003). Therefore, we have established a zero baseline for southwestern willow flycatcher.

Cattail stands within the project area do provide suitable habitat for the Yuma clapper rail. However, surveys for Yuma clapper rail were conducted during the 2003 season within the action area at the outfall of the Arizona Department of Transportation (ADOT) Priest-Hardy drain (SR-17) and no Yuma clapper rails were detected (U.S. Department of Agriculture 2003). Accordingly, the Agreement establishes a baseline of zero for the southwestern willow flycatcher and Yuma clapper rail.

According to Bays & CH2M-Hill *et al.* (1997), immature bald eagles were observed along the Gila River downstream of the project area during surveys in early May of 1996. No nesting bald eagles are known to occur in the study area and suitable habitat is generally lacking. Therefore, the baseline for the bald eagle is zero.

FACTORS AFFECTING SPECIES ENVIRONMENT WITHIN THE ACTION AREA

Due to upstream river management of dams and reservoirs by the Salt River Project, the portion of the Salt River within the project area normally receives little water from the upper Salt River watershed. The Final Environmental Impact Statement for the Rio Salado Environmental Restoration Project provides a description of environmental conditions (U.S. Army Corps of Engineers 1998). However, the Rio Salado Restoration Project – Tempe Reach Annual Report August 2003- July 2004 (U.S. Department of Agriculture 2004) provides the most recent published description of environmental conditions.

The majority of the Tempe project area is characterized by barren uplands and riverbed, although desert broom (*Baccharis sarothroides*) and rabbitbrush (*Chrysothamnus nauseosus*) occur sparsely and sporadically. Stream side terraces contain a few scattered desert scrub species such as creosote (*Larrea tridentata*), brittlebush (*Encelia farinosa*), and salt cedar (*Tamarix* sp.).

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.

The proposed action is expected to result in proactive conservation benefits to the Yuma clapper rail, southwestern willow flycatcher, and bald eagle during the 50-year life of this program. Monitoring and adaptive management will be part of the ongoing activities to be implemented by the Permittee, as part of the U.S. Army Corps of Engineers habitat restoration project. With a baseline of zero for the Yuma clapper rail, southwestern willow flycatcher, and bald eagle, adaptive management activities may enhance habitat for these species and attract them to the environmental restoration area. Success criteria established by the Final Environmental Impact Statement for the Rio Salado Environmental Restoration Project concluded that attraction of threatened and endangered species indigenous to the area is a desired outcome. Measures to support attraction and preservation of indigenous species is the overriding goal of the design and project implementation. Monitoring will be provided by the City of Tempe and U.S. Army Corps of Engineers during the first five years after project construction. A Restoration Advisory Committee (RAC) including representatives from the City of Tempe, the FWS, the U.S. Army Corps of Engineers, and the Arizona Game and Fish Department will exist during the first five years of the project. The RAC will collectively evaluate and recommend adaptive management actions to address diversity and abundance, population management, and habitat modification consistent with the success criteria.

The proposed action is expected to establish 159 acres of native vegetation along the Salt River. An expansion of cottonwood-willow vegetation communities may provide nesting habitat for the southwestern willow flycatcher. Large cottonwoods could serve as perching sites for bald eagle, though we expect the potential for nesting would be limited due to the proximity of urbanization.

Expansion of marsh vegetation communities may provide nesting habitat for the Yuma clapper rail. Nothing in this Agreement prevents the Permittee from implementing management activities not described in the Agreement, as long as such actions do not affect the beneficial actions set forth in the Agreement. The Permittee will notify the FWS at least 60 days in advance of any activities likely to result in the loss of covered species individuals or occupied habitat. The notification will allow the FWS an opportunity to capture and relocate the affected individuals, thereby minimizing the impact of incidental take. The Permittee will strive to avoid potentially disturbing actions during the breeding season of any covered species and to minimize the impact of authorized take by avoiding any possible disruption of reproductive efforts.

Emergency situations such as natural disasters (e.g., excessive rainfall, extreme drought, insect infestations, or epidemic disease) may require initiation of certain management actions (such as salvage or sanitation harvesting) within less than 60 days prior notification. The Permittee will notify the FWS within 10 days of discovering such a situation, and will make reasonable accommodations to the FWS for survey and/or relocation of affected individuals of covered species.

The proposed action will grant to the FWS, after reasonable prior notice, the right to enter the Permittee's property for the purpose of ascertaining compliance with the Agreement and for censusing, banding, and in certain circumstances, relocating individuals of covered species, as well as other measures that may be necessary. In addition, the Permittee will complete and submit to the FWS, an annual report of activities related to covered species management and the biological effectiveness of the conservation measures implemented, as well as other reports as required by the Agreement. Survey and translocation of species may be precluded by certain urgent situations.

The FWS has determined that the enrolled property has a zero baseline for the Yuma clapper rail, southwestern willow flycatcher, and bald eagles as surveys conducted on the property have failed to detect individuals. The Permit would allow, at the end of the Agreement term, the Permittee to return the property to baseline conditions by ceasing the management activities and/or undoing improvements as described in the Agreement. Events that could return the enrolled properties to a baseline condition are those associated with termination of the Agreement or those associated with operation and maintenance (e.g., removal of understory vegetation for fire safety, burning cattail stands to promote new growth). However, ongoing conservation activities undertaken by the Permittee on the enrolled lands, described in the Agreement, are not anticipated to result in returning the covered property to baseline conditions.

In summary, a net conservation benefit is expected to occur for southwestern willow flycatcher, Yuma clapper rail, and bald eagle.

CUMULATIVE EFFECTS

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

The geographical spread of the action area is bisected by a 220-acre manmade lake. The Tempe Town Lake was created by installation of rubber dams in the dry streambed of the Salt River. Completed and filled in 1999, the Tempe Town Lake is a flood control, economic development, and recreational resource for the City of Tempe. About 2 miles of the 5-mile perimeter of the lake is currently developed as a linear park. Remaining development of the linear park will be completed over the next 5 to 10 years. Turf, native species, and ornamental trees and shrubs are included in the urban landscape. Urban mixed use development, including multi-story office and housing, retail, hospitality, and cultural land uses are being developed adjacent to the linear park (see Agreement).

Environmental restoration sponsored by the U.S. Army Corps of Engineers and the City of Tempe will include additional amenities such as walking paths outside of habitat areas, viewing areas for watching wildlife, ramadas, restrooms, and interpretive signs. These amenities are not expected to negatively affect the net conservation benefit, and may benefit the project by generating greater interest in endangered species conservation.

The Federal Aviation Administration has established guidelines to reduce the potential for wildlife collisions within 10,000 feet around airports. The Rio Salado Project areas downstream of Tempe Town Lake occur within this 10,000-foot buffer. Phoenix Sky Airport has developed a wildlife hazard management plan to minimize hazards to aircraft through actions such as habitat modification, pyrotechnics, and water management (Steve Fairaizl, Airport Wildlife Consultants, pers. comm., February 8, 2008). The timing of management activities could be flexible to avoid important breeding seasons because this location is at the edge of the 10,000 foot buffer (Steve Fairaizl, pers. comm., February 8, 2008), though vegetation could be subject to modification. Additionally, we have initiated discussions with Airport Wildlife Consultants regarding the need to develop a comprehensive management plan to address the protection of listed species while providing for public health and safety. As such, we do not expect this plan would negatively affect the net conservation benefit.

CONCLUSION

After reviewing the current status of the southwestern willow flycatcher, Yuma clapper rail, and bald eagle, the environmental baseline for the action area, the effects of the proposed issuance of an enhancement of survival permit, and the cumulative effects, it is the FWS's biological opinion that the issuance of the permit, as proposed, is not likely to jeopardize the continued existence of the southwestern willow flycatcher, Yuma clapper rail, and bald eagle. No critical habitat for these species has been designated in the action area, therefore none will be affected. We base these conclusions on the following:

1. The length of the Permit and conservation goals will increase the availability of habitat for listed species and provide for their expansion into new areas.
2. Habitat restoration will provide for species reproduction and dispersal by developing and maintaining habitats that can support these functions.

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.

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.

The Agreement with Tempe clearly identifies the actions and activities that will be implemented to provide a net conservation benefit to the southwestern willow flycatcher, Yuma clapper rail, and bald eagle covered by the Section 10(a)1(A) permit. Anticipated effects likely to result from the proposed actions and the return to the baseline conditions by participants under the Agreement have been identified in the Agreement. All management activities described in the Agreement and the Section 10(a)1(A) permit are hereby incorporated by reference as reasonable and prudent measures and terms and conditions within the incidental take statement pursuant to 50 CFR 402.14(i). Such terms and conditions are non-discretionary and must be undertaken for the exemptions under section 10(a)1(A) and section 7(o)(2) of the Act to apply. If Tempe fails to adhere to these terms and conditions, the protective coverage of the Section 10(a)1(A) permit and Section 7(o)(2) may lapse. However, the FWS and Tempe may agree that modifications to the management activities are needed. The process for modifications in management activities to be incorporated is described within the Agreement. These new modifications will be incorporated as reasonable and prudent measures, superseding the former management activities.

AMOUNT OR EXTENT OF TAKE

Safe Harbor Agreements are written in anticipation of "take" of the covered species at some point in the future. Take cannot occur below the established baseline for a covered site. Take is expected to occur as a result of conservation activities, otherwise legal activities, and the potential return to baseline at the termination of the Agreement and its associated section 10(a)1(A) permit. Measures will be implemented to prevent or reduce levels of take; however, incidental take of southwestern willow flycatcher, Yuma clapper rail, and bald eagle could result under a variety of circumstances as described in the Proposed Action. The ultimate level of incidental take anticipated is all southwestern willow flycatcher, Yuma clapper rail, and bald eagle occurring in the action area. Predicting how many individuals will utilize the action area is

difficult because of the dynamic and stochastic influence of riverine processes on riparian and wetland ecosystems.

The Fish and Wildlife Service will not refer the incidental take of any migratory bird or bald eagle for prosecution under the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. §§ 703-712), or the Bald and Golden Eagle Protection Act of 1940, as amended (16 U.S.C. §§ 668-668d), if such take is in compliance with the terms and conditions (including amount and/or number) specified herein.

EFFECT OF THE TAKE

In the accompanying biological opinion, the FWS has determined 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

The FWS believes the following reasonable and prudent measure is necessary and appropriate to minimize or avoid impacts of incidental take to southwestern willow flycatcher, Yuma clapper rail, and bald eagle.

1. The FWS shall require that the Permittee comply with and implement the issued section 10(a)(1)(A) enhancement of survival permit and the Agreement, and require the Permittee to report their findings.

In order to be exempt from the prohibitions of section 9 of the Act, the Permittee must comply with the following terms and conditions, which implement the reasonable and prudent measure described above and outline required reporting/monitoring requirements. These terms and conditions are non-discretionary.

1. The FWS shall include the Agreement's conservation measures in the issued permit
2. Information obtained from pertinent monitoring operations will be reported by the Permittee and made available to the FWS. Reports will include information from population monitoring, incidental take, and all other actions undertaken to implement the Agreement. Reports will be completed annually for the term of the permit.

Review requirement: The reasonable and prudent measures, with their implementing terms and conditions, are designed to minimize incidental take that might otherwise result from the proposed action.

Disposition of Dead or Injured Listed Species

Upon locating a dead, injured, or sick listed species initial notification must be made to the FWS's Law Enforcement Office, 2450 W. Broadway Rd, Suite 113, Mesa, Arizona, 85202, 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 sick or injured animals to ensure effective treatment and care, and in handling dead specimens to preserve the biological material in the best possible state.

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.

1. Ensure implementation of appropriate coordination with the Arizona Game and Fish Department regarding participation in the Restoration Advisory Committee.

REINITIATION NOTICE

This concludes formal consultation on the action outlined in the 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.

If you have questions regarding this BO or the Agreement, please contact Mike Martinez (x224) or Debra Bills (x239). Please refer to the consultation number 22410-2008-F-0126 in future correspondence concerning this project.

Delmer T. Bills
 Acting Field Supervisor

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

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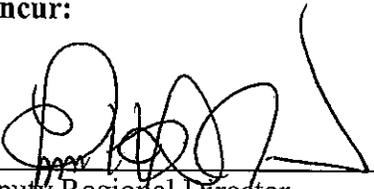
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Concur:



Deputy Regional Director

4.22.08

Date