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In Reply Refer To:
AESO/SE
02-21-05-F-0784

June 15, 2006

Memorandum

To: Field Manager, Lake Havasu Field Office, Bureau of Land Management, Lake Havasu City, Arizona

From: Field Supervisor

Subject: Biological Opinion on the Effects of the Lake Havasu Field Office (LHFO) Proposed Resource Management Plan

Thank you for your request for formal section 7 consultation on the final Lake Havasu Field Office District Proposed Resource Management Plan (PRMP), pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531-1544), as amended (Act). Species addressed in this consultation include effects of your proposed action on the following species:

- Endangered southwestern willow flycatcher (*Empidonax traillii extimus*) (SWWF)
- Threatened bald eagle (*Haliaeetus leucocephalus*) (BAEA)
- Endangered razorback sucker (*Xyrauchen texanus*) (RBS) and critical habitat.
- Endangered bonytail chub (*Gila elegans*) (BTC) and critical habitat
- Endangered Yuma clapper rail (*Rallus longirostris yumanensis*) (YCR)
- Threatened desert tortoise – Mohave Desert Population (*Gopherus agassizii*) (MDT)

You have also requested our concurrence with your determination that the proposed action may affect, but is not likely to adversely affect, the endangered California brown pelican (*Pelicanus occidentalis californicus*) and the candidate western yellow-billed cuckoo (*Coccyzus americanus occidentalis*). We concur with these determinations, which are addressed in Appendix A at the end of this memorandum.

This biological opinion (BO) is based on information provided in the November 28, 2005, biological assessment (BA), the PRMP EIS, email correspondence, updated memos, telephone conversations, site investigations, meetings between the Bureau of Land Management (BLM) and us, and other sources of information (all this information is considered part of the proposed

action). References cited in this BO are not a complete list of all available literature on the species of concern, associated actions, management and their effects, or on other subjects considered in this BO. A complete administrative record of this consultation is on file at our Phoenix office.

CONSULTATION HISTORY

September through November 2005. We participated in the planning process by making recommendations and commenting on the draft BE.

November 28, 2005. We received your final biological assessment and request for formal consultation on the draft Lake Havasu Field Office RMP and EIS.

March 24, 2006. We sent you the draft biological opinion on the Lake Havasu Field Office RMP and EIS.

April 3, 2006. Final BO due to be sent to the LHFO (135 days since the initiation of formal consultation).

April 24, 2006. Comments received from BLM on draft BO.

BIOLOGICAL OPINION

DESCRIPTION OF THE PROPOSED ACTION AND ACTION AREA

The proposed action is implementation by the BLM of the preferred alternative as set forth in the PRMP for BLM lands of the Lake Havasu Field Office in western Arizona. The PRMP provides for the overall management guidance for administration of the planning area and makes specific land allocation decisions regarding identification of lands eligible for disposal, designation of Areas of Critical Environmental Concern (ACECs), and limitation on use of BLM lands by off-highway vehicles (OHVs). The PRMP also identified which wildlife and plant species were to be considered as priority species in land management decisions (table 3-4, PRMP page 3-34). The PRMP and FEIS were developed to guide management of BLM lands and resources within the planning area for approximately 15 years. Section 202 of the Federal Land Policy and Management Act of 1976 requires the Secretary of the Interior to develop, maintain, and revise land use plans for managing BLM lands. To comply with that Act, the LHFO prepared the PRMP.

The decisions resulting from the approved PRMP and Records of Decision determine which use or combination of uses the Field Offices will emphasize. Decisions also state which uses were not suitable. In certain cases, the decisions were specific and immediately implementable (e.g., ACEC and utility corridor (UC) designation, identification of wildlife travel corridors and restricting saleable mineral leases on 299, 802 acres). In other instances, the BLM must prepare more specific activity plans and environmental analyses before implementing decisions (e.g.,

Lake Havasu and Parker Strip Special Recreation Management Area (SRMA) Plans, locatable mineral withdrawal recommendations, and acquisition, exchange, or disposal of specific tracts of land).

The FRMP and FEIS presented and analyzed issues and management concerns identified by BLM planning team members, interagency consultation, the public, and BLM managers. A summary of these issues and management concerns and the proposed actions developed to address them are presented in this document. The PRMP focuses on the following 14 topics and the potential decisions needed to implement future management actions:

Biological Resources

The four major areas, vegetation management, fish and wildlife habitat management, special status species management, and invasive or noxious species management are examined in the PRMP:

Vegetation Management– All resource activities will meet the Arizona Standards for Rangeland Health and Guidelines for Grazing (Standards and Guidelines). Management actions will promote sufficient vegetation across the landscape to maintain watershed stability, provide forage, improve or restore riparian-wetland functions, enhance groundwater recharge, and satisfy state water quality standards appropriate to climate and landform. Priority plant species for the LHFO are listed on page 2-100 in the PRMP.

Fish and Wildlife Habitat Management- The objective is to restore, enhance, and maintain habitats and to mitigate for the loss of habitats to sustain or increase fish and wildlife populations.

Specific management actions include:

- Approximately 1,017,759 acres pf public lands would be allocated for management as category 1, 2 or 3 desert tortoise habitats (PRMP Map 2-39).

- Six wildlife corridors would be allocated (PRMP Map 2-42).

- Desert bighorn sheep lambing grounds would be allocated for special seasonal management (PRMP Map 2-43).

- There would be 737,127 acres cooperatively managed as Wildlife Habitat Areas (WHA) with State and Federal wildlife agencies (PRMP Map 2-40).

Special Status Species Management

Special status species refers to all federally-listed endangered, threatened, proposed and candidate species, and designated or proposed critical habitat; species of concern managed under conservation agreements or management plans; state-listed species; and BLM-sensitive species. Special status species found in the action area are listed in appendix J of the PRMP. The PRMP

incorporates applicable recovery tasks as conservation measures in the proposed action from the following recovery plans:

- Mohave Desert tortoise
- Yuma clapper rail
- Southwestern willow flycatcher
- Bonytail chub
- Razorback sucker
- Southwestern bald eagle

The LHFO would also continue to participate in recovery strategies found in the other activities such as the Lake Havasu Fisheries Partnership Program, to assist in the basin-wide recovery of the bonytail chub and razorback sucker, and other native fishes in the LCR.

Invasive or Noxious Species Management

The BLM would cooperate with other authorities to educate the public to the risks to the environment from invasive and noxious species. The BL would research the means to control, monitor the resources affected and implement control actions where needed in the action area. The BLM will require the use of weed-free certified hay and domestic sheep-free forage for all wildernesses, wilderness study areas, lands allocated for wilderness characteristics, and WHAs. BLM will encourage the use of these forages for all other public lands within the LHFO.

Cultural Resources

The desired future condition of all cultural resources on BLM land within the planning area is to preserve and protect significant cultural resources for future generations. Cultural resources are sites, buildings, objects, features, and artifacts that indicate past lifeways and represent the nation's collective past.

Fire Management

Specific desired future conditions (DFCs) and land use allocations (LUAs) were described for four vegetation communities in the action area:

Two Desert scrub communities (below 3,500 feet elevation and 3,500 to 4,500 feet elevation) would have adequate cover and mix of natural plant species that have good vigor. In terms of fire management and fire ecology, the desired future conditions are for fire to control or reduce exotic annual weeds such as red brome and to limit woody vegetation to non-hazardous levels.

Interior Chaparral - Adequate cover and mix of natural plant species that have good vigor. In terms of fire management and fire ecology, the desired future conditions are for fire to control or

reduce exotic annual weeds such as red brome and to limit woody vegetation to non-hazardous levels.

Riparian/mesquite - Adequate cover and mix of natural plant species that have good vigor. In terms of fire management and fire ecology, the desired future conditions are for fire to control or reduce exotic annual weeds and to limit woody vegetation to non-hazardous levels.

Grazing

LHFO's objectives for rangeland management are to carry out the intent of the Taylor Grazing Act of 1934, as amended and supplemented, the Federal Land Policy and Management Act of 1976, and the Public Rangelands Improvement Act of 1978. The DFCs for grazing allotments in the action area to provide forage on a sustain yield basis for livestock consistent with meeting Lands Health Standards and multiple use objectives. Rangeland ecosystems would be maintained or improved to meet Standards and Guidelines for Rangeland Health. There are 17 grazing allotments administered by the LHFO; five of which are classified as ephemeral (PRMP Map 2-5, Table 3-15, PRMP page 3-92).

Lands and Realty

Land Ownership Adjustment - The purpose of the program is to adjust land tenure in the planning area to achieve BLM resource management objectives and improve service to the public. No BLM or private lands will be acquired, exchanged, or disposed of without additional compliance with the NEPA and ESA through a site-specific analysis of a proposed action. See the Land Tenure Amendment for more details regarding criteria and locations.

Land Acquisition – Established objectives for land acquisition and the characteristics these lands will possess are described in Table 2-7 (PRMP page 2-33).

Land Disposal- All land-disposal actions are discretionary. BLM will evaluate lands it selects for disposal for significant natural and cultural resources, threatened and endangered plants and animals, floodplain/flood hazards, prime and unique farmlands, and other critical factors. These actions would trigger NEPA compliance, and BLM would conduct an effects analysis to listed species and their critical habitat. BLM would conduct section 7 consultations with USFWS according to the effects determination. Some of the factors considered during the NEPA process include the importance of the habitat or area to the overall abundance and distribution of the listed species or its critical habitat, the importance of Federal management to species survival, the foreseeable uses of the habitat or area in non-BLM ownership, and the difference between feasible Federal and non-Federal protection for the habitat or area. National BLM policy (Manual Section 6840.06) would factor into this decision, which states in part:

- "Ensure activities affecting populations and habitats of T&E species are designed to be consistent with recovery needs and objectives. Screen all proposed actions to determine if T&E species and their habitats may be affected. Ensure no actions adversely affect the likelihood of recovery of any T&E species."

The PRMP identifies 56,715 acres of BLM lands that are targeted for disposal by sale or exchange (Table 2-8, PRMP page 2-35). This includes 2,934 acres available for Recreation and Public Purposes (R&PP) land disposals. However, disposal of all identified BLM lands is not required. Unforeseen land-management concerns, the presence of significant natural resources, or public concerns raised during the NEPA process may prevent disposal or may result in identification of other lands for disposal. However, disposal of other lands would require a land use plan amendment. The decision to consider these lands for disposal is completed and part of the environmental baseline; however, actual selection of specific parcels and their disposal are site-specific actions subject to future section 7, as appropriate.

Land Use Authorization – LHFO may allow use of the public lands or interests in lands through issuance of rights-of-way (ROW), leases and permits. Typical ROW issuances include; access roads, powerlines, telephone lines, fiber optic systems, communication facilities, etc.

Twelve utility corridors (UCs) will be designated along existing lines; three new UCs were also designated (Table 2-1, PRMP page 2-42). Future major cross-Field Office utility rights-of-way proposals will be encouraged to use these corridors unless an evaluation of the project shows that location outside of the designated area is the only practicable alternative.

The LHFO will continue to lease recreation areas for concessions, state parks, county parks and city park in accordance with desired Recreational Opportunity Spectrum settings.

Minerals Management

The LHFO minerals program manages three categories of mineral resources:

- Saleable Minerals – (Sand and gravel, stone and clay resources) The PRMP predicts up to 40 new mineral material sites would be developed throughout the planning area over the15-year life of the plan, disturbing a maximum of 1,000 acres.

- Leasable Minerals – (Oil, gas and geothermal resources) The PRMP foresees a maximum of ten holes drilled throughout the planning area over the15-year life of the plan, disturbing a maximum of 50 to 70 acres.

- Locatable Minerals – (Gold, silver, copper, etc.) - The PRMP foresees three to five new exploration-level notices submitted per year that would disturb a maximum of five acres per notice. Five to ten new locatable mineral operations, disturbing approximately 20 acres at each operation, would be developed over the life of the plan.

The PRMP prohibits new or expanded saleable mineral material sites in the following areas:

- Swansea Historic District ACEC, cultural sites and areas, and site complexes managed for conservation for future, traditional, and public uses.

- Aubrey Hills Recreation Management Zone and Cactus Plain Wilderness Study Area (WSA).

- All riparian zones.

- Category 1 desert tortoise habitat.
- Bullhead Bajada Natural and Cultural and Beal Slough Riparian and Cultural ACECs.
- Open OHV areas or recreation management zones managed for extensive OHV use.

The PRMP prohibits surface occupancy for leasable minerals in the following areas:

- Cultural resource sites and site complexes managed for conservation for future, traditional, and public uses.
- Cactus Plain WSA.
- Within 0.25 miles of the Bill Williams and Colorado rivers and within the riparian zones of the Three Rivers Riparian ACEC.

The PRMP recommends withdrawing the following areas from locatable mineral entry:

- 200 acres of the Swansea Historic District ACEC.
- 238 acres of the Three Rivers Riparian ACEC.
- 185 acres of the Bullhead City Bajada Natural and Cultural ACEC.
- 10 acres to protect the Incline Railway in the Harcuvar Mountains.

Some of the LHFO is split estate with BLM owning the surface and the private land owner owning the minerals below the surface. Under this type of split estate BLM has very little control over mineral development on those lands.

Paleontological Resources

Paleontological resources will be managed for their scientific, educational, and recreational values, and adverse impacts to these resources will be mitigated.

Public Lands with Wilderness Characteristics

The LHFO evaluated 41,590 acres of public lands, outside of designated wilderness, which will be maintain or enhance the following wilderness characteristics:

- Naturalness Lands and resources exhibit a high degree of naturalness when effected by the forces of nature and where the imprint of human activity is substantially unnoticeable.
- Solitude Visitors may have outstanding opportunities for solitude when the sights, sounds, and evidence of other people are rare and infrequent.

- Primitive and Unconfined Recreation Visitors may have outstanding opportunities for primitive and unconfined types of recreation where the use of the area is through non-motorized, non-mechanical means, and where no or minimal developed recreation facilities are encountered.

Recreation

Recreation Management Actions for all LHFO administered lands include:

- Dispersed camping is allowed without a permit for no longer than 14 days within any 28-day period. After the 14th day, campers must move beyond a 25-mile radius of their previous camp.
- Collection of dead and downed wood is prohibited except within the vicinity of a dispersed campsite for campsite use only.
- No paintball activities would be allowed in Wilderness Areas or ACECs.
- The Parker 400-course would be limited to two competitive use events per year to be run from December 1 through February 28. No additional competitive use-off road racecourses would be allowed.
- Establishment of new camping areas, including long-term visitor areas, would be based on criteria outlined in Appendix H of the PRMP.

The PRMP will manage areas where there is concentrated or intensive recreational use as Special Recreation Management Areas (SMRA). The LHFO will focus specific management, funding, and planning to provide recreational opportunities while protecting, sustaining, and enhancing environmental resources in these areas. Within each SMRA, Recreation Management Zones may be identified to provide site-specific planning and management. Activity level plans would be created or reviewed for all SRMAs designated in the PRMP. The PRMP identifies seven SMRAs within the action area:

- Colorado River Nature Center SMRA (363 acres) includes facilities developed in partnership with other agencies such as the AGFD. It is divided into Southern Bluff RMZ and River Side RMZ (PRMP Map 2-26)
- Lake Havasu SMRA (57,581 acres) is divided into eight RMZs (PRMP Maps 2-26 and 2-27):
    - Whipple Mountains
    - North Aubrey
    - Aubrey Hills
    - AZ Shoreline

  - Havasu Springs
  - CA Shoreline
  - North Lake Havasu
  - South Lake Havasu

- Parker Strip SMRA (25,449 acres) will continue to manage the area outlined in the Parker Strip Recreation Management Area Plan (1993). This SMRA is divided into three RMZs (PRMP Map 2-26):
  - Parker Strip Urban
  - Crossroads and Copper Basin
  - Parker Strip Backcountry
- Swansea SMRA (3,837 acres) contains one RMZ for the entire area (PRMP Map 2-26).
- Gibraltar SMRA (49,167 acres) is divided into five RMZs (PRMP Map 2-28):
  - Gibraltar Wilderness
  - Cienega
  - Shea Road
  - Buckskin Mesa
  - Osborne Wash
- Havasu Urban SMRA (64,753 acres) contains three RMZs (PRMP Map 2-29):
  - Standard Wash
  - Crossman Peak
  - Havasu Urban Interface
- Plomosa SMRA (112,116 acres) contains three RMZs (PRMP Map 2-30):
  - Backcountry Byway
  - Plomosa Mountains
  - Bouse Plain

All areas outside of the SMRAs that do not receive focused, specific recreation program management are classified as Extensive Recreation Management Areas (ERMA).

Areas of Critical Environmental Concern (ACEC) and Other Special Management Areas

The BLM lands have a variety of important historical, cultural, scenic, and natural values. ACEC, Wild and Scenic River and Wilderness designations may be used to protect these values. They may also be used to identify and manage areas that are hazardous to human life and property.

ACECs were designated where values were determined to be of the appropriate level of significance. Three ACECs containing 15,458 acres were designated to protect important natural and cultural resources (See Table 2-43, Page 2-153, PRMP). The ACECs that were designated were:

- Bullhead Bajada Natural and Cultural ACEC (7,090 acres).
- Beal Slough Riparian and Cultural ACEC (2,395 acres).
- Swansea Historic District ACEC (5,973 acres).

The Three Rivers Riparian ACEC is being decreased in size from 32,608 to 2,246 acres. The portions eliminated are located within the State-administered Alamo Wildlife Area and the Rawhide Mountains Wilderness. Management prescriptions are being implemented for each ACEC as described in Table 2-44, page 2-158 in the PRMP.

The Bill Williams River will continue to be managed as suitable for inclusion into the National Wild and Scenic Rivers System. The three segment, totaling 20.5 miles, will be managed to protect their outstandingly remarkable values until Congress acts to designate them or release them to management under provisions of the applicable Resource Management Plan. These segments are:

- Segment 1 (Rawhide Mountains Wilderness) would be 8.3 miles in length and would be recommended as Wild.
- Segment 2 (interim reach between the two wilderness areas) would be 5.1 miles in length and would be managed as Scenic.
- Segment 3 (Swansea Wilderness) would be 6.2 miles in length and would be managed as Wild.

The five Wilderness Areas in the LHFO and portions of three others in California would be managed in compliance with the designating Act, the Wilderness Act of 1964, BLM's wilderness management regulations at 43 CFR 6300, BLM's Wilderness Management Policy (Manual 8560) and subsequent Instruction Memoranda), and Wilderness Management Plans, where completed. The Arizona Desert Wilderness Act of 1990 maintained Wilderness Study Area (WSA) status for the East Cactus Plain area. The BLM will continue to protect these resources and wilderness values under BLM's *Interim Management Policy and Guidelines for Land under*

Wilderness Review (Manual 8550 and subsequent Instructional Memoranda) until final determination of the status of the Cactus Plain WSA by Congress.

Transportation and Public Access

Land ownership in the action area varies from large blocks of BLM, and Tribal lands to small, scattered tracts of BLM, State, and private lands. Access problems, because there are no roads or trails, or no legal right to use existing roads or trails, prevent BLM from administering some tracts of BLM lands and prevent the public from legally accessing these lands. The decisions made for access were:

- Provide the necessary vehicular, horse, and foot access routes to meet the needs and responsibilities of the private parties and public entities present in the planning area. This includes managing existing and new roads and trails, and closing roads and trails, as needed.

- This PRMP will implement the following OHV area designations:

    - *Open Area*- All types of vehicle use is permitted at all times; subject to regulations and standards set forth in 43 CFR 8341 and 8342.

    - *Limited Area*- An area is restricted at certain times, in certain areas, and/or to certain vehicle use.

    - *Closed Area*- Any vehicle use is prohibited, unless permitted by an authorized official.

- A route designation process will occur within five years of the date of acceptance of this plan. The result of this designation will be implemented in a Travel Management Plan, resulting in a Travel Management Network that will define the road, trail, public, and administrative access needs on the planning area.

Visual Resources

The PRMP assigns a visual resource management class for all areas in the action area based on an inventory of visual resources and management considerations for other land uses (PRMP Map 2-51). These classes are described in PRMP Table 2-32 on page 2-131. Other resource uses and management activities would be managed to conform to the applicable visual resource management objectives established in this PRMP.

Wild Horse and Burros

The LHFO will manage burros in two Herd Management Areas (HMA), Alamo and Havasu. The Havasu HMA is divided into two segments, one on each side of the Colorado River. LHFO will manage each HMA to maintain the following appropriate management levels (AML):

- Alamo HMA AML of 160 burros

- Havasu (Arizona-side) HMA AML of 166 burros

- Havasu (California-side, Chemehuevi) HMA of 108 burros

The PRMP removes the State-administered Alamo Wildlife Area from the Alamo HMA. The original 200 AML will be reduced to 160. The 160 AML would not include this excluded area.

Conservation Measures

In order to protect and enhance threatened and endangered species, the PRMP incorporates numerous conservation measures from existing threatened and endangered species recovery plans, the Lower Colorado River Multi-Species Conservation Plan, Lake Havasu Fisheries Partnership Plan, Migratory Bird Executive Order 13186, and the Arizona Partners in Flight Bird Conservation Plan.

The BLM has committed to implementing the following conservation measures, as part of the PRMP proposed action. These measures would be implemented within the BLMs' scope of authority.

Conservation Measures Common to All Federally-Listed Species Include:

- The BLM's compliance with the Endangered Species Act and National Environmental Policy Act (NEPA) policy will contribute to the conservation of these species.
- BLM will not jeopardize the continued existence of any species listed or proposed for listing as threatened or endangered.
- All proposed activity-level plans will be evaluated to prevent or mitigate any impacts that could degrade or destroy listed or proposed species and their designated or proposed critical habitat.
- All activity-level plans will undergo site specific section 7 compliance before becoming final.
- The potentially adverse effects of the PRMP will be tempered by legal guidelines that require NEPA compliance and analysis.
- The direction in the 'Arizona Standards for Rangeland Health and Guidelines for Grazing Administration' (effective August 21, 1995) will be incorporated in all plans affecting rangeland resources and grazing administration.

Southwestern Willow Flycatcher Conservation Measures

Recovery tasks found in the various plans including the SWWF Recovery Plan (USFWS 2002) and the Lower Colorado River Multi-Species Conservation Plan (2004) (MSCP) were used to create the management action alternatives. A number of these management actions are proposed, or ongoing, for the SWWF. LHFO proposes the following conservation measures for the SWWF:

- Survey, monitor, and conduct research to improve the recovery of the SWWF.

- Carry out a program of public conservation, education, and planning directed towards preservation of SWWF habitat.

- Assure implementation of laws, policies, and agreements that benefit the SWWF.

- To the extent practical, avoid and minimize disturbance of the SWWF during the breeding season.

- Provide habitat protection (including fire management).

- Review and evaluate existing USFWS riparian restoration programs within the LHFO to determine how these programs may be modified to maximize conservation for the SWWF.

- Riparian areas that could physically support SWWF habitats would be managed, maintained, increased, and improved to attain the vegetation structure plant species diversity, density, and canopy cover to constitute suitable habitat.

In addition to the specific management actions listed above, a wide variety of habitat-based management actions are ongoing. Most of these actions are small-scale projects that focus on the restoration/enhancement of native riparian habitat.

Yuma Clapper Rail Conservation Measures

Recovery tasks found in the various plans including the YCR Recovery Plan (USFWS 1983) and the MSCP were used to create the management action alternatives. LHFO proposes the following conservation measures for the YCR:

- Sample every five years all known regions where YCR populations are found using standardized techniques and develop and implement a plan of local population surveys every year.

- Preserve and maintain breeding habitat to support populations of YCR within LHFO.

- Preserve winter habitat of the YCR within the LHFO.

- Carry out a program of public conservation, education, and planning directed towards preservation of YCR habitat.

- Maintain existing important YCR habitat areas.

- Avoid, minimize and/or mitigate, to the extent possible, disturbance in occupied territories during the breeding and molting seasons (March 15-September 1).

Bald Eagle Conservation Measures

Recovery tasks found in the various plans were used to create the management action alternatives. A number of these management actions are proposed or ongoing for the BAEA. LHFO proposes the following conservation measures for the BAEA:

Recovery tasks found in the *Southwestern Bald Eagle Recovery Plan* (USFWS 1982) and subsequent plans:

- Achieve habitat quality and quantity in riparian areas within the foraging range of BAEAs to maintain nesting and wintering birds within the Bill Williams and Colorado River drainages.

- Coordinate with the Southwestern Bald Eagle Management Committee to continue implementation of the guidelines set forth in the Arizona Conservation Assessment and Strategy Plan for the BAEA in Arizona.

- Continue to support Federal and State agencies efforts to protect and enhance breeding areas on all BLM lands.

- At a minimum, BLM would follow the management guidelines in the Bald Eagle Conservation Assessment Strategy.

- The following restrictions in three buffer zones around all known nest sites would protect breeding attempts from adverse impacts:

  Buffer Zone 1: 500-foot radius around the nest.

  - During breeding season – December 1 to June 30: No activity occurs around all known nests.

  - During non-breeding season – July 1 to November 30: No activity would be permitted that would permanently change the landscape.

  Buffer Zone 2: 500- to 1,000-foot radius around the nest.

  - During breeding season – December 1 to June 30: Limited human activity.

  - During non-breeding season – July 1 to November 30: No activity should permanently change the landscape.

  Buffer Zone 3: 1,000- to 2,500-foot radius around the nest.

- During breeding season – December 1 to June 30: No activity should permanently change the landscape.

- During non-breeding season – July 1 to November 30: Maintenance activities such as upkeep of existing buildings and roads can occur, but no activity should permanently change the landscape.

Desert Tortoise (Mohave Population) Conservation Measures

A number of the management actions are proposed or ongoing for the MDT. LHFO proposed the following conservation measures for the MDT:

- To the extent possible avoid and minimize impacts on the MDT (MSCP 2004a-d)
- Protect existing occupied habitat (MSCP 2004b).
- No disposal of known occupied habitat as required by BLM policy.
- Avoid impacts on individuals and their burrows.
- Develop increased awareness of tortoise resources on the public lands.
- Assure all personnel working within desert tortoise habitat, on public lands, are knowledgeable about the tortoise and its resource.
- Develop a strong awareness of tortoises and their habitats, particularly in the BLM planning, environmental assessment, and budget processes.
- Complete and maintain a continuing inventory and monitoring program of tortoise populations and habitats; to assist in making management decisions, including habitat categorization.
- Include monitoring provisions specific to decisions affecting the desert tortoise. Maintain a log of environmental assessment (EAs) containing stipulations pertaining to the desert tortoise, for the express purpose of tracking compliance and effectiveness of the stipulations. The monitoring of these stipulations and recommendations for improvement will be documented in the log.
- Develop and maintain a monitoring program specifically for land use activities that adversely affect tortoise habitats for use in analyzing and responding to the cumulative impacts of land-use decisions on tortoise habitats.
- Accomplish actions promoting the recovery of the listed MDT, by assuring that BLM actions do not jeopardize the continued existence of the desert tortoise (MSCP 2004a-d).

- All future highway projects through MDT habitat will require tortoise fencing when traveling through MDT habitat to reduce future mortality.

Razorback Sucker and Bonytail Chub Conservation Measures

The short-term recovery goal for these species is to prevent its extinction. Quantifiable recovery goals for down listing and delisting were developed by the USFWS (USFWS 2002). The recovery goals for the RBS and BTC relevant to the LCR require the establishment and maintenance of genetic refugia and two self-sustaining populations of both species.

Specific LHFO conservation measures:

- Protect the habitats of these populations from further degradation to the highest extent of BLM authority.

- Restore suitable habitats to make them compatible with interagency recovery goals.

- Cooperatively monitor existing augmented populations and address unique threats and site-specific management actions/tasks necessary to minimize or remove those threats.

- Continue to work with an interagency group on developing backwater areas for rearing RBS.

ISSUES, MANAGEMENT CONCERNS, AND PROPOSED ACTIONS

PRMPS are developed to resolve significant issues and management concerns associated with the management of public lands in the planning area. The PRMP proposals and other alternatives are designed to resolve the identified planning issues. The LHFO held ten open houses and identified 15 issues relevant to the planning area were identified. The planning team analyzed the publics' comments and identified the major issues to be addressed in the PRMP and which issue effects to special status species are assessed in this BO (Table 1).

Table 1. Some planning issues identified in public scoping meetings and affected listed species, Lake Havasu Field Office Resource Management Plan.

ISSUE	SWWF	YCR	BAEA	MDT	RBS	BTC
Livestock Grazing	X					
Minerals Management			X			
OHVs			X	X		
Recreation	X	X	X	X	X	X
Transportation and Public Access		X	X	X		
Wild Horse and Burro Management	X					

In addition to issues identified by public scoping process, ten management concerns were identified by LHFO BLM resource specialists during the planning process:

- Back Country Byways
- Fire Ecology
- Public Health and Safety
- Renewable Energy
- Riparian Areas and Wetlands
- Special Area Designation
- Utility and Communication Corridors
- Vegetation
- Water
- Wilderness Management

These were not specifically discussed, as a group, in the BA to track the effects on each species in this BO. Major effect categories assessed in this BO include:

- Lands and Realty
- Recreation
- Livestock Grazing
- Recreation
- Minerals Management
- Transportation and Public Access
- Wild Burro Management

General Description of the Project Area

The planning area, encompassing approximately 1.3 million acres of federally administered public land, includes portions of Mohave, La Paz, Yavapai, and Maricopa counties in Arizona and San Bernardino County in California (Map 1). Three incorporated cities, Lake Havasu City, Bullhead City, and Parker, Arizona; plus more than a dozen smaller communities are located

within the planning area. The area is a popular recreation destination and seasonal population influxes significantly influence waterway and land use within the planning area.

The planning area follows the Lower Colorado River (LCR) from Davis Dam, six miles north of Bullhead City, Arizona, south to the town of Poston, Arizona on the Colorado River Indian Tribes Reservation. The LHFO administers lands in both Arizona and California along LCR. LHFO-administered lands in California vary in width from less than 0.25 mile to approximately 6 miles.

Also located within the planning area are the Lake Havasu National Wildlife Refuge (NWR) which includes Topock Marsh and Gorge and the Bill Williams River NWR. These areas are managed under separate State and Federal authority. The planning area extends 40 miles upstream of the Bill Williams River to Alamo Dam. The Alamo Lake State Wildlife Area, upstream of the dam, is located within the Alamo Herd Management Area. The LHFO administers and manages this wild burro herd. The eastern boundaries of the planning area extend south of Alamo Lake towards Salome Arizona then eventually to Interstate 10. The southern boundary follows Interstate 10 to Quartzsite, Arizona, then northwest to Poston, Arizona. The upland areas east of the LCR do not provide habitat for any threatened or endangered species.

Seven Native American tribes (the Chemehuevi Indian Tribe, Fort Mojave Indian Tribe, Hopi Tribe, Hualapai Tribe, Salt River Pima-Maricopa Indian Community, Yavapai-Prescott Tribe, and Colorado River Indian Tribes) either currently reside within boundaries of the planning area or have recognized cultural ties to these lands. These areas are managed under separate tribal authority.

The planning area has been divided by geographic area into three management units (MU) with significant BLM jurisdiction. The MUs are the Bill Williams MU, Colorado River MU, and Desert MU. Management of the resources within these MUs is addressed as needed, by area, and includes management decisions that apply to all areas.

The action area, under this consultation process, includes all BLM lands, along with adjacent private, municipal, State and other Federal jurisdiction lands in which the effects of BLM activities implemented under the PRMP may manifest. These land managers have implemented management that could result in cumulative or other effects to listed species and critical habitat, including ground and surface water extraction, agriculture, and recreation.

STATUS OF THE SPECIES

The purpose of this section is to summarize the current rangewide status of each species analyzed in this document. Therefore, this BO contains abbreviated assessments of the status of each species. We used the best available information in our analyses for each species. Additional information regarding each species is contained in the administrative record for this consultation and other sources of information cited for each species.

Southwestern Willow Flycatcher

The SWWF was listed as endangered, without critical habitat, on February 27, 1995 (USFWS 1995). A final recovery plan for the SWWF was signed by the Fish and Wildlife Service's Region 2 Director on August 30, 2002, and was released to the public in March 2003. The Plan describes reasons for endangerment and the current status of the SWWF, recovery actions, management needs, and recovery goals (USFWS 2002). A Final Rule for critical habitat was published in the Federal Register in October 2005 (USFWS 2005).

Habitat Requirements and Special Considerations: The SWWF breeds in dense riparian habitats from sea level in California to just over 8,000 feet in Arizona and southwestern Colorado. SWWF primarily use coyote (*Salix exigua*), Geyer's (*Salix geyerana*), Gooding's willow (*Salix gooddingii*), box elder (*Acer negundo*), saltcedar (*Tamarix* sp.), Russian olive (*Elaeagnus angustifolia*), and live oak (*Quercus agrifolia*) for nesting. Based on the diversity of plant species composition and complexity of habitat structure, four basic habitat types have been identified for the SWWF: monotypic willow, monotypic exotic, native broadleaf dominated, and mixed native/exotic (Sogge et al. 1997).

Declining SWWF numbers have been attributed to loss, modification, and fragmentation of riparian breeding habitat, 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 SWWF 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). SWWF 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 watering areas and corrals, agriculture, urban areas, golf courses, bird feeders, and trash areas. These feeding areas, when in close proximity to SWWF breeding habitat, especially when coupled with habitat fragmentation, facilitate cowbird parasitism of flycatcher nests (Harris 1991, Tibbitts et al. 1994).

Despite being implicated as a cause for the decline of riparian bird species in the Southwest, saltcedar often supports nesting SWWF (Owen and Sogge 2002). In Arizona, over 75 percent of SWWF nests located between 1995 and 2000 were located in a saltcedar tree (Paradzick et al. 2001). However, the majority of nests (70 – 76 percent 2001 through 2003) were located in mixed stands where either native species or saltcedar were dominant; monotypic saltcedar stands were used much less (14 – 18 percent) (Smith et al. 2002, Smith et al. 2003, and Smith et al. 2004). Recent studies (Owen and Sogge 2002, Drost et al. 2001) indicate that saltcedar not only provides adequate nesting habitat, but insect numbers are also sufficient in saltcedar to provide food for adults and young SWWF.

The designation of SWWF critical habitat identified the following primary constituent elements for the SWWF:

- Riparian habitat in a dynamic successional riverine environment (for nesting, foraging, migration, dispersal, and shelter) that comprises: Trees and shrubs that include Gooddings willow, coyote willow, Geyers willow, arroyo willow (*Salix lasiolepis*), red willow (*Salix laevigata*), yewleaf willow (*Salix taxifolia)*, pacific willow (*Salix lasiandra*), boxelder, tamarisk, Russian olive, buttonbush (*Cephalanthus occidentalis*), cottonwood (*Populus fremontii*), stinging nettle (*Urtica dioica*), alder (*Alnus rhombifolia, Alnus oblongifolia, Alnus tenuifolia*), velvet ash (*Fraxinus velutina*), poison hemlock (*Conium maculatum*), blackberry (*Rubus ursinus*), seep willow (*Baccharis salicifolia, Baccharis glutinosa*), oak (*Quercus agrifolia, Quercus chrysolepis*), rose (*Rosa californica, Rosa arizonica, Rosa multiflora*), sycamore (*Platinus wrightii*), false indigo (*Amorpha californica*), Pacific poison ivy (*Toxicodendron diversilobum*), grape (*Vitus arizonica*), Virginia creeper (*Parthenocissus quinquefolia*), Siberian elm (*Ulmus pumila*), and walnut (*Juglans hindsii*).
- Nesting habitat with trees and shrubs that include, but are not limited to, willow species and box elder.
- Dense riparian vegetation with thickets of trees and shrubs ranging in height from 6 to 98 feet, with lower-stature thickets of 6 to 13 feet tall, found at higher elevation riparian forests; and tall-stature thickets found at middle- and lower-elevation riparian forests.
- Areas of dense riparian foliage, at least from the ground level up to approximately 13 feet above ground, or dense foliage only at the shrub level, or as a low, dense tree canopy.
- Sites for nesting that contain a dense (50 to 100 percent) tree and/or shrub canopy (the amount of cover provided by tree and shrub branches measured from the ground).
- Dense patches of riparian forests that are interspersed with small openings of open water or marsh or shorter/sparser vegetation, which creates a mosaic that is not uniformly dense. Patch size may be as small as 0.25 acre or as large as 175 acres.
- A variety of insect prey populations, including but not limited to, wasps and bees (Hymenoptera); flies (Diptera); beetles (Coleoptera); butterflies/moths and caterpillars (Lepidoptera); and spittlebugs (Homoptera).

Yuma Clapper Rail

The YCR was listed as an endangered species on March 11, 1967 under the Endangered Species Preservation Act of 1966 (Public Law 89-669). Only populations found in the United States were listed as endangered; those in Mexico were not listed under the 1966 law or the subsequent Endangered Species Act of 1973 (as amended). Critical habitat has not been designated for the YCR. The YCR Recovery Plan was issued in 1983 (USFWS 1983).

Habitat for the YCR includes freshwater and brackish marshes with dense vegetation, dominated by cattails that include both mats of old material and more open stands. The YCR is the only clapper rail subspecies that breeds in freshwater. The most productive areas consist of uneven-aged stands of cattails interspersed with open water of variable depths (Conway et al. 1993).

Other important factors in the suitability of habitat include the presence of vegetated edges between marshes and shrubby riparian vegetation (saltcedar or willow thickets) (Eddleman and Conway 1989), with stable or slowly changing water levels preferred over conditions with large and rapid water level fluctuations. Water flow in the open channels within the marsh is desirable (Todd 1971, Tomlinson and Todd 1973). YCR will use quiet backwater ponds, flowing stream or riverside areas, irrigation canals and drainage ditches, reservoirs and small lakes or other small marshlands where cattail habitat is available. Natural and artificially constructed marshes can provide suitable habitat. Additional life history information is found in the Recovery Plan (USFWS 1983).

Annual rangewide survey data, compiled by FWS for the period 1990 through 2005, documented between 464 and 1076 YCR observed (via calls or visual observation) at the survey sites. Surveys in 2005 documented 885 birds in Arizona and California (L. Fitzpatrick, FWS, pers. comm. January 13, 2006). These figures are of actual birds and are not extrapolated to provide a population estimate.

Declines in actual YCR numbers heard or seen on survey transects since the early 1990s have not been positively connected to any event on the lower Colorado River or Salton Sea; however, changes in habitat quality caused by overgrown marsh vegetation is likely a factor influencing changes in population size over time as habitat quality changes. Habitat restoration through mowing or burning over-age cattail stands is under evaluation in several locations to determine future management needs.

New information that may affect the life history of the YCR involves selenium levels in the crayfish, the primary prey species. Levels of selenium in crayfish from YCR habitats were high enough to cause concern for potential reproductive effects (Roberts 1996, King et al. 2000). No adverse effects from selenium have been observed; however, due to the YCR's secretive nature, nests are very difficult to find and young birds hard to observe. Additional monitoring is under consideration at this time.

Bald eagle

The BAEA, south of the 40th parallel, was listed as endangered under the Endangered Species Preservation Act of 1966, on March 11, 1967 (USFWS 1967), and reclassified it to threatened status on July 12, 1995 (USFWS 1995). No critical habitat has been designated for this species.

Although not considered a separate subspecies, the BAEA in the southwestern United States has been evaluated separately for the purposes of consultation and recovery efforts under the Act. A recovery plan has been developed for BAEA in the Southwest recovery region (USFWS 1982). The FWS determined that BAEA in the Southwest recovery region are part of the same BAEA population found in the rest of the lower 48 States (USFWS 1995). On July 6, 1999, the FWS proposed delisting the BAEA in the lower 48 States, including Arizona, stating that the number of breeding pairs in the Southwest recovery unit has more than doubled in the last 15 years (USFWS 1999). The FWS recently re-opened the public comment period to provide new information, respond to comments, and further clarify rationale for delisting the BAEA (USFWS 2006).

The BAEA historically ranged and nested throughout North America except extreme northern Alaska and Canada and central and southern Mexico. The BAEA occurs in association with aquatic ecosystems, frequenting estuaries, lakes, reservoirs, major rivers systems, and some seacoast habitats. Generally, suitable habitat for BAEA includes those areas that provide an adequate food base of fish, waterfowl, and/or carrion, with large trees for perches and nest sites. Occupied territories in Arizona continue to increase. In 2002, 37 eaglets fledged in Arizona, the most ever recorded in a single year (Koloszar et al. 2002).

In addition to breeding BAEA, Arizona provides habitat for wintering BAEA, which migrate through the State between October and April each year. BAEA often congregate at specific wintering sites that are generally close to open water and offer good perch trees and night roosts (USFWS 1995). In 2004, 402 wintering BAEA were counted, including 236 adults, 147 subadults, and 19 of unknown age.

Desert tortoise (Mojave population)

The desert tortoise populations north and west of the LCR in Arizona and Utah (excluding the Beaver Dam slope population) were listed as endangered under an emergency rule on August 4, 1989. Subsequently, the entire Mohave population of the desert tortoise west of the LCR in California and Nevada, and north of the LCR in Arizona and Utah, including the Beaver Dam slope, was listed as a threatened species on April 2, 1990 (USFWS 1990). Reasons for the determination included loss of habitat from construction projects such as roads, housing and energy developments, and conversion of native habitat to agriculture. Grazing and OHV activity have degraded additional habitat. Also cited as threatening the MDT's continuing existence were illegal collection by humans for pets or consumption, upper respiratory tract disease (URTD), predation on juvenile desert tortoises by common ravens (*Corvus corax*) and kit foxes (*Vulpes macrotis*), and collisions with vehicles on paved and unpaved roads. Fire is an increasingly important threat to desert tortoise habitat. Over 500,000 acres of desert lands burned in the Mojave Desert in the 1980s. Fires in Mojave Desert scrub degrade or eliminate habitat for desert tortoises (Appendix D of USFWS 1994).

The desert tortoise is a large, herbivorous, hard-shelled reptile found in portions of California, Arizona, Nevada, and Utah. It also occurs in Sonora and Sinaloa, Mexico. Optimal habitat has been characterized as creosote bush scrub in which precipitation ranges from 2 to 8 inches, where the diversity of perennial plants is relatively high, and production of ephemerals is high (Luckenbach 1982, Turner 1982, Turner and Brown 1982). Soils must be friable enough for digging of burrows, but firm enough so that burrows do not collapse. Desert tortoises occur from below sea level to an elevation of 7,300 feet, but the most favorable habitat occurs at elevations of approximately 1,000 to 3,000 feet (Luckenbach 1982).

In 1988, the BLM initiated desert tortoise habitat categorization on public lands (BLM 1988). Three categories were delineated with the following goals:

- Category 1. Maintain stable, viable populations and protect existing habitat values; increase populations where possible. Habitat area is essential to maintain large, viable populations.

- Category 2. Maintain stable, viable populations and halt further decline in tortoise habitat values. Habitat area may be essential to maintain viable populations.

- Category 3. Limit tortoise habitat and population declines to the extent possible by mitigating impacts. Habitat area is not essential to maintain viable population.

The FWS designated approximately 6.4 million acres of critical habitat for the Mojave population of the desert tortoise in portions of California, Nevada, Arizona, and Utah (USFWS 1994:5820-5846; also see corrections at 59 FR 9032-9036).

In 1994, the FWS approved the final Desert Tortoise Recovery Plan (USFWS 1994). The Desert Tortoise Recovery Plan divides the range of the desert tortoise into six Recovery Units (RU); Western Mojave, Northeastern Mojave, Eastern Mojave, Upper Virgin River, Eastern Colorado, and Northern Colorado, and recommends establishment of 14 Desert Wildlife Management Areas (DWMA) throughout the RUs. Within each DWMA, the desert tortoise Recovery Plan recommends implementation of reserve-level protection of desert tortoise populations and habitat, while maintaining and protecting other sensitive species and ecosystem functions.

The General Accounting Office Report titled *Endangered Species: Research Strategy and Long-Term Monitoring Needed for the Mojave Desert Tortoise Recovery Program* (GAO 2002) directed the FWS to periodically reassess the species' Recovery Plan to determine whether scientific information developed since its publication could alter implementation actions or allay some of the uncertainties about its recommendations. In response to the GAO report, Interior Appropriation Congressional directed language, and in light of new information, the FWS initiated a review of the current desert tortoise Recovery Plan. In March 2003, the Desert Tortoise Recovery Plan Assessment Committee was assembled to review the existing 1994 Recovery Plan and prepare an Assessment Report that will recommend where and to what degree the Recovery Plan needs to be revised. The final report will be used as the basis for revising the Recovery Plan.

Razorback Sucker and its critical habitat

The RBS was listed as an endangered species November 22, 1991 (USFWS 1991). The RBS Recovery Plan was released in 1998 (USFWS 1998) and updated with the RBS Recovery Goals in 2002 (USFWS 2002)

Critical habitat was designated in 15 river reaches in the historical range of the RBS on March 21, 1994 (USFWS 1994). Critical habitat included portions of the Colorado, Duchesne, Green, Gunnison, San Juan, White, and Yampa rivers in the Upper Colorado River Basin, and the Colorado, Gila, Salt, and Verde rivers in the Lower Colorado River Basin. The conservation role of the critical habitat is largely intact in all 15 river segments.

The RBS was once abundant in the Colorado River and its major tributaries throughout the Basin, occupying 3,500 miles of river in the United States and Mexico (USFWS 1993). Records from the late 1800s and early 1900s indicated that the species was abundant in the lower Colorado and Gila river drainages (Krisch 1889, Gilbert and Scofield 1898, Minckley 1983, Bestgen 1990).

Since 1997, significant new information on recruitment to the wild RBS population in Lake Mead has been developed (Holden et al. 2000) that indicates some degree of successful recruitment is occurring. This degree of recruitment has not been documented elsewhere in the species' remaining populations.

RBS persist on the Colorado River in Lakes Mead, Mohave, and Havasu and in the mainstem between the reservoirs and downstream of Lake Havasu. In the Gila, Salt, and Verde rivers of interior Arizona, stocking activities have created small populations but no recruitment of wild-born young has been observed in these populations. The wild adults in the Mohave population were estimated at 9,087 individuals in 1999 with an additional 3,104 repatriated sub-adults captured on the spawning grounds with the adults (Pacey and Marsh 1999). The Lake Mead population is estimated at 100-200 individuals (Welker and Holden 2003).

RBS spawning has been documented in Lakes Mead and Mohave. RBS are known to spawn on submerged alluvial fans where large washes enter Lake Mohave (C. Minckley, FWS, pers. comm. January 31, 2006). Large recruitment events facilitated by the filling of lakes Mead and Mohave (in the 1930's and 1950's respectively) created the adult populations found there (summarized in Minckley et al. 1991). Recruitment into the Lake Mohave population has not occurred since that time, resulting in the decline from an estimated 60,000 adults in the 1980s to 2,698 in 2002 (Marsh et al. 2003) and an estimated 475 fish in 2004 (Marsh 2004). Wild populations in Lake Havasu and the river between Parker and Imperial dams are extremely small, and past stocking activities with marked fish, especially in the Parker Dam to Imperial Dam reach, confuse the identification of fish captured there. Recent declines in wild fish numbers are a result of the dying off of old adults that comprise the majority of these populations. None of the populations are confirmed to be self-sustaining, with recent recruitment of wild-bred young only documented in Lake Mead (Welker and Holden 2003). Captures of small RBS in a canal below Parker Dam may also represent some recruitment occurring in this area. The normal pattern seen for RBS populations in reservoirs is to die out approximately 40-50 years after formation of the reservoir as fish reach the end of their life span. The current demands for augmentation of this species are far greater than the numbers that can be produced given the available rearing capacity. Willow Beach National Fish Hatchery, Bubbling Ponds Hatchery, and other associated hatcheries and rearing ponds have the annual capacity to produce between 25,000 and 30,000 RBSs that are 10 inches long. The current annual demand for augmentation of this species is more than double that production. This demand is expected to increase by as much as 100% in the near future.

Bonytail Chub

The BTC was listed as an endangered species on May 23, 1980. Critical habitat for the BTC was designated on April 20, 1994, and includes portions of the Colorado, Green, and Yampa rivers in

Colorado and Utah, and portions of the Colorado River in Arizona. The BTC Recovery Plan (USFWS 1990) was updated and supplemented by the BTC Recovery Goals in 2002 (USFWS 2002).

The BTC is a cyprinid fish species endemic to the Colorado River Basin. Extremely small populations of wild BTC exist in the Colorado, Green, and Yampa rivers in Colorado and Utah, and in the LCR in Arizona and Nevada. The species may be functionally "extinct", since the last capture of a documented wild (not born from hatchery stock) adult in the Upper Basin was in 1988, and in the Lower Basin the last wild adult documented in Lake Havasu was in the early 1990s. In Lake Mohave the consistent records end about the same period (data summarized in USFWS 2002); however, one presumed wild adult was taken from Lake Mohave in 2003. The wild populations failed due to a lack of sufficient recruitment to maintain the populations. The recovery goals (USFWS 2002) contain the most recent life-history information on the species.

Predation and competition from non-native fish species introduced into the Colorado River Basin pose the greatest threat to the BTC. Other significant threats to the BTC include loss of riverine habitats, fragmentation of remaining riverine habitats, changes in flows due to water development projects, and hybridization with other species of *Gila*.

The range-wide trend for the BTC is for a continued range-wide decrease in wild populations due to lack of sufficient recruitment of young adults with the loss of old adults due to natural mortality. Loss of the extant wild populations is expected. Extinction of this fish in the wild throughout its historical range is being forestalled by the stocking of sub-adult fish into the Upper Colorado River Basin, and lakes Mohave and Havasu in the Lower Colorado River. These stockings are intended to create populations of young adults that may be expected to persist for 40-50 years.

There is very little information available on natural BTC spawning habitats. BTC were observed spawning in Lake Mohave in the 1950s in early June through July on gravels bars in up to 29.5 feet (nine meters) of water (C. Minckley, FWS, pers. comm. February 6, 2006).

Rangewide, no critical habitat areas are considered pristine or unmodified. Changes to water flow and physical habitat conditions from the pre-development patterns have had significant impacts to habitat quality; however, the areas remain capable of supporting the species at some level. The biological environment has also changed significantly with the introduction of non-native fish species. The non-native fish may be the greatest impediment to survival and recovery of the BTC.

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. We define the action area to

be all BLM-administered, NWR, State, Tribal, and private lands, located within the planning area, that may be affected by the proposed action of the PRMP.

Past consultations in the action area.

Some of the formal section 7 consultations with the BLM or in which BLM was a cooperating agency that have addressed one or more species being addressed in this BO are listed in Appendix B. These consultations include actions that were either completely or partially implemented, or are being implemented, in the action area. Cumulatively these activities have resulted in adverse effects to listed species. Although many of these projects have implemented RPMs to minimize these affects.

A. Status of the species within the action area

Southwestern Willow Flycatcher

The SWWF has been documented breeding within the action area only on lands not administered by the Lake Havasu Field Office (Table 2). Migrants moving through the LCR corridor, may use BLM-administered lands to travel migrate to other breeding grounds and back to Central America for the winter.

Table 2. Southwestern willow flycatcher survey and territory sites within the action area 1999 through 2005 (territories/nests) (N = not surveyed, Blank = data not available).

Location	1999[1]	2000[2]	2001[3]	2002[4]	2003[5]	2004[6]	2005[7]
HAVASU NWR							
Topock Marsh	15/20	15/19	14/20	20/10	11/9	34/43	
BWR NWR							
BWR Delta	N	N	0	N	1/0	0	0
Monkeys Head	1/1	1/1	2/5	9/7	5/2	2/0	0/0
Cave Wash 1	0	0	0	6/3	0	0	0
Cave Wash 2	0	0	N	N	0	0	0
Gemini	0	0	0	N	0	0	
Buckskin	0	0	0	N	0	0	
BWR (BLM)							
BWR Pipeline	0	0	N	N	N	N	N
L. COLORADO RIVER							
Disneyland	N	0	N	N	N	N	N
Standard Wash	N	0	N	N	N	N	N
Beaver Island	N	0	N	N	N	N	N
Neptune –N. Lake Havasu	0	0	0	N	0	0	N
Waterwheel Cove	0	0	0	N	0	0	N
S. Needles	0	N	N	N	N	N	
Beal Slough	N	0	N	N	N	N	N
BOR Lagoon	0	N	N	N	N	N	N

Blankenship	N	N	N	N	0	0	
Pulpit Rock	N	N	N	N	0	0	

[1]Paradzick et al. 2000.
[2] Paradzick et al. 2001.
[3]Smith et al. 2002.
[4]Smith et al. 2003.
[5]Smith et al. 2004.
[6]Munzer et al. 2005.
[7]Data incomplete, annual report not completed

Although the Lower Colorado River corridor is used heavily by migrating SWWF, there has not been nesting documented south of the Bill Williams River confluence since 1922 (Unitt 1987, Koronkiewicz et al. 2004). Two other subspecies of willow flycatcher, (*E. t. brewsteri* and *E. t. adastus*) may also migrate through the LCR corridor (Sogge et al. 1997).

Portions of the Lower Colorado River SWWF Recovery Unit occur within the action area. The following is a description of management units within these recovery units that fall within the action area.

Parker-Southerly International Boundary Management Unit (MU): BLM's Lake Havasu Field Offices southern half is located within this MU from Parker Dam to Poston, Arizona. SWWF habitat in this MU is primarily monotypic exotic (salt cedar) along the Lower Colorado River and associated backwaters.

Hoover to Parker MU: This MU contains lands administered by the Lake Havasu Field Office (Davis Dam to Parker Dam) and FWS [Havasu National Wildlife Refuge (NWR)]. SWWF have been documented breeding on the Havasu NWR (Table 2). All sightings on BLM-administered lands in this MU have been migrants.

Bill Williams MU: This MU includes flycatcher habitats along the Bill Williams River and Alamo Lake. SWWF have been documented breeding on the Bill Williams River NWR (Table 2).

SWWF breeding habitat on the BLM-administered portions of the Bill Williams River is limited to areas located near the private land where the river channel widens. The AGFD has recently developed a multi-scaled model that combines GIS and SWWF survey data to predict SWWF habitat breeding suitability (Hatten and Paradzick 2003). In 2005, AGFD applied this model to the Bill Williams River downstream of Alamo Dam to the eastern boundary of the BWRNWR. Over 90% of the river considered potential or suitable SWWF habitat is located on private land (M. Ingraldi, AGFD, pers. comm. January 20, 2006). There are a few BLM parcels that contain potential habitat, those areas exceeding the 40% probability rate of occurrence, immediately downstream of Reid Valley (Map 2)**.** The majority of BLM-administered lands on the Bill Williams River are located within narrow canyons within either the Swansea or Rawhide Mountains Wilderness. These sites do not have the potential to support SWWF suitable habitat. Due to the remoteness within the designated wilderness and their narrow canyon locations these areas have not been reported surveyed within the AGFD annual reports.

Critical habitat was not designated in the action area. The Bill Williams River within the Bill Williams River NWR was excluded because of ongoing wildlife habitat management activities already being implemented which protect the SWWF (USFWS 2005). The Lower Colorado River, from Hoover Dam to the International Border was excluded from critical habitat designation because of the habitat management measures to be implemented as part of the LCR MSCP (USFWS 2005).

Yuma Clapper Rail

In the LHFO planning area, YCR populations are rarely encountered. The annual population within the Havasu Division (Parker Dam upstream to Davis Dam) appears too cyclic varying between 0 and nine birds (Table 3). It does not appear that YCR have ever been numerous in this division. Current population data is limited since surveys have not been consistently done over the last 5 years on Lake Havasu or the Parker Strip (Table 3).

The MSCP Habitat Conservation Plan (2004) summarized land cover types by river reach and land ownership on the LCR (Appendix H in MSCP 2004). The LHFO planning area is located within reach 3 (Davis Dam downstream to Parker Dam) and the upper portion of reach 4 (Parker Dam downstream to Poston, Arizona. Reach 4 continues southward to the south end of the Cibola NWR). There are only 28 acres and 55 acres of marsh habitat on BLM-administered lands within reach 3 and 4, respectively. The majority of marsh habitats in these two river reaches are located on NWR or tribal lands (Table H-1 in MSCP 2004).

Portions of the Havasu NWR that are surveyed annually include Topock Marsh and Topock Gorge (located on the LCR, north of Lake Havasu). Topock Gorge is surveyed annually by the BOR as part of mitigation for the MSCP.

There are approximately 640 acres of YCR habitat at the Bill Williams River delta (Bill Williams National Wildlife Refuge. An average of 12 birds per year has been documented since 1970; representing the largest YCR population in the action area south of Topock Gorge. Surveys along the Bill Williams River have not occurred east of Planet Ranch due to the lack of suitable habitat (K. Blaire, BWR NWR, pers. comm. August 24, 2005).

Bald eagle

Within the action area there are two BAEA eagle breeding areas, Alamo and Ives Wash (Table 4). These nests have been monitored since the late 1980s. Both nests were occupied in 2003 and 2004 (AGFD unpubl. data 2004). BAEAs at these two sites have fledged a total of 31 young since monitoring began. The Alamo breeding area nest is located on BLM-administered lands north of the Alamo Wildlife Area. A new nest, Alamo nest #6, was found in January 2006 in a willow tree in Alamo Lake on the Alamo Wildlife Area. It is considered within the Alamo breeding area (G. Beatty, FWS pers. comm. February 6, 2006). The Ives Wash breeding area is located within the Rawhide Mountains Wilderness. The nest is located on a cliff south of the Bill Williams River, downstream of Alamo Dam, and has had varying levels of success.

Table 4. Bald eagle breeding area information in the Action Area in Arizona (1997 to 2005).

Breeding Area	1997	1998	1999	2000	2001	2002	2003	2004	2005
Alamo	Failed	Failed	Failed	Fledged 1	Failed	Occup.	Occup.	Failed	Failed
Ives Wash	Failed	Occup.	Occup.	Occup.	Occup.	Fledged 1	Occup.	Fledged 3	Fledged 1

A breeding area is "occupied" when the pair is present but did not lay eggs. In the case of the Alamo breeding area, three factors may be responsible for the lack production. The female for that territory is old, has a broken leg, and lowered lake levels may have significantly reduced foraging areas in Alamo Lake (G. Beatty, FWS pers. comm. February 6, 2006).

The only BAEA eagle nest location near the action area is Gene Wash Reservoir in 1996 (across the LCR from the Bill Williams NWR in California). This site was used until the reservoir was drained a few years ago (K. Blaire, BWR NWR, pers. comm. January 26, 2006). Gene Wash Reservoir is located on private land owned by the Metropolitan Water District (MWD) (Los Angeles, California). Public access is limited due to locked gates maintained by the MWD (Driscoll et al. 2003).

Wintering BAEA numbers are variable along the LCR. AGFD conducts winter BAEA surveys in early January throughout Arizona. Two site, Topock Marsh/Havasu NWR and Alamo Lake are the only sites surveyed within the action area. Wintering BAEA data from the two sites within the planning area is presented in Table 5.

Table 5. Wintering bald eagle survey results in the Action Area (1997 to 2005).

	1997	1998	1999	2000	2001	2002	2003	2004	2005
Topock/Havasu NWR	NS	NS	0	1	2	NS	NS	0	0
Alamo Lake WA	4	4	4	1	2	1	2	3	3

The Bill Williams River NWR is not surveyed as part of the annual winter BAEA counts. Point counts done by NWR personnel at the Bill Williams River Delta from September through February find wintering BAEA eagle numbers ranging from 0 to 3 each year (K. Blaire, BWR NWR, pers. comm. January 26, 2006).

Desert Tortoise (Mohave Population)

MDT are present in the LHFO planning area in California. Desert tortoise habitat in these areas occurs within the Lower Colorado River Valley subdivision of Sonoran Desert scrub. This is the largest and most arid subdivision of the Sonoran Desert (Turner and Brown 1982). MDT critical habitat was not designated in the action area. The closest designated critical habitat, the Chemehuevi Unit, is located three to four miles west of the LHFO border with Needles Field Office (USFWS 1994), and will not be affected by this proposed action.

Desert tortoise habitat in the Yuma BLM District, including the Havasu Resource Area (now LHFO) was categorized in 1989 (BLM 1989). These habitat categories are based upon field surveys and transects conducted in potential, suitable, or known MDT habitat. Only the Cross Roads habitat area (3,170 acres), located in the Whipple Mountain foothills adjacent to the Parker Strip, is found in the planning area. Thirty-nine miles of transects were walked in the Crossroads habitat area; yielding a population density of 12 MDT per square mile (Yuma District RMP Biol. Opinion 2-21-97-F-082).

All BLM-administered lands in the action area, west of the LCR, will be categorized as MDT category 3 habitat. This increases protected habitat from 3,170 acres (5 mi^2) to 49,105 acres (77 mi^2). This expands categorized MDT habitat in the Whipple Mountains, into the Dead Mountain Wilderness and the lower part of Chemehuevi Wash. There were no surveys done to determine MDT densities in these new areas. Past surveys done in these areas have shown very low MDT densities, meeting the criteria for category 3 designations (BLM 1989). These new designations are also consistent with the habitat categorizations that were done by the adjoining Needles Field Office (BLM) as part of the Northern and Eastern Colorado Desert Coordinated Management Plan (2002). All other areas outside of critical habitat and Desert Wildlife Management Areas, including those bordering the LHFO, were designated category 3 habitats (A. Rabas, BLM, pers. comm. January 31, 2006).

Razorback Sucker and its critical habitat

RBS persist in the action area in Lake Havasu, and in the mainstem between Davis Dam and Poston, Arizona. The wild adults in the Lake Mohave population were estimated at 9,087 individuals in 1999 with an additional 3,104 repatriated sub-adults captured on the spawning grounds along with the adults (Pacey and Marsh 1999). Recent population estimates in Lake Havasu show a decrease from approximately 3,000 RBS in 2001 to approximately 1,500 RBS in 2006 (G. Mueller, USGS, pers comm. April 26, 2006). In February 2006, 236 RBS were captured by electroshocking in a five mile spawning reach upstream of Needles, California. This two-week capture effort equaled that of the previous five year survey between Davis Dam and Catfish Bay (North end of Lake Havasu). It is estimated that 1,000 or more RBS may be found in this reach above Needles. The increased numbers were a result of improved survey methods rather than an increase in RBS numbers (G. Mueller, USGS, pers. comm. April 26, 2006).

RBS spawning has been documented in Lake Mohave just upstream of the action area. Wild populations in Lake Havasu and the river between Parker and Imperial dams are extremely small and past stocking activities with marked fish, especially in the Parker Dam to Imperial Dam reach, complicates positive identification of wild versus stocked fish. Captures of small RBS in canals below Parker Dam may also represent some recruitment occurring in this area (summarized in FWS 2002).

A number of management actions are proposed or ongoing for the RBS. For example, RBS stocking programs have been implemented in a number of locations. The Native Fish Work Group is recreating a population of 50,000 adult RBSs in Lake Mohave and has stocked more than 60,000 subadults in this effort to date. The Lake Havasu Fisheries program on Lake Havasu completed its goal to stock 30,000 subadult RBSs in the lake in 2000. Reclamation has

contracted with the AGFD to provide 50,000 subadults for stocking below Parker Dam over the next few years. An additional 20,000 subadults may also be stocked there if the Interagency Steering Committee program is initiated. During the fall of 1997, AGFD stocked 2,000 RBSs that were approximately 10 inches long in the Colorado River between Parker Dam and Headgate Rock Dam. (LCR MSCP 2004).

Critical habitat in the action area includes the Lower Colorado River between Hoover and Davis dams including Lake Mohave to its full pool elevation, and the river and 100-year floodplain between Parker Dam and Imperial Dam (USFWS 1994). The primary constituent elements of habitat are present but are in a degraded condition.

Bonytail Chub and its critical habitat

BTC are found within the action area in Lake Havasu and the riverine reach upstream to Davis Dam. The number of wild-born bonytail remaining in the action area is unknown, but is likely to be extremely small. Most of the current populations are a result of stocking of hatchery-reared fish beginning in the 1980s and continuing through to the present. These stocking programs are the primary ongoing recovery activity for the BTC on the entire LCR, including the action area, and have developed from requirements of section 7 consultations on Federal actions and voluntary conservation activities by Federal and state partners.

As recent as November 2004, 30,349 BTC were stocked into Lake Havasu by the BLM to meet heir commitment to stock 30,000 sub-adults under the Lake Havasu Fisheries Improvement Program (USFWS 2005). An additional 1,000 sub-adult BTC were stocked in December 2004. There have been insufficient recaptures to estimate the size of the Lake Havasu population.

BTC critical habitat, within the action area, is located from the northern boundary of the Havasu NWR downstream to Parker Dam, including Lake Havasu to its full-pool elevation (USFWS 1994). The primary constituent elements of critical habitat have been significantly altered by activities authorized or carried out by the many Federal, State, Tribal agencies and private land ownerships on the LCR within action area. Principal threats include the fragmentation of the river by dams which preclude fish movements, and the extensive presence of non-native fish that are largely responsible for the lack of recruitment. Critical habitat designation was made after the significant changes to the historical physical and biological conditions described in the constituent elements of habitat were determined. The conservation value of the LCR, in this existing condition was considered in the critical habitat designation process (USFWS 1993).

B. Factors Affecting the Species' Environment within the Action Area

In this section we summarize the most important factors that have affected listed species and their habitats in the action area.

Southwestern Willow Flycatcher

The most significant factor affecting SWWF within the action area is habitat loss through fragmentation and vegetation modification. The construction of Davis and Parker dams has

interfered with the natural flood regime which is necessary to maintain and establish SWWF breeding habitat.

The replacement of native riparian species with exotics such as saltcedar has changed the historical fire regime in these areas. Mature cottonwoods are often killed by fire, but mature willows and mesquites, as well sapling native trees, can re-sprout from the root crowns. Saltcedar typically resprouts vigorously after fire. Saltcedar becomes established in riparian communities where native species are stressed from water table declines from pumping and diversions or where flow regimes have been changed or eliminated that allow for native vegetation regeneration. As in the case with willow, saltcedar aggressively re-sprouts after burning; however, saltcedar is more efficient in water acquisition and thus gains a competitive edge (Busch and Smith 1992). Saltcedar flammability increases with the build-up of dead and senescent woody material within the plant community. Dense stands of saltcedar can be highly flammable in areas where limited or non-existent flooding allows litter to accumulate on the floodplain (USFWS 2002).

The LHFO would no longer consider the Alamo Wildlife Area (State of Arizona) as part of the Alamo wild burro herd management area (HMA). The Alamo Wildlife Area would also be excluded from the appropriate management level (AML) determination for the HMA. The new AML incorporated into the PRMP decreases the Alamo HMA AML from 200 to 160 burros.

The LCR MSCP (2004) addressed BOR operations and maintenance on the LCR. The LCR MSCP objective was to provide a long-term framework for compliance with the ESA for ongoing, proposed and future projects. Flow-related activities may result in take of SWWF. Diversions in the action area will lower groundwater level sufficiently to reduce habitat quality in 355 acres of occupied habitat and 214 acres of unoccupied habitat. Proposed mitigation by the LCR MSCP will create at least 4,050 acres of suitable habitat. The plan does not specify the location of where mitigation will occur. Specific projects to benefit the SWWF in the planning area include: Ahakhav Tribal Preserve, Beal Lake Habitat Restoration, Needles-Topock Stabilization, Pintail Slough, and the Planet Ranch on the Bill Williams River. Therefore, significant SWWF habitat improvements are expected to occur over the life of the LCR MSCP.

Yuma Clapper Rail

YCR prefer dense stands of cattails with access to open water and shorelines for foraging. Cattail habitat too dense with large amounts of previous-year dead material is less suitable for YCR. YCR have difficulty accessing the interior of the stand. When the Colorado River had a natural hydrograph with high and low water cycles, marshes were created and destroyed with regularity and seldom were in place long enough to become overgrown. With the control of river conditions since the construction of Hoover Dam, natural river processes are constrained and marshes are stabilized. Such stability enables overgrowth to occur. Further, marshes age and become dryer land with the accumulation of sediments and dead plant materials that raise the ground surface above the water. Many marshes in the LCR exhibit this aging process. Because the natural cycle of creation and destruction is not operating, without active human interference through fire, dredging, or other management, these areas will cease to be marshes that can support YCR. The most significant areas of YCR habitat on the LCR are in Federal ownership

and are protected from development pressures. Active management is necessary to provide for the long-term continuance of these marshes due to natural aging.

However, in some cases the fluctuating water level, although modified, still occurs and that has prevented marsh habitat establishment. This is very evident immediately downstream of the Parker Dam on the Parker Strip (J. Swett, BOR, pers. comm. December 16, 2005).

The magnitude of recreational boating on the lower Colorado River has increased dramatically over the past several decades. Recreational boating is a significant economic input for the local community. Lake Havasu is Arizona's most heavily used boating lake. Boat use days in Mohave County increased from 440,482 boat use days (Arizona Game and Fish Department 1993) to 679,273 boat use days on just Lake Havasu (Arizona Game and Fish Department 2003). The National Recreation Lakes Study Commission states in a 1999 publication (*Reservoirs of Opportunity*) that Lake Havasu attracts 50,000 boaters on holiday weekends.

This increase in boating has affected YCR through direct harassment and disturbance of nesting and feeding birds. YCR are flushed from nests which may increase the threat of egg predation. YCR are considered weak fliers and are likeier to run away from disturbance than fly as in the case of other waterbirds (Rogers and Schwikert 2002). Quantifying buffer zones to prevent boating disturbance to YCR is difficult to determine since flushed or disturbed birds may not be observed.

YCR nests can also be flooded and destroyed by excessive boat wakes (Asplund 2000). Marsh habitat can be affected when excessive boat wake action causes bank erosion and impacts emergent vegetation on shorelines. Excessive wake action can erode and uproot emergent vegetation located on the shoreline. Lake Havasu bank erosion potential would be dependent upon the present soils; sands would erode more quickly than the more cohesive clay (Asplund 2000).

The LCR MSCP (2004) addressed BOR operations and maintenance on the LCR. The LCR MSCP objective was to provide a long-term framework for compliance with the ESA for ongoing, proposed and future projects. Flow-related activities have resulted in take of YCR. Diversions in reaches 3, 4 and 5 will lower groundwater level sufficiently to reduce habitat quality in 133 acres of YCR habitat (Acreages were not separated out by reach in the plan). Proposed mitigation by the LCR MSCP creates or improves up to 512 acres of low value or marginal quality habitat. The plan does not specify what reaches this mitigation would occur. Specific projects to benefit the YCR in the planning area include: Ahakhav Tribal Preserve, Beal Lake Habitat Restoration, Needles-Topock Stabilization, and Butler Lake.

Bald eagle

BAEA nests at Alamo and Ives Wash breeding areas can be affected by heavy recreational use by anglers and boaters. Nest disturbance may occur when hikers or off-highway vehicles users approach the Alamo nest sites from BLM lands to the north. Alamo Lake fluctuations may affect the availability of BAEA foraging habitat. Alamo Dam flooded a large canyon when forming Alamo Lake. At high lake elevations a large area of shallow water is available for

BAEA foraging. This shallow water decreases in acreage as the lake elevation lowers, decreasing available foraging habitat. Foraging is also made more difficult at lower lake elevations due the lack of perches. BAEA can hunt from perches along the lake shore at higher lake elevations. Much more energy is expended when BAEA must hunt from the air when these perches are not available at lower lake elevations (G. Beatty, FWS, pers. comm. February 7, 2006).

Roosting and foraging by wintering BAEA may be limited by recreational boating in lakes Alamo and Havasu; however, winter is not the high use period for either lake. Winter bald eagle counts are not specifically done on Lake Havasu, as reported by the annual AGFD reports. Alamo Lake is surveyed annually and few BAEA are seen (Table 5).

Desert Tortoise (Mohave Population)

Human developments and disturbances have increased the effects of predation, especially in and adjacent to areas experiencing rapid population growth as in the case of the planning area. Hatchlings and young MDT are preyed upon by domestic and feral dogs which occur near human development. Ravens, which also prey upon young MDT, are attracted to human development by garbage and other artificial food sources (Boarman 2002a), which occurs in various locations in the action area.

Roads and highways can directly affect MDT and their habitats. The PRMP (Map 3-10) shows a proposed route that may transverse MDT habitat from Needles, California to Laughlin, Nevada. This proposed route appears to follow the existing Pew Road. This route is bordered on the east by agricultural lands on the Fort Mohave Indian Reservation in California and bordered on the west by the Dead Mountains Wilderness. The West Parker Dam Road is located along the southeast boundary of the Crossroads MDT habitat near Cross Roads, California. Direct impacts may include road kills and habitat destruction. Many tortoises are killed on highways, mortality rates are dependant upon traffic speed and volume, age and width of the road and the density of tortoises in the surrounding area (Boarman 2002b). The BA mentions that a road-killed MDT was found near Cross Roads in 1989. There is also a MDT population depression zone along highways which may extend up to 0.25 mile (0.4 km) or more (Nicholson 1978 In Boarman 2002b). Increased vegetation growth, particularly annuals, often occurs near highways as a result of runoff from the impervious pavement surface after rainfall. This vegetation flush attracts MDT to highways where they can be killed on the road, during mowing operations, when vehicles pull off the road, or if they feed on the plants that have been sprayed with herbicides (Boarman 2002b). MDT may have been killed by motor vehicles on the numerous unpaved roads that may cross MDT habitat in the Cross Roads area (PRMP Map 2-38) but this is not well documented.

Utility corridors (UC) can also directly affect MDT and their habitats. UCs cross areas too remote and rugged for highways, thus impact MDT in areas farther away from other human disturbances. There is an existing powerline located one mile west of the current Cross Roads Category 3 MDT habitat. This powerline marks the boundary between the Needles and LHFO in California. There is no access road associated with this powerline. It is not known whether this powerline provides roosting, perching, or nesting structure for ravens. Raven predation has

increased as a result of transmission line construction which provides nest structure and perches to hunt from (Boarman 2000a). The proposed UC-6 (PRMP Map 2-11) crosses through the eastern edge of the Cross Roads Category 3 MDT habitat. The two-mile wide UC follows the West Parker Dam Road. UCs can affect MDT depending upon the service they provide. Open trenches during pipeline construction can trap MDT. MDT can die from overheating or being crushed and /or buried during pipeline installation. Future UC maintenance can affect MDT when authorized and unauthorized vehicles drive along maintenance roads.

Recreational activities in MDT habitat have been documented as a source of mortality. Off-highway vehicles can kill or injure MDT or negatively affect its' habitat through destruction of vegetation needed for forage or cover, or causing soil compaction, destruction of soil crusts, and increase soil erosion.

On March 26, 1998, the FWS issued a biological opinion (file number 02-21-97-F-082) on the Yuma District Resource Management Plan which addressed the adverse effects of the plan implementation on MDT. The primary issues were:

- Wild burro management in the Palo Verde Mountains (Cibola-Trigo Herd Management Area).
- Land disposal and land use authorization (leases, utility corridors, rights-of-way, and communication sites).
- Recreation, primarily in the form of OHV use.
- Minerals management requirements to locate and preserve adequate permanent material sites for levee and revetment work along the LCR.

The proposed action also involved numerous activities in BLM-administered programs that provided beneficial effects, or to have no effect to the MDT. These included:

- Wildlife and Fisheries
- Range
- Cultural Resources
- Soil, Water, and Air
- Fire Management
- Vegetation Management
- Wilderness and Special Area Management

The FWS concluded that the proposed action would not jeopardize the continued existence of the MDT. MDT take of 50 was anticipated, over the entire Yuma District, as a result of the proposed action in the form of harassment, injury or direct mortality. The level of take would be exceeded if the following were to occur:

- Fifty (50) MDT are found dead along BLM roads and trails during routine travel and patrol activities by BLM personnel.

In order to minimize take, the following reasonable and prudent measure was issued:

- Reduce the likelihood of MDT deaths from projects and vehicular traffic

On December 4, 1992, the Ventura California FWS Field Office issued a biological opinion (file number 1-8-93-F-3) on the draft Parker Strip Recreation Area Management Plan which addressed the adverse effects of the plan implementation on MDT in this portion of the action area. The primary issue was the establishment of the Cross Roads OHV open area in MDT category 3 habitats. Effects to the MDT were thought to occur through:

- Direct mortality from vehicles traveling cross-country.

- Indirect effects of cross-country travel destroying vegetation that are important MDT habitat components.

- OHV vehicle travels compacting soil, destroying soil crusts and increasing erosion.

The proposed action also provided beneficial effects to the MDT by:

- Restricting camping to within 0.5 mile of the West Parker Dam Road.

- Establishing manageable boundaries for both the Cross Roads and Copper Basin OHV areas.

- All areas outside of the OHV vehicle areas and ten of 16 miles of existing routes would be closed. The Final Resource Management Plan continues to restrict travel around the Cross Roads OHV area to designated routes and trails.

The FWS concluded that the proposed action would not jeopardize the continued existence of the MDT. MDT take was anticipated as a result of the proposed action in the form of harassment, injury or direct mortality. The level of take would be exceeded if any of the following were to occur:

- Thirty (30) MDT over the life of the management plan suffered injury or direct mortality resulting from OHV use in the Cross Roads OHV Area.

- Two MDT every four years in the form of injury or direct mortality during implementation.

- Ten MDT per year in the form of harassment resulting from moving animals out of harm's way during recreational events and other activities.

In order to minimize take, the following reasonable and prudent measures were issues:

- Education programs, defined work and recreation areas, and well-defined operation procedures shall be implemented, with the cooperation of on-site qualified biologists, to avoid the take of MDT and minimize loss of their habitat.

- Attraction of common ravens and other potential MDT predators to the Parker Strip Recreation Area shall be reduced to the maximum extent possible.

The LCR MSCP (2004) addressed BOR operations and maintenance on the LCR. The LCR MSCP objective was to provide a long-term framework for compliance with the ESA for ongoing, proposed and future projects. Proposed activities related to land conversions to agriculture may result in the loss of 192 acres of MDT habitat. Other MDT habitat may be affected during the development of riparian-wetland habitats for other MSCP-covered species. MDT habitat site conditions may be too dry for any of these projects to take place. However, infrastructure such as roads and utility lines needed for the development of the other MCSP-covered species may cross MDT habitat. The MSCP plan proposes to acquire up to 230 acres of unprotected occupied MDT habitat to mitigate for the anticipated loss of 192 acres of MDT habitat.

Razorback sucker and Bonytail chub

The RBS and BTC have declined in numbers largely due to the introduction and proliferation of nonnative fishes such as flathead catfish, black bullhead, channel catfish, and carp through predation and competition food and space. Before large numbers of non-native fish were stocked into reservoirs, RBS and BTC spawning resulted in successful recruitment.

Riverine habitat in LCR in the action area has been replaced with reservoirs as a result of construction of Davis, and Parker dams. These reservoirs continue to provide suitable habitat for RBS and BTC, but dam operations directly affect spawning and nursery areas. Fluctuating water levels inundate and expose spawning beds. Terrestrial vegetation becomes established at low water levels and provides habitat during high levels. These same fluctuations prevent or limit establishment of emergent or aquatic vegetation.

Pollutants such as petroleum products and runoff from developed recreation facilities or urban areas may reduce water quality for RBS and BTC in shallow water areas near developments such as boat ramps and marinas. The Environmental Protection Agency (EPA) passed a regulation in 1996 to regulate exhaust admissions from new spark-ignition gasoline marine engines (including outboard engines, personal water craft engines and jet boat engines) due to very high hydrocarbon emissions (EPA 1996). These new emission standards were expected to reduce hydrocarbon emissions by more than 75%. These standards must be fully in place by the 2006 model year for all outboard, personal water craft and jet boat engines. Although originally

considered an air quality issue, these new restriction would also limit the amount of hydrocarbons entering the water. This new emission standard would result in less hydrocarbon pollution entering Lake Havasu and the LCR in the future.

Winter-spring spawning by RBS, along with the extreme susceptibility of larvae to predation in clear water, may account for total recruitment failure in that lake. However, in upper basin rivers, suspended sediments remain high enough to limit predation on young RBS (Johnson and Hines. 1999). There is very little information available on natural BTC spawning in Lake Havasu (C. Minckley, FWS, pers comm. February 6, 2006).

On February 18, 1993, the FWS issued a biological opinion (file number 2-21-92-F-641) on the Lake Havasu Fisheries Improvement Partnership Program which addressed the adverse effects of the projects' implementation on RBS and BTC. The primary issues were:

- Creation of habitat for non-native fish which have been identified as causing the decline of native species, such as RBS and BTC, through competition and predation.

- Concentrating non-native and native fish around habitat structures may increase predation by non-natives and increase the likelihood of anglers catching either RBS or BTC.

The proposed action also involved numerous activities that provided beneficial effects to the RBS and BTC. These included:

- The project proposes to reintroduce 60,000 BTC and RBS into Lake Havasu as a result of the development of up to ten native fish rearing coves. This goal was reached in 2002.

The FWS concluded that the proposed action would not jeopardize the continued existence of the RBS and BTC. RBS and BTC take was anticipated as a result of the proposed action in the form of harassment, injury or direct mortality. The level of take would be exceeded if the following were to occur:

- Greater than twenty each of BTC and RBS taken by anglers per calendar year. Individuals caught and released alive and those killed by anglers are both included in the limits set.

In order to minimize take, the following reasonable and prudent measure was issued:

- Measures will be taken to inform anglers using Lake Havasu of the presence of the two endangered fish species.

- Measures to reduce the potential mortality of any endangered fish taken by anglers will be implemented.

- Measures will be taken at rearing coves to minimize the potential sources of mortality to young endangered fish.

On March 26, 1998, the FWS issued a biological opinion (file number 02-21-97-F-082) on the Yuma District Resource Management Plan which addressed the adverse effects of the plan implementation on RBS and BTC. The primary issues were:

- Loss of shoreline habitat for RBS from recreational development.

- Loss of BTC spawning habitat, as defined as clean, sandy bottom with reverse eddy currents, from recreational development.

The FWS concluded that the proposed action would not jeopardize the continued existence of the RBS and BTC. RBS and BTC take was anticipated as a result of the proposed action in the form of harassment, injury or direct mortality. The level of take would be exceeded if the following were to occur:

- Any decline in the currently available suitable RBS.

- Any decline in the currently available suitable BTC spawning habitat.

In order to minimize take of both RBS and BTC, the following reasonable and prudent measure was issued:

- The BLM will further seek to educate the public who use and operate the recreational facilities along the Colorado River and within the Yuma resource planning area about the status and uniqueness of the RBS and BTC.

- The BLM will assess the remaining undeveloped suitable spawning habitat in Lake Havasu and will determine measures to reduce the amount of loss to BTC spawning habitat from actions being taken under direction of the Yuma RMP.

The LCR MSCP (2004) addressed BOR operations and maintenance on the LCR. The LCR MSCP objective was to provide a long-term framework for compliance with the ESA for ongoing, proposed and future projects. Changes in flow in the action area would result in the loss of 399 acres of habitat between the northern boundary of the Havasu NWR and Lake Havasu. The LCR MSCP proposes to augment RBS populations (660,000 subadults) and BTC populations (620,000 subadults). The plan also proposes to create up to 360 acres of habitat. Specific habitat improvement projects include: Ahakhav Tribal Preserve, Beal Lake Habitat Restoration, Butler Lake, and Needles-Topock Stabilization Project.

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, which 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.

Implementation of the direction in the PRMP may result in both negative and positive effects to species and their habitat, including any designated or proposed critical habitat in the action area. These activities are listed in the proposed action section of this document under Issue and Management Concern, and Proposed Action. All of the actions would occur on BLM lands. The effects described as a result of these actions could occur not only on BLM lands but also on adjacent lands in action area. Populations of some species are currently known in the action area, with some on BLM lands. Specific project proposals developed under the PRMP will evaluate the likelihood of species presence and possible effects to determine the need for future consultation.

Southwestern Willow Flycatcher

Lands and Realty

There are no proposed land disposals in areas that would directly or indirectly affect SWWF (PRMP Map 2-78). No UCs have been designated along existing lines that would affect SWWF breeding habitat (PRMP Map 2-79). The PRMP EIS (table 2-12) states that utilities, outside of designated corridors, would not be placed in priority wildlife habitat areas, which include SWWF breeding habitats.

Vegetation removal resulting from issued leases, permits or other authorized activities may decrease some migratory habitat. However, unless this results in long distances between habitat patches greater than 94 miles (150 km) (Otahal 1998) to 140 miles (225 km) (Yong and Finch 1997), this should not adversely affect the SWWF during migration (USFWS 2002). SWWF insect foraging needs during migration can be met from native and introduced plant species such as salt cedar (Durst 2004) and is expected to continue under current conditions. Land cover map data from the LCR MSCP Biological Assessment (2004) measured 74,189 acres of salt cedar, mesquite and salt cedar/mesquite habitat within the entire planning area; 21,908 acres are located on BLM, NPS, and FWS lands. Tree removal resulting from BLM-authorized leases or permits are not likely to be a significant impact to migrating SWWF as is it not likely to cause great distances between available foraging habitats.

Livestock Grazing

There are no documented territory/nesting sites within any BLM-administered livestock grazing allotment within the action area (Table 2). Most of the LCR corridor is closed to grazing. The allotments that border the Bill Williams River NWR are managed as ephemeral, grazed only when sufficient winter annuals have germinated from winter precipitation. The potential SWWF breeding habitat mapped on the Bill Williams River is within the Primrose Allotment. This is an ephemeral allotment which has not been used since 1994. Future use would depend upon ephemeral forage availability and the permittees desire to graze the allotment. This would not likely effect SWWF habitat since ephemeral licensing occurs in winter-early spring when livestock use of riparian areas is generally very low. Trespass livestock do wander on to the Bill

Williams River NWR from adjacent BLM allotments on occasion but do not cause any significant damage (K. Blaire, BWR NWR, pers. comm. August 24, 2005). There are no BLM allotments bordering the Havasu NWR. SWWF are not expected to be significantly impacted by livestock grazing.

Recreation Management

One parcel of potential SWWF breeding habitat, downstream from Reid Valley is protected from OHV-use as a result of its location in the Rawhide Mountains Wilderness. Access to the river at this site may also be limited by the private lands located at Reid Valley.

Wild Burro Management

SWWF breeding habitat is located within the Alamo HMA. SWWF nest at Browns Crossing and the Big Sandy River within the Alamo Wildlife Area in this HMA. The affects of wild burro management on breeding SWWF, including wild burro use of woody riparian vegetation, have been formally consulted upon in the Lower Gila Resource Area Amendment (FWS file number 02-21-95-F-269). The PRMP proposes to exclude the Alamo Wildlife Area from the Alamo HMA. The Alamo HMA AML will be decreased from 200 to 160 burros. The direct effects of wild burros on nesting SWWF could be nest damage and/or death to young birds from nests being dislodged from trees by wild burros moving through or feeding in the dense willow habitats. To date, these direct effects have not been documented. Past monitoring has failed to document indirect effects of wild burros to SWWF habitat; wild burros do not strip bark from willow trees nor has willow seedling use in SWWF habitat at Browns Crossing been documented (S. Elefritz, BLM, pers. comm. May 2, 2006)

Yuma Clapper Rail

Lands and Realty

No UCs has been designated along existing lines that would affect YCR habitat (PRMP Map 2-79). The DRMP EIS (table 2-12) states that utilities, outside of designated corridors, would not be placed in priority wildlife habitat areas, which include YCR habitats.

Recreation Management

Because the site specific management plans, Lake Havasu and Parker Strip Special Recreation Management Plans are not available, the frequency or magnitude of adverse effects cannot be quantified.

Bald Eagle

Mineral Resources

The PRMP would prevent expansion of mineral material disposal sites (sand and gravel sales) within riparian areas. This would protect riparian areas and allow for the development of large

roost trees for wintering BAEA. These areas may also be used by nesting BAEA in the future. The Ives Wash breeding area would not be affected by this program because the Rawhide Mountains Wilderness was withdrawn from all mineral entry activities. The Alamo breeding area is adjacent to numerous mines and prospects which may be active. It is not located within a riparian area so it may be affected by future mineral material disposal sites. This portion of the Three Rivers ACEC was not recommended withdrawn from saleable, locatable, or leasable minerals in the PRMP. The presence of these mines also implies there is mineral potential in the area. Additional mining activity may occur in the future. The PRMP proposes to establish the three restrictive buffer zones around BAEA nests as conservation measures from the Southwestern bald eagle recovery plan (1982). These buffer zones restrict allowable human disturbances; becoming more restrictive in closer proximity to the nest site.

Recreation

The buffer zones (Conservation Measures) around BAEA breeding areas would also restrict off-highway vehicle use and other recreational activities during the December 1 through June 30 BAEA breeding season.

The Ives breeding area would not be affected by off-highway vehicle use as a result of its location within the Rawhide Mountains Wilderness. Breeding occurs during the cooler time of the year when visitation to this wilderness is most likely at its peak level.

Wintering BAEA may be affected by recreational activities along the LCR, although wintering birds are very mobile and take advantage of multiple roosting locations. The few BAEA that are seen in this area may be limited by the few roosts that are available along the Lake Havasu shoreline. Although wintering BAEA are not in the area during the peak boating season, recreational boating does occur and may limit interfere with BAEA roosting and foraging opportunities.

Transportation and Public Access

Off-highway vehicle use within the Alamo breeding area is designated as limited to existing roads and trails. Within five years of completion of the PRMP, Travel Management Network Plans will be completed for all travel management areas. At this time off-highway vehicle use would be limited to designated roads and trails only. The Alamo breeding area was not designated as a Wildlife Habitat Areas (WHAs) (PRMP Map 2-40), as in the Ives Wash breeding area and wintering areas, that will be closed during season(s) of use by special status species.

Desert Tortoise (Mohave Population)

Lands and Realty

The proposed UC 6b will cross the eastern portion of the existing Crossroads Category 3 MDT habitat along the West Parker Dam Road. It will pass through approximately 5.1 miles of the proposed enlarged Crossroads Category 3 MDT habitat. If the authorized utility work involves pipeline construction, depending upon time of year of construction, the open trench may be a

hazard for MDT. MDT that fall into the trench may be injured or become trapped in the trench. If the MDT are not removed they may die from overheating or be crushed by equipment or buries with the pipeline.

Recreation

Two off-highway vehicle areas, Cross Roads and Copper Basin were designated in the Parker Strip Recreation Management Plan (1993). This RMP was formally consulted upon in 1993 (Biological Opinion file number 1-8-93-F-3). The 1996 recreation project plan for these two areas did not change the proposals from the 1993 Area plan. The PRMP does not propose changes from these earlier plans. The reasonable and prudent measures with their terms and conditions from this earlier biological opinion would be carried forward into this biological opinion.

Transportation and Public Access

The proposed Needles to Laughlin Road will pass through MDT habitat in California and Nevada. The Dead Mountains were not categorized as MDT habitat in 1992. This area is proposed as category 3 MDT habitat in this PRMP. MDT and their sign have been found at the Manchester Mine during recent clearances (C. Bates, BLM, pers. comm. January 30, 2006). Although information concerning road-killed MDT in this area is not available, increasing the traffic volume and speed with the improved highway will increase the potential for MDT mortality if MDT densities are at a high enough level (Boarman 2002b). The Nevada-portion of the route does not pass through a portion of the planning area; but must be considered since the road is proposed in this plan. The proposed road passes through low density, marginal MDT habitat that would not require highway fencing as mitigation (M. Burroughs, FWS, pers. comm. January 31, 2006).

Razorback Sucker and Bonytail Chub

Recreation

Discussion of boating management is very limited in the PRMP EIS and BA. There is no information on current and proposed number of boat ramps, marinas or other facilities within the planning area. The BA describes the potential effects of these facilities on BTC and RBS. However, without more specific information only a general determination can be made on the effects of these facilities on these two species.

Petroleum products and other potential pollutants are introduced to the lakes in a variety of locations. At marinas, there is the potential for spills from gas docks, boat refueling, and boat maintenance operations which may concentrate significant amounts of pollutants to a small area in a short period of time. These contaminant concentrations may cause injury or death to fish in the vicinity. However, other fish such as carp are commonly seen around these facilities. Water within the LCR and Lake Havasu does turnover or is routinely replaced from Davis Dam water releases. Davis Dam annually releases 9.3 million acre feet of water. Lake Havasu's storage capacity is 648,000 acre feet of water. Theoretically, water in Lake Havasu turns over every 25

days (L. Fitzpatrick, FWS, pers. comm. January 13, 2006). This constant flushing may prevent pollutants from concentrating in an area long enough to cause harm to fish. This flushing may not dissipate contaminants in heavy use areas in secluded coves. RBS and BTC are also unlikely to inhabit areas around marinas and boat ramps because of the constant noise and disturbance.

The amount of petroleum products and other pollutants from marinas and boating operation introduced in Lake Havasu and the LCR is unknown. The anticipated expansion of boating facilities under the proposed action may increase the risk of a major spill or the amount of pollutant accidentally or intentionally introduced into Lake Havasu and the LCR.

Boat wakes and landings may impact emergent vegetation located along the shoreline. Theses areas provide important RBS and BTC foraging habitat and cover in backwaters. However, these emergent vegetation stands along the fringe of the lake are not likely to provide significant habitat because they are likely to be narrow and in shallow water. Lake bed levels drop off quickly and do not provide a substrate in which a wider stand of vegetation can establish (L. Fitzpatrick, FWS, pers. comm. January 13, 2006). Emergent vegetation is very limited on BLM-administered lands in the planning area, 83 acres of marsh habitat in both river reaches 3 and 4 (Lower Colorado River Multi-species Conservation Program 2004). Larger emergent vegetation stands are located in Topock Gorge on the Havasu NWR. These habitats are protected by boating regulations implemented by the NWR.

Since RBS and BTC spawn in areas dominated by gravels and cobbles, their nests are less likely to suffer from sediment burying their eggs. It is important that boat facilitates in the future are not placed in or adjacent to known or suspected RBS and BTC spawning beds. Shoreline and lake bed sediment is often disturbed as a result of boat wake action. The no-wake zones recommended in the PRMP would help protect shoreline habitats. However, no specific locations, such as known spawning beds are known for Lake Havasu (C. Minckley, FWS, pers. comm. February 7, 2006).

There are numerous large washes located on Lake Havasu, primarily on the west-side on the Chemehuavi Reservation. Large washes, such as Standard and Black Metal on BLM-administered lands, may provide large alluvial fans for RBS spawning habitat. The proposed boat ramps, if placed in these alluvial fans areas, will adversely affect RBS. RBS spawn early in the year, January through early April during a period of low visitor use. Increased visitor use of these shallow water areas later in the summer would avoid the spawning season and not likely adversely affect spawning RBS. RBS are also known to use spawning beds in a wide range of water depths (C. Minckley, FWS, pers comm. February 7, 2006). RBS spawning in deeper water would be less likely affected by boating and other recreational activities.

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. Effects of past Federal and private actions are considered in the Environmental Baseline.

Effects to covered species from these non-Federal actions include but are not limited to:

- Loss or degradation of covered species habitat through conversion of undeveloped lands for residential, commercial, or other types of development together with their supporting infrastructure.

- Increased use of undeveloped lands for recreation that may disturb or result in mortality of individuals of the covered species.

- Increased predation or competition from domestic animals, native or non-native birds more suited to the altered habitats (including starlings and cowbirds) created by new development.

- Introduction of additional non-native plants, invertebrates, or fish to the LCR that compete with, prey on, or alter the habitat components for covered species.

- Increased potential for contamination of the LCR with municipal effluent, storm-water discharge, chemical spills, petroleum residues from boating, and non-point source discharges. Increased salinity levels are likely to occur based on documented trends, and increases in selenium may occur if water inflows from the Upper Basin continue to have increasing levels of this contaminant.

- Increased risk of wildfires started by recreational activities, personal land-management actions, or arson.

Analysis of these effects at this time is limited by the lack of specific information on actual projects that raises questions on the reasonable certainty of occurrence, uncertainty regarding the potential for increases in numbers of non-native species, and in the likelihood of contamination incidents. It is also important to consider that if there are increases in effects to covered species from these types of actions, there could be a response to address those increases. For example, when giant salvinia was discovered in the LCR, efforts were immediately undertaken to control the infestation. Future introductions of non-native species would likely elicit the same response. Similarly, significant changes in salinity, selenium, or other contaminants would likely elicit a control or management response. Some of those responses are likely to be Federally driven, as would be the case with salinity (a significant concern for Reclamation in deliveries of water to Mexico) and municipal effluent (by the Environmental Protection Agency under water quality standards). The effects of land development or management actions would not likely remove significant amounts of high value habitats, since most of those areas are not on private lands. There are high value habitats on Tribal lands, and there is an opportunity to work with the Tribes to minimize effects at the time the project is proposed.

Southwestern Willow Flycatcher

Further economic development of private lands along the LCR will, in some cases, occur in the absence of Federal permitting. This increased development would lead to more public use of the rivers and shoreline areas. Increases or changes in cowbird foraging areas (corrals, domestic

stock, and bird feeders) and habitat fragmentation may increase the parasitism rate and decrease flycatcher productivity. Continued and future conversion of floodplains and near-shore lands would eliminate opportunities to restore floodplains for flycatcher habitats. Increased recreation may harass and disturb breeding birds or impact nesting habitats. This increased recreation also increases wildfire potential in these areas.

Yuma Clapper Rail

Future non-Federal actions include continued heavy recreational use of the lower Colorado River corridor and various unregulated uses. Recreational activities include boating, fishing, water-skiing, picnicking, and camping on State, Tribal and private lands. Unauthorized uses include long-term camping, dumping trash and littering, and cutting firewood in adjacent areas. These activities increase the potential for disturbance to Yuma clapper rails, degradation or loss of marsh habitats, and human-caused fires.

Bald Eagle

Bald eagles are susceptible to activities on State and private lands that have cumulatively contributed to its status. Many of these activities, such as livestock grazing, water impoundments and diversions, human population expansion and associated infrastructure development, and recreation activities (including OHV use, boating and fishing), are expected to continue on State and private lands within the action area. These activities will continue to affect bald eagle productivity by disturbing nesting birds, eliminating nest trees (either though direct destruction or indirectly by interfering with future nest tree recruitment), and introducing and supporting nonnative fish species that prey on native fish that bald eagles feed upon. The lack compliance to the established breeding area buffer zones on BLM-administered lands may also affect bald eagle productivity by disturbing nesting birds.

Desert Tortoise (Mohave Population)

As the human population continues to grow in planning areas, traffic will continue to increase on roads and highways. Increases in traffic are likely to increases in air pollution, fires and habitat destruction from accidents, and the spread of invasive plant species. Traffic may also increase on secondary and unmaintained roads in MDT habitat, leading to higher desert tortoise mortality rates from vehicular impacts.

Razorback Sucker and Bonytail Chub and their Critical Habitat

Many activities outside of the Federal nexus occur and are expected to continue in RBS and BTC habitat. The population growth of Lake Havasu City, Parker, and Bullhead City is expected to continue to increase. As these areas become developed, the increase in non-point source pollution being carried into RBS and BTC habitat and critical habitat is likely to increase. There are numerous washes that drain developed lands in the local communities and cities in the action area. RBS and BTC may be adversely affected by these pollutants if they are spawning in the shallow areas where these washes enter spawning areas. Recreational site development and encroachment around occupied reaches and designated critical habitat may further fragment, or

destroy upland or riparian vegetation and negatively affect water quality and quantity, and the primary constituent elements of critical habitat. Continued visitation and recreation could affect water quality from increased petroleum product spills and contaminants as well as discharge of treated and un-treated sewage. Recreation activities may also result in increased disturbances to fish and their spawning areas.

Because of the recent EPA transfer of the section 402 Clean Water Act National Pollutant Discharge Elimination System (NPDES) program to the State of Arizona, further economic development of private lands near rivers will require less Federal permitting. Continued development will lead to more public use of the river and shoreline areas. Continued and future conversion of floodplain and near shore lands will eliminate opportunities to restore historical wetlands and flood plains for fish habitats.

CONCLUSION

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.

Southwestern Willow Flycatcher

After reviewing the current status of the SWWF, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is our biological opinion that the action, as proposed, is not likely to jeopardize the continued existence of the SWWF. We base our conclusion on the following:

1. Many of the proposed actions in the PRMP will generally maintain or improve the habitat for SWWF.

2. To date, SWWF have not been documented breeding on BLM-administered lands in the planning area despite recent surveys (Koronliewicz et al. 2004, McLeod et al. 2005). There is no information concerning the effects of BLM-authorized activities effecting breeding SWWF at the Topock Marsh and Bill Williams River NWR nest sites.

3. The BLM will analyze all projects and plans completed under this PRMP for effects to listed species, including the SWWF, and request future consultation if necessary.

4. The BLM will survey for SWWF in appropriate habitat as part of project analyses.

5. The BLM proposes a number of conservation measures that act together to reduce or eliminate potential adverse effects from the PRMP.

Yuma Clapper Rail

After reviewing the current status of the YCR, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is our biological opinion that the action, as proposed, is not likely to jeopardize the continued existence of the YCR. We base our conclusion on the following:

1. Many of the proposed actions in the PRMP, emergent and riparian vegetation establishment projects, will maintain or improve the habitat for YCR.

2. YCR are rarely encountered on BLM-administered lands in the planning area. Marsh habitat is limited at these locations.

3. Large YCR habitat patches within the planning area are located on the Havasu and Bill Williams River NWRs. These habitats are protected by regulation established by the NWRs, and are not significantly affected by BLM activities.

Bald Eagle

After reviewing the current status of the BAEA, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is our biological opinion that the action, as proposed, is not likely to jeopardize the continued existence of the BAEA. We base our conclusion on the following:

1. The PRMP will implement recovery tasks from the Southwestern Bald Eagle Recovery Plan.
2. There are only two BAEA breeding areas in the planning area. The action area is also not heavily used by wintering BAEA.
3. Ives Wash BAEA breeding area is located within the Rawhide Mountains Wilderness. It is protected from disturbances from mining and off-highway vehicle use. Both Ives Wash and the Alamo breeding areas are protected by seasonal buffer zones established as Conservation Measures in the proposed action.

Desert Tortoise (Mohave Population)

After reviewing the current status of the MDT, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is our biological opinion that the action, as proposed, is not likely to jeopardize the continued existence of the MDT. We base our conclusion on the following:

1. The proposed action would affect a relatively small amount of habitat and few MDT that are geographically isolated from other MDT in California. These habitats, Whipple and Dead Mountains are immediately adjacent to areas categorized by the BLM California Desert District as habitat category 3. These habitats are not essential to maintenance of viable populations (BLM 1988).

Razorback Sucker and Bonytail Chub and their Critical Habitat

After reviewing the current status of the RBS and BTC, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is our biological opinion that the action, as proposed, is not likely to jeopardize the continued existence of the razorback sucker, nor likely to result in destruction or adverse modification of designated critical habitat. This biological opinion does not rely on the regulatory definition of "destruction or adverse modification" of critical habitat at 50 C.F.R. 402.02. Instead, we have relied upon the statutory provisions of the ESA to complete the following analysis with respect to designated and proposed critical habitat. We base our conclusion on the following:

1. Most of the proposed actions in the PRMP will generally maintain or improve the physical and vegetation components of RBS and BTC habitat.
2. Actions that may have negative effects on RBS and BTC habitat generally will include measures to minimize those effects.
3. The BLM will analyze all projects and plans completed under this PRMP for effects to listed species, including RBS and BTC, and request consultation if necessary.

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.

The measures described below are non-discretionary, and must be undertaken by the BLM so that they become binding conditions of any grant or permit issued to an applicant, as appropriate, for the exemption in section 7(o)(2) to apply. Two other biological opinions that analyze the effects of component parts of the PRMP, the draft Parker Strip Recreation Management Area

Management Plan (file number 1-8-93-F-3) and the Yuma District RMP (file number 02-21-97-F-082) provides an incidental take statements for those activities. Those take statements are included here by reference. The take statements provided below address other aspects of the PRMP. We provide specific amounts and forms of take anticipated below; which are based on the best information available to us at this time. However, we are conservative with anticipated take because we do not know many locations and other specific details of proposed actions under the PRMP, how those projects may result in incidental take, and we are not able to anticipate where new locations of listed species may be discovered in the future. As program or project-level plans are developed and the BLM comes to us for consultation on those plans, and as surveys are conducted in areas that are not documented as occupied by listed species, we will likely have better information at that time to predict incidental take. Based on those plans, our analysis in consultation, and new documented locations of listed species, reinitiation of this consultation (which could be addressed through those program or project-level consultations) may be necessary to adjust anticipated take herein (50 CFR 402.16a).

The BLM has a continuing duty to regulate the activity covered by this incidental take statement. If the BLM (1) fails to assume and implement the terms and conditions or (2) fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, the BLM must report the progress of the action and its impact on the species to the FWS as specified in the incidental take statement. [50 CFR §402.14(i)(3)].

AMOUNT OR EXTENT OF TAKE

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.

Southwestern Willow Flycatcher

Our effects analyses found that incidental take of SWWF along the LCR would be difficult to estimate due to the preponderance of migratory habitat that is available in this river corridor. Migrating SWWF are also known to use many different vegetation communities during migration.

Breeding flycatchers have never been documented on BLM-administered lands within the action area. The lack of flood pulses, the presence of levees and rip rapped shoreline, and narrow shorelines due to river regulation and reservoir management limits the availability of SWWF breeding habitat to develop. These are actions that are beyond the control of BLM management in the action area. The proposed action is to provide overall guidance for administration of the planning area. As a result, we do not anticipate incidental take of the SWWF from actions associated with the PRMP. Future actions as part of implementing the PRMP may result in incidental take if breeding SWWF do become established on BLM lands, but this is unknown at

this time and will require consideration and section 7 consultation as appropriate (see the Reinitiation Notice).

The FWS completed a biological opinion on October 2, 1997 (file number 02-21-95-F-269) for BLM management of wild burros in the Alamo HMA on the Alamo Wildlife Area. The BLM proposes to continue management of the Alamo HMA; however, the Alamo Wildlife Area has been excluded from the Alamo HMA. The original 200 wild burro AML will be decreased to 160 in the HMA. The major form of take of SWWF by wild burros would be the direct effect of nests, eggs, and/or young birds being dislodged from trees as wild burros move or feed through an area. Currently, nesting SWWFs have been at Browns Crossing; whereas wild burro use has not been documented in this area. Wild burros may move through this area on occasion. We anticipate that direct take would be very difficult to measure. Unless actually witnessed, attributing nest failure to wild burros would be very difficult to document. The Browns Crossing SWWF population is annually monitored by AGFD biologists. If it can be substantiated that wild burro moving or feeding through an area has dislodged eggs, nestlings, or nests from a tree, take will have been exceeded.

Yuma Clapper Rail

Specific habitat information on BLM-administered portions of the planning area is not available. Because of the uncertainty of boat ramp locations, facility development, etc, within the proposed Lake Havasu and Parker strip SRMA; the effects of these SMRAs on YCR would be consulted upon at that time (see the Reinitiation Notice). We do not anticipate take of YCRs as a result of this project.

Bald Eagle

Due to the limited details of adverse effects and implementation of the conservation measures of the proposed action of this species, we do not anticipate that the proposed action will result in the incidental take of BAEA.

Desert Tortoise (Mohave Population)

The FWS anticipates incidental take of MDT as a result of the proposed action. Although some conservation measures are in place, OHV use, recreation, and transportation and public access projects are likely to result in harm, harassment, and death to MDT. Estimating the number of take over the 10-15 year project implementation will be difficult. Due to the low MDT densities in the action area, it is not possible to provide precise MDT numbers that would be harmed, harassed, or killed. Therefore we quantify incidental take using habitat surrogate measures. Incidental take will be considered exceeded if there is a net loss of occupied habitat as a result of habitat disturbance resulting from OHV and road management.

Incidental take may occur as a result of the proposed Laughlin Road construction. The proposed route follows the boundary of MDT habitat in the Dead Mountains Wilderness. There is no other specific information concerning this proposed highway. There have been no standardized MDT surveys to determine or estimate densities in this area. Due to this lack of information, an

incidental take statement can not be issued for this proposed project to address the need for highway fencing (permanent or temporary), biological monitors, or other mitigating factors. This issue would be addressed as a further Federal action (see the Reinitiation Notice).

Razorback Sucker and Bonytail Chub

The FWS concludes a reasonable certainty for take of individual RBS and BTC from implementation of the proposed action. It would be in the form of harassment, harm, and possibly, killing of individuals from the recreational use of shorelines used by RBS and BTC for spawning and nursery areas as described in the Effects of the Action section. The proposed no wake zones around the Lake Havasu shoreline, along with the peak of recreational use occurring when the RBS are not heavily using the shallow waters for spawning.

Nevertheless, it is not possible to provide precise numbers of RBS or BTC that will be harmed, harasses, or killed. Therefore, we quantify incidental take using habitat surrogate measures. Incidental take will be considered exceeded if current spawning areas become unavailable as a result of recreation impacts.

REASONABLE AND PRUDENT MEASURES AND TERMS AND CONDITIONS

In order to be exempt from the prohibitions of section 9 of the Act, the BLM must comply with the terms and conditions of the following reasonable and prudent measures, and report implementation of these terms and conditions to us. These terms and conditions are non-discretionary. The reasonable and prudent measures, with the implementing terms and conditions are designed to minimize or avoid the impact of incidental take that might otherwise result from the proposed action. If, during the course of the action, the level of incidental take is exceeded, such incidental take represents new information requiring reinitiation of consultation and review of the reasonable and prudent measures provided.

Southwestern Willow Flycatcher

Direct take from wild burro use at Browns Crossing will be difficult to measure. The following reasonable and prudent measure is necessary and appropriate to minimize the effects of take on SWWF.

1. Coordinate with AGFD documentation of the occurrence of wild burro impacts to nesting SWWF at Alamo Wildlife Area. The following term and condition will implement reasonable and prudent measure:

   a. BLM shall coordinate with AGFD to document and report wild burro impacts to nesting SWWF at Browns Crossing. The BLM shall inquire annually for any documentation of this occurrence. If effects can be substantiated, the BLM shall prepare and send a report to the FWS (AESO).

Yuma Clapper Rail

There are no reasonable and prudent measures and terms and conditions required under this consultation. No additional incidental take is anticipated as a result of implementing the proposed action.

Bald Eagle

There are no reasonable and prudent measures and terms and conditions required under this consultation. No additional incidental take is anticipated as a result of implementing the proposed action.

Desert Tortoise (Mohave Population)

The FWS had completed two biological opinions which addressed actions that may adversely affect the MDT. One biological opinion (file number 1-8-93-F-3) addressed the Parker Strip Recreation Area Management Plan and its adverse affects on MDT. That opinion issued an incidental take statement for OHV management in MDT habitat. The BLM proposes to continue management of the Parker Strip Recreation Area and we anticipate that the opinion covered any incidental take that may occur as a result of this action. The biological opinion for the Parker Strip Recreation Area Management Plan (file number 1-8-93-F-3) included a term and condition (1 F.) to establish manageable boundaries for the two designated off-highway vehicle areas, Cross Roads and Copper Basin). There was no requirement to report the effectiveness of this T&C. This new T&C shall require annual surveys to monitor the effectiveness of installed boundaries in preventing OHV access of the designated MDT habitat areas: a) The BLM shall survey the OHV area boundaries and record unauthorized access into closed areas. This would not include authorized access on established and/or designated routes that may lead to or away from these two areas. b) If the annual surveys indicate that current boundary management is not preventing access into protect MDT habitat, more secure boundary management such as fencing will be implemented. Please refer to that biological opinion for more detailed information. The other biological opinion (file number 02-21-97-F-082) addressed Yuma District Resource Management Plan and its adverse effect on MDT. That opinion issued an incidental take statement for OHV and road management in MDT habitat for the entire Yuma District; the Yuma and Havasu Resource Areas (LHFO). Incidental take was not specifically identified per Resource Area. However, the BLM has committed to retain the Reasonable and Prudent Measures and their Terms and Conditions as established in the 1998 biological opinion. The BLM proposes many new changes to manage transportation and public access to BLM-administered lands in the planning area. Despite the conservation measures established for the MDT, the guidance may not adequately eliminate incidental take that may occur as a result of these proposed actions. For example, specific adverse effects would not be known until the proposed route inventories are completed for the California-portions of the Bullhead (2-37A), Havasu (2-37B), and Cactus Plain (2-37C) Travel Management Areas.

Razorback Sucker and Bonytail Chub

The FWS completed a biological opinion on February 18, 1993 (file number 02-21-92-F-641) for the Lake Havasu Fisheries Improvement Partnership Program. That opinion issued an incidental take statement to cover these two species if caught and/or killed by fishermen. The FWS also completed a biological opinion on March 26, 1998 (file number 02-21-97-F-082) for the Yuma District RMP. That opinion issued an incidental take statement to cover these two species if recreational development on the Lake Havasu shoreline impacted BTC or RBS habitat. The BLM proposes to continue these programs and we anticipate the continued implementation of the RPM and Terms and Conditions as described in the Environmental Baseline portion of the biological opinion. No additional measures are issued at this time.

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. The recommendations provided here do not necessarily represent complete fulfillment of the BLM's section 2(c) or 7(a)(1) responsibility for these species. In furtherance of the purposes of the Act, we recommend implementing these discretionary actions.

Southwestern Willow Flycatcher

We recommend:

1. Continue to support inventories and monitoring of SWWF and their habitats.

2. Implement the SWWF recovery plan, by considering the recommendations in that plan in all program and project-level activities under the PRMP.

3. Implement saltcedar control in riparian patches and SWWF migration habitat with careful evaluation and coordination with our office and the Arizona Game and Fish Department and the California Department of Fish and Game.

Yuma Clapper Rail

We recommend:

1. Support and participate in inventorying and annual monitoring of YCR and their habitats within the planning area.

2. Develop an environmental baseline for the Lake Havasu Special Recreation Area Management (SRMA) Plan; inventory all YCR habitats in this action area prior to plan development and consultation. Document location, acreage and YCR habitat suitability of each habitat patch. Incorporate YCR habitat monitoring as part of the proposed action.

3. Develop environmental baselines for the Parker Strip SRMA Plan by inventorying all YCR habitats in this action area prior to plan development and consultation. Document location, acreage and YCR habitat suitability of each habitat patch. Incorporate YCR habitat monitoring as part of the proposed action.

Bald Eagle

We recommend that you:

1. In cooperation with the AGFD, initiate winter bald eagle counts on the LCR in areas not currently covered by the AGFD.

2. Develop roosting habitat (artificial structures) in managed backwaters to facilitate foraging habitat for wintering BAEA along the LCR.

Desert Tortoise (Mohave Population)

We recommend:

1. Conduct surveys in all MDT habitats in the planning area to determine population density estimates. Coordinate with the survey protocols being evaluated and developed by the Desert Tortoise Recovery Plan Assessment Committee, to determine which survey protocol will be most appropriate for this area.

2. Record and document all MDT sightings (tortoises and sign) into appropriate special status species databases for future work.

3. Survey the route for the proposed Laughlin Road prior to future consultation to develop an environmental baseline in order that an incidental take statement may be issued.

Razorback Sucker and Bonytail Chub

We recommend:

1. Continue to support inventories and monitoring of occupied or potential razorback sucker and bonytail chub habitats. This could include unsurveyed and partly surveyed sites.

2. Incorporate conservation measures to protect spawning habitat, not limited to wakeless zones and appropriate placement of boating facilities, within the Lake Havasu and Parker Strip Special Recreational Management Area Plans.

3. Work with us to implement the recovery plan for these species.

4. Coordinate with the Arizona Game and Fish Department, California Department of Fish and Game, and FWS to begin a program to control non-native aquatic species on BLM lands.

REINITIATION NOTICE

This concludes formal consultation on the action of the PRMP as described in the requests. 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. As discussed in the incidental take statement, specific project plans or programmatic plans developed under the PRMP may provide new information indicating the amount or extent of incidental take anticipated may be different than indicated herein. Reinitiation of consultation would be required in that scenario (50 CFR 402.16a). We suggest that reinitiation of this plan-level consultation could be batched with the consultation document(s) for these project or program-level consultations.

We appreciate your efforts to identify and minimize effects to listed species from this project. For further information please contact Dave Smith (928) 226-0614 (x109) or Debra Bills (602) 242-0524 (x239). Please refer to the consultation number 02-21-05-F-0086 in future correspondence concerning this project.

/s/ Steven L. Spangle

cc: Regional Director, Fish and Wildlife Service, Albuquerque, NM (ARD-ES)
Assistant Field Supervisor, Fish and Wildlife Service, Tucson, AZ
Assistant Field Supervisor, Fish and Wildlife Service, Flagstaff, AZ
Habitat Branch Chief, Bob Broscheid, Arizona Game and Fish Department, Phoenix, AZ
Chemehuevi Indian Tribe, Havasu Lake, CA
Fort Mojave Indian Tribe, Fort Mohave, AZ
Hopi Tribe, Kykotsmovi, AZ
Hualapai Tribe, Peach Springs, AZ
Salt River Pima-Maricopa Indian Community, Scottsdale, AZ
Yavapai-Prescott Tribe, Prescott, AZ
Colorado River Indian Tribes, Parker, AZ

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APPENDIX A

The appendix contains our concurrences with your determinations that the proposed action may affect, but is not likely to adversely affect; these concurrences are based on the full implementation of the proposed action as described in the Description of the Proposed Action section of the Biological Opinion, including the conservation measures proposed by the BLM.

California brown pelican (*Pelicanus occidentalis californicus*)

Status of the Species
USFWS listed the California brown pelican (CBPE) throughout its range as endangered under the Endangered Species Preservation Act of 1966, on October 13, 1970 (USFWS 1983).

Status of the Species in the Action Area

Adult CBPEs are wandering coastal seabirds that erratically appear and sometimes move through the region, but may occasionally use the river surface during summer, fall or winter for resting or feeding. Factors affecting the survivorship of wandering birds are unknown. Because of their erratic, wandering status, no breeding or predictable habitat use occurs within the planning area. CBPE were not documented as breeders in the recently published Arizona Breeding Bird Atlas (Corman and Wise-Gervais 2005).

Adult CBPE are found from summer through the winter in Arizona, primarily along the Colorado River (Monson and Phillips 1981). Usually, 1-3 adults are observed throughout the year, but there are some years when the CBPE do not forage this far up the Colorado River.

We concur with the finding of "may affect, not likely to adversely affect" for the CBPE from the proposed action for the following reasons:

1) There is no breeding habitat documented within the LHFO.

2) The PRMP proposes the following conservation measures:

- To the extent practicable, avoid, minimize impacts to CBPEs.
- Conduct research to identify important resting locations for the CBPEs.
- Mitigate adverse effects on CBPE habitat
- Replace important habitat that is lost due to BLM permitted activities.
- Identify potential bird conservation projects and seek grant funding.

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Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) (YBCU)

Status of the Species

The western continental United States distinct population segment of the yellow-billed cuckoo (western yellow-billed cuckoo) is a candidate species under the Act (USFWS 2002). In response to a petition to list the species submitted in February 1998, on July 25, 2001, the FWS issued a 12-month "warranted but precluded" finding (meaning that listing of the species is warranted but precluded by higher priority listing actions (USFWS 2002).

Status of the Species in the Action Area

No known breeding habitat occurs within the LHFO (Corman and Wise-Gervais 2005). The Bill Williams River NWR does support a large population of YBCU. The NWR has surveyed YBCU since 1993; 80 detections were made in 2003 representing 42 individual birds (K. Blaire, FWS, pers comm. February 10, 2006).

We concur with the finding of "may affect, not likely to adversely affect" for the YBCU from the proposed action for the following reasons:

1) Implementation of the following conservation measures will result in all remaining effects being insignificant:

- Increase enforcement of access into restricted areas.

- Avoid intense and repeated human disturbance that travels from BLM lands into the Bill Williams NWR nesting areas especially from 20 May through 1 September.

- Increase cooperation between State and Federal agencies and private organizations regarding YBCU habitat.

- Establish riparian corridors and "island" habitats to allow natural dispersal and recolonization of historical habitats.

Conservation Recommendations for Yellow-billed cuckoo

In addition, we recommend that the BLM:

1. Apply the conservation measures for southwestern willow flycatcher for potential or suitable yellow-billed cuckoo habitat.

2. Map and survey potential, suitable, and occupied yellow-billed cuckoo habitat to determine where management actions should occur.

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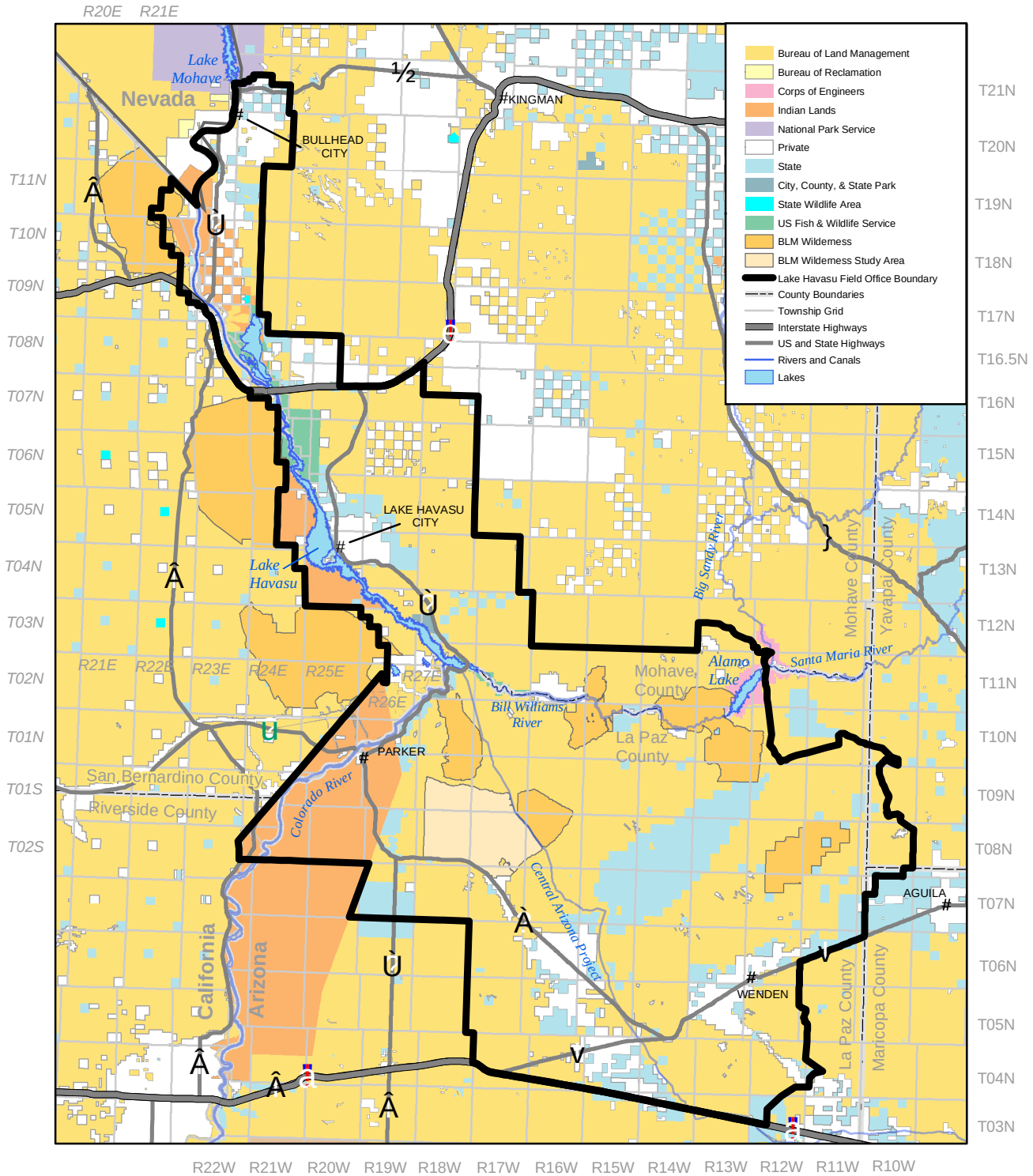
Appendix B. Formal section 7 consultations and conferences on activities within Lake Havasu Field Office area (1983 to 2005).

Biological Opinion File Number:	**Date**	**Title:**
02-21-04-F-0161	March 4, 2005	Biological and Conference Opinion on the Lower Colorado River Multi-Species Conservation Program, Arizona, California, and Nevada
02-21-03-F-0210	September 3, 2004	Biological and Conference Opinion for the BLM Arizona Statewide Land Use Plan Amendment for Fire, Fuels, and Air Quality Management
02-21-04-F-0036	January 30, 2004	Pesticide Use Proposal for Lower Colorado River Fish and Wildlife Service Refuges in FY 04
02-21-95-F-216R	April 30, 2002	Biological and Conference opinion on Lower Colorado River Operations and Maintenance - Lake Mead to Southerly International Boundary
02-21-96-F-026	April 16, 2001	Windmill Resort Expansion
02-21-00-F-273	January 12, 2001	Interim Surplus Criteria, Secretarial Implementation Agreements, and Conservation Measures on the Lower Colorado River, Lake Mead to the Southerly International Boundary Arizona, California and Nevada
02-21-98-F-329	March 26, 1999	Alamo Lake Re-operation and Ecosystem Restoration
02-21-97-F-082	March 26, 1998	Yuma District Resource Management Plan and Amendments on listed species.
02-21-95-F-269	October 2, 1997	Lower Gila Resource Area Amendment
02-21-95-F-216	April 30, 1997	Biological and Conference Opinion on Lower Colorado River Operations and Maintenance - Lake Mead to Southerly International Boundary

02-21-96-F-161	March 21, 1997	Blue Water Marina, Casino & Resort (404 Permit)
02-21-96-F-422	September 18, 1996	BLM's Plan (1983) and Lower Gila North Final Grazing Environmental Impact Statement (1982) (Management Framework Plan/EIS).
02-21-94-F-305	February 15, 1996	Effects to the Bald Eagle from the operations of Alamo Dam and Alamo Lake
02-021-94-F-262	May 3, 1994	Native Fish Management Activities on Lake Mohave, Arizona and Nevada
02-21-92-F-641	February 18, 1993	Lake Havasu Fisheries Improvement Partnership Program
02-21-89-F-170	February 2, 1993	Colorado Bridge Crossing - Hoover Dam
1-8-93-F-3	December 4, 1992	Parker Strip Recreation Area Management Plan
02-21-91-F-089	March 8, 1991	Kingman Resource Management Plan
02-21-85-F-065	January 27, 1986	Parker II Division, Channel Modification, Colorado River Front Work and Levee Project
02-21-83-F-004	February 1, 1983	Flood Control Hoover Dam

Map 1. Planning Area for the Lake Havasu Field Office Resource Management Plan

Map 1-1 Existing Lake Havasu Field Office Boundaries



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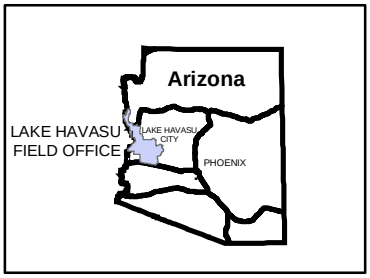
U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

The Bureau of Land Management makes no warranties, implied or expressed, with respect to information shown on this map.



UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Land Management

November 2005

Map 2. AGFD Map of Potential Southwestern Willow Flycatcher Habitat along the Bill Williams River, Alamo Dam to Bill Williams River NWR, 2006

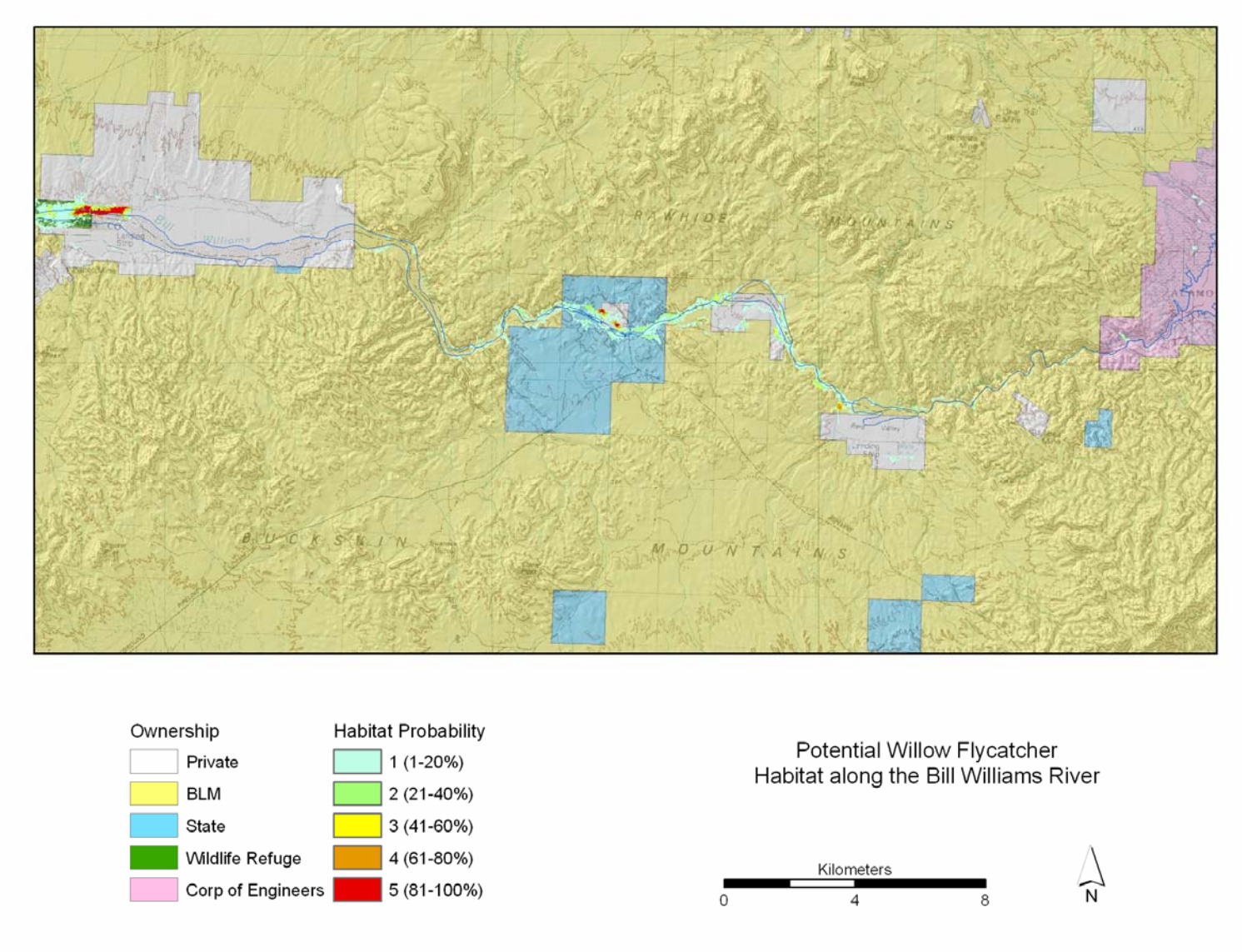


Figure A. SWIFL habitat map of BWR depicting all reaches between Alamo Dam and BWNWR.