

**DEPARTMENT OF THE INTERIOR****Fish and Wildlife Service****50 CFR Part 17**

[Docket No. FWS-R2-ES-2011-0053;  
4500030114]

RIN 1018-AX43

**Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Southwestern Willow Flycatcher**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Final rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), designate revised critical habitat for the southwestern willow flycatcher (*Empidonax traillii extimus*) (flycatcher) under the Endangered Species Act. In total, approximately 1,975 stream kilometers (1,227 stream miles) are being designated as critical habitat. These areas are designated as stream segments, with the lateral extent including the riparian areas and streams that occur within the 100-year floodplain or flood-prone areas encompassing a total area of approximately 84,569 hectares (208,973 acres). The critical habitat is located on a combination of Federal, State, tribal, and private lands in Inyo, Kern, Los Angeles, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura Counties in California; Clark, Lincoln, and Nye Counties in southern Nevada; Kane, San Juan, and Washington Counties in southern Utah; Alamosa, Conejos, Costilla, and La Plata Counties in southern Colorado; Apache, Cochise, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Pima, Pinal, Santa Cruz, and Yavapai Counties in Arizona; and Catron, Grant, Hidalgo, Mora, Rio Arriba, Socorro, Taos, and Valencia Counties in New Mexico. The effect of this regulation is to conserve the flycatcher's habitat under the Endangered Species Act.

**DATES:** This rule becomes effective on February 4, 2013.

**ADDRESSES:** This final rule is available on the Internet at <http://www.regulations.gov>, Docket No. FWS-R2-ES-2011-0053. Comments and materials received, as well as supporting documentation used in preparing this final rule, are available for public inspection, by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Arizona Ecological Services Office, 2321 West Royal Palm Rd., Suite 103, Phoenix, AZ 85021;

telephone 602-242-0210; facsimile 602-242-2513.

The coordinates or plot points or both from which the critical habitat maps are generated are included in the administrative record for this critical habitat designation and are available at <http://www.fws.gov/southwest/es/arizona>, [www.regulations.gov](http://www.regulations.gov) at Docket No. FWS-R2-ES-2011-0053, and at the Arizona Ecological Services Office (see **FOR FURTHER INFORMATION CONTACT**). Any additional tools or supporting information that we may develop for this critical habitat designation will also be available at the Fish and Wildlife Service Web site and Field Office set out above, and may also be included in the preamble or at <http://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:**

Steve Spangle, Field Supervisor, U.S. Fish and Wildlife Service, Arizona Ecological Services Office, 2321 West Royal Palm Rd., Suite 103, Phoenix, AZ 85021; telephone 602-242-0210; facsimile 602-242-2513. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800-877-8339.

**SUPPLEMENTARY INFORMATION:****Executive Summary**

*Why we need to publish a rule.* This is a final rule to revise the designation of critical habitat for the southwestern willow flycatcher (flycatcher). Under the Endangered Species Act (Act), any species that is determined to be an endangered or threatened species requires critical habitat to be designated, to the maximum extent prudent and determinable. Designations and revisions of critical habitat can only be completed by issuing a rule.

The revised critical habitat areas we are designating in this rule constitute our current best assessment of the areas that meet the definition of flycatcher critical habitat. In total, we are designating as flycatcher critical habitat approximately 1,975 stream kilometers (km) (1,227 stream miles (mi)) encompassing a total area of approximately (84,569 hectares (ha), (208,973 acres (ac)) in 24 Management Units.

*We have prepared an economic analysis and environmental assessment for the designation of critical habitat.* In order to consider economic impacts, we have prepared an analysis of the economic impacts of the critical habitat designations and related factors. The purpose of the environmental assessment, prepared pursuant to the National Environmental Policy Act (NEPA), is to identify and disclose the

environmental consequences resulting from the proposed action of designating revised critical habitat for the flycatcher. We announced the availability of the draft economic analysis and draft environmental assessment in the **Federal Register** on July 12, 2012 (77 FR 41147), allowing the public to provide comments on our analyses. We have considered the comments and have completed the final economic analysis and final environmental assessment concurrently with this final determination.

*Peer review and public comment.* We sought comments from independent specialists to ensure that our designation is based on scientifically sound data and analyses. We obtained opinions from four knowledgeable individuals with scientific expertise to review our technical assumptions, analysis, and whether or not we had used the best available information. These peer reviewers generally concurred with our methods and conclusions and provided additional information, clarifications, and suggestions to improve this final rule. Information we received from peer review is incorporated in this final revised designation. We also considered all comments and information received from the public during the comment period.

**Previous Federal Actions**

The flycatcher was listed as endangered under the Act (16 U.S.C. 1531 *et seq.*) on February 27, 1995 (60 FR 10694). On July 22, 1997, we published a final critical habitat designation for the flycatcher along 964 river km (599 river mi) in Arizona, California, and New Mexico (62 FR 39129). We published a correction notice on August 20, 1997, on the lateral extent of critical habitat (62 FR 44228).

As a result of a 1998 lawsuit from the New Mexico Cattle Growers' Association, on October 19, 2005 (70 FR 60886), we published a revised final flycatcher critical habitat rule for portions of Arizona, California, New Mexico, Nevada, and Utah, totaling approximately 48,896 ha (120,824 ac) or 1,186 km (737 mi). River segments were designated as critical habitat in 15 of the 32 Management Units described in the Recovery Plan (Service 2002, p. 63).

We were sued by the Center for Biological Diversity over our 2005 critical habitat rule, and on July 13, 2010, we agreed to redesignate critical habitat. The resulting settlement left the existing critical habitat designation from 2005 in effect. We proposed a flycatcher critical habitat revision on August 15, 2011 (76 FR 50542), and additional

proposal information was included in our July 12, 2012 (77 FR 41147), rule reopening the comment period. We requested and received an extension to allow a final rule to be delivered to the **Federal Register** by December 14, 2012.

### Background

Additional background information on the flycatcher, beyond what is provided below, can be found in the proposed revision of flycatcher critical habitat published on August 15, 2011 (76 FR 50542), as well as the final flycatcher critical habitat rule published in the **Federal Register** on October 19, 2005 (70 FR 60886); our October 12, 2004, proposed critical habitat rule (69 FR 60706); the Southwestern Willow Flycatcher Recovery Plan (Recovery Plan) (Service 2002, entire); our first flycatcher critical habitat designation, published July 22, 1997 (62 FR 39129), and August 20, 1997 (62 FR 44228); the final flycatcher listing rule (60 FR 10694, February 27, 1995); the 10-year flycatcher study in central Arizona (Paxton *et al.* 2007, entire); the 2007 rangewide status report (Durst *et al.* 2008, entire); and flycatcher survey protocol and natural history summary (Sogge *et al.* 2010, entire). Other reports can be retrieved from the U.S. Geological Survey's (USGS) flycatcher site at <http://sbosc.wr.usgs.gov/cprs/research/projects/swwf>.

### Taxonomy

The flycatcher, from the taxonomic order Passeriformes, is one of four subspecies of the willow flycatcher currently recognized (Hubbard 1987, pp. 3–6; Unitt 1987, pp. 137–144), although Browning (1993, p. 248) suggests a possible fifth subspecies (*Empidonax traillii campestris*) in the central and midwestern United States.

### Species Description

The flycatcher is a small, insect-eating generalist (Service 2002, p. 26), neotropical migrant bird. It grows to about 15 centimeters (5.8 inches) in length. It eats a wide range of invertebrate prey including flying, and ground- and vegetation-dwelling, insect species of terrestrial and aquatic origins (Drost *et al.* 2003, pp. 96–102). The flycatcher spends the winter in locations such as southern Mexico, Central America, and probably South America (Ridgely and Gwynne 1989, p. 303; Stiles and Skutch 1989, pp. 321–322; Howell and Webb 1995, pp. 496–497; Unitt 1997, pp. 70–73; Koronkiewicz *et al.* 1998, p. 12; Unitt 1999, p. 14).

### Distribution

The known geographical area historically occupied by migrating and breeding flycatchers includes southern California, southern Nevada, southern Utah, southern Colorado, Arizona, New Mexico, western Texas, and extreme northwestern Mexico (Hubbard 1987, pp. 6–10; Unitt 1987, pp. 144–152; Browning 1993, pp. 248, 250). The flycatcher's current range is similar to the historical range, but the quantity of suitable habitat within that range is reduced from historical levels (Service 2002, pp. 7–10). Flycatchers nest within the southwestern United States from about May to September (Sogge *et al.* 2010, p. 11).

At the time of listing in February 1995 (60 FR 10694), the distribution and abundance of nesting flycatchers, their natural history, and areas occupied by breeding, nonbreeding, migrating, and dispersing flycatchers were not well known. In February 1995, 359 breeding territories were known only from California, Arizona, and New Mexico. Unitt (1987, p. 156) estimated the entire population was “well under a 1000 pairs, more likely 500,” and 230 to 500 breeding territories (see definition below) were estimated to exist in the July 23, 1993, flycatcher listing proposal (58 FR 39495, p. 39498).

At the end of 2007, 1,299 flycatcher breeding territories were estimated to occur throughout southern California, southern Nevada, southern Utah, southern Colorado, Arizona, and New Mexico (Durst *et al.* 2008, p. 4). Some of the flycatcher breeding sites (see definition below) having the highest number of territories are found along the middle Rio Grande and upper Gila River in New Mexico, and Roosevelt Lake and the San Pedro and Gila River confluence area in central Arizona.

A breeding site is simply an area along the river that has been described while surveying for flycatcher territories (Service 2002, p. C–4; Sogge *et al.* 2010, p. 34). A breeding site can contain none, only one, or many territories. However, within this final rule, we refer to breeding sites as areas where flycatcher territories were detected. A territory is defined as a discrete area defended by a single flycatcher or pair of flycatchers within a single breeding season (Sogge *et al.* 2010, p. 34). The territory is usually evidenced by the presence of a singing male, and possibly one or more mates (Sogge *et al.* 2010, p. 34). When we discuss locations occupied by flycatchers, those are locations not just of those areas used as breeding territories, but also of those areas used

by foraging, migrating, and dispersing flycatchers for food, cover, and shelter.

At the time of listing, breeding sites in California, Nevada, Utah, and Colorado described by Unitt (1987, pp. 149–152) were adopted as the subspecies' northern boundary. However, the collection and analysis of genetic material across this part of the flycatcher's range has since refined this boundary (Paxton 2000, pp. 3, 18–20), and reduced the extent of the northern boundary of the southwestern subspecies in Utah and Colorado (Service 2002, Figure 3). Territories once believed to be held by southwestern willow flycatchers in Utah and Colorado are now more accurately known to be occupied by a different, non-listed willow flycatcher subspecies. As a result, the southwestern subspecies' range only occurs in the southernmost portions of Utah and Colorado. This genetic work also confirmed the identity of southwestern willow flycatcher subspecies throughout the rest of its range.

The USGS has continued to collect genetic information to help refine the northern boundary of the subspecies' range in Utah, Colorado, and New Mexico (Paxton *et al.* 2007a, entire). They reconfirmed the genetic markers that identify differences among flycatcher subspecies, with breeding sites clustering into two groups separated approximately along the currently recognized boundary; however, they noted a distinct genetic boundary line between the subspecies does not exist (Paxton *et al.* 2007a, p. 17). Instead of a distinct boundary, they suggested that the boundary should be thought of as a “region of genetic overlap” (Paxton *et al.* 2007a, p. 17). They also described that this genetic overlap region will likely widen and contract over time based upon habitat changes (Paxton *et al.* 2007a, p. 17). An additional complication in refining the subspecies' northern boundary is that this region is sparsely populated with breeding flycatchers, and therefore only minimal information is available that would help narrow down the location of a boundary (Paxton *et al.* 2007a, p. 16). We continue to seek out territories and collect genetic samples to further our understanding of this area, but we currently recognize the northern geographic boundary of the flycatcher as described in the Recovery Plan (Service 2002, Figures 3, 4).

All willow flycatcher subspecies spend time migrating in the United States from April to June and from July through September. Willow flycatchers, like most small, migratory, insect-eating birds, require food-rich stopover areas

in order to replenish energy reserves and continue their northward or southward migration (Finch *et al.* 2000, pp. 71, 78, and 79; Service 2002, pp. E–3, 42). Migration stopover areas are likely critically important for flycatcher productivity and survival (Sogge *et al.* 1997, p. 13; Yong and Finch 1997, p. 253; Service 2002, pp. E–3, 19).

#### Habitat

The flycatcher currently breeds in areas from near sea level to over 2,600 meters (m) (8,500 feet (ft)) (Durst *et al.* 2008, p. 14) in vegetation alongside rivers, streams, or other wetlands (riparian habitat). It establishes nesting territories, builds nests, and forages where mosaics of relatively dense and expansive growths of trees and shrubs are established, near or adjacent to surface water or underlain by saturated soil (Sogge *et al.* 2010, p. 4). Habitat characteristics such as dominant plant species, size and shape of habitat patch, tree canopy structure, vegetation height, and vegetation density vary widely among breeding sites. Nests are typically placed in trees where the plant growth is most dense, where trees and shrubs have vegetation near ground level, and where there is a low-density canopy. Some of the more common tree and shrub species currently known to comprise nesting habitat include Gooddings willow (*Salix gooddingii*), coyote willow (*Salix exigua*), Geyer's willow (*Salix geyeriana*), arroyo willow (*Salix lasiolepis*), red willow (*Salix laevigata*), yewleaf willow (*Salix taxifolia*), boxelder (*Acer negundo*), tamarisk (also known as saltcedar, *Tamarix ramosissima*), and Russian olive (*Elaeagnus angustifolia*) (Service 2002, p. D–2). While there are exceptions, generally flycatchers are not found nesting in areas without willows, tamarisk, or both.

Use of riparian habitats along major drainages in the Southwest during migration has been documented (Sogge *et al.* 1997, pp. 3–4; Yong and Finch 1997, p. 253; Johnson and O'Brien 1998, p. 2; McKernan and Braden 1999, p. 17; Koronkiewicz *et al.* 2004, pp. 9–11). Many of the willow flycatchers found migrating are detected in riparian habitats or patches (small areas of riparian vegetation) that would be unsuitable for nest placement (the vegetation structure is too short or sparse, or the patch of vegetation is too small). In these drainages, migrating flycatchers may use a variety of riparian habitats, including ones dominated by native or exotic plant species, or mixtures of both (Service 2002, p. E–3).

#### Life History

Flycatchers are believed to exist and interact as groups of metapopulations (Service 2002, p. 72). A metapopulation is a group of geographically separate flycatcher breeding populations connected to each other by immigration and emigration (Service 2002, p. 72). Flycatcher populations are most stable where many connected sites or large populations exist (Service 2002, p. 72). Metapopulation persistence or stability is more likely to improve by adding more breeding sites rather than adding more territories to existing sites (Service 2002, p. 72). This would distribute birds across a greater geographical range, minimize risk of simultaneous catastrophic population loss, and avoid genetic isolation (Service 2002, p. 72).

Flycatchers have higher site fidelity (to a local area) than nest fidelity (to a specific nest location) and can move among sites within stream drainages and between drainages (Kenwood and Paxton 2001, pp. 29–31). Within-drainage movements are more common than between-drainage movements (Kenwood and Paxton 2001, p. 18). Juvenile flycatchers were the group of flycatchers that moved (dispersed) the farthest to new and distant breeding sites from the area where they hatched (Paxton *et al.* 2007, p. 74). The USGS's 10-year flycatcher study in central Arizona (Paxton *et al.* 2007, entire) is the key movement study that has generated these conclusions, augmented by other flycatcher banding and re-sighting studies (Sedgwick 2004, p. 1103; McLeod *et al.* 2008, p. 110).

The difference in flycatcher dispersal distance among different study areas and regions reflects the varying spatial arrangement of breeding habitat, illustrating how dispersal tendencies are influenced by the geographic distribution of habitat at the stream segment, drainage, and landscape scales (Paxton *et al.* 2007, p. 75). While USGS's study focused its effort in central Arizona at two of the largest breeding sites, it also included multiple auxiliary sites (up to 444 km (275 mi) away), along with other researchers and surveyors across the flycatcher's range paying attention to whether flycatchers were banded or not. As a result, the broad scope of the study of flycatcher movement extends broadly beyond a localized, regional area, where habitat configuration dominates the results.

Banded flycatchers from season to season (and sometimes within season) were recorded moving from 50 m (150 feet) to 444 km (275 mi) to try to nest. Some long-distance season-to-season movement records captured flycatchers

moving from the Basin and Mojave Recovery Units to the Lower Colorado Recovery Unit and from the Lower Colorado Recovery Unit to the Gila Recovery Unit.

The USGS assimilated all of the flycatcher movement information and concluded that rapid colonization and increased metapopulation stability could be accomplished by establishing breeding sites within 30 to 40 km (18 to 25 mi) of each other (Paxton *et al.* 2007, p. 4). Flycatchers at breeding sites configured in this way would be able to regularly disperse to new breeding sites or move between known breeding sites within the same year or from year-to-year. This proximity of sites would increase the connectivity and stability of the metapopulation and smaller, more distant breeding sites.

#### Recovery Planning

Because the breeding range of the flycatcher encompasses a broad geographic area with much site variation, the Recovery Plan divides the flycatcher's range into six Recovery Units, each of which are further subdivided into four to seven Management Units (for a total of 32 Management Units) (Service 2002, pp. 61–63). This provides an organizational strategy to “characterize flycatcher populations, structure recovery goals, and facilitate effective recovery actions that should closely parallel the physical, biological, and logistical realities on the ground” (Service 2002, p. 61). Recovery Units are defined based on large watershed and hydrologic units. Within each Recovery Unit, Management Units are based on watershed or major drainage boundaries at the Hydrologic Unit Code Cataloging Unit level (standard watershed boundaries which have already been defined for other purposes). The “outer” boundaries of some Recovery Units and Management Units were defined by the flycatcher's range boundaries. Recovery goals are recommended for 29 of the 32 Management Units, and this designation of critical habitat is organized geographically within these Recovery Units and Management Units (see “Methodology Overview” section below).

The Service's 2002 Recovery Plan provides reasonable actions recommended to recover the flycatcher and provides two criteria, either of which can be met, in order to consider downlisting the species to threatened (Service 2002, pp. 77–78). The first alternative for downlisting requires reaching a total population of 1,500 flycatcher territories geographically distributed among all Recovery Units

and maintained for 3 years with habitat protections (Service 2002, pp. 77–78). Habitat protections include a variety of options such as habitat conservation plans (HCPs), conservation easements, or safe harbor agreements. The second alternative approach for downlisting calls for reaching a population of 1,950 territories also strategically distributed among all Recovery and Management Units for 5 years without additional habitat protection (Service 2002, pp. 77–78).

In order to delist this flycatcher subspecies (to remove it from the List of Endangered and Threatened Wildlife), the Recovery Plan recommends that a minimum of 1,950 territories are geographically distributed among all Recovery and Management Units, and that twice the amount of habitat is provided to maintain these territories over time. Second, these habitats must be protected from threats to assure maintenance of these populations and habitat for the foreseeable future through development and implementation of conservation management agreements (Service 2002, pp. 79–80). Third, all of these delisting criteria must be accomplished and their effectiveness demonstrated for a period of 5 years (Service 2002, pp. 79–80). This critical habitat designation is structured to allow the Service to work toward achieving the numerical, geographical, and habitat-related recovery goals.

Twice the amount of suitable habitat is needed to support the numerical territory goals because the long-term persistence of flycatcher populations cannot be assured by protecting only those habitats in which flycatchers currently breed (Service 2002, p. 80). It is important to recognize that most flycatcher breeding habitats are susceptible to future changes in site hydrology (natural or human-related), human impacts such as development or fire, and natural catastrophic events such as flood or drought (Service 2002, p. 80). Furthermore, as the vegetation at sites matures, it can lose the structural characteristics that make it suitable for breeding flycatchers (Service 2002, p. 80). These and other factors can destroy or degrade breeding sites, such that one cannot expect any given breeding site to remain suitable in perpetuity (Service 2002, p. 80). Thus, it is necessary to have additional suitable habitat available to which flycatchers can readily move if displaced by such habitat loss or change (Service 2002, p. 80).

### Summary of Changes From Proposed Rule

In developing the final revised flycatcher critical habitat designation, we reviewed public comments received on the proposed August 15, 2011 (76 FR 50542), revision to critical habitat and the draft economic analysis, draft environmental assessment, and proposed revisions document made available to the public published on July 12, 2012 (77 FR 41147). We also conducted further evaluation of lands proposed as critical habitat; refined our mapping methodologies; and excluded areas from the final designation pursuant to section 4(b)(2) of the Act (16 U.S.C. 1531 et seq.). We are making the following changes to the final rule from the proposed August 15, 2011, revision and subsequent July 12, 2012, document.

#### *Proposed Areas Removed From Final Designation*

(1) We excluded a number of river segments and reservoir bottoms under section 4(b)(2) of the Act that we identified as being considered for exclusion in the proposed rule (see Exclusions section below). In this final rule, we did not exclude every area that was identified in the proposed rule as being considered for exclusion. For a complete discussion and analysis of areas excluded and an explanation of the basis for exclusion see the Exclusions section. This is the primary source of reduction in the total designated critical habitat area compared to what we identified in the proposal.

(2) In California, based on information received from public comments, we reviewed maps and reports and reevaluated Little Tujunga Creek in the Santa Clara Management Unit. We discovered that the 2.2-km (1.4-mi) segment of the Little Tujunga Creek is not essential for the flycatcher because it provides minimal habitat, metapopulation stability, and prevention against catastrophic loss. As a result, we determined that it was not essential for flycatcher conservation and did not include it in this final revised critical habitat designation.

(3) In California, we reevaluated mapped information and proposed critical habitat along the Santa Ana River within the Prado Basin in the Santa Ana Management Unit (76 FR 50542, August 15, 2011, pp. 50563–50564). We detected, through additional analysis, several groundwater recharge ponds and areas at, or below, the 154-m (505-ft) elevation line that will be subject to regular inundation. These

areas total approximately 900.2 ha (2,224.5 ac), and they do not represent areas that currently have or can develop flycatcher habitat. As a result, we determined that these locations were not essential for flycatcher conservation and do not include them in this final revised critical habitat designation.

(4) In Arizona, in response to comments, we reevaluated information through maps, reports, and site-specific knowledge about the proposed segments of the San Francisco River in the San Francisco Management Unit (76 FR 50542, August 15, 2011, p. 50576). This evaluation resulted in determining that a 2.7-km (1.7-mi) segment of the San Francisco River at Luna Lake, Arizona, which we proposed for designation, does not contain the essential physical or biological features of flycatcher habitat, and it does not appear to have the ability to develop into flycatcher nesting habitat. The habitat surrounding Luna Lake is comprised of cattails and meadow grasses, and a narrow section of stream downstream from the lake primarily consists of conifers. As a result, we determined that this portion of the San Francisco River was not essential for flycatcher conservation and do not include it in this final revised critical habitat designation.

(5) In Arizona, in response to comments, we reevaluated approximately 6.8 ha (16.8 ac) of land within the proposed segment along Pinal Creek, representing about 4 percent of the land outside of the Freeport McMoRan (FMC) administered Pinal Creek Management Area. These lands are located primarily at the perimeter of the floodplain and end of the proposed segment. Because of their placement, these lands provide limited value for the flycatcher outside of the conservation area. As a result, we determined that these disconnected portions of the Pinal Creek floodplain were not essential for flycatcher conservation and do not include them in this final revised critical habitat designation.

(6) In Nevada, we reevaluated the 17.3-km (10.8-mi) stream and other bodies of water in Pahranaagat Valley (hereinafter referred to as the Pahranaagat River in this final rule) proposed in the Pahranaagat National Wildlife Refuge (NWR) in the Pahranaagat Management Unit (76 FR 50542, August 15, 2011, p. 50570). Based on our reevaluation, we determined that the southern 13.7 km (8.5 mi) of this segment is not essential for flycatcher conservation. The habitat along this segment consists of open water, marsh, wet meadow, alkali flats, and upland salt desert shrub. The water along this segment is standing, is



ephemeral, or has been channelized in ditches. These areas do not currently consist of riparian tree and shrub species and are unlikely to develop the necessary vegetation for flycatcher habitat in the future. As a result, we determined that these locations were not essential for flycatcher conservation and do not include it in this final revised critical habitat designation.

(7) In Nevada, within the Pahrangat Management Unit, we inaccurately described the Key Pittman Wildlife Area as a 6.3-km (3.9-mi) single stream segment along the Pahrangat River (76 FR 50542, August 15, 2011, p. 50570) and also inaccurately described the area we were considering for exclusion, under section 4(b)(2) of the Act, as a single 4.0-km (2.5-mi) segment (76 FR 50542, p. 50583). The Key Pittman Wildlife Area is more accurately described as being comprised of two separate stream segments, one 2.5 km (1.6 mi) long and the other 1.4 km (0.9 mi) long. Between these two portions of the Key Pittman Wildlife Area is a 2.4-km (1.5-mi) segment of private land, which consists of agricultural fields, and limited water and riparian habitat. Therefore, because of the lack of both flycatcher habitat and likelihood of developing flycatcher habitat in the future, this area between the separate portions of the Key Pittman Wildlife Area should not have been identified as an essential area for flycatcher conservation, and we do not include it in our final critical habitat designation. We are excluding the two stream segments on Key Pittman Wildlife Area under section 4(b)(2) of the Act (see Exclusions section).

(8) In Colorado, we reevaluated information about the habitat on the Los Pinos River in the San Juan Management Unit (76 FR 50542, August 15, 2011, p. 50571) through maps, reports, and site visits (Ireland T. 2012, entire). We found that the northern 9.1-km (5.6-mi) portion of the Los Pinos River is at a high elevation, with a steep stream slope, and the vegetation composition is not consistent with flycatcher habitat. The plant species adjacent to this stream are mostly comprised of those not used by nesting flycatchers (such as alders and conifers). Therefore, this segment does not currently consist of the riparian tree and shrub species used by flycatchers, and it is unlikely to develop them in the future. As a result, we determined that this portion of the Los Pinos River was not essential for flycatcher conservation, and do not include it in this final revised critical habitat designation.

(9) In Colorado, there is a collection of checker-boarded parcels of private

land interspersed with Southern Ute tribal land along the Los Pinos River within the San Juan Management Unit that, upon further analysis, we do not consider critical habitat because they are not essential for flycatcher conservation. At the perimeter of Southern Ute tribal lands along the Los Pinos River, but outside of tribal jurisdiction, are collectively about 2.7 intermittent river km (1.7 mi) of private lands. Additionally, at the southern end of the Southern Ute Reservation, approximately 1.2 km (0.8 mi) or less of scattered private land parcels occur. Individually, these parcels are at the perimeter of the floodplain, are small in size, and are not contiguous. Collectively, they represent a small fraction of the area we considered for critical habitat along the Los Pinos River. As result of their small size and limited extent of habitat, we do not consider these segments essential to flycatcher conservation and do not include them in this final revised critical habitat designation.

(10) In Colorado, there are five small parcels of BLM land on the Rio Grande in the San Luis Valley Management Unit that were included in the proposed critical habitat. The farthest upstream section is west of Del Norte and is 300 m (980 feet) long. The other four parcels are south of Alamosa NWR near the Conejos and Costilla County border. The boundary of the first parcel does not intersect with the river but is within the lateral extent of proposed critical habitat and constitutes 3.73 ha (9.21 ac). The second parcel is 135 m (443 feet) long. The third parcel is 0.96 km (0.59 mi) long. The boundary of the fourth parcel also does not intersect the river but is within the lateral extent of proposed critical habitat and constitutes 2.77 ha (6.85 ac). Because these five small, scattered, and limited sections of habitat are not essential to flycatcher recovery, we do not include them in this final revised critical habitat designation.

(11) In New Mexico, in response to comments, we reevaluated information about the Elephant Butte Reservoir portion of the proposed 211.8-km-km (131.6-mi) Rio Grande segment in the Middle Rio Grande Management Unit (76 FR 50542, August 15, 2011). This evaluation resulted in our determination that the downstream 31.4 km (19.5 mi) of the proposed segment within the active conservation pool of Elephant Butte Reservoir is not critical habitat. The 31.4 km (19.5 mi) downstream portion of the proposed segment that is within the active storage pool of Elephant Butte Reservoir is not necessary for the conservation of flycatcher, as the Unit without this

portion meets the quantity of habitat and territories identified as essential for this Management Unit (refer to our *Criteria Used To Identify Critical Habitat* section). Therefore, we are not including this portion in the designation for this Management Unit.

More specifically, although the segment contains some elements of the physical or biological features of flycatcher habitat along the reservoir edge, the habitat features in the downstream portion are not essential to flycatcher conservation because the number of flycatcher territories and amount of habitat in the farther upstream portion of this segment have already far exceeded the recovery goals for this Management Unit. The recovery goals in this Management Unit are for 100 flycatcher territories, and the most recent survey data from 2012 found 327 territories in this management unit (USBR 2012, p. 1). Only 33 of these territories occurred in the downstream portion along Elephant Butte Reservoir. Therefore, the upstream portion of the proposed segment within Socorro County has about three times more flycatcher territories than the recovery goals for this management unit. As a result, the lower portion of this segment, where reservoir inundation is more likely, and flycatcher habitat may be less persistent over time, is not needed to reach recovery goals in this management unit. This is consistent with other areas (such as the Roosevelt Management Unit) where we used the numerical and habitat-related recovery goals from the Recovery Plan, along with the current and previous number of known flycatcher territories, to guide the endpoints of critical habitat segments along areas with large populations (see "Methodology Overview," "Areas with Large Populations"). As a result, we have determined this downstream 31.4 km (19.5 mi) portion of the Rio Grande in Elephant Butte Reservoir does not meet our criteria for, and, therefore, the definition of, critical habitat for the flycatcher, and we have removed it from our final critical habitat designation.

#### *Other Changes*

(12) In California, after further analysis of maps and using information received during comments, we have made three revisions to the approximate stream lengths along tribal lands within the San Diego Management Unit. These lands were subsequently excluded from our final designation under section 4(b)(2) of the Act (see Exclusions section).

We incorrectly described the length of the San Diego River occurring along the

Barona Group of Capitan Grande Band of Mission Indians of the Barona Reservation, California and the Viejas (Baron Long) Group of Capitan Grande Mission Indians of the Viejas Reservation, California, as 4.7 km (2.9 mi) (76 FR 50542, August 15, 2011, p. 55082). We have corrected the distance to 0.9 km (0.6 mi) along the San Diego River, consisting of approximately 9.0 ha (22 ac) to accurately reflect tribal ownership of these lands being excluded under section 4(b)(2) of the Act (see Exclusions section).

We incorrectly described the length of the San Luis Rey River occurring along the tribal lands of the Pala Band of Luiseño Mission Indians, California, as 3.7 km (2.3 mi) (76 FR 50542, August 15, 2011, p. 55082). We have corrected the distance to 8.3 km (5.2 mi) along the San Luis Rey River, to accurately reflect tribal ownership of these lands being excluded under section 4(b)(2) of the Act (see Exclusions section).

We incorrectly described the length of the San Luis Rey River occurring along the tribal lands of the Rincon Band of Luiseño Mission Indians, California, as 2.4 km (1.5 mi) (76 FR 50542, August 15, 2011, p. 55082). We have corrected the distance to 4.3 km (2.7 mi) along the San Luis Rey River, to accurately reflect tribal ownership of these lands being excluded under section 4(b)(2) of the Act (see Exclusions section).

(13) In California, we inadvertently did not include the Pala Band of Luiseño Mission Indians' tribal fee lands, currently being brought into trust, for exclusion from the revised critical habitat designation under section 4(b)(2) of the Act. Subsequently, we received information from them explaining where these fee lands are located, have included them in our exclusion analysis, and are excluding them under section 4(b)(2) of the Act (see Exclusions section).

(14) In California, we inaccurately described the length of a proposed segment of the Santa Ynez River within the Santa Ynez Management Unit within the unit description portion of our proposed rule (76 FR 50542, August 15, 2011, p. 50563). However, we correctly described the end points on the maps within the **Federal Register** notice and maps and electronic maps provided on the Internet and at <http://www.regulations.gov>. The lower Santa Ynez River segment above Vandenberg Air Force Base should more accurately be described as 42.3-km (26.3-mi) segment, not the 27.6-km (17.2-mi) segment described in our proposal.

(15) In California, we inaccurately described the length of a proposed segment of the Santa Ysabel River

within the San Diego Management Unit (76 FR 50542, August 15, 2011, p. 50565). The upper San Ysabel River segment that is contiguous with Temescal Creek should more accurately be described as 8.7-km (5.4-mi) segment, not the 9.8-km (6.1-mi) segment described in our proposal.

(16) In California, we inaccurately described the length of a proposed segment of the Cañada Gobernadora Creek within the San Diego Management Unit (76 FR 50542, August 15, 2011, p. 50565). The mapped Cañada Gobernadora Creek segment inadvertently included a portion of San Juan Creek. As a result, the portion of San Juan Creek is not included in this designation, and our Cañada Gobernadora Creek segment is now more accurately a 4.7-km (2.9-mi) segment, not the 5.9-km (3.7-mi) segment described in our proposal.

(17) In Arizona, while we identified San Carlos Apache tribal lands as areas we were considering for exclusion under section 4(b)(2) of the Act, we received new information about parcels of San Carlos Apache tribal lands along the lower San Pedro River between the Aravaipa Creek and Gila River confluence, totaling about 1.0 km (0.6 mi) and 75 ha (185 ha). Subsequently, we have included these separate parcels in our exclusion analysis, and are excluding them under section 4(b)(2) of the Act (see Exclusions section).

(18) In New Mexico, we inaccurately identified and mapped the location of Navajo Nation (Ramah Navajo) as just south of Zuni Pueblo. The most downstream portion of the Zuni River is not on Navajo Nation (Ramah Navajo) lands, but more accurately part of Zuni Pueblo. This portion of the Zuni River on Zuni Pueblo is excluded from this final revised designation of critical habitat under section 4(b)(2) of the Act (see Exclusions section).

(19) In New Mexico, we inaccurately described the length of a proposed segment of the Gila River within the Upper Gila Management Unit (76 FR 50542, August 15, 2011, p. 50574). The Gila River segment from the downstream end of the Middle Gila Box Canyon near the Town of Red Rock downstream across the Arizona State line through the Town of Duncan, Arizona, should more accurately be described as 65.3-km (40.6-mi) segment, not the 62.2-km (38.7-mi) segment described in our proposal.

(20) In Colorado, we included an area within our electronic map of the proposed rule along the Conejos River that was an error. As a result of correcting that error, we are not including an area about 1.6 km (1 mi)

in length that was represented as a lateral extent of the Conejos River in this final critical habitat designation. This area included a portion of the Rio Grande National Forest in addition to private land.

(21) While mapping the lateral extent of critical habitat, some side drainages, tributaries, or washes were included within our electronic maps that extend beyond the confluence of the streams we described in the proposal. These areas sometimes extended well beyond the reasonable confluence area, sometimes about 3 km (1.9 mi) up a tributary. For example, portions of San Juan or San Francisquito Creeks in California, or West Clear Creek and Beaver Creek in Arizona, occurred on our electronic maps. We did not describe these segments in the text of the proposed rule, because they were not intended to be part of our proposal. We have truncated these segments to the best of our ability in the final critical habitat maps, so only those habitats on the rivers described are included in the final designation. The removal of these segments resulted in an overall minor reduction in the amount of critical habitat.

(22) While mapping the lengths of stream segments electronically, the results can vary as GIS programs attempt to account for the bends and turns along a stream. Additionally, the irregular shape of properties and the exclusion or revision of segments caused challenges in trying to accurately describe a length of a stream segment. Even when the end points of a segment did not change, as we continued to reassess and recalculate stream lengths and round to the nearest tenth, a change in a few tenths of a kilometer or mile sometimes occurred. Therefore, there is expected to be some minor change in stream lengths between our proposal and this final rule.

(23) Although we attempted to remove as many developed areas as possible (areas that have no conservation value as flycatcher habitat) before publishing the proposed rule, we were not able to eliminate all developed areas. Since publication of the proposed rule and the receipt of more accurate mapping data and information, we were able to further refine the designation, which has resulted in a more precise delineation of habitat containing the physical or biological features necessary to support flycatcher life-history requirements. This resulted in a minor reduction for some segments from the amounts of critical habitat published in the proposed rule. However, it is not possible to remove each and every one of these developed areas even at the

refined mapping scale used; therefore, the maps of the designation may contain areas that do not contain the physical or biological features necessary for the flycatcher. These areas, which include locations such as roads, cement pads, utility substations, agricultural fields, housing, etc., are not critical habitat and are therefore excluded by text in this final rule.

## Critical Habitat

### Background

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features:

(a) Essential to the conservation of the species, and

(b) Which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-

Federal landowners. Where a landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) of the Act would apply, but even in the event of a destruction or adverse modification finding, the obligation of the Federal action agency and the landowner is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act's definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat). In identifying those physical and biological features within an area, we focus on the principal biological or physical constituent elements (primary constituent elements such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type) that are essential to the conservation of the species. Primary constituent elements are those specific elements of the physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

Under the second prong of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. For example, an area currently occupied by the species but that was not occupied at the time of listing may be essential to the conservation of the species and may be included in the critical habitat designation. We designate critical habitat in areas outside the geographical area occupied by a species only when a designation limited to its range would be inadequate to ensure the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific and commercial data available. Further, our Policy on Information Standards Under the Act

(published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106-554; H.R. 5658)), and our associated Information Quality Guidelines, provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information developed during the listing process for the species. Additional information sources may include the recovery plan for the species, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, other unpublished materials, or experts' opinions or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. This is particularly true for the flycatcher because its riparian vegetation it uses is prone to alteration and regrowth from periodic disturbance, such as flooding. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act; (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to insure their actions are not likely to jeopardize the continued existence of any endangered or threatened species; and (3) section 9 of the Act's prohibitions on taking any individual of the species, including taking caused by actions that affect habitat. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will

continue to contribute to recovery of this species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, HCPs, or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

#### *Physical or Biological Features*

In accordance with section 3(5)(A)(i) and 4(b)(1)(A) of the Act and regulations at 50 CFR 424.12, in determining which areas within the geographical area occupied by the species at the time of listing to designate as critical habitat, we consider the physical or biological features essential to the conservation of the species and which may require special management considerations or protection. These include, but are not limited to:

- (1) Space for individual and population growth and for normal behavior;
- (2) Food, water, air, light, minerals, or other nutritional or physiological requirements;
- (3) Cover or shelter;
- (4) Sites for breeding, reproduction, or rearing (or development) of offspring; and
- (5) Habitats that are protected from disturbance or are representative of the historical, geographical, and ecological distributions of a species.

We derive the specific physical or biological features essential for the flycatcher from studies of this species' habitat, ecology, and life history as described below. Additional information can be found in the final listing rule published in the **Federal Register** on February 27, 1995 (60 FR 10694), and the Flycatcher Recovery Plan (Service 2002, entire), Survey Protocol and Natural History Summary (Sogge *et al.* 2010, entire), and the 10-year central Arizona ecology study (Paxton *et al.* 2007, entire).

In general, the areas designated as critical habitat are designed to provide sufficient riparian habitat for breeding, non-breeding, territorial, dispersing, and migrating flycatchers in order to reach the geographic distribution, abundance, and habitat-related recovery goals described in the Recovery Plan (Service 2002, pp. 77–85). We are not designating any areas as critical habitat solely because they serve as a migration habitat. Instead, the areas we are designating serve a variety of functions, including habitat to be used by migrating flycatchers. The habitat components important for conservation

of this subspecies were determined from studies of flycatcher behavior and habitat use throughout the bird's range (see Background section).

In general, the physical or biological features of critical habitat for nesting flycatchers are found in the riparian areas within the 100-year floodplain or flood-prone area. Flycatchers use riparian habitat for feeding, sheltering, and cover while breeding, migrating, and dispersing. It is important to recognize that flycatcher habitat is ephemeral in its presence, and its distribution is dynamic in nature because riparian vegetation is prone to periodic disturbance (such as flooding) (Service 2002, p. 17). Even with the dynamic shifts in habitat conditions, one or more of the primary constituent elements described below are found throughout each of the units that we are designating as critical habitat.

Flycatcher habitat may become unsuitable for breeding through maturation or disturbance of the riparian vegetation, but it may remain suitable for use during migration or for foraging. This situation may be only temporary, and vegetation may cycle back into suitability as breeding habitat (Service 2002, p. 17). Therefore, it is not practical to assume that any given breeding habitat area will remain suitable over the long term or persist in the same location (Service 2002, p. 17). Over a 5-year period, flycatcher habitat can, in optimum conditions, germinate, be used for migration or foraging, continue to grow, and eventually be used for nesting. Thus, flycatcher habitat that is not currently suitable for nesting at a specific time, but is useful for foraging and migration, can still be important for flycatcher conservation. Feeding sites and migration stopover areas are important components for the flycatcher's survival, productivity, and health, and they can also be areas where new breeding habitat develops as nesting sites are lost or degraded (Service 2002, p. 42). These successional cycles of habitat change are important for long-term persistence of flycatcher habitat.

Based on our current knowledge of the life history and ecology of the flycatcher and the relationship of its life-history functions to its habitat, as summarized in the Background section above and in more detail in the Recovery Plan (Service 2002, Chapter II), it is important to recognize the interconnected nature of the physical or biological features that provide the primary constituent elements of critical habitat. Specifically, we consider the relationships between river function, hydrology, floodplains, aquifers, and

plant growth, which form the environment essential to flycatcher conservation.

The hydrologic regime (stream flow pattern) and supply of (and interaction between) surface and subsurface water is a driving factor in the long-term maintenance, growth, recycling, and regeneration of flycatcher habitat (Service 2002, p. 16). As streams reach the lowlands, their gradients typically flatten and surrounding terrain opens into broader floodplains (Service 2002, p. 32). In these geographic settings, the stream-flow patterns (frequency, magnitude, duration, and timing) will provide the necessary stream-channel conditions (wide configuration, high sediment deposition, periodic inundation, recharged aquifers, lateral channel movement, and elevated groundwater tables throughout the floodplain) that result in the development of flycatcher habitat (Poff *et al.* 1997, pp. 770–772; Service 2002, p. 16). Allowing the river to flow over the width of the floodplain, when overbank flooding occurs, is integral to allow deposition of fine moist soils, water, nutrients, and seeds that provide the essential material for plant germination and growth. An abundance and distribution of fine sediments extending farther laterally across the floodplain and deeper underneath the surface retains much more subsurface water, which in turn supplies water for the development of the vegetation that provides flycatcher habitat and micro-habitat conditions (Service 2002, p. 16). The interconnected interaction between groundwater and surface water contributes to the quality of riparian vegetation community (structure and plant species) and will influence the germination, density, vigor, composition, and the ability of vegetation to regenerate and maintain itself (Arizona Department of Water Resources 1994, pp. 31–32).

In many instances, flycatcher breeding sites occur along streams where human impacts are minimized enough to allow more natural processes to create, recycle, and maintain flycatcher habitat. However, there are also breeding sites that are supported by various types of supplemental water including agricultural and urban runoff, treated water outflow, irrigation or diversion ditches, reservoirs, and dam outflows (Service 2002, p. D–15). Although the waters provided to these habitats might be considered “artificial,” they are often important for maintaining the habitat in appropriate condition for breeding flycatchers within the existing environment.

In considering the specific physical or biological features essential for flycatcher conservation, it is also important to consider longer-term processes that may influence habitat changes over time, such as climate change. Climate change is a long-term shift in the statistics of the weather (including its averages). In its *Fourth Assessment Report*, the Intergovernmental Panel on Climate Change (IPCC) defines climate change as, “a change in the state of the climate that can be identified by changes in the mean and/or variability of its properties and that persists for an extended period, typically decades or longer” (Solomon *et al.* 2007, p. 943). Changes in climate already are occurring. Examples of observed changes in the physical environment include an increase in global average sea level and declines in mountain glaciers and average snow cover in both the northern and southern hemispheres (IPCC 2007a, p. 30). At continental, regional, and ocean basin scales, observed changes in long-term trends of other aspects of climate include: a substantial increase in precipitation in eastern parts of North America and South America, northern Europe, and northern and central Asia; declines in precipitation in the Mediterranean, southern Africa, and parts of southern Asia; and an increase in intense tropical cyclone activity in the North Atlantic since about 1970 (IPCC 2007a, p. 30).

Projections of climate change globally and for broad regions through the 21st century are based on the results of modeling efforts using state-of-the-art Atmosphere-Ocean General Circulation Models and various greenhouse gas emissions scenarios (Meehl *et al.* 2007, p. 753; Randall *et al.* 2007, pp. 596–599). As is the case with all models, there is uncertainty associated with projections due to assumptions used and other features of the models. However, despite differences in assumptions and other parameters used in climate change models, the overall surface air temperature trajectory is one of increased warming in comparison to current conditions (Meehl *et al.* 2007, p. 762; Prinn *et al.* 2011, p. 527). Among the IPCC’s projections for the 21st century are the following: (1) It is virtually certain there will be warmer and more frequent hot days and nights over most of the earth’s land areas; (2) it is very likely there will be increased frequency of warm spells and heat waves over most land areas, and the frequency of heavy precipitation events will increase over most areas; and (3) it is likely that increases will occur in the

incidence of extreme high sea level (excludes tsunamis), intense tropical cyclone activity, and the area affected by droughts in various regions of the world (IPCC 2007b, p. 8).

Changes in climate can have a variety of direct and indirect ecological impacts on species, and can exacerbate the effects of other threats. Climate-associated environmental changes to the landscape, such as decreased stream flows, increased water temperatures, reduced snowpack, and increased fire frequency, affect species and their habitats. The vulnerability of a species to climate change impacts is a function of the species’ sensitivity to those changes, its exposure to those changes, and its capacity to adapt to those changes. The best available science is used to evaluate the species’ response to these stressors. We recognize that future climate change may present a particular challenge evaluating habitat conditions for species like the flycatcher because the additional stressors may push species beyond their ability to survive in their present location.

Exactly how climate change will affect precipitation in the specific areas with flycatcher habitat is uncertain. However, consistent with recent observations of regional effects of climate change, the projections presented for the Southwest predict warmer, drier, and more drought-like conditions (Hoerling and Eischeid 2007, p. 19; Seager *et al.* 2007, p. 1181). For example, climate simulations of the Palmer Drought Severity Index (a calculation of the cumulative effects of precipitation and temperature on surface moisture balance) for the Southwest for the periods of 2006 to 2030 and 2035 to 2060 show an increase in drought severity with surface warming. Additionally, drought still increases even during wetter simulations because of the effect of heat-related moisture loss through evaporation and evapotranspiration (Hoerling and Eischeid 2007, p. 19). Annual mean precipitation is likely to decrease in the Southwest, as is the length of snow season and snow depth (IPCC 2007b, p. 887). Most models project a widespread decrease in snow depth in the Rocky Mountains and earlier snowmelt (IPCC 2007b, p. 891). In summary, we expect that climate change will result in a warmer, drier climate, and reduced surface water across the flycatcher’s range.

In the recent past, drought has had both negative and positive effects on breeding flycatchers and their habitat, which can provide insight into how climate change may affect flycatchers and flycatcher habitat. For example, the

extreme drought of 2002 caused near complete reproductive failure of the 146 flycatcher territories at Roosevelt Lake in central Arizona (Smith *et al.* 2003, pp. 8, 10), and caused a dramatic rise in the prevalence of non-breeding and unpaired flycatchers (Paxton *et al.* 2007, p. 4). While extreme drought during a single year can generate impacts to breeding success, drought can also have localized short-term benefits in some regulated environments. For instance, at some reservoirs (such as Roosevelt Lake, Arizona, and Lake Isabella, California), drought led to reduced water storage, which increased the exposure of wet soils at the lake’s perimeter. Continued drought in those areas allowed the exposed areas to grow vegetation and become new flycatcher nesting habitat (Ellis *et al.* 2008, p. 44). These short-term and localized habitat increases are not likely sustainable with persistent drought or long-term predictions of a drier environment, because of the overall importance of the presence of surface water and elevated groundwater needed to grow dense riparian forests for flycatcher habitat. As a result, we expect long-term climate trends associated with a drier climate to have an overall negative effect on the available rangewide habitat for flycatchers.

Considering these issues and other information regarding the biology and ecology of the species, we have determined that the flycatcher requires the essential physical or biological features described below.

#### Space for Individual and Population Growth and for Normal Behavior

Streams of lower gradient and more open valleys with a wide and broad floodplain are the geological settings that are known to support flycatcher breeding habitat from near sea level to about 2,600 m (8,500 ft) in elevation in southern California, southern Nevada, southern Utah, southern Colorado, Arizona, and New Mexico (Service 2002, p. 7). Lands with moist conditions that support riparian plant communities are areas that provide flycatcher habitat. Conditions like these typically develop in lower elevation floodplains as well as where streams enter impoundments, either natural (such as beaver ponds) or human-made (reservoirs). Low-gradient stream conditions may also occur at high elevations, as in the marshy mountain meadows supporting flycatchers in the headwaters of the Little Colorado River near Greer, Arizona, or the flat-gradient portions of the upper Rio Grande in south-central Colorado and northern New Mexico (Service 2002, p. 32). Sometimes, the

low-gradient wider floodplain exists only at the habitat patch itself within a stream that is otherwise steeper in gradient (Service 2002, p. D-12).

Relatively steep, confined streams can also support flycatcher breeding habitat (Service 2002, p. D-13). For instance, a portion of the San Luis Rey River in California supports a substantial flycatcher population and stands out among flycatcher habitats as having a relatively high gradient and being confined in a fairly narrow, steep-sided valley (Service 2002, p. D-13). Even a steep, confined canyon or mountain stream may present local conditions where just a small area less than a hectare (acre) in size of flycatcher breeding habitat may develop (Service 2002, p. D-13). Such sites are important individually and in aggregate to contribute to metapopulation stability, site connectivity, and gene flow (Service 2002, p. D-13). Flycatchers can occupy very small, isolated habitat patches and may occur in fairly high densities within those small patches.

Many willow flycatchers are found along streams using riparian habitat during migration (Yong and Finch 1997, p. 253; Service 2002, p. E-3). Migration stopover areas can be similar to breeding habitat or riparian habitats with less vegetation density and abundance compared to areas for nest placement (the vegetation structure is too short or sparse or the patch is too small) (Service 2002, p. E-3). For example, many locations where migrant flycatchers were detected on the lower Colorado River (LCR) (Koronkiewicz *et al.* 2004, pp. 9-11) and throughout Arizona in 2004 (Munzer *et al.* 2005, Appendix C) were areas surveyed for territories, but none were detected. Such migration stopover areas, even though not used for breeding, are critically important resources affecting productivity and survival (Service 2002, p. E-3). The variety of riparian habitat occupied by migrant flycatchers ranges from small patches with shorter and sparser vegetation to larger more complex breeding habitats.

Therefore, based on the information above, we identify streams of lower gradient and more open valleys with a wide or broad floodplain an essential physical or biological feature of flycatcher habitat. In some instances, streams in relatively steep, confined areas can also support flycatcher breeding habitat (Service 2002, p. D-13). These areas support the abundance of riparian vegetation used for flycatcher nesting, foraging, dispersal, and migration.

#### Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

##### Food

The flycatcher is somewhat of an insect generalist (Service 2002, p. 26), taking a wide range of invertebrate prey including flying, and ground- and vegetation-dwelling species of terrestrial and aquatic origins (Drost *et al.* 2003, pp. 96-102). Wasps and bees (Hymenoptera) are common food items, as are flies (Diptera), beetles (Coleoptera), butterflies, moths and caterpillars (Lepidoptera), and spittlebugs (Homoptera) (Beal 1912, pp. 60-63; McCabe 1991, pp. 119-120). Plant foods such as small fruits have also been reported (Beal 1912, pp. 60-63; Roberts 1932, p. 20; Imhof 1962, p. 268), but are not a significant food during the breeding season (McCabe 1991, pp. 119-120). Diet studies of adult flycatchers (Drost *et al.* 1998, p. 1; DeLay *et al.* 1999, p. 216) found a wide range of prey taken. Major prey items were small (flying ants) (Hymenoptera) to large (dragonflies) (Odonata) flying insects, with Diptera and Hemiptera (true bugs) comprising half of the prey items. Willow flycatchers also took non-flying species, particularly Lepidoptera larvae. From an analysis of the flycatcher diet along the South Fork of the Kern River, California (Drost *et al.* 2003, p. 98), flycatchers consumed a variety of prey from 12 different insect groups. Flycatchers have been identified targeting seasonal hatchlings of aquatic insects along the Salt River arm of Roosevelt Lake, Arizona (Paxton *et al.* 2007, p. 75).

Flycatcher food availability may be largely influenced by the density and species of vegetation, proximity to and presence of water, saturated soil levels, and microclimate features such as temperature and humidity (Service 2002, pp. 18, D-12). Flycatchers forage within and above the tree canopy, along the patch edge, in openings within the territory, over water, and from tall trees as well as herbaceous ground cover (Bent 1960, pp. 209-210; McCabe 1991, p. 124). Flycatchers employ a "sit and wait" foraging tactic, with foraging bouts interspersed with longer periods of perching (Prescott and Middleton 1988, p. 25).

Therefore, based on the information above, we identify the presence of a wide range of invertebrate prey, including flying and ground- and vegetation-dwelling species of terrestrial and aquatic origins to be an essential physical or biological feature of flycatcher habitat.

##### Water

Flycatcher nesting habitat is largely associated with perennial (persistent) stream flow that can support the expanse of vegetation characteristics needed by breeding flycatchers, but there are exceptions. Flycatcher nesting habitat can persist on intermittent (ephemeral) streams that retain local conditions favorable to riparian vegetation (Service 2002, p. D-12). The range and variety of stream flow conditions (frequency, magnitude, duration, and timing) (Poff *et al.* 1997, pp. 770-772) that will establish and maintain flycatcher habitat can arise in different types of both regulated and unregulated flow regimes throughout its range (Service 2002, p. D-12). Also, flow conditions that will establish and maintain flycatcher habitat can be achieved in regulated streams, depending on scale of operation and the interaction of the primary physical characteristics of the landscape (Service 2002, p. D-12).

In the Southwest, hydrological conditions at a flycatcher breeding site can vary remarkably within a season and between years (Service 2002, p. D-12). At some locations, particularly during drier years, water or saturated soil is only present early in the breeding season (May and part of June) (Service 2002, p. D-12). At other sites, vegetation may be immersed in standing water during a wet year but be hundreds of meters from surface water in dry years (Service 2002, p. D-12). This is particularly true of reservoir sites such as the Kern River at Lake Isabella, California; Roosevelt Lake, Arizona; and Elephant Butte Reservoir, New Mexico (Service 2002, p. D-12). Similarly, where a river channel has changed naturally, there may be a total absence of water or visibly saturated soil for several years. In such cases, the riparian vegetation and any flycatchers breeding within it may persist for several years (Service 2002, p. D-12).

In some areas, natural or managed hydrologic cycles can create temporary flycatcher habitat, but may not be able to support it for an extended amount of time, or may support varying amounts of habitat at different points in the cycle. Some dam operations create varied situations that allow different plant species to thrive when water is released below a dam, held in a lake, or removed from a lakebed, and consequently, varying degrees of flycatcher habitat are available as a result of dam operations (Service 2002, p. 33). The riparian vegetation that constitutes flycatcher breeding habitat requires substantial water (Service 2002,

p. D-12). Because flycatcher breeding habitat is often where there is slow-moving or still water, these slow and still water conditions may also be important in influencing the production of insect prey base for flycatcher food (Service 2002, p. D-12). These slow-moving water situations can also be managed or mimicked through manipulated supplemental water originating from sources such as agricultural return flows or irrigation canals (Service 2002, p. D-15).

Therefore, based on the information above, we identify flowing streams with a wide range of stream flow conditions that support expansive riparian vegetation as an essential physical feature of flycatcher habitat. The most common stream flow conditions are largely perennial (persistent) stream flow with a natural hydrologic regime (frequency, magnitude, duration, and timing). However, in the Southwest, hydrological conditions can vary, causing some flows to be intermittent, but the floodplain can retain surface moisture conditions favorable to expansive and flourishing riparian vegetation. These appropriate conditions can be supported by managed water sources and hydrological cycles that mimic key components of the natural hydrologic cycle.

#### Sites for Germination or Seed Dispersal

Subsurface hydrologic conditions may in some places (particularly at the more arid locations of the Southwest) be equally important to surface water conditions in determining riparian vegetation patterns (Lichivar and Wakely 2004, p. 92). Where groundwater levels are elevated to the point that riparian forest plants can directly access those waters, it can be an area for breeding, non-breeding, territorial, dispersing, foraging, and migrating flycatchers. Elevated groundwater helps create moist soil conditions believed to be important for nesting conditions and prey populations (Service 2002, pp. 11, 18), as further discussed below.

Depth to groundwater plays an important part in the distribution of riparian vegetation (Arizona Department of Water Resources 1994, p. 31) and, consequently, flycatcher habitat. The greater the depth to groundwater below the land surface, the less abundant the riparian vegetation (Arizona Department of Water Resources 1994, p. 31). Localized, perched aquifers (a saturated area that sits above the main water table) can and do support some riparian habitat, but these systems are not

extensive (Arizona Department of Water Resources 1994, p. 31).

The abundance and distribution of fine sediment deposited on floodplains is critical for the development, abundance, distribution, maintenance, and germination of the plants that grow into flycatcher habitat (Service 2002, p. 16). Fine sediments provide seed beds to facilitate the growth of riparian vegetation for flycatcher habitat. In almost all cases, moist or saturated soil is present at or near breeding sites during wet and non-drought years (Service 2002, p. 11). The saturated soil and adjacent surface water may be present early in the breeding season, but only damp soil is present by late June or early July (Service 2002, p. D-3). Microclimate features (temperature and humidity) facilitated by moist or saturated soil, are believed to play an important role where flycatchers are detected and nest, their breeding success, and availability and abundance of food resources (Service 2002, pp. 18, D-12).

Therefore, based on the information above, we identify elevated subsurface groundwater tables and appropriate floodplain fine sediments as essential physical or biological features of flycatcher habitat. These features provide water and seedbeds for the germination, growth, and maintenance of expansive growth of riparian vegetation needed by the flycatcher.

#### Cover or Shelter

Riparian vegetation (described more in detail within the "Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring" section) also provides the flycatcher cover and shelter while migrating and nesting. Placing nests in dense vegetation provides cover and shelter from predators or nest parasites that would seek out flycatcher adults, nestlings, or eggs. Similarly, using riparian vegetation for cover and shelter during migration provides food-rich stopover areas, a place to rest, and shelter or cover along migratory flights (Service 2002, pp. D-14, F-16). Riparian vegetation used by migrating flycatchers can sometimes be less dense and abundant than areas used for nesting (Service 2002, p. D-19). However, migration stopover areas, even though not used for breeding, may be critically important resources affecting local and regional flycatcher productivity and survival (Service 2002, p. D-19).

Therefore, based on the information above, we identify riparian tree and shrub species (described in more detail below) that provide cover and shelter for nesting, breeding, foraging,

dispersing, and migrating flycatchers as essential physical or biological features of flycatcher habitat.

#### Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring Reproduction and Rearing of Offspring

Riparian habitat characteristics such as dominant plant species, size and shape of habitat patches, tree canopy structure, vegetation height, and vegetation density are important parameters of flycatcher breeding habitat, although they may vary widely at different sites (Service 2002, p. D-1). The accumulating knowledge of flycatcher breeding sites reveals important areas of similarity, which constitute the basic concept of what is suitable breeding habitat (Service 2002, p. D-2). These habitat features are generally discussed below.

Flycatchers nest in thickets of trees and shrubs ranging in height from 2 m to 30 m (6 to 98 ft) (Service 2002, p. D-3). Lower-stature thickets (2-4 m or 6-13 ft tall) tend to be found at higher elevation sites, with tall-stature habitats at middle- and lower-elevation riparian forests (Service 2002, p. D-2). Nest sites typically have dense foliage at least from the ground level up to approximately 4 m (13 ft) above ground, although dense foliage may exist only at the shrub level, or as a low, dense tree canopy (Service 2002, p. D-3).

Regardless of the plant species' composition or height, breeding sites usually consist of dense vegetation in the patch interior, or an aggregate of dense patches interspersed with openings creating a mosaic that is not uniformly dense (Service 2002, p. 11). Common tree and shrub species currently known to comprise nesting habitat include Gooddings willow, coyote willow, Geyer's willow, arroyo willow, red willow, yewleaf willow, pacific willow (*Salix lasiandra*), boxelder, tamarisk, and Russian olive (Service 2002, pp. D-2, D-11). Other plant species used for nesting have been buttonbush (*Cephalanthus occidentalis*), cottonwood, 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 (*Platanus wrightii*), giant reed (*Arundo donax*), false indigo (*Amorpha californica*), Pacific poison ivy (*Toxicodendron diversilobum*), grape



(*Vitis arizonica*), Virginia creeper (*Parthenocissus quinquefolia*), Siberian elm (*Ulmus pumila*), and walnut (*Juglans hindsii*) (Service 2002, pp. D-3, D-5, D-9). Other species used by nesting flycatchers may become known over time as more studies and surveys occur.

Canopy density (the amount of cover provided by tree and shrub branches measured from the ground) at various nest sites ranged from 50 to 100 percent (Service 2002, p. D-3). Flycatcher breeding habitat can be generally organized into three broad habitat types—those dominated by native vegetation (typically willow), by exotic (nonnative) vegetation (typically salt cedar), and those with mixed native and those dominated by exotic plants (typically salt cedar and willow).

These broad habitat descriptors reflect the fact that flycatchers inhabit riparian habitats dominated by both native and nonnative plant species. Salt cedar and Russian olive are two exotic plant species used by flycatchers for nest placement and also foraging and shelter (Service 2002, p. D-4). The riparian patches used by breeding flycatchers vary in size and shape (Service 2002, p. D-2). They may be relatively dense, linear, contiguous stands or irregularly-shaped mosaics of dense vegetation with open areas (Service 2002, pp. D-2–D-11).

Flycatchers use tamarisk (or salt cedar) and Russian olive for nest placement, foraging, roosting, cover, migration, and dispersal. Fewer than half (44 percent) of the known flycatcher territories occur in habitat patches that are greater than 90 percent native vegetation in composition (Durst *et al.* 2008, p.15). About 50 percent of all known flycatcher territories are located at breeding sites that include mixtures of native and exotic plant species (mostly tamarisk) (Durst *et al.* 2008, p.15). In many of these areas, exotic plant species are significant contributors to the habitat structure by providing the dense lower strata vegetation that flycatchers prefer (Durst *et al.* 2008, p.15). A USGS comparative study (Sogge *et al.* 2005, p. 1) found no difference in flycatcher physiology, immunology, site fidelity, productivity, or survivorship between flycatchers nesting in tamarisk-dominated habitat versus native-dominated habitats. Tamarisk habitats vary with respect to suitability for breeding flycatchers across their range, just as do native habitats (Sogge *et al.* 2005, p.1). While the literature refutes or questions the negative environmental impacts of tamarisk (Glenn and Nagler 2005, pp. 1–2; USGS 2010, pp. vi–xviii), many

riparian vegetation improvement projects focus on the eradication or control of tamarisk. The implementation of these projects requires careful evaluation (see Special Management Considerations or Protections below) and success can rely on the improvement of the physical or biological features included in this determination associated with river flow and groundwater (Service 2002, Appendices H and K).

Flycatchers have been recorded nesting in patches as small as 0.1 ha (0.25 ac) along the Rio Grande, and as large as 70 ha (175 ac) in the upper Gila River, New Mexico (Service 2002, p. 17). The mean reported size of flycatcher breeding patches was 8.6 ha (21.2 ac), with the majority of sites toward the smaller end, as evidenced by a median patch size of 1.8 ha (4.4 ac) (Service 2002, p. 17). Mean patch size of breeding sites supporting 10 or more flycatcher territories was 24.9 ha (62.2 ac). Aggregations of occupied breeding patches within a breeding site may create a riparian mosaic as large as 200 ha (494 ac), such as areas like the Kern River (Whitfield 2002, p. 2), Alamo Lake, Roosevelt Lake (Paradzick *et al.* 1999, pp. 6–7), and Lake Mead (McKernan 1997, p. 13).

Flycatchers can cluster their territories into small portions of riparian sites (Whitfield and Enos 1996, p. 2; Sogge *et al.* 1997, p. 24), and major portions of the site may only be used briefly or not at all in any given year. Habitat modeling based on remote sensing and electronic Geographic Information System (GIS) data has found that breeding site occupancy at reservoir sites in Arizona is influenced by vegetation characteristics of habitat adjacent to the actual nesting areas (Hatten and Paradzick 2003, pp. 774, 782); therefore, areas adjacent to nest sites can be an important component of a breeding site. How size and shape of riparian patches relate to factors such as flycatcher nest-site selection and fidelity, reproductive success, predation, and brood parasitism is unknown (Service 2002, p. D-11).

With only some exceptions, flycatchers are generally not found nesting in confined floodplains (typically those bound within a narrow canyon) (Hatten and Paradzick 2003, p. 780) or where only a single narrow strip of riparian vegetation less than approximately 10 m (33 ft) wide develops (Service 2002, p. D-11). While riparian vegetation too mature, too immature, or of lesser quality in abundance and breadth may not be used for nesting, it can be used by breeding flycatchers for foraging (especially if it

extends out from larger patches) or during migration for foraging, cover, and shelter (Sogge and Tibbitts 1994, p. 16; Sogge and Marshall 2000, p. 53).

Therefore, based on the information above, we identify a variety of riparian tree and shrub species as essential physical or biological features of flycatcher habitat. Typically, dense expansive riparian forests provide habitat to place nests. Riparian vegetation of broader quality, with a mosaic of open spaces, typically surround locations to place nests or along river segments and provide vegetation for foraging, perching, dispersal, and migration, and habitat that can develop into nesting areas through time.

#### *Primary Constituent Elements for Flycatcher*

Under the Act and its implementing regulations, we are required to identify the physical or biological features essential to flycatcher conservation in areas occupied at the time of listing, focusing on the features' primary constituent elements. Primary constituent elements are those specific elements of the physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the species' life-history processes, we determine that the primary constituent elements specific to the flycatcher are:

(1) Primary Constituent Element 1—*Riparian vegetation*. Riparian habitat along a dynamic river or lakeside, in a natural or manmade successional environment (for nesting, foraging, migration, dispersal, and shelter) that is comprised of trees and shrubs (that can include Gooddings willow, coyote willow, Geyer's willow, arroyo willow, red willow, yewleaf willow, pacific willow, boxelder, tamarisk, Russian olive, buttonbush, cottonwood, stinging nettle, alder, velvet ash, poison hemlock, blackberry, seep willow, oak, rose, sycamore, false indigo, Pacific poison ivy, grape, Virginia creeper, Siberian elm, and walnut) and some combination of:

(a) Dense riparian vegetation with thickets of trees and shrubs that can range in height from about 2 to 30 m (about 6 to 98 ft). Lower-stature thickets (2 to 4 m or 6 to 13 ft tall) are found at higher elevation riparian forests and tall-stature thickets are found at middle- and lower-elevation riparian forests;

(b) Areas of dense riparian foliage at least from the ground level up to

approximately 4 m (13 ft) above ground or dense foliage only at the shrub or tree level as a low, dense canopy;

(c) Sites for nesting that contain a dense (about 50 percent to 100 percent) tree or shrub (or both) canopy (the amount of cover provided by tree and shrub branches measured from the ground);

(d) Dense patches of riparian forests that are interspersed with small openings of open water or marsh or areas with shorter and sparser vegetation that creates a variety of habitat that is not uniformly dense. Patch size may be as small as 0.1 ha (0.25 ac) or as large as 70 ha (175 ac).

(2) Primary Constituent Element 2—*Insect prey populations*. A variety of insect prey populations found within or adjacent to riparian floodplains or moist environments, which can include: flying ants, wasps, and bees (Hymenoptera); dragonflies (Odonata); flies (Diptera); true bugs (Hemiptera); beetles (Coleoptera); butterflies, moths, and caterpillars (Lepidoptera); and spittlebugs (Homoptera).

With this critical habitat designation, we intend to identify the physical or biological features essential to the conservation of the species, through the identification of the features' primary constituent elements sufficient to support the life-history processes of the species.

#### *Physical or Biological Features and Primary Constituent Elements Summary*

The discussion above outlines those physical or biological features essential to flycatcher conservation and presents our rationale as to why those features were selected. The primary constituent elements described above are results of the dynamic river or lakeside environment that germinates, develops, maintains, and regenerates the riparian forest and provides food for breeding, non-breeding, dispersing, territorial, and migrating flycatchers.

Anthropogenic factors such as dams, irrigation ditches, or agricultural field return flow can assist in providing or mimicking the conditions that support flycatcher habitat. In regulated environments, riparian vegetation improvement projects associated with planting, irrigation, and cultivation may also require manual manipulation to maintain suitability over the long term.

Because the flycatcher exists in disjunct breeding populations across a wide geographic and elevation range and its habitat is subject to dynamic events (such as flooding and drying), the quantity and spatial arrangement of critical habitat river segments described below are essential for the flycatcher to

maintain metapopulation stability, connectivity, and gene flow, and to protect against catastrophic loss. All river segments designated as flycatcher critical habitat are either: (1) Within the known range of the subspecies, representing areas known to be occupied at the time of listing; or (2) essential areas for the conservation of the species not known to be occupied by the flycatcher at the time of listing, but now may or may not be known to have flycatchers present. These areas contain at least one the primary constituent elements of the physical or biological features essential for the conservation of the subspecies. It is important to recognize that the primary constituent elements such as riparian vegetation with trees and shrubs of a certain type and insect prey populations are present throughout the river segments selected, but the specific quality of riparian habitat for nesting (which involve elements such as specific configuration of riparian foliage, sites for nesting, and interspersed of small openings), migration, foraging, and shelter will not remain constant in condition or location over time due to succession (plant germination and growth) and the dynamic environment in which they exist.

In order to reach the goal of conserving the subspecies by recovering an adequate geographical distribution that represents ecological diversity of the flycatcher populations, the distribution and abundance of flycatcher habitat and breeding populations must improve across the 29 Management Units (see Background section). The recovery goal is 1,950 flycatcher territories geographically and numerically distributed in the appropriate Management Units along with twice the habitat needed to maintain these territories (see Background section). Also, these areas must hold these populations for a number of years and be protected through conservation agreements or other means. The most recent rangewide flycatcher assessment estimated that there were about 1,300 flycatcher territories (Durst *et al.* 2008, p. 13). The Lower Colorado, Upper Colorado, and Basin and Range Recovery Units need the most growth in known territories and habitat to reach recovery goals. While there is still great variance in the known number of territories within the Coastal California, Gila, and Rio Grande Recovery Units, these areas are closer in number of territories and amount of habitat to the established recovery goals. The numeric territory goals established per Management Unit are in

denominations of 25. The goal for some Management Units may be as few as 25 territories or as many as 325.

With this designation of critical habitat, we intend to identify the physical or biological features essential to the conservation of the species, through the identification of the features' primary constituent elements sufficient to support the life-history processes of the species.

#### *Special Management Considerations or Protections*

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features that are essential to the conservation of the species and which may require special management considerations or protection.

As mentioned briefly or referenced in this rule, the flycatcher and its habitat are threatened by a multitude of factors occurring at once. Threats to those features that define critical habitat (elements of physical or biological features) are caused by various factors. We believe the essential features within the critical habitat areas will require some level of management or protection (or both) to address the current and future threats and maintain the quality, quantity, and arrangement of the elements of physical or biological features essential to flycatcher conservation.

Essential features in need of special management occur not only at the immediate locations where the flycatcher may be present, but at additional areas needed to reach recovery goals and areas that can provide for normal population fluctuations and habitat succession that may occur in response to natural and unpredictable events. The flycatcher may be dependent upon habitat components beyond the immediate areas where individuals of the species occur if they are important in maintaining ecological processes such as hydrologic regimes; plant germination, growth, maintenance, and regeneration (succession); sedimentation; groundwater elevations; plant health and vigor; or maintenance of prey populations.

The designation of critical habitat does not imply that lands outside of critical habitat do not play an important role in flycatcher conservation. Federal activities outside of critical habitat are still subject to review under section 7 of the Act if they may affect the flycatcher or its critical habitat (such as groundwater pumping, developments, watershed condition). Prohibitions of

section 9 of the Act also continue to apply both inside and outside of designated critical habitat.

A detailed discussion of threats to the flycatcher and its habitat can be found in the final listing rule (60 FR 10694, February 27, 1995), the previous critical habitat designations (62 FR 39129, July 22, 1997; 70 FR 60886, October 19, 2005), and the final Recovery Plan (Service 2002, pp. 33–42, Appendix F). Some of the special management actions that may be needed for essential features of flycatcher habitat are briefly summarized below.

(1) Restore adequate water-related elements to improve and expand the quality, quantity, and distribution of riparian habitat. Special management may: increase efficiency of groundwater management; use urban water outfall and irrigation delivery and tail waters for vegetation improvement; maintain, improve, provide, or reestablish instream flows to expand the quality, distribution, and abundance of riparian vegetation; increase the width between levees to expand the active channel during overbank flooding; and manage regulated river flows to more closely resemble the natural hydrologic regime.

(2) Retain riparian vegetation in the floodplain. Special management may include the following actions: avoid clearing channels for flood flow conveyance or plowing of flood plains; and implement projects to minimize clearing of vegetation (including exotic vegetation) to help ensure that desired native species and exotic vegetation persist until an effective riparian vegetation improvement plan can be implemented.

(3) Manage biotic elements and processes. Special management may include the following actions: manage livestock grazing to increase flycatcher habitat quality and quantity by determining appropriate areas, seasons, and use consistent within the natural historical norm and tolerances; reconfigure grazing units, improve fencing, and improve monitoring and documentation of grazing practices; manage wild and feral hoofed-mammals (ungulates) (e.g., elk, horses, burros) to increase flycatcher habitat quality and quantity; and manage keystone species such as beaver to restore desired processes to increase habitat quality and quantity.

(4) Protect riparian areas from recreational impacts. Special management may include actions such as managing trails, campsites, off-road vehicles, and fires to prevent habitat development and degradation in flycatcher habitat.

(5) Manage exotic plant species, such as tamarisk or Russian olive, by reducing conditions that allow exotics to be successful, and restoring or reestablishing conditions that allow native plants to thrive. Throughout the range of the flycatcher, the success of exotic plants within river floodplains is largely a symptom of land and water management (for example, groundwater withdrawal, surface water diversion, dam operation, and unmanaged grazing) that has created conditions favorable to exotic plants over native plants. Special management may include the following actions: eliminate or reduce dewatering stressors such as surface water diversion and groundwater pumping to increase stream flow and groundwater elevations; reduce salinity levels by modifying agricultural practices and restoring natural hydrologic regimes and flushing flood flows; in regulated streams, restore more natural hydrologic regimes that favor germination and growth of native plant species. Improve timing of water draw down in lake bottoms to coincide with the seed dispersal and germination of native species; and restore ungulate herbivory to intensities and levels under which native riparian species are more competitive.

(6) Manage fire to maintain and enhance habitat quality and quantity. Special management may include the following actions: suppress fires that occur; and reduce risk of fire by restoring elevated groundwater levels, base flows, flooding, and natural hydrologic regimes in order to prevent drying of riparian areas and more flammable exotic plant species from developing; and reduce risk of recreational fires.

(7) Evaluate and conduct exotic plant species removal and native plant species management on a site-by-site basis. If habitat assessments reveal a sustained increase in exotic plant abundance, conduct an evaluation of the underlying causes and conduct vegetation improvement under measures described in the Recovery Plan (Service 2002, Appendices H and K). Remove exotics only if: underlying causes for dominance have been addressed; there is evidence that exotic species will be replaced by vegetation of higher functional value; and the action is part of an overall vegetation improvement plan. Native riparian vegetation improvement plans should include: a staggered approach to create mosaics of different aged successional tree and shrub stands; consideration of whether the sites are presently occupied by nesting flycatchers; and management of stressors that can improve the

germination, growth, and maintenance of preferred vegetation.

(8) Manage or reduce the occurrence, spread, and effects of biocontrol agents on flycatcher habitat. Exotic biocontrol tamarisk leaf beetle insects (leaf beetles) were brought into and released in many locations throughout the western United States. This specific U.S. Department of Agriculture program was terminated in 2010, largely because these insects are moving farther and thriving in the southwestern United States (within the flycatcher's breeding range) where it was initially believed they would not persist (APHIS 2010, p. 2). However, leaf beetles still exist within the United States, and specifically within the northern range of the flycatcher in Nevada, Arizona, and New Mexico. It is unknown to what extent these leaf beetles will continue to move throughout the Southwest. Their overall impact or benefit to the flycatcher, flycatcher habitat, and other wildlife species is also unknown, but there are predictions that the beetles could occur throughout the western United States and into northern Mexico (Tracy *et al.* 2008, pp. 1–3). There is concern about effects to the flycatcher in places throughout much of its range where the landscape does not support healthy native riparian vegetation (even in the absence of tamarisk). Along the Virgin River in southwestern Utah, flycatcher breeding attempts have failed concurrent with leaf beetle impacts to the vegetation (Paxton *et al.* 2010, p.1). Rangeland, tamarisk is a habitat component of over half of all known flycatcher territories (Durst *et al.* 2007, p. 15). Therefore, it would be beneficial to prevent purposeful or accidental intra- or interstate transport of leaf beetles to locations that would increase the likelihood of beetles dispersing to flycatcher habitat. Similarly, because insects can travel or be moved large distances, prevent the additional release of leaf beetles (in all their varieties) into the environment where they can eventually occur within flycatcher habitat. Where leaf beetle-related impacts may occur or are happening, consider the previous items in this list and the Recovery Plan for strategies to help improve the germination and growth of native plants (Service 2002, p. Appendix X).

#### *Criteria Used To Identify Critical Habitat*

As required by section 4(b)(1)(A) of the Act, we use the best scientific and commercial data available to designate critical habitat. We review available information pertaining to the habitat requirements of the species (or in this

instance, a willow flycatcher subspecies). In accordance with the Act and its implementing regulation at 50 CFR 424.12(e), we consider whether designating additional areas—outside those currently occupied as well as those occupied at the time of listing—are necessary to ensure the conservation of this flycatcher subspecies. As defined under section 3(5)(A)(i) of the Act, we are designating critical habitat in areas within the geographical area known to be occupied by nesting flycatchers at the time of listing in 1995 that contain the essential physical or biological features and require special management or protections. As defined under section 3(5)(A)(ii) of the Act, we also are designating specific areas outside the geographical area occupied by nesting flycatchers at the time of listing (but that are within its known historical breeding distribution), because such areas are essential for the conservation of the species as supported by the geographical and numerical flycatcher territory and habitat-related recovery goals established in the Recovery Plan (Service 2002, pp. 84–85).

#### Stream Segments as Critical Habitat

We are designating “stream segments” as the descriptor for the designated area of flycatcher critical habitat (which in some areas also includes exposed reservoir bottoms). Stream segments are appropriate for delineating critical habitat because in addition to providing stream-side vegetation for flycatchers to place nests, stream segments satisfy other various flycatcher life needs adjacent to or between nesting sites (foraging habitat, streams, elevated groundwater tables, moist soils, flying insects, and other alluvial floodplain habitats) (see *Physical or Biological Features* section). Also, the dynamic processes of riparian vegetation succession (loss and regrowth) and river hydrology allow for stream segments to provide both current and future areas for flycatcher habitat to grow. Riparian vegetation in these segments is expected to naturally expand and contract from flooding, inundation, drought, and the resulting changes in the extent and location of floodplains and river channels (Service 2002, pp. 18, D–13–D–15). Therefore, while one or more of the physical or biological features are currently present, over time these habitat features will fluctuate in quality or location throughout these stream segments. Management of stream flows and other anthropogenic (manmade) factors, such as agricultural practices or dam operations, can also influence the location and quality of the riparian vegetation in many of these stream

segments. The lateral extent of each river segment occurs within the 100-year floodplain (see *Physical or Biological Features* section) and is further described below (see Lateral Extent section). Therefore, designating stream segments as critical habitat will provide for the variety of flycatcher uses and allow for ever-changing streamside vegetation habitat quality (in location and abundance).

#### Occupancy at the Time of Listing

We identified areas occupied at the time of listing in 1995 as those streams where flycatcher territories were detected in any one season from surveys conducted from 1991 to 1994 (Sogge and Durst 2008). The flycatcher rangewide database (Sogge and Durst 2008) is the authoritative source for determining territories because our 1995 flycatcher listing rule did not list all known data regarding flycatcher distribution and abundance. We considered a broader area to be occupied than just the specific site where a territory was located because flycatchers are a neotropical migrant traveling between Central America (and possibly northern South America) and the United States using migration stopover areas for food, cover, and shelter, and they are known to move to different nest areas from year to year.

Because flycatchers are neotropical migrants that occupy riparian areas along rivers while traveling between wintering and breeding grounds, we expect that abundant small areas along long stretches of stream can be irregularly occupied by migrant flycatchers from year-to-year. North- and south-bound migrating flycatchers are frequently found occupying stopover areas along streams upstream of, downstream of, and between known breeding sites (Yong and Finch 1997, pp. 265–266; Service 2002, pp. E2–E3; Koronkiewicz *et al.* 2004, pp. 9–11). In Arizona, migrant flycatchers were detected at 204 sites statewide along 15 of 19 river drainages surveyed for nesting flycatchers over a 10-year period (Ellis *et al.* 2008, p. 26). Over 600 migrant willow flycatchers (subspecies not known) were detected along the length of the LCR in 2004 (Ellis *et al.* 2008, p. 26), where only a relatively few known breeding sites and territories exist.

Similarly, flycatchers are known to have fidelity to a larger area along stream drainages (rather than specific nest site fidelity), and can move their territory locations about 30 to 40 km (18 to 25 mi) from year to year (Paxton *et al.* 2007, p. 4). Locations with breeding habitat that are within 30 to 40 km (18

to 25 mi) of each other will have higher metapopulation connectivity, and there is a higher probability of colonization of new habitats that are within this distance (Paxton *et al.* 2007, p. 76). Sometimes, flycatchers can even move to a very distant location, dispersing as far as 444 km (275 mi) from a previous year's nesting area (Paxton *et al.* 2007, p. 2). These year-to-year movements are facilitated by the dynamic nature of flycatcher habitat, changing in quality and location over time. More dramatic changes in habitat quality caused by events such as flooding or inundation can force flycatchers to move their breeding location, thus causing them to use broader locations and habitat quality.

Therefore, for this wide-ranging bird, it is difficult to precisely determine known occupied areas due to the following considerations: (1) The flycatcher's neotropical migratory habits of occupying stopover areas along streams upstream of, downstream of, and between breeding sites; and (2) the season-to-season variation in habitat quality and subsequent lack of specific nest-site fidelity. As a result, for the purpose of this critical habitat designation, we believe it is most conservative and reasonable to conclude that any stream segment along a stream where flycatcher territories were detected from 1991 to 1994 also be considered occupied at the time of listing. Those stream segments considered occupied at the time of listing and those considered not occupied at the time of listing that we are designating as revised critical habitat are organized by Recovery and Management Units (see below) and described briefly in the unit descriptions below. All of the stream segments occupied at the time of listing contain one or more of the primary constituent elements supported by the physical or biological features, which may require special management considerations, or protection as described above. We also include whether flycatcher territories were detected on stream segments not known to be occupied at the time of listing (but are essential for flycatcher conservation).

#### Recovery Plan Guidance

We relied heavily on the Recovery Plan (Service 2002) to help identify the areas that we are designating as revised critical habitat because the Recovery Plan represents a compilation of the best scientific data available to us. We particularly used the information from the Recovery Plan, such as distribution and abundance of flycatchers, flycatcher

natural history and habitat needs, and stream segments with substantial recovery value, to help identify stream segments with features essential to flycatcher conservation.

The Recovery Plan's strategy, rationale, and science for conservation of the flycatcher guided our efforts to identify essential features (elements in sufficient quantity and spatial arrangement) and areas of critical habitat (Service 2002, pp. 61–95). Because of the wide distribution of this bird and the dynamic nature of its habitat, it was important to designate critical habitat in areas throughout all of the breeding range of the flycatcher that have stated recovery goals. This widespread distribution of habitat is intended to allow flycatchers to function as a group of metapopulations, realize gene flow throughout its range, provide ecological connectivity among disjunct populations, allow for breeding site colonization potential, and prevent catastrophic population losses.

The Recovery Plan (Service 2002, pp. 74–76) identifies important factors to consider in minimizing the likelihood of extinction. These factors were also considered in our approach to designating areas for critical habitat: (1) The territory is the appropriate unit of measure for numerical flycatcher recovery goals; (2) populations should be distributed throughout the bird's range; (3) populations should be distributed close enough to each other to allow for movement among them; (4) large populations contribute most to metapopulation stability, while smaller populations can contribute to metapopulation stability when arrayed in a matrix with high connectivity; (5) as the population of a site increases, the potential to disperse and colonize increases; (6) increase and decrease in one population affects other populations; (7) some Recovery and Management Units have stable metapopulations, but others do not; (8) maintaining or augmenting (or both) existing populations is a greater priority than establishing new populations; and (9) establishing habitat close to existing breeding sites increases the chance of colonization.

#### Methodology Overview

Our goal was to propose stream segments as critical habitat within 29 of the 32 Management Units (which are geographic areas clustered within 6 Recovery Units) in order to meet the specific numerical flycatcher territory and habitat-related recovery goals (Service 2002, pp. 84–85), which are the same criteria that we are using to identify physical or biological features

and designate areas that are essential to flycatcher conservation. Three of the 32 Management Units (Lower Gila, Pecos, and Texas) do not have any goals identified in the Recovery Plan because of either the lack of habitat, the inability for habitat to recover, or the determination that meaningful populations could not be established and persist. Therefore, no critical habitat was proposed or designated within these three Management Units. Numerical flycatcher territory recovery goals for each of the 29 Management Unit vary throughout the flycatcher's range from as few as 25 territories to as many as 325 (Service 2002, pp. 84–85).

In relying on these recovery goals and strategies, we used a methodology with two basic strategies to identify areas and, subsequently, river segments within those areas to propose and consider as critical habitat. First, we identified areas based upon the presence of large breeding populations and areas with multiple small breeding populations that when found in proximity, form a large population. Once these areas were established, we identified the specific end points of the stream segments of flycatcher habitat. Second, for those Management Units with a specific number of territories required to meet recovery goals, but no, or very few, known flycatcher territories, we used information from the Recovery Plan (Service 2002, pp. 86–92) and other relevant sources to identify river segments with flycatcher habitat. The results of this strategy were the identification of streams that: (1) Were within the geographical area known to be occupied by flycatchers at the time of listing with elements of the physical or biological features; (2) the identification of essential areas that were not known to be occupied by flycatchers at the time of listing but that also include elements of the physical or biological features of critical habitat; and (3) the identification of areas for critical habitat that have never been known to be occupied by flycatchers but are essential for the conservation of the flycatcher in order to meet recovery goals.

#### Areas With Large Populations

To identify the areas with flycatcher habitat in each Management Unit, we first considered specific areas that are known since 1991 to have had large populations of nesting flycatchers. Since the time of listing in 1995, the known distribution and abundance of flycatcher territories has increased primarily due to increased survey effort (Durst *et al.* 2008, p. 4). Population increases have also been detected at

specific areas where habitat quality and quantity improved. As a result of more extensive surveys and research, and in particular re-establishing known occupancy of breeding sites in Nevada, Utah, and Colorado, the extent of streams known to be used by migrating, non-breeding, and dispersing flycatchers has also expanded.

Following the most recent rangewide estimate in 2007, 1,299 territories were described occurring in California, Nevada, Utah, Colorado, Arizona, and New Mexico (Durst *et al.* 2008, p. 4). Additional sites have been detected in the following years, but an updated rangewide estimate has not yet been compiled.

The locations of breeding sites were generated from standardized flycatcher surveys conducted from 1991 to 2010. There has been a standardized survey protocol since the 1995 listing of the flycatcher that biologists have used to confirm the presence of flycatcher territories that has produced reliable and accurate information (Tibbitts *et al.* 1994, p. 1; Sogge *et al.* 1997, p. 1; Sogge *et al.* 2010, p. 1). To help ensure the protocol is being used properly, the Service and our partners provide annual training on protocol implementation and flycatcher status, identification, and natural history.

A variety of sources were used to determine breeding site location and information from 1991 to 2010. The Recovery Plan (Service 2002), the USGS flycatcher rangewide database (Sogge and Durst 2008), the 2007 flycatcher rangewide report (Durst *et al.* 2008), and recent survey information for the 2008, 2009, and 2010 breeding seasons were all used as authoritative sources of information on breeding flycatcher distribution and abundance. The flycatcher rangewide database developed and maintained by USGS (Sogge and Durst 2008) compiles the results of surveys conducted throughout the bird's range since 1991. The most recent rangewide assessment of flycatcher distribution and abundance analyzed by USGS (Durst *et al.* 2008) estimates the number of territories that occur following the 2007 breeding season, taking into account that the entire range of the flycatcher is not surveyed completely in any single year. A summary of known historical breeding records can be found in the Recovery Plan (Service 2002, pp. 8–10). We also evaluated data in reports submitted during section 7 consultations and by biologists holding section 10(a)(1)(A) recovery permits; research published in peer-reviewed articles, agency reports, and databases;

and regional GIS coverages and habitat models.

We also examined 2008 to 2010 data that the Service in Arizona, Nevada, Utah, and Colorado compiled and entered into separate databases and spreadsheets and data from the USGS and U.S. Bureau of Reclamation (USBR) for California and New Mexico, respectively. These data were compatible and therefore able to be added to results of the 2007 USGS rangewide database (Sogge and Durst 2008) and report (Durst *et al.* 2008, entire) to identify breeding site locations, territory abundance and distribution, and large populations. However, these additional 3 years of raw data have not been synthesized by USGS into their overall USGS rangewide database (Sogge and Durst 2008) and analyzed (consistent with Durst *et al.* 2008, entire) to estimate the overall existing number of territories across the flycatcher's range in a single year. Since this newer information has not been analyzed along with the remainder of the data, the data up to 2007 were the best available information for us to identify the overall number of estimated territories known to occur across a geographic area, such as a Management Unit or Recovery Unit. Therefore, the best available information for estimating the number of territories rangewide is the compiled information up through the 2007 breeding season (Durst *et al.* 2008, entire; Sogge and Durst 2008).

In order to identify areas with large flycatcher populations, we first considered and defined a "large" population. We defined a large population as a single breeding site or collection of smaller connected breeding sites that support 10 or more territories in a single year. We selected 10 or more territories to identify a large population because the flycatcher population viability analysis indicates a breeding site exhibits greatest long-term stability with at least 10 territories (Service 2002, p. 72). Large populations persist longer than small ones, and produce more dispersers capable of emigrating to other populations or colonizing new areas (Service 2002, p. 74). In addition, smaller populations with high connectivity to other small populations can provide as much or more stability than a single isolated larger population with the same number of territories because of the potential to disperse colonizers throughout the network of breeding sites (Service 2002, p. 75).

Once the distribution and abundance of flycatcher breeding sites were identified and mapped, we considered the degree of connectivity to assign

smaller separate flycatcher breeding sites and the distance from large populations to evaluate these areas as critical habitat. In other words, how much area around breeding sites should be considered as critical habitat? To determine these distances, we examined the known between-year movements of banded adult and juvenile flycatchers. The USGS's 10-year flycatcher study in central Arizona is the key movement study that has generated these conclusions (Paxton *et al.* 2007, pp. 59–80), augmented by other flycatcher banding and re-sighting studies (Sedgwick 2004, p. 1103; McLeod *et al.* 2008, pp. 93–112). These studies found that flycatchers have higher site fidelity than nest fidelity and can move among breeding sites within drainages and between drainages (Kenwood and Paxton 2001, pp. 30–31). Within-drainage movements are more common than between-drainage movements (Paxton *et al.* 2007, p. 77). Juveniles disperse the farthest and were the only group of flycatchers to connect very distant populations (Paxton *et al.* 2007, p. 74). Banded flycatchers from season-to-season were recorded moving across a wide area from 50 m (150 feet) to 444 km (275 mi) (Paxton *et al.* 2007, p. 2).

Because of the broad range of flycatcher movements, it is a challenge to apply a single distance to characterize the degree of connectivity of separated flycatcher breeding sites. However, USGS (Paxton *et al.* 2007, pp. 4, 76, 84, 139, 140) assimilated all of the movement information and concluded that rapid colonization of flycatcher breeding sites and increased metapopulation stability could be accomplished by establishing breeding sites within 30 to 40 km (18 to 25 mi) of each other. Flycatchers at these breeding sites can disperse or move between sites within the same year or from year-to-year. This proximity of these sites would increase the connectivity and stability of the metapopulation and smaller, more distant breeding sites.

As a result of USGS's conclusion, we decided to use 35 km (22 mi), the average of the reported range, as a radius to identify an area surrounding known large flycatcher breeding sites and the distance to connect smaller populations to identify a large population. Because there was no distinction by USGS of a distance within this 30 to 40 km (18 to 25 mi) range that was more valuable to flycatchers, we believe the average is the best representation. After a large population area was established, we determined whether other breeding sites in proximity occurred. If so, this would

add to our large population area, generate an additional 35-km (22-mi) radius and extend our area, and so on. We also used this 35-km (22-mi) radius to identify those highly connected breeding sites with a small number of territories that together equaled a large flycatcher population.

Following the identification of these areas that surround large flycatcher populations, we determined where flycatcher habitat occurred on streams and where to establish end points for critical habitat. We used the Recovery Plan and other literature sources and local knowledge to identify stream segments. In combination with these areas of flycatcher habitat, we then considered the numerical and habitat-related recovery goals, and current and previous number of known territories. We also considered site-specific knowledge of these streams, aerial photography, agency reports, and input from other resource managers. The proximity and connectivity of segments to known populations and metapopulation stability were also key aspects of the flycatcher's natural history we considered in delineating river segment end points.

In both the Roosevelt and Middle Rio Grande Management Units, our methods identified a large population area where the current number of flycatcher territories needed to reach management unit recovery goals has been surpassed by two and three times, respectively. In order to identify stream segments and end points for critical habitat that supports our recovery goals in this unique situation, we considered additional factors such as the known fluctuation and persistence of territories over time (such as those associated with reservoir inundation), territory proximity, and metapopulation stability. Both Management Units have large flycatcher populations located within the conservation space of reservoirs, which can produce a large amount of habitat and number of territories. But the persistence of these reservoir habitats and territories can also be lessened as a result of precipitation, river inflow, and dam operations that affect habitat availability over time. Therefore, because of the dynamic fluctuation of habitat and territories within these reservoirs, we selected areas of habitat that overall can contain a greater number of territories than are identified in the Recovery Plan in order to meet the goals for habitat and territory persistence over time. These habitats included portions of reservoirs and streamside habitat outside of these reservoirs, which together, can support the goals of territory and habitat

persistence through time when lake elevations remain high. With the number of current territories far exceeding recovery goals in these Management Units, we found that some occupied habitats at the perimeter of our large population areas became less important to reach recovery goals. Because of the unique situation where the number of territories exceeds the numerical goals established in the Recovery Plan, we did not identify some portions of stream segments with territories along the Rio Grande and Salt River as critical habitat. Although these areas were occupied at the time of listing and had some of the elements of physical and biological features, they were determined not to be essential for flycatcher conservation and were not included as critical habitat.

Nearly the entire areas of the San Diego and Santa Ana Management Units in the Coastal California Recovery Unit were identified as a large population area because of the wide distribution and proximity of occupied stream segments within them. In contrast to other Management Units, our methods were unable to distinguish more specific areas to designate within these Management Units.

Also, our methodology discussed above was unable to distinguish areas within some Management Units where neither large populations nor small populations with high connectivity were known to occur. For example, in the Amargosa, Santa Cruz, San Francisco, Hassayampa and Agua Fria, San Juan, Powell, and Lower Rio Grande Management Units, there are no known breeding sites with 10 or more flycatcher territories, nor are any known territories in high connectivity that create a large population. Similarly, in some Management Units a large population and surrounding area was identified, but that area was found not to be of adequate size to include enough river segments needed to support the number of territories called for in the recovery goals. This situation occurred in the Little Colorado, Santa Ynez, and Santa Clara Management Units. In all of these cases, we used the guidance from the Recovery Plan, local knowledge about habitat, and other information available to identify additional stream segments as important to meet recovery goals, and therefore, essential for the conservation of flycatcher.

When generating the river segments in the situations where there were few territories to help guide us, we relied heavily upon recommendations and strategies provided in the Recovery Plan and local knowledge of habitat conditions, maps, and flycatcher natural

history. We also sought information from other sources through this critical habitat designation process. The Recovery Plan identified portions of streams for each Management Unit that would contribute significantly toward recovery (Service 2002, pp. 86–92). These streams were not listed for the purpose of designating critical habitat nor were they intended to be the only streams that were important for recovery, but they did identify streams of substantial recovery value. Also, we have generated additional information since the Recovery Plan was completed about river segments and whether they have or do not have substantial recovery value. Still, the list of stream segments described in the Recovery Plan (Service 2002, pp. 86–92) provides important guidance, especially for Management Units where there are few known flycatcher sites, to guide our critical habitat designation. Site-specific knowledge of these streams, aerial photography, agency reports, and input from other resource managers were also considered. The proximity and connectivity of segments to known populations and metapopulation stability were also key aspects of the flycatcher's natural history we considered in delineating these areas.

The streams designated as revised flycatcher critical habitat are described below. Those streams not within the geographical area known to be occupied at the time of listing were determined to be essential for flycatcher conservation.

#### Migratory Habitat

Habitat for migrating flycatchers is captured in this revised designation by our approach to identify critical habitat as “river segments” and distributing segments across the flycatcher's breeding range within the southwestern United States. We are currently unable to distinguish the value of specific locations along particular streams for flycatcher migration, because stopover areas contain broad habitat quality in wide-ranging locations, are only for short-term use, and have uncertain occurrence from year-to-year (Finch *et al.* 2000, pp. 73, 76–77). Additionally, flycatchers are difficult to distinguish from other flycatcher species and subspecies during migration (Finch *et al.* 2000, pp. 71–72). Migrant flycatchers can sometimes be found in unusual locations away from riparian areas (Finch *et al.* 2000, p. 76), but many, if not most, are detected while searching for nesting flycatchers (McLeod *et al.* 2005, pp. 9–11; Ellis *et al.* 2008, pp. 26–27). An extensive study of flycatcher habitat use along the LCR (from Lake Mead to Mexico) and some of its major

tributaries in Arizona and southern Nevada and Utah found migrating flycatchers in consecutive years occurring in nearly all study areas and over half of the survey sites (McLeod *et al.* 2005, pp. 9–11; Koronkiewicz *et al.* 2006, pp. 11–13). Similarly, migratory flycatcher movement was regularly detected along the Middle Rio Grande (Yong and Finch 1997, p. 255). As a result of these factors, we expect similar flycatcher migration behavior for the other major drainages where flycatchers breed throughout its range and where these locations are included within this designation. Therefore, flycatcher migration habitat is captured within our methods for identifying critical habitat to reach recovery goals, because: (1) We are designating areas as broader river segments; (2) our areas will be geographically located across a broad area of the Southwest encompassing most of the range of the flycatcher; and (3) we are identifying areas surrounding territory and breeding sites where migrant flycatchers are most often detected.

#### Lateral Extent

For the lateral extent or width of flycatcher critical habitat, we considered the variety of purposes riparian habitat serves the flycatcher; the dynamic nature of rivers and riparian habitat; the relationship between the location of rivers, flooding, and riparian habitat; and the expected boundaries, over time, of these habitats. The condition or quality of riparian habitat that flycatchers use adjacent to streams for breeding, feeding, sheltering, cover, dispersal, and migration stopover areas varies. Riparian habitat is dependent on the location of river channels, floodplain soils, subsurface water, and floodplain shape, and is driven by the wide variety of high, medium, and low flow events. In addition, manmade factors such as diversion ditches or agricultural return flows can also influence riparian vegetation distribution. Over time, river channels can braid or move from one side of the floodplain to the other. Flooding occurs at periodic frequencies that recharge aquifers and that deposit and moisten fine floodplain soils which create seedbeds for riparian vegetation germination and growth within these boundaries.

In this designation, we consider the riparian zone where flycatcher habitat occurs to be the area surrounding the select river segment that is directly influenced by river functions. The present boundaries, for mapping purposes, of the lateral extent or riparian zone (in other words, the



surrogate for the delineation of the lateral boundaries of critical habitat within stream segments) were derived by one of two methods. The area was either captured from existing digital data sources (listed below) or created through expert visual interpretation of remotely sensed data (aerial photographs and satellite imagery—also listed below). GIS technology was utilized throughout the lateral extent determination. ESRI, Inc. ArcInfo 8.3 was used to perform all mapping functions and image interpretation. Pre-existing data sources used to assist in the process of delineating the lateral extent of the riparian zones for this designation included: (1) National Wetlands Inventory digital data from the mid-1980s, 2001, and 2002; (2) Federal Emergency Management Agency 1995, Q3 100 year flood data; (3) U.S. Census Bureau Topologically Integrated Geographic Encoding and Referencing (TIGER); and (4) 2000 digital data. The riparian zone is anticipated to occur within the 100-year floodplain.

Where pre-existing data may not have been available to readily define riparian zones, visual interpretation of remotely sensed data was used to define the lateral extent. Data sources used in this included: (1) Terraserver online Digital Orthophoto Quarter Quads, black and white, 1990s era and 2001; (2) USGS Digital Orthophoto Quarter Quads 1997; (3) USGS aerial photographs, 1 meter, color-balanced, and true color, 2002; (4) Landsat 5 and Landsat 7 Thematic Mapper, bands 4, 2, 3, 1990–2000; (5) Emerge Corp, 1 meter, true color imagery, 2001; (6) Local Agency Partnership, 2 foot, true color, 2000; and (7) NWI aerial photographs, 2001–2002.

We refined all lateral extents for this designation by creating electronic maps of the lateral extent and attributing them according to the following riparian sub-classifications. Riparian developed areas, as defined below, are not included in our critical habitat designation since these areas do not contain the primary constituent elements (see *Primary Constituent Elements for the Flycatcher* section above), are not considered essential to flycatcher conservation and, therefore, do not meet the definition of critical habitat. We separated riparian areas into the following two categories: (1) **Riparian Vegetated:** This class is used to describe areas still in natural unvegetated wetlands, water bodies, and any undeveloped or unmanaged lands within the approximate riparian zone. (2) **Riparian Developed:** This class is used to describe all developed areas, such as urban and suburban development, agriculture, utility

structures and stations, mining, and extraction.

#### Mapping

When determining critical habitat boundaries within this final rule, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack physical or biological features for the flycatcher. These types of developments are not often found adjacent to rivers within floodplains, and may not be found on recent maps. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the removal of such developed lands. Any such developed lands inadvertently left inside critical habitat boundaries shown on the maps of this final rule have been excluded by text in the rule and are not designated as critical habitat. Therefore, a Federal action involving these developed lands will not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical or biological features in the adjacent critical habitat.

The critical habitat designation is defined by the map or maps, as modified by any accompanying regulatory text, presented at the end of this document in the rule portion. We include more detailed information on the boundaries of the critical habitat designation in the preamble of this document. We will make the coordinates or plot points or both on which each map is based available to the public on <http://www.regulations.gov> at Docket No. FWS-R2-ES-2011-0053 on our Internet site at <http://www.fws.gov/southwest/es/arizona/>, and at the field office responsible for the designation (see **FOR FURTHER INFORMATION CONTACT** above).

#### Summary of Criteria Used To Identify Critical Habitat

Our initial steps and approach in generating areas for flycatcher critical habitat were to identify areas: (1) Known to be within the specific geographic area occupied by the flycatcher at the time of listing (from surveys occurring from 1991 to 1994) that contain the physical or biological features which may require special management or protections; and (2) that are essential to flycatcher conservation based on the Recovery Plan goals.

Following the evaluation of the two factors above, our goal was to incorporate the conservation strategies described in the Recovery Plan. These

strategies describe the importance of flycatcher habitat to support stable and growing breeding populations, to provide migration stopover areas, to protect against simultaneous catastrophic loss, to maintain gene flow, to prevent isolation and extirpation, and to provide colonizers to use new areas. Also, the Recovery Plan describes the importance of habitat that supports large breeding populations of flycatchers and small populations that, when in proximity, equal a large population. To achieve these goals, the Recovery Plan describes a recovery strategy of distributing flycatcher habitat that could hold a specific minimum number of breeding territories across 29 different Management Units in portions of California, Nevada, Utah, Colorado, Arizona, and New Mexico.

We therefore created criteria and methodology to identify areas surrounding large populations and small populations, in proximity, that equaled a large population. We used a 35-km (22-mi) distance as a radius to identify areas around large flycatcher populations (those with at least 10 territories) and small populations in high connectivity that together equal a large population.

We chose to generate critical habitat in “river segments” to account for the dynamic aspects of flycatcher riparian habitat, the changing locations of flycatcher habitat due to these dynamic conditions, population growth, and the variety of other life-history needs such as nest placement, foraging, dispersing, cover, shelter, and migration habitat. Once these broad areas were established, we identified stream segments with flycatcher habitat that we believe will support the numerical territory and habitat-related recovery goals for the 29 Management Units described in the Recovery Plan.

Some Management Units with recovery goals do not have known large populations or small populations that equal a large population in high connectivity. Also, in some Management Units, an area may not contain enough habitat to reach the number of territories stated in the Recovery Plan. In these instances, we relied upon the Recovery Plan guidance (recovery strategy, stream identification, and habitat descriptions), flycatcher detections, and local expertise in habitat quality to identify river segments considered essential for the conservation of the species.

The lateral extent of river segments designated as critical habitat represent the riparian zone, which is an area that is most directly influenced by river functions and is anticipated to occur

within the 100-year floodplain. We created these boundaries from existing digital sources and visual interpretation.

Overall, these designated stream segments represent flycatcher habitat known to be occupied at the time of listing and essential areas that have high recovery value. The designated areas support stable and growing breeding populations, provide migration stopover areas, protect against simultaneous catastrophic loss, maintain gene flow, prevent isolation and extirpation, and encourage colonizers to use new areas. All stream segments provide habitat for a wide distribution of flycatcher territories, including areas for population growth to meet numerical and habitat-related recovery goals. The designated areas also support other important flycatcher needs such as migration, dispersal, foraging, and shelter to reach the geographic distribution and habitat-related recovery goals.

We are designating as critical habitat lands that we have determined were occupied at the time of listing and contain sufficient elements of physical or biological features to support life-history processes essential for the conservation of the species (as defined under section 3(5)(A)(i) of the Act), and lands outside of the geographical area occupied at the time of listing that we have determined are essential for flycatcher conservation (as defined under section 3(5)(A)(ii) of the Act). The occupied stream segments are designated based on sufficient elements of physical or biological features being present to support flycatcher life processes. Some segments contain all of the identified elements of physical or biological features and support multiple life processes. Some segments contain only some elements of the physical or biological features necessary to support the flycatcher's particular use of that habitat.

#### Final Critical Habitat Designation

We are designating stream segments in 24 Management Units found in six Recovery Units as flycatcher critical habitat. Following our evaluation and analysis under section 4(b)(2) of the Act, stream segments in five Management Units (Owens, Middle Colorado, Hoover to Parker Dam, Parker Dam to Southerly International Border, and Lower Rio Grande Management Units) where recovery goals occur and critical habitat was proposed were excluded in their entirety (see Exclusions section). The

designated stream segments occur in California, Nevada, Utah, Colorado, Arizona and New Mexico and include a total of approximately 1,975 km (1,227 mi) of streams. The following list represents the names of the portions of streams that are being designated as flycatcher critical habitat organized by Recovery and Management Unit. In order to help further understand the location of these designated stream segments, please see the associated maps found within the Regulation Promulgation section of this final rule.

#### *Coastal California Recovery Unit in California*

(1) Santa Ynez Management Unit—Santa Ynez River and Mono Creek.

(2) Santa Clara Management Unit—Santa Clara River, Ventura River, Piru Creek, Castaic Creek, Big Tujunga Canyon, and San Gabriel River.

(3) Santa Ana Management Unit—Bear Creek, Mill Creek, Oak Glen Creek, San Timoteo Creek, Santa Ana River (including portions of Prado Basin), Waterman Creek, and Bautista Creek.

(4) San Diego Management Unit—Santa Margarita River, DeLuz Creek, San Luis Rey River, Pilgrim Creek, Agua Hedionda Creek, Santa Ysabel Creek, Temescal Creek, Temecula Creek, Sweetwater River, and San Diego River.

#### *Basin and Mojave Recovery Unit in California and Nevada*

(5) Kern Management Unit—South Fork Kern River (including upper Lake Isabella) and Canebroke Creek, California.

(6) Mojave Management Unit—Deep Creek, Holcomb Creek, Mojave River, and West Fork Mojave River, California.

(7) Salton Management Unit—San Felipe Creek and Mill Creek, California.

(8) Amargosa Management Unit—Willow Creek, California; Amargosa River, California and Nevada; and five separate riparian areas within Ash Meadows National Wildlife Refuge, Nevada.

#### *Lower Colorado Recovery Unit in Nevada, California and Arizona Border, Arizona, Utah, and New Mexico*

(9) Little Colorado Management Unit—Little Colorado River and West Fork Little Colorado River, Arizona.

(10) Virgin Management Unit—Virgin River, Nevada, Arizona, and Utah.

(11) Pahrangat Management Unit—Pahrangat River, Nevada.

(12) Bill Williams Management Unit—Big Sandy River, Bill Williams River,

and Santa Maria Rivers (including upper Alamo Lake), Arizona.

#### *Upper Colorado Recovery Unit in Arizona, Utah, Colorado, and New Mexico*

(13) San Juan Management Unit—Los Pinos River, Colorado; San Juan River (north bank), Utah.

(14) Powell Management Unit—Paria River, Utah.

#### *Gila Recovery Unit in Arizona and New Mexico*

(15) Verde Management Unit—Verde River, Arizona.

(16) Roosevelt Management Unit—Salt River and Tonto Creek, Arizona.

(17) Middle Gila and San Pedro Management Unit—Gila River and San Pedro River, Arizona.

(18) Upper Gila Management Unit—Gila River in Arizona and New Mexico.

(19) Santa Cruz Management Unit—Santa Cruz River, Empire Gulch, and Cienega Creek, Arizona.

(20) San Francisco Management Unit—San Francisco River, Arizona and New Mexico.

(21) Hassayampa and Agua Fria Management Unit—Hassayampa River, Arizona.

#### *Rio Grande Recovery Unit in New Mexico and Colorado*

(22) San Luis Valley Management Unit—Conejos River and Rio Grande, Colorado.

(23) Upper Rio Grande Management Unit—Coyote Creek, Rio Grande, Rio Grande del Rancho, and Rio Fernando, New Mexico.

(24) Middle Rio Grande Management Unit—Rio Grande, New Mexico.

Table 1 below lists all the streams included in this revised designation and whether they are considered occupied at the time of listing and whether they are currently considered occupied.

We note which streams were within the geographical area known to be occupied at time of listing, based upon our criteria (1991–1994), and are therefore being designated under section 3(5)(A)(i) of the act because they contain essential physical or biological features that require special management or protections. Streams not known to be occupied at the time of listing are being designated as critical habitat under section 3(5)(A)(ii) of the act because they are essential for the conservation of the species. We also note which streams have had flycatcher territories detected between 1991 and 2010.

TABLE 1—PORTION OF STREAMS DESIGNATED FOR FLYCATCHER CRITICAL HABITAT

Recovery unit	Management unit	Portion of streams	Known to be occupied at time of listing (1991–1994)	Territories detected (1991–2010)
Coastal California .....	Santa Ynez .....	Mono Creek .....	No	No.
		Santa Ynez River .....	Yes	Yes.
	Santa Clara .....	Big Tujunga Canyon .....	No	No.
		Castaic Creek .....	No	No.
		Piru Creek .....	No	Yes.
		San Gabriel River .....	No	Yes.
		Santa Clara River .....	Yes	Yes.
	Santa Ana .....	Ventura River .....	No	No.
		Bautista Creek .....	No	Yes.
		Bear Creek .....	No	Yes.
		Mill Creek .....	No	Yes.
		Oak Glen Creek .....	No	Yes.
		San Timoteo Creek .....	No	Yes.
		Santa Ana River .....	No	Yes.
		Waterman Creek .....	No	Yes.
	San Diego .....	Agua Hedionda Creek .....	No	Yes.
		DeLuz Creek .....	No	Yes.
		Pilgrim Creek .....	Yes	Yes.
		San Diego River .....	No	Yes.
		San Luis Rey River .....	Yes	Yes.
		Santa Margarita River .....	No	Yes.
		Santa Ysabel Creek .....	No	Yes.
		Sweetwater River .....	No	Yes.
		Temecula Creek .....	No	Yes.
		Temescal Creek .....	No	No.
Basin and Mojave .....	Kern .....	Canebrake Creek .....	No	Yes.
		South Fork Kern River .....	Yes	Yes.
	Mohave .....	Deep Creek .....	No	No.
		West Fork Mojave River .....	No	No.
		Holcomb Creek .....	No	Yes.
		Mojave River .....	No	Yes.
	Salton .....	Mill Creek .....	No	Yes.
		San Felipe Creek .....	No	Yes.
	Amargosa .....	Amargosa River .....	No	Yes.
		Willow Creek .....	No	No.
		Ash Meadows Riparian Areas .....	No	Yes.
Lower Colorado .....	Little Colorado .....	Little Colorado River .....	Yes	Yes.
		West Fork Little Colorado River .....	No	No.
	Virgin .....	Virgin River .....	No	Yes.
	Pahrnagat .....	Pahrnagat River .....	No	Yes.
	Bill Williams .....	Big Sandy River .....	Yes	Yes.
		Bill Williams River .....	Yes	Yes.
		Santa Maria River .....	Yes	Yes.
Upper Colorado .....	San Juan .....	San Juan River .....	No	Yes.
		Los Pinos River .....	No	Yes.
Gila .....	Powell .....	Paria River .....	No	No.
	Verde .....	Verde River .....	Yes	Yes.
		Tonto Creek .....	Yes	Yes.
	Roosevelt .....	Salt River .....	Yes	Yes.
		San Pedro River .....	Yes	Yes.
		Gila River .....	Yes	Yes.
	Middle Gila and San Pedro .....	Gila River .....	Yes	Yes.
		Santa Cruz River .....	No	No.
	Upper Gila .....	Cienega Creek .....	No	Yes.
		Empire Gulch .....	No	Yes.
		San Francisco River .....	Yes	Yes.
		Hassayampa River .....	No	Yes.
		Rio Grande .....	Yes	Yes.
Rio Grande .....	San Luis Valley .....	Conejos River .....	No	Yes.
		Coyote Creek .....	Yes	Yes.
	Upper Rio Grande .....	Rio Fernando .....	No	Yes.
		Rio Grande .....	Yes	Yes.
		Rio Grande Del Rancho .....	Yes	Yes.
		Rio Grande .....	Yes	Yes.
	Middle Rio Grande .....	Rio Grande .....	Yes	Yes.

Approximate land ownership in each State where the designated critical habitat occurs is provided below in Table 2.

TABLE 2—LAND OWNERSHIP, BY STATE, OF REVISED DESIGNATED CRITICAL HABITAT AREAS FOR SOUTHWESTERN WILLOW FLYCATCHER, LISTED AS APPROXIMATE STREAM LENGTHS IN KM (MI); AND APPROXIMATE AREA IN HA (AC)

State	Federal	State	Private	Other/Unclassified	Total
AZ .....	365 (227); 9,869 (24,387).	50 (31); 3,012 (7,443) ...	369 (229); 19,436 (48,026).	0 (0); 0 (0) .....	784 (487); 32,317 (79,856).
CA .....	188 (117); 2,688 (6,642)	26 (16); 619 (1,529) .....	78 (48); 1,089 (2,692) ...	316 (196); 11,470 (28,342).	609 (378); 15,866 (39,205).
CO .....	43 (27); 4,063 (10,040)	0 (0); 0 (0) .....	7 (5); 221 (547) .....	0 (0); 0 (0) .....	51 (31); 4,284 (10,586).
NV .....	29 (18); 1,451 (3,584) ...	7 (4); 649 (1,603) .....	19 (12); 1,383 (3,416) ...	0 (0); 0 (0) .....	54 (34); 3,482 (8,603).
NM .....	125 (78); 6,318 (15,613)	29 (18); 4,780 (11,812)	248 (154); 14,817 (36,613).	0 (0); 0 (0) .....	402 (250); 25,916 (64,039).
UT .....	41 (25); 1,544 (3,816) ...	0 (0); 15 (38) .....	35 (22); 1,146 (2,831) ...	0 (0); 0 (0) .....	76 (47); 2,705 (6,685).
Total .....	791 (492); 25,933 (64,082).	112 (69); 9,075 (22,424)	756 (470); 38,091 (94,125).	316 (196); 11,470 (28,342).	1,975 (1,227); 84,569 (208,973).

**Notes:** No tribal lands were included in the final revised designation. Totals do not sum because some stream segments have different ownership on each side of the bank resulting in those segments being counted twice. Other/Unclassified includes some local government ownership and unclassified segments (where land ownership was not available).

### Critical Habitat Unit Descriptions

We present brief descriptions below of all critical habitat units and reasons why they meet the definition of critical habitat for the flycatcher. The units are organized by Recovery Unit and then Management Unit. For each Recovery Unit we provide a broad overview of the recent distribution and abundance of flycatcher territories. Based upon our criteria, we also specifically list those streams designated as critical habitat within that Recovery Unit that were known to be occupied by flycatchers at the time of listing, and possess the physical or biological features that may require special management considerations or protection. Detailed site and territory summary information used for Recovery and Management Units are primarily generated from the USGS Rangewide Database (Sogge and Durst 2008, entire) and Flycatcher Rangewide Report (Durst *et al.* 2008, entire).

Because of the abundance of information presented in each Management Unit description, this paragraph is a brief overview of the order of information presented in each unit description. For each Management Unit, we begin by stating the numerical territory goal described in the Recovery Plan and, in many instances, a brief note about flycatcher territory distribution. We next explain whether the Management Unit supported a large flycatcher nesting population (as defined in the *Criteria Used To Identify Critical Habitat*, “Areas with Large Populations” section) in order to establish the areas where we initially focused our selection of stream segments to propose as critical habitat. For Management Units where there was a large population, we provide more

specific information about the occurrence of flycatcher territories within that large population area. If there was no known large flycatcher nesting population, we provide information about known flycatcher distribution and abundance with that Management Unit. We next present those stream segments we are designating as critical habitat and appropriate location and length descriptions. Any stream segments we designate that were not known to be occupied at the time of listing, we described as an “essential” segment for flycatcher conservation in order to reach the stated recovery goals for this Management Unit. We reiterate the description of those designated segments that were known to be occupied by flycatchers at the time of listing. Finally, we explain how the critical habitat designation of stream segments supports the science and conservation goals established in the Recovery Plan, and for those streams not occupied at the time of listing, we offer information supporting why they are considered essential for flycatcher conservation.

For each stream segment being designated as critical habitat, we identify the State and County where it occurs and list the stream length being designated rounded up to the nearest tenth of a kilometer and mile. The specific beginning and ending points of each designated stream segment can be found below in the combination of textual descriptions and associated maps for each critical habitat unit in the Regulation Promulgation section of this document. In addition, GIS data for all designated stream segments, which include more specific lateral extent critical habitat information, may be downloaded online at <http://www.fws.gov/southwest/es/arizona/>

[southwes.htm](#). We also note in our descriptions which stream segments which were proposed for critical habitat were exempted under section 4(a)(3) under the Act or were excluded from critical habitat under section 4(b)(2) of the Act. For more explanation of why any stream is being exempted or excluded, see the discussions under the Exemptions and Exclusions sections below.

All of the designated stream segments provide flycatcher habitat for breeding, feeding, sheltering, and migration, and subsequently provide metapopulation stability, gene flow of the subspecies, protection against catastrophic population losses, and connectivity between neighboring Management Units and Recovery Units (Service 2002, pp. 74–75, 86–92). They also provide habitat to help meet the numerical and habitat-related goals identified in the Recovery Plan (Service 2002, pp. 77–92). Most of the segments are a subset of those identified in the Recovery Plan as areas that provide substantial recovery value (Service 2002, pp. D–12–D–15). Since completion of the Recovery Plan, additional segments of substantial recovery value have been identified through continued survey, analysis, and habitat evaluation, and have been included in this designation when needed to reach recovery goals. The distribution and abundance of territories and habitat within each designated segment are expected to shift over time as a result of natural disturbance events such as flooding that reshape floodplains, river channels, and riparian habitat (Service 2002, pp. 18, D–11–D–13, D–15).

### Coastal California Recovery Unit

This Recovery Unit stretches along the coast of southern California from just north of Point Conception south to

the Mexico border. In 2002, 167 flycatcher territories were estimated to occur in this Recovery Unit (14 percent of the rangewide total) (Sogge *et al.* 2003); however the most recent 2007 rangewide assessment estimated that the number of territories has declined to 120 (9 percent of rangewide total) (Durst *et al.* 2008, p. 12). Since the completion of the Recovery Plan, territories have been distributed along 15 relatively small watersheds, mostly in the southern third of the Recovery Unit (Service 2002, p. 64; Sogge and Durst 2008). Unlike most other Recovery Units, the Coastal California Unit possesses many streams in proximity to one another. However, most breeding sites are small (fewer than five territories); the largest populations occur along the San Luis Rey, Santa Margarita, and Santa Ynez Rivers (Service 2002, p. 64). In 2001, all territories occurred in habitats dominated by native plants, and over 60 percent were on government-managed lands (Federal, State, and local) (Service 2002, p. 64). This Recovery Unit contains the Santa Ynez, Santa Clara, Santa Ana, and San Diego Management Units. The stream segments designated as critical habitat are described below under their appropriate Management Units.

Based upon our occupancy criteria (see above) within the Coastal California Recovery Unit, the Santa Ynez (1991), Santa Clara (1994), and San Luis Rey (1993) Rivers, and Pilgrim Creek (1994) are streams that were within the geographical area known to be occupied at the time of listing (1991–1994) (Sogge and Durst 2008) where we are designating critical habitat segments. Below we identify that each listed item described in our *Special Management Considerations or Protection* section (see above) applies to the streams described in each Management Unit within the Coastal California Recovery Unit.

#### Santa Ynez Management Unit, California

The Recovery Plan describes a goal of 75 flycatcher territories in the Santa Ynez Management Unit (Service 2002, p. 84). The Santa Ynez River is the only stream in this Management Unit known to have flycatcher territories (Sogge and Durst 2008).

We identified a large flycatcher nesting population surrounding the lowest portion of the Santa Ynez River in Santa Barbara County, California. Flycatcher territories were detected on the Santa Ynez River in 1991 (Sogge and Durst 2008). A total of four breeding sites are known to occur within our large population area. A high of 26

flycatcher territories was detected on the lower Santa Ynez River in 1996, but the known number of territories has fluctuated greatly from year-to-year (from 1 to 26) (Sogge and Durst 2008). As a result, more critical habitat than just the large population area is expected to be needed to meet the Recovery Plan goal of 75 territories.

To help reach the Recovery Plan goals, we identified two additional areas of flycatcher habitat on the upper Santa Ynez River that are considered occupied at the time of listing and a short segment of Mono Creek farther upstream outside of our large population area (near Gibraltar Reservoir) that was not occupied at the time of listing. As a result, we are designating three Santa Ynez River segments and a segment of Mono Creek as flycatcher critical habitat. The lower 42.3-km (26.3-mi) Santa Ynez River segment occurs immediately upstream from Vandenberg AFB. The upper 6.1-km (3.8-mi) and 7.6-km (4.7-mi) segments of the Santa Ynez River occur near Gibraltar Reservoir. We are also designating the lowest 2.6 km (1.6 mi) of Mono Creek, also in Santa Barbara County.

The stream segments along the Santa Ynez River were occupied by flycatchers at the time of listing and contain the physical or biological features essential to the conservation of the species which may require special management considerations or protection, for the reasons described above. Mono Creek was not occupied at the time of listing, but is an essential area for flycatcher conservation in order to help meet recovery goals (see below).

The Santa Ynez River and its tributaries (including Mono Creek and other unnamed tributaries) were described as having substantial recovery value in the Recovery Plan (Service 2002, p. 86). The Santa Ynez River and Mono Creek segments are anticipated to provide habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

A 14.7-km (9.1-mi) portion of the lower Santa Ynez River segment that was occupied at the time of listing and contains the physical or biological features essential to the conservation of the species which may require special management considerations or protection, occurs within the

boundaries of Vandenberg AFB. We are exempting this portion of the river from designation as critical habitat, under section 4(a)(3) of the Act, based on the implementation of their Integrated Natural Resources Management Plan (INRMP) which provides a benefit to the flycatcher (see Exemptions section below).

#### Santa Clara Management Unit, California

The Recovery Plan describes a goal of 25 flycatcher territories in the Santa Clara Management Unit (Service 2002, p. 84). Flycatcher territories have been detected in small numbers and sporadically over a broad area in this Management Unit.

There are no large flycatcher nesting populations in the Santa Clara Management Unit to help guide us toward a critical habitat area. As a result, we sought known flycatcher territories and breeding sites, guidance from the Recovery Plan, and knowledge about stream habitat to determine critical habitat segments that may be within the geographical area known to be occupied at the time of listing and others essential for flycatcher conservation (see below). Flycatcher territories have been detected in small numbers in the Santa Clara Management Unit, ranging from zero to seven territories annually between 1995 and 2001 (Sogge and Durst 2008). Three breeding sites have been detected on the Santa Clara River and two breeding sites each on Piru Creek and the San Gabriel River (Sogge and Durst 2008).

We are designating as critical habitat a 75.2 km (46.7 mi) segment of the Santa Clara River in Ventura and Los Angeles Counties. These segments were within the geographical area known to be occupied by flycatchers at the time of listing (Sogge and Durst 2008) and have the physical or biological features essential to the conservation of the species which may require special management consideration or protection, for the reasons described above. We are also designating as flycatcher critical habitat segments of the Ventura River (27.5 km, 17.1 mi) in Ventura County; and segments of Castaic Creek (4.8 km, 3.0 mi), Piru Creek (41.9 km, 26.0 mi), Big Tujunga (4.9 km, 3.0 mi) Canyon, and the San Gabriel River (14.2 km, 8.8 mi) in Los Angeles County. These segments were not occupied at the time of listing, but are essential for flycatcher conservation in order to help meet recovery goals, as explained below.

The Santa Clara, Ventura, and San Gabriel Rivers, Piru Creek and Big Tujunga Canyon, were identified in the

Recovery Plan as having substantial recovery value in the Santa Clara Management Unit (Service 2002, p. 86). Together with Castaic Creek, these six stream segments are essential to flycatcher conservation because they are anticipated to provide habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

Habitat along the Santa Clara River east of Interstate 5 (4.4 km, 2.7 mi) with features essential for flycatcher conservation, owned and managed by Newall Land and Farming Company, is excluded from this critical habitat designation based upon the habitat management provided under a conservation easement (see Exclusions section below).

#### Santa Ana Management Unit, California

The Recovery Plan describes a goal of 50 flycatcher territories in the Santa Ana Management Unit (Service 2002, p. 84). Flycatcher territories have been detected from the headwaters and tributaries of the Santa Ana River in the San Bernardino Mountains in San Bernardino County, California, down to breeding sites in Riverside County at Prado Basin and other nearby separate streams. None of the seven streams (eight stream segments) within the Santa Ana Management Unit were within the geographical area known to be occupied at listing; however, all seven streams have had territories identified since listing.

We identified a large flycatcher nesting population that surrounds the Santa Ana River and its tributaries in San Bernardino and Riverside Counties. Because of the wide distribution and close proximity of flycatcher territories, nearly all the streams within the Santa Ana Management Unit were included in the large population area. A survey in 2007 detected 30 breeding sites along the Santa Ana River (Durst *et al.* 2008, p. 11). Since 1995, flycatcher territories have been detected along the Santa Ana River, and tributaries such as Bear Creek, Mill Creek, Oak Glen Creek, Waterman Creek, San Timoteo Creek, and Bautista Creek (Sogge and Durst 2008). While breeding sites are numerous, the number of territories detected at each site was typically less than five (Sogge and Durst 2008).

Throughout the entire Management Unit, a high of 49 territories was detected in 2001 (Sogge and Durst 2008), but limited on-the-ground surveys only detected one territory in 2007 (Sogge and Durst 2008). In 2007, Durst *et al.* (2008, p. 12) estimated that 28 territories occurred in this Management Unit. The combination of these streams provides riparian habitat for breeding, migrating, dispersing, non-breeding and territorial flycatchers, metapopulation stability, gene flow, connectivity, population growth, and prevention against catastrophic loss.

The Santa Ana River is the single largest river system in southern California with flycatchers distributed throughout the stream from its headwaters and tributaries in the San Bernardino Mountains in San Bernardino County, downstream to Riverside County. We are designating three segments—an upper 42.5-km (26.4-mi) segment in the San Bernardino National Forest, a middle 13.4-km (8.3-mi) segment in San Bernardino County (just above the Riverside County line), and a lower 1.9 km (1.2 mi) portion (consisting of about 4 separate parcels) located about 2.3 km (1.4 mi) northeast of Prado Basin flood control dam—of the Santa Ana River in San Bernardino County and other segments with high connectivity near its headwaters. In San Bernardino County we are designating 5.2 km (3.2 mi) of Waterman Creek (including portions of the Left and Right Fork), 14.7 km (9.2 mi) of Bear Creek, 4.1 km (2.6 mi) of San Timoteo Creek, 19.3 km (12.0 mi) of Mill Creek, and 4.7 km (2.9 mi) of Oak Glen Creek as critical habitat.

We are designating three segments of Bautista Creek on Federal Lands within the San Bernardino National Forest. The most eastern segment occurs for 2.0 km (1.3 mi), upstream of the Ramona Band of Cahuilla Reservation. West of tribal land is an 11.4-km (7.1-mi) stream segment that extends through the San Bernardino National Forest until a segment of private land occurs. West of this portion of private land is another San Bernardino National Forest segment that is 5.9 km (3.7 mi) long.

Portions of the Santa Ana Watershed in Riverside County identified as being essential for flycatcher conservation (the lower Santa Ana River (including Prado Basin), San Timoteo Creek, and Bautista Creek) fall within the boundaries of the Western Riverside County Multiple Species Habitat Conservation Plan (Western Riverside County MSHCP). All non-Federal and tribal lands that fall within the Western Riverside County Multispecies Habitat Conservation Plan are being excluded from critical habitat

designation under section 4(b)(2) of the Act (see Exclusions section below).

Habitat with features essential for the flycatcher was also identified within the boundaries of the Ramona Band of Cahuilla Reservation on Bautista Creek. We are excluding these tribal lands from the critical habitat designation under section 4(b)(2) of the Act (see Exclusions section below).

This diverse and widely distributed group of seven streams was identified in the Recovery Plan (although Oak Glen Creek was not specifically named as a tributary to the Santa Ana River) as areas of substantial recovery value (Service 2002, p. 86). Together, these stream segments are essential for flycatcher conservation because they are anticipated to provide habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and provide for population growth and colonization potential. As a result, these river segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

#### San Diego Management Unit, California

The Recovery Plan describes a goal of 125 flycatcher territories in the San Diego Management Unit (Service 2002, p. 84). Flycatcher territories have been detected throughout this Management Unit primarily along the rivers and tributaries of the largest river drainages in the area, such as the San Luis Rey, Santa Margarita, and San Diego Rivers.

We identified a large flycatcher nesting population that includes nearly all of the streams within the San Diego Management Unit. Within the San Diego Management Unit, about 24 breeding sites are known to occur (Durst *et al.* 2008, p. 12). A high of 86 flycatcher territories were detected in 2001 (Sogge and Durst 2008). In 2003, Durst *et al.* (2005, p. 10) estimated a total of 100 territories for the entire San Diego Management Unit, with 86 territories on San Luis Rey and Santa Margarita Rivers. In 2007, Durst *et al.* (2008, p. 11) estimated a total of 77 territories at 24 breeding sites for the entire San Diego Management Unit, with 69 territories at 12 breeding sites on these two river drainages.

Within this large population area, we identified flycatcher habitat on 18 different streams within the San Diego Management Unit that occur in San Diego, Riverside, and Orange Counties, California. The streams we identified in San Diego County are: San Mateo Creek,

Cristianitos Creek, San Onofre Creek, Las Flores Creek, Las Pulgas Creek, Fallbrook Creek, Santa Margarita River, DeLuz Creek, San Luis Rey River (two segments), Pilgrim Creek, Agua Hedionda Creek, San Dieguito River, Santa Ysabel Creek, San Diego River (two segments), Temescal Creek, and Sweetwater River. A segment of Temecula Creek travels across San Diego and Riverside Counties and a Cañada Gobernadora Creek segment occurs in Orange County.

The longest two streams in the San Diego Management Unit are the San Luis Rey and Santa Margarita Rivers, which contain the largest numbers of flycatcher territories within this Management Unit. In addition to these two streams, we are designating a collection of smaller streams within the Unit.

We are designating a 9.3-km (5.8-mi) segment of the Santa Margarita River and a 3.3-km (2.1-mi) segment of De Luz Creek in San Diego County, upstream of Marine Corps Base, Camp Pendleton (Camp Pendleton). Territories have been detected on the Santa Margarita River on Camp Pendleton. The segment upstream from Camp Pendleton maintains a diversity of riparian vegetation used by dispersing and migrating flycatchers and the ability to develop breeding habitat for population growth or discovery of undetected territories.

We are designating seven segments of the San Luis Rey River and a 5-km (3.1-mi) segment of Pilgrim Creek in San Diego County. Four separate upper San Luis Rey segments of critical habitat occur upstream (7.4 km, 4.6 mi), between (0.8 km, 0.5 mi and 0.9 km, 0.6 mi), and downstream (3.1 km, 1.9 mi) of the La Jolla Band of Luiseño Indians and the Rincon Band of Luiseño Mission Indians tribal lands from Lake Henshaw downstream to the Puma Valley Country Club. The western most three segments of the San Luis Rey River (30.8 km, 19.1 mi; 5.1 km; 3.2 mi; and 8.5 km, 5.3 mi) occur surrounding the Pala Band of Luiseño Mission Indians tribal lands from Interstate 5 upstream to the Puma Valley Country Club. Flycatcher breeding sites have been detected since 1991 on Pilgrim Creek and the San Luis Rey River. Durst *et al.* (2008, p. 11) reported 55 territories from the San Luis Rey River drainage. A 2007 survey of Pilgrim Creek did not identify any territories (Durst *et al.* 2008, p. 28).

We are designating a segment of Agua Hedionda Creek, which include small portions of the right and left forks. The upstream forks extend from La Mirada Drive (right fork) (0.4 km, 0.2 mi) and Sycamore Avenue (left fork) (1.0 km, 0.6

mi) and then downstream along the mainstem Agua Hedionda Creek for 2.5 km (1.6 mi). A single breeding site and flycatcher territory was detected on Agua Hedionda Creek in 1998 and 1999 (Sogge and Durst 2008). The segments of Agua Hedionda Creek were not within the geographical area known to be occupied at the time of listing, but are essential for conservation in order to meet recovery goals.

We are designating joining segments of Temescal Creek (7.6 km, 4.7 mi) and Santa Ysabel River (6.5 km, 4.0 mi) in San Diego County. Both segments are found upstream of known breeding sites (within areas that were proposed as critical habitat but are being excluded from the revised final designation). These two upstream segments currently provide habitat for dispersing and migrating flycatchers and locations for population growth or discovery of undetected territories.

We are designating a 5.2-km (3.2-mi) segment of Temecula Creek in San Diego County. Two breeding sites are known from Temecula Creek, with one occurring on the designated segment. Territories were first detected in 1997, and Sogge and Durst (2008) reported a single territory for 2003. A 2007 survey of Temecula Creek did not identify any territories (Sogge and Durst 2008).

On the San Diego River north of the El Capitan Reservoir, we are designating a 3.8-km (2.4-mi) segment downstream and 2.2-km (1.4-mi) segment upstream of land (proposed but excluded from flycatcher critical habitat) that is jointly managed by the Barona Group of Capitan Grande Band of Mission Indians and the Viejas (Baron Long) Group of Capitan Grande Band of Mission Indians. Territories in this stream were not identified at listing, but two territories were detected in 2001 (USGS 2007).

Proposed critical habitat on the San Dieguito River, San Diego River, non-Federal lands on the Sweetwater River, and a portion of Santa Ysabel Creek within the boundaries of the San Diego County MSCP are being excluded from this critical habitat designation under section 4(b)(2) of the Act. However, we are designating 4.5 km (2.8 mi) of federally owned lands on the Sweetwater River within the boundaries of the San Diego County MSCP (see Exclusions section below).

Proposed critical habitat on Agua Hedionda Creek identified within the boundaries of the City of Carlsbad's Habitat Management Plan is being excluded from this critical habitat designation under section 4(b)(2) of the Act (see Exclusions section below).

Proposed critical habitat on Cañada Gobernadora Creek identified within the boundaries of the Orange County Southern Subarea Plan is being excluded from this critical habitat designation under section 4(b)(2) of the Act (see Exclusions section below).

Proposed critical habitat on the San Luis Rey River was identified within the boundaries of tribal lands of the Pala Band of Luiseño Mission, Rincon Band of Luiseño Mission Indians, and La Jolla Band of Luiseño Indians. We are excluding these tribal lands from the critical habitat designation under section 4(b)(2) of the Act (see Exclusions section below).

Proposed critical habitat on the San Diego River was identified within the boundaries of tribal lands of the Barona Group of Capitan Grande Band of Mission Indians and the Viejas (Baron Long) Group of Capitan Grande Band of Mission Indians of the Capitan Grande Band of Diegueno Mission Indians. We are excluding these tribal lands from the critical habitat designation under section 4(b)(2) of the Act (see Exclusions section below).

Critical habitat considered within the boundaries of Marine Corps Base, Camp Pendleton on Cristianitos Creek, San Mateo Creek, San Onofre Creek, Los Flores/Las Pulgas Creek, Pilgrim Creek, DeLuz Creek, and the Santa Margarita River was exempted from this critical habitat designation (76 FR 50542, August 15, 2011, p. 50579). Critical habitat considered on portions of the Santa Margarita River located within the boundaries of the Seal Beach Naval Weapons Station, Fallbrook Detachment was also exempted from this critical habitat designation (76 FR 50542, August 15, 2011, p. 50580) (see Exemptions section below).

The San Luis Rey River and Pilgrim Creek are the only streams in this management unit within the geographical area known to be occupied by flycatchers at the time of listing. The remaining critical habitat stream segments will help reach flycatcher recovery goals within the San Diego Management Unit. Collectively, these segments contain essential features for breeding, non-breeding, territorial, migrating, and dispersing flycatchers and help provide metapopulation stability, population growth, gene flow, connectivity, and protection against catastrophic losses.

#### Basin and Mojave Recovery Unit

The Basin and Mojave Recovery Unit is comprised of a broad geographic area including the arid interior lands of southern California and a small portion of extreme southwestern Nevada. In



2002, there were a total of 69 known flycatcher territories estimated to occur (7 percent of the rangewide total), but have declined to an estimated 51 territories in 2007 (Durst *et al.* 2008, p.12). With the exception of breeding sites on the Owens and Kern Rivers, all known breeding sites have fewer than five territories (Service 2002, p.64). As of 2002, all flycatcher territories were in riparian habitats dominated by native plants, and approximately 70 percent are on privately owned lands (Service 2002, p. 64). Because there has been little change in the amount of known flycatcher breeding sites since completion of the Recovery Plan and the number of estimated territories has declined, flycatcher habitat use and land ownership are likely similar today. The Recovery Unit contains the Owens, Kern, Mojave, Salton, and Amargosa Management Units.

Based upon our occupancy criteria (see above), within the Basin and Mojave Recovery Unit, the South Fork Kern (1993) and Owens Rivers (1993) are streams that were within the geographical area known to be occupied at the time of listing (1991–1994) (Sogge and Durst 2008). Below we identify that each listed item described in our *Special Management Considerations or Protection* section (see above) applied to the streams described in each Management Unit within the Basin and Mojave Recovery Unit.

#### Owens Management Unit, California

The Recovery Plan describes a goal of 50 flycatcher territories in the Owens Management Unit (Service 2002, p. 84). The Owens River is the only stream in the Management Unit known to have flycatcher territories and is the most northern in the Basin and Mojave Recovery Unit.

We identified a large flycatcher nesting population along the Owens River within Mono and Inyo Counties, California. Nesting flycatchers have been detected at four sites within this area, with a high of 29 territories detected in 1999 (Sogge and Durst 2008). Within this large population area, we proposed as critical habitat a 128.5-km (79.9-mi) continuous segment of the Owens River (from Long Valley Dam to just north of Tinemaha Reservoir).

This segment of the Owens River is within the geographical area known to be occupied by flycatchers at the time of listing, and contains the physical or biological features essential to the conservation of the species, which may require special management considerations or protection, for the reasons described above.

The Owens River is the only stream identified in the Recovery Plan as having substantial recovery value within the Owens Management Unit (Service 2002, p. 88). The Owens River segment is anticipated to provide habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, this river segment and associated flycatcher habitat is anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

The flycatcher habitat essential for conservation identified along the Owens River is being managed by the Los Angeles Department of Water and Power (LADWP) and is being conserved through implementation of their Southwestern Willow Flycatcher Conservation Strategy. LADWP entered into a Memorandum of Understanding with the Service to implement these conservation actions. As a result, the entire 128.5-km (79.8-mi) Owens River, in Inyo and Mono Counties, California, is being excluded from this critical habitat designation (see Exclusions section below).

#### Kern Management Unit, California

The Recovery Plan describes a goal of 75 flycatcher territories in the Kern Management Unit (Service 2002, p. 84). The South Fork Kern River and Canebrake Creek within Kern County, California, are the only streams known to have flycatcher territories within this Management Unit.

We identified a large flycatcher nesting population along the lower portion of the South Fork Kern River. Flycatchers were first detected nesting on the South Fork Kern River in 1993 and have been detected annually through at least 2007 (Sogge and Durst 2008). A high of 38 territories were detected in 1997 within this Management Unit (Sogge and Durst 2008). The South Fork Kern River is within the geographical area known to be occupied by flycatchers at the time of listing, and contains the physical or biological features essential to the conservation of the species, which may require special management considerations or protection, as described above.

Because of the need to increase the abundance of flycatcher territories to reach recovery goals in the Kern Management Unit, we also identified a small portion of Canebrake Creek in Kern County within our large population areas as being essential to

flycatcher conservation. Canebrake Creek (a tributary to the South Fork Kern River) was not within the geographical area known to be occupied at the time of listing, but territories were detected in 1998 (Sogge and Durst 2008).

We are designating as critical habitat a 23.6-km (14.6-mi) portion of the South Fork Kern River (including the upper 1.0-km (0.6-mi) portion of Lake Isabella) and a 1.7-km (1.0-mi) segment of Canebrake Creek in Kern County, California. Along this segment of the South Fork Kern River, two pieces of private land that are woven within this segment, the Hafenfeld Ranch (0.30 km, 0.20 mi of stream on the south side of the river) and Sprague Ranch (4.0 km, 2.5 mi on north side of the river), are being excluded from the final designation (see below and Exclusions section).

The South Fork Kern River segment was the lone segment identified within this Management Unit as having substantial recovery value in the Recovery Plan (Service 2002, p. 88). The South Fork Kern River and the additional Canebrake Creek segment are important for flycatcher conservation because they are anticipated to provide habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

Flycatcher habitat on the Hafenfeld Ranch along the South Fork of the Kern River is being excluded under section 4(b)(2) of the Act due to a conservation easement established with the National Resource Conservation Service (NRCS) specific to protecting flycatcher habitat. As a result of the habitat protections provided through this easement, this property is being excluded from this critical habitat designation (see Exclusions section below).

Flycatcher habitat on the Sprague Ranch along the South Fork of the Kern River is being excluded under section 4(b)(2) of the Act due to protections assured by their long-term commitments to management programs specific to the riparian habitat and needs of the flycatcher. The Sprague Ranch was acquired specifically for flycatcher conservation and is co-managed by the Corps, the California Department of Fish and Game (CDFG), and the National

Audubon Society (Audubon) (see Exclusions section below).

#### Mojave Management Unit, California

The Recovery Plan describes a goal of 25 territories in the Mojave Management Unit (Service 2002, p. 84). The Mojave River and Holcomb Creek are the only streams known to have flycatcher territories within the Mojave Management Unit (Sogge and Durst 2008).

There are no large flycatcher nesting populations in the Mojave Management Unit to help guide us toward a critical habitat area, and no areas were known to be occupied at the time of listing. Therefore, to identify the areas that would contribute to meeting recovery goals for this Management Unit, we used information based on currently known flycatcher territories and breeding sites, guidance from the Recovery Plan, and knowledge about stream habitat to determine areas essential for flycatcher conservation.

Flycatchers were first detected nesting on the Mojave River in 1995 and Holcomb Creek in 1999. A total of five breeding sites occur along the Mojave River and one site at Holcomb Creek (Sogge and Durst 2008). A high of 12 territories were detected at these breeding sites in 2001 (Sogge and Durst 2008). In addition, we found additional areas that would contribute to meeting recovery goals in the West Fork Mojave River and Deep Creek.

We are designating as flycatcher critical habitat a 35.7-km (22.2-mi) segment of the Mojave River, an 11.2-km (6.9-mi) segment of the West Fork Mojave River, a 19.6-km (12.2-mi) segment of Holcomb Creek, and a 20.0-km (12.5-mi) segment of Deep Creek (including Mojave River Forks Reservoir) in San Bernardino County, California, near the Town of Victorville. Deep Creek connects Holcomb Creek with the Mojave Forks Reservoir. All of these segments were not within the geographical area known to be occupied at the time of listing, but are essential for flycatcher conservation because they will help meet recovery goals.

Three of these streams (Mojave River, West Fork Mojave River, and Deep Creek) were identified as having substantial recovery value in the Recovery Plan (Service 2002, p. 88). Holcomb Creek was not specifically identified in the Recovery Plan, but since flycatcher territories have been detected there we find it also important to meet recovery goals. Together, these four critical habitat segments are essential to flycatcher conservation because they are anticipated to provide habitat for metapopulation stability,

gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

#### Salton Management Unit, California

The Recovery Plan describes a goal of 25 flycatcher territories in the Salton Management Unit (Service 2002, p. 84). A single known flycatcher breeding site occurs along San Felipe Creek in this Management Unit.

There are no large flycatcher nesting populations solely in the Salton Management Unit, and no areas were within the geographical area known to be occupied at the time of listing. However, portions of the Salton Management Unit were part of a large population area because of the proximity of flycatcher territories in the adjacent San Diego and Santa Ana Management Units. Therefore, to identify the areas that would contribute to meeting recovery goals for this Management Unit, we used information based on currently known flycatcher territories and breeding sites, guidance from the Recovery Plan, and knowledge about stream habitat to determine areas essential for flycatcher conservation (see below). From 1998 to 2002, flycatcher territories were detected in small numbers (2 to 4 territories) at single breeding site on San Felipe Creek within this Management Unit (Sogge and Durst 2008).

We are designating as flycatcher critical habitat a 19.7-km (12.3-mi) segment of San Felipe Creek and a short 0.9-km (0.6 mi) segment of Mill Creek in San Diego County, California. This short portion of Mill Creek is connected to the Mill Creek segment within the Santa Ana Management Unit. We find that both of the segments are essential for flycatcher conservation because they will help meet recovery goals.

Although the San Felipe Creek segment proposed as critical habitat was the only river segment identified in the Recovery Plan as having substantial recovery value (Service 2002, p. 88), the additional Mill Creek segment was identified within the Santa Ana Management Unit as having substantial recovery value (Service 2002, p.88). As a result, the San Felipe and Mill Creek segments, along with the other populations and river segments in proximity within the adjacent San Diego and Santa Ana Management Units are

essential to flycatcher conservation because they are anticipated to provide habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

A small portion of San Felipe Creek (1.6 km, 1.0 mi) that occurs within the Iipay Nation of Santa Ysabel, California (formerly the Santa Ysabel Band of Diegueno Mission Indians of the Santa Ysabel Reservation), was identified as having features essential to the flycatcher. Because of our partnership with the Tribe toward conservation of flycatcher habitat, the portion of San Felipe Creek that occurs on the Iipay Nation lands is being excluded from the final critical habitat designation under section 4(b)(2) of the Act (see Exclusions section below).

#### Amargosa Management Unit, California and Nevada

The Recovery Plan describes a goal of 25 flycatcher territories in the Amargosa Management Unit (Service 2002, p. 84). Flycatcher territories have been detected in small numbers within this Management Unit.

There are no large flycatcher nesting populations in the Amargosa Management Unit to help guide us toward a critical habitat area, and no areas were within the geographical area known to be occupied at the time of listing. Therefore, to identify the areas that would contribute to meeting recovery goals for this Management Unit, we used information based on currently known flycatcher territories and breeding sites, guidance from the Recovery Plan, and knowledge about stream habitat to determine areas essential for flycatcher conservation (see below).

Within the Amargosa Management Unit, one breeding site has been detected on the Amargosa River and two breeding sites are known within the Ash Meadows NWR (Sogge and Durst 2008). From 1998 to 2007, one to seven territories were detected at these breeding sites within this Management Unit (Sogge and Durst 2008). Therefore, we sought additional areas for critical habitat that could contribute to recovery goals in this Management Unit.

We refined our proposal within the Amargosa Management Unit in our July 12, 2012 (77 FR 41147), Notice of

Availability, by identifying five specific stream segments and their management within the Ash Meadows NWR, in Nye County, Nevada. These areas were not within the geographical area known to be occupied by the flycatcher at the time of listing.

We are designating as flycatcher critical habitat five areas on the Ash Meadows NWR in Nye County, Nevada: Soda Spring segment (0.5 km, 0.3 mi); Lower Fairbanks segment (0.8 km, 0.5 mi); Crystal Reservoir segment (0.5 km, 0.3 mi); North Tubbs segment (0.2 km, 0.1 mi); and South Tubbs segment (0.4 km, 0.2 mi). We are also designating segments of the Amargosa River (12.3 km, 7.7 mi) and Willow Creek (3.5 km, 2.2 mi) in Inyo and San Bernardino Counties, California. No known breeding sites have yet to be detected on the Amargosa River and Willow Creek segments in California. None of the segments were within the geographical area known to be occupied at the time of listing.

The Ash Meadows NWR and the Amargosa River in California, were described in the Recovery Plan as having substantial recovery value (Service 2002, p. 88). Willow Creek was also determined to be essential in order to reach recovery goals in this Management Unit. Together, these segments are essential to flycatcher conservation because they are anticipated to provide habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

#### Lower Colorado Recovery Unit

This is a geographically large and ecologically diverse Recovery Unit, encompassing the Colorado River and its major tributaries (such as the Virgin, Pahrnagat, Muddy, and Little Colorado Rivers) from the high-elevation streams in White Mountains of East-Central Arizona and Central Western New Mexico to the mainstem Colorado River through the Grand Canyon downstream through the arid lands along the LCR to the Mexico border (Service 2002, p. 64).

In 2002, despite its size, the Lower Colorado Recovery Unit had only 127 known flycatcher territories (11 percent of the rangewide total), most of which occur away from the mainstem Colorado River (Sogge *et al.* 2003, p. 10). In 2007,

150 territories were estimated to occur within this Recovery Unit (also 11 percent of the rangewide total) (Durst *et al.* 2008, p. 12). Most sites included fewer than 5 territories; the largest populations (most of which are fewer than 10 territories) are found on the Bill Williams, Virgin, and Pahrnagat Rivers (Service 2002, p. 64). Approximately 69 percent of territories are found on government-managed lands and 8 percent are on tribal lands (Service 2002, p. 64). Habitat characteristics range from purely native (including high-elevation and low-elevation willow) to exotic (primarily tamarisk)-dominated stands (Service 2002, p. 64). Because of the similarity in abundance and distribution of territories since 2002, these land ownership and habitat-use statistics are likely similar today. This Recovery Unit contains the Little Colorado, Middle Colorado, Virgin, Pahrnagat, Bill Williams, Hoover to Parker Dam, and Parker Dam to Southerly International Border Management Units.

Based upon our occupancy criteria (see above), within the Lower Colorado Recovery Unit, the Colorado (1993), Little Colorado (1993), Bill Williams (1994), Big Sandy (1994), Santa Maria (1994), and Zuni (1993) Rivers, and Rio Nutria (1993) are streams that were within the geographical area known to be occupied at the time of listing (1991–1994) (Sogge and Durst 2008) where we proposed critical habitat segments. At the time of listing only specific sites on the Colorado River within the Middle Colorado Management Unit were known to be specifically occupied with territories, but based upon our criteria and the wide-ranging nature of this bird as a neotropical migrant and its use of migration stop-over habitat, we also consider the Colorado River within the Hoover to Parker Dam and Parker Dam to Southerly International Border Management Units occupied at the time of listing. Below we identify that each listed item described in our *Special Management Considerations or Protection* section (see above) applies to the streams described in each Management Unit within the Lower Colorado Recovery Unit.

Little Colorado Management Unit, Arizona and New Mexico

The Recovery Plan describes a goal of 50 flycatcher territories in the Little Colorado Management Unit (Service 2002, p. 84). Flycatcher territories have been detected on the Little Colorado and Zuni Rivers and Rio Nutria within this large area along the New Mexico and Arizona border (Sogge and Durst 2008).

We identified a large flycatcher nesting population surrounding the Little Colorado River, near the Town of Greer in Apache County, Arizona. Flycatcher territories have been detected along the Little Colorado River, Zuni River, and Rio Nutria since 1993. A high of 16 territories were detected on these river segments in 1996, but known territories have declined, with only two and six territories detected in 2005 and 2006, respectively (Sogge and Durst 2008). Because of the need to increase the abundance of flycatcher territories to reach recovery goals, we also identified the Zuni River and Rio Nutria in McKinley County, New Mexico, and the West Fork Little Colorado River, in Apache County, Arizona. No flycatcher territories are known from the West Fork Little Colorado River.

We are designating as flycatcher critical habitat a contiguous 8.8-km (5.5-mi) segment of the West Fork Little Colorado River and a 17.6-km (10.9-mi) segment of the Little Colorado River. This West Fork and Little Colorado River segment begins where USFS (Forest Service) Road 113 crosses the West Fork and extends downstream to its confluence with the Little Colorado River, through the Town of Greer, and ends at the Diversion Ditch. The Little Colorado River was within the geographical area known to be occupied at the time of listing, and contains the physical or biological features essential to the conservation of the species which may require special management considerations or protection, as described above. The West Fork Little Colorado River is not within the geographical area known to be occupied at the time of listing, but is essential to flycatcher conservation of the flycatcher in order to meet recovery goals, as described above.

The Little Colorado River and the West Fork Little Colorado River segments were identified in the Recovery Plan as areas with substantial recovery value (Service 2002, p. 89). These two stream segments are anticipated to provide habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

Proposed segments along the Rio Nutria (55.4 km, 34.4 mi) and Zuni River (35.8 km, 22.2 mi), occurring on

Zuni Pueblo in New Mexico, are within the geographical area known to be occupied by flycatchers at the time of listing, and contain the physical or biological features essential to the conservation of the species which may require special management considerations or protection. Because of our partnership with Zuni Pueblo toward wildlife conservation, and their development, completion, and implementation of actions described in their Flycatcher Management Plan, we have excluded the Rio Nutria and Zuni River stream segments that occur on Zuni Pueblo under section 4(b)(2) of the Act (see Exclusions section below).

Virgin Management Unit, Utah, Arizona and Nevada

The Recovery Plan describes a goal of 100 flycatcher territories in the Virgin Management Unit (Service 2002, p. 84). Flycatcher territories have been detected along a broad area of the Virgin River within this Management Unit through the States of Utah, Arizona, and Nevada (Sogge and Durst 2008).

We identified a large flycatcher nesting population along an essential segment of the Virgin River where it occurs through Washington County, Utah; Mohave County, Arizona; and Clark County, Nevada. Flycatchers were first detected nesting on this portion of the Virgin River in 1995. A total of seven breeding sites have been detected within this large population area through 2007 (Durst *et al.* 2008, p. 12). Also, a high of 43 territories were estimated to occur within this Management Unit in 2007 (Durst *et al.* 2008, p. 12), most occurring within the State of Nevada, although territories are also known along the Virgin River in Utah and Arizona.

We are designating as flycatcher critical habitat a 152.0-km (94.4-mi) segment (total length) of the Virgin River that begins at Berry Springs in Washington County, Utah, continues 47.5 km (29.5 mi) through the State of Utah, then extends 56.0 km (34.8 mi) through the Town of Littlefield and the State of Arizona, and then 48.4 km (30.0 mi) through the State of Nevada until it ends at Colorado River Mile 280 at the upper end of Lake Mead, Clark County, Nevada. This segment is not within the geographical area known to be occupied at the time of listing, but is being designated as critical habitat because it is essential for flycatcher conservation in the Virgin River Management Unit in order to meet recovery goals.

The Virgin River was identified as having substantial recovery value in the Recovery Plan (Service 2002, p. 89). This essential segment of the Virgin

River we are designating as critical habitat within the Virgin River Management Unit is anticipated to provide habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, this river segment and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

Middle Colorado Management Unit, Arizona

The Recovery Plan describes a goal of 25 flycatcher territories in the Middle Colorado Management Unit (Service 2002, p. 84).

We identified a large flycatcher nesting population along the lower portion of the Colorado River within the Grand Canyon (including upper Lake Mead) in Mohave County, Arizona. Flycatchers were first detected nesting along the Colorado River within the Middle Colorado Management Unit in 1993. A total of 16 breeding sites have been detected in our selected segment through 2007. Also, a high of 16 territories was detected within this Management Unit in 1998 (Sogge and Durst 2008), but has declined to an estimated 4 territories in 2007 (Durst *et al.* 2008, p. 12).

We proposed as critical habitat a 74.1-km (46.0-mi) segment of the Colorado River that extends from the middle of Lake Mead upstream to Colorado River Mile 243. This entire segment is within the full pool elevation of Lake Mead. The Colorado River in Mohave County, Arizona, is within the geographical area known to be occupied by flycatchers at the time of listing, and contains the physical or biological features essential to the conservation of the species which may require special management considerations or protection, as described above.

This Middle Colorado River segment was identified as having substantial recovery value in the Recovery Plan (Service 2002, p. 89). The portion of the Colorado River we proposed as critical habitat, within the Middle Colorado Management Unit, is anticipated to provide habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, this river segment and associated flycatcher habitat are anticipated to support the strategy, rationale, and

science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

The conservation space of Lake Mead and the Colorado River immediately upstream is within the planning area of the LCR Multi-Species Conservation Plan (LCR MSCP) up to full pool elevation of Lake Mead. The full pool elevation is defined by water surface elevation 1,229 feet National Geodetic Vertical Datum, which extends up to near river mile 235 at Separation Canyon. The Hualapai Nation, which also occurs within this segment, is also within the planning area of the LCR MSCP. The Nation developed, completed, and is implementing actions described in their Flycatcher Management Plan. As a result of the upper portion of Lake Mead and the Colorado River through river mile 235 being included in the planning area of the LCR MSCP, this entire segment is being excluded from this critical habitat designation under section 4(b)(2) of the Act (see Exclusions section below).

Pahranagat Management Unit, Nevada

The Recovery Plan describes a goal of 50 flycatcher territories in the Pahranagat Management Unit (Service 2002, p. 84).

We identified a large flycatcher nesting population along the Pahranagat River and the Muddy River. Flycatchers were first detected nesting on these portions of the Pahranagat and Muddy Rivers in 1997. Through 2007, a total of three breeding sites were known to occur within these segments, with a high of 38 territories detected in 2006 (Sogge and Durst 2008).

We are designating as flycatcher critical habitat a 3.6-km (2.3-mi) segment of the Pahranagat River through the Pahranagat NWR in Nye County, Nevada. This segment is not within the geographical area known to be occupied at the time of listing, but is being designated as critical habitat because it is essential for flycatcher conservation in order to meet recovery goals in the Pahranagat Management Unit.

The Pahranagat River segment was identified as having substantial recovery value in the Recovery Plan (Service 2002, pp. 89–90). This essential river segment we are designating as critical habitat within the Pahranagat Management Unit is anticipated to provide habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, this river segment and associated flycatcher habitat is anticipated to

support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

The Pahranaagat River (2.5 km, 1.6 mi and 1.4 km, 0.9 mi) segments within the Key Pittman State Wildlife Area in Lincoln County and the 3.1-km (1.9-mi) Muddy River segment within the boundaries of the Overton State Wildlife Area in Clark County, Nevada, were also identified as being essential to flycatcher conservation. As a result of the State of Nevada's management of the Key Pittman and Overton State Wildlife Areas for wildlife and riparian habitat for the flycatcher, both of these proposed segments in this Management Unit are being excluded from this designation under section 4(b)(2) of the Act (see Exclusions section below).

Bill Williams Management Unit, Arizona

The Recovery Plan describes a goal of 100 flycatcher territories in the Bill Williams Management Unit (Service 2002, p. 84). Flycatcher territories are distributed across a broad area of the Bill Williams Management Unit.

We identified a large flycatcher nesting population in the Bill Williams Management Unit. It encompasses areas along the Big Sandy River near the Town of Wikieup in Mohave County; the Big Sandy, Santa Maria, and Bill Williams Rivers at the upper end of Alamo Lake in La Paz County; and along the Bill Williams River between Alamo Dam and the Colorado River in La Paz and Mohave Counties. Flycatchers were first detected nesting on the Big Sandy, Santa Maria, and Bill Williams Rivers in 1994 (Sogge and Durst 2008). Through 2007, a total of 9 breeding sites occurred within these segments with a high of 61 territories detected in 2004 (Sogge and Durst 2008). Since 2007, an additional breeding site was discovered on the upper Big Sandy River and an additional two sites discovered along the Bill Williams River.

We are designating as flycatcher critical habitat a 35.3-km (21.9-mi) segment of the upper Big Sandy River from the Town of Wikieup to Groom Peak Wash in La Paz County, Arizona. At upper Alamo Lake where the Big Sandy (9.6 km, 6.0 mi), Santa Maria (8.4 km, 5.2 mi), and Bill Williams Rivers (5.4 km, 3.3 mi) converge, we are designating collectively, a 23.4-km (14.5-mi) portion of these three streams in La Paz County. Between Alamo Dam and the Colorado River, we are designating as critical habitat a 17.8-km (11.0-mi) segment of the Bill Williams River near Lincoln Ranch in La Paz and Mohave Counties, Arizona. Also below

Alamo Dam, closer to the Colorado River, we are designating as critical habitat a 12.4 km (7.7 mi) of the Bill Williams River from Casteñeda Wash downstream of Planet Ranch to the middle of the Bill Williams NWR, where it meets the boundary of the LCR MSCP planning area. All of these areas are within the geographical area known to be occupied by flycatchers at the time of listing, and contain the physical or biological features essential for the conservation of the species which may require special management considerations or protection, as described above.

The Big Sandy, Santa Maria, and Bill Williams Rivers were identified as having substantial recovery value in the Recovery Plan (Service 2002, p. 90). These river segments we are designating within the Bill Williams Management Unit are anticipated to provide habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated flycatcher habitat is anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

An 8.9-km (5.6-mi) section of the lower Bill Williams River within the Bill Williams River NWR is also within the geographical area known to be occupied by flycatchers at the time of listing, and contains the physical or biological features essential to the conservation of the species, which may require special management considerations or protection. This portion of the Bill Williams River occurs within the planning area of the LCR MSCP. As a result of the conservation provided the flycatcher within the LCR MSCP planning area, this portion of the Bill Williams River is being excluded from this critical habitat designation under section 4(b)(2) of the Act (see Exclusions section below).

Hoover to Parker Dam Management Unit, Arizona and California

The Recovery Plan describes a goal of 50 flycatcher territories in the Hoover to Parker Dam Management Unit (Service 2002, p. 84).

We identified a large flycatcher nesting population along the Colorado River (and a small portion of the Bill Williams River) within Mohave and La Paz Counties, Arizona, and San Bernardino County, California. Flycatchers were first detected on this portion of the Colorado River in 1995

(Sogge and Durst 2008). Through 2007, a total of 6 breeding sites occurred within this segment (Durst 2008, p. 12) with a high of 34 territories detected in 2004 (Sogge and Durst 2008).

These segments of the Colorado River and Bill Williams River were identified as having substantial recovery value in the Recovery Plan (Service 2002, p. 90). These river segments are anticipated to provide flycatcher habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

These segments of the Colorado River (107.0 km, 66.4 mi) and Bill Williams River (1.7 km, 1.0 mi) are within the geographical area known to be occupied by flycatchers at the time of listing, and contain the physical or biological features essential to the conservation of the species, which may require special management considerations or protection. The entirety of the segments proposed as flycatcher critical habitat occur within the planning area of the LCR MSCP. The Fort Mojave and Chemehuevi Tribes also occur within this segment and are also within the planning area of the LCR MSCP. These tribes have developed, completed, and are implementing actions described in their Flycatcher Management Plans. As a result of the flycatcher conservation occurring along the Colorado River and Bill Williams River as a result of being included within the planning area of the LCR MSCP, these entire segments are being excluded from this critical habitat designation under section 4(b)(2) of the Act (see Exclusions section below).

Parker Dam to Southerly International Border Management Unit, Arizona and California

The Recovery Plan describes a goal of 150 flycatcher territories in the Parker Dam to Southerly International Border Management Unit (Service 2002, p. 84).

We identified a large flycatcher nesting population along the Colorado River within La Paz and Yuma Counties, Arizona, and San Bernardino, Riverside, and Imperial Counties, California. Flycatcher territories were first detected on this portion of the Colorado River in 1995 (Sogge and Durst 2008). Through 2007, a total of 16 breeding sites occurred within this Management Unit (Durst 2008, p.12), with a high of 15

territories detected in 1996 (Sogge and Durst 2008). In 2007, it was estimated that only one territory occurred within this Management Unit (Sogge and Durst 2008).

This segment of the Colorado River was identified as having substantial recovery value in the Recovery Plan (Service 2002, p. 90). This portion of the LCR is anticipated to provide flycatcher habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, this portion of the LCR and associated flycatcher habitat is anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

The LCR within the Parker to Southerly International Border Management Unit is within the geographical area known to be occupied by flycatchers at the time of listing, and contains the physical or biological features essential to flycatcher conservation which may require special management considerations or protection. The entirety of the segments proposed as flycatcher critical habitat occurs within the planning area of the LCR MSCP. The Colorado Indian and Quechan (Fort Yuma) tribal lands occur within these segments and are also within the planning area of the LCR MSCP. These tribes have developed, completed, and are implementing actions described in their Flycatcher Management Plans. As a result of the flycatcher conservation occurring along the Colorado River from being included within the planning area of the LCR MSCP, these segments are being excluded from this critical habitat designation under section 4(b)(2) of the Act (see Exclusions section below).

#### Upper Colorado Recovery Unit

The Upper Colorado Recovery Unit is comprised of a broad geographic area covering much of the Four Corners area of southeastern Utah and southwestern Colorado, with smaller portions of northwestern Arizona and northeastern New Mexico. Ecologically, this area may be an intergradation area between the southwestern willow flycatcher subspecies and the Great Basin willow flycatcher subspecies (Service 2002, p. 64). Flycatchers are only known to breed at five breeding sites across this broad Recovery Unit, representing an estimated high of 10 territories occurring in 2007 (Durst *et al.* 2008, p.13). However, this low number of breeding sites and territories (less than 1 percent of the rangewide total) is

probably a function of relatively low survey effort rather than an accurate reflection of the bird's actual numbers and distribution (Service 2002, p. 64). Much willow riparian habitat occurs along drainages within this Recovery Unit and remains to be surveyed (Service 2002, p. 64). The Upper Colorado Recovery Unit contains the Powell and San Juan Management Units.

Based upon our occupancy criteria (see above), within the Upper Colorado Recovery Unit, no streams were known to be occupied at the time of listing (1991–1994) (Sogge and Durst 2008). Below we identify that each listed item described in our *Special Management Considerations or Protection* section (see above) applies to the streams described in each Management Unit within the Upper Colorado Recovery Unit.

San Juan Management Unit, Colorado, New Mexico, Arizona, and Utah

The Recovery Plan describes a goal of 25 flycatcher territories in the San Juan Management Unit (Service 2002, p. 84). Flycatcher territories have been detected in small numbers over a broad area of the southwestern Colorado and northwestern New Mexico within the Management Unit.

There were no large flycatcher nesting populations in the San Juan Management Unit to help guide us toward a critical habitat area, and no areas were known to be occupied at the time of listing. Therefore, to identify the areas that would contribute to meeting recovery goals for this Management Unit, we used information based on known flycatcher territories and breeding sites, guidance from the Recovery Plan, and knowledge about stream habitat to determine critical habitat segments that may be essential for flycatcher conservation (see below). In 2007, 10 territories were estimated to occur (within a total of 3 breeding sites) along the Los Pinos River in southwestern Colorado in La Plata County, Colorado, and along the San Juan River in San Juan County, New Mexico (Durst *et al.* 2008, p. 13). Through 2007, no known breeding sites have yet to be detected in the Utah portion of this Management Unit (Sogge and Durst 2008).

Following our August 15, 2011, proposal, we reevaluated the Los Pinos River segment following further habitat analysis (Ireland, T. 2012, entire) and determined that the upper portion of this stream contained habitat, vegetation, and features that do not support flycatcher habitat. As a result, this reduced the overall length of the

Los Pinos River that we considered essential for flycatcher conservation and were considering for flycatcher critical habitat (see Summary of Changes from Proposed Rule above).

We are designating as flycatcher critical habitat a segment of the Los Pinos River in La Plata County, Colorado (7.2 km, 4.5 mi), and the northern bank of the San Juan River in San Juan County, Utah (43.5 km, 27.0 mi). The Los Pinos River segment begins at a private road crossing of the Los Pinos River west of the Pine River Ranch Road, approximately 3.7 km (2.3 mi) north of Highway 160 near the town of Bayfield, and ends at the northern boundary of Southern Ute tribal land. The north bank of the San Juan River in Utah occurs from the Navajo Nation boundary downstream to Chinle Creek. These segments were not within the geographical area known to be occupied at the time of listing, but are essential for flycatcher conservation in order to help meet recovery goals in this Management Unit.

These segments of the San Juan and Los Pinos Rivers were identified as having substantial recovery value in the Recovery Plan (Service 2002, p. 88). These essential river segments are anticipated to provide flycatcher habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

Segments along the Los Pinos River that occur on Southern Ute tribal land in Colorado, and San Juan River on the Navajo Nation in New Mexico and Utah (southern bank), were not within the geographical area known to be occupied by flycatchers at the time of listing, but essential for flycatcher conservation in order to meet recovery. Because of our partnership with the Southern Ute Tribe and Navajo Nation toward wildlife conservation, and their development, completion, and implementation of actions described in their Flycatcher Management Plans, we have excluded the portions of the Los Pinos River in Colorado and San Juan River in New Mexico and Utah (south bank) that occur tribal lands under section 4(b)(2) of the Act (see Exclusions section below).

Powell Management Unit, Utah and Arizona

The Recovery Plan describes a goal of 25 flycatcher territories in the Powell Management Unit (Service 2002, p. 84). No flycatcher territories have been detected in this Management Unit (Sogge and Durst 2008).

There were no large flycatcher nesting populations in the Powell Management Unit to help guide us toward a critical habitat area, and no areas were known to be occupied at the time of listing. Therefore, to identify the areas that would contribute to meeting recovery goals for this Management Unit, we used information based on guidance from the Recovery Plan and available information about stream habitats to determine critical habitat segments that may be essential for flycatcher conservation (see below).

We are designating as flycatcher critical habitat a segment of the Paria River in Kane County, Utah (19.0 km, 11.8 mi). This Paria River segment occurs from its confluence with Cottonwood Wash and ends at Highway 89. This segment was not within the geographical area known to be occupied by flycatchers at the time of listing. This river segment may be able develop and sustain flycatcher habitat and territories and therefore is essential to flycatcher conservation in order to help meet recovery goals in this Management Unit.

This segment of the Paria River was identified as having substantial recovery value in the Recovery Plan (Service 2002, p. 88). This essential river segment is anticipated to provide flycatcher habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, this river segment and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

#### Gila Recovery Unit

The Gila Recovery Unit includes the Gila River watershed, from its headwaters in southwestern New Mexico downstream across the State of Arizona toward the confluence with the Colorado River, in southwest Arizona (Service 2002, p. 65). In 2002, 588 flycatcher territories (51 percent of the estimated rangewide total) were estimated to occur, distributed primarily on the Gila and lower San Pedro Rivers (Sogge *et al.* 2003, pp. 10–11). From the latest rangewide estimate, the number of

known territories grew to 659 within this Recovery Unit (50 percent of the estimated rangewide total) (Durst *et al.* 2008, p. 12).

Many breeding sites have small numbers of territories within the Gila Recovery Unit, but along sections of the upper and middle Gila River, lower San Pedro River, lower Tonto Creek, and the Tonto Creek and Salt River confluence within the water conservation space of Roosevelt Lake, abundant breeding sites occur over a relatively broad geographic range that together comprise many flycatcher territories. Following the 2007 rangewide estimate (Durst *et al.* 2008, p. 12), the Upper Gila, Middle Gila and San Pedro, and Roosevelt Management Units had surpassed numerical recovery goals. Within the Gila Recovery Unit, there are concentrations of flycatcher territories in the Cliff-Gila Valley, New Mexico, and at Roosevelt Lake, Arizona, that can be some of the largest across its range.

Flycatcher territories in the Gila Recovery Unit occurred primarily on lands managed by private and Federal land managers and in a variety of habitat types dominated by both native and exotic plants. In 2001, private lands hosted 50 percent of the territories (mostly on the San Pedro River and Gila River), including one of the largest known flycatcher populations, in the Cliff-Gila Valley, New Mexico (Service 2002, p. 65). Almost the remaining 50 percent of the territories were on government-managed lands (Service 2002, p. 65). While in 2001 (Service 2002, p. 65), 58 percent of territories were in habitats dominated by native plants, flycatchers in this Recovery Unit also make extensive use of exotic (77 territories) or exotic-dominated (108 territories) vegetation (primarily tamarisk). Because the current distribution of breeding sites in this Recovery Unit is similar, we believe these statistics are mostly accurate today. This Recovery Unit contains the Verde, Hassayampa and Agua Fria, Roosevelt, San Francisco, Upper Gila, Middle Gila and San Pedro, and Santa Cruz Management Units.

Based upon our occupancy criteria (see above), within the Gila Recovery Unit, the Gila (1993), San Pedro (1993), San Francisco (1993), Verde (1993), and Salt (1993) Rivers, and Tonto Creek (1993) are streams that were within the geographical area known to be occupied at the time of listing (1991–1994) (Sogge and Durst 2008) where we are designating critical habitat segments. At the time of listing, only specific sites on the Gila River within the Middle Gila and San Pedro and Upper Gila Management Units were known to be

specifically occupied by nesting birds, but based upon our criteria and the wide-ranging nature of this neotropical migrant, the Gila River within the Hassayampa and Agua Fria Management Unit is also considered occupied at the time of listing. Below we identify that each listed item described in our *Special Management Considerations or Protection* section (see above) applies to the streams described in each Management Unit within the Gila Recovery Unit.

#### Verde Management Unit, Arizona

The Recovery Plan describes a goal of 50 flycatcher territories in the Verde Management Unit (Service 2002, p. 85).

We identified a large flycatcher nesting population along the Verde River within Yavapai, Gila, and Maricopa Counties, Arizona. Flycatchers were first detected nesting on the Verde River in 1993; a total of six breeding sites are known and are spread out from the Verde Valley near the towns of Clarkdale and Camp Verde and downstream near Horseshoe Lake (Sogge and Durst 2008). A high of 23 territories were detected within this Management Unit in 2005 (Sogge and Durst 2008).

We are designating as flycatcher critical habitat five separate segments of the Verde River (three segments on upper Verde River and two segments along the middle Verde River). Along the upper Verde River through the Verde Valley, in Yavapai County, we are designating a 42.0-km (26.1-mi) segment of the that occurs from above Tuzigoot National Monument near the Town of Clarkdale, downstream through the towns of Cottonwood to the north end of Yavapai Apache tribal land. At the southern end of Yavapai Apache tribal land the next segment (15.3 km, 9.5 mi) extends toward Camp Verde where it meets the north end of another, separate piece of Yavapai Apache tribal land. At the southern end of this additional piece of Yavapai Apache tribal land, the third and last river segment along the upper Verde River extends 14.0 km (8.7 mi) to Beasley Flat. We are also designating a 46.3-km (28.8-mi) segment in the middle Verde River that extends from the East Verde River confluence down to the upper end of Horseshoe Lake. The last (6.7 km, 4.2 mi) segment of the Verde River designated as flycatcher critical habitat occurs from Horseshoe Dam and ends a short distance downstream to the USGS gauging station and cable crossing. These segments of the Verde River are within the geographical area known to be occupied by flycatchers at the time of listing, and contain the physical or



biological features essential to the conservation of the species which may require special management considerations or protection, as described above.

The Verde River was the lone river identified within this Management Unit as having substantial recovery value in the Recovery Plan (Service 2002, p. 91). These river segments are anticipated to provide flycatcher habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

The conservation space of Horseshoe Lake is within the planning area of the Horseshoe and Bartlett Dams HCP. As a result of the management and protection provided flycatcher habitat within the conservation space of Horseshoe Lake due to its inclusion in the HCP, this portion of the Verde River (9.6 km, 6.0 mi) is being excluded from this critical habitat designation under section 4(b)(2) of the Act (see Exclusions section below).

Two separate sections (2.1 km, 1.3 mi and 0.7 km, 0.4 mi) of the upper Verde River occur on Yavapai Apache tribal lands. Because of our partnership with the Yavapai Apache Tribe toward wildlife conservation, and their development, completion, and implementation of actions described in their Flycatcher Management Plan, we have excluded these two sections of the Verde River that occur on their tribal lands under section 4(b)(2) of the Act (see Exclusions section below).

#### Roosevelt Management Unit, Arizona

The Recovery Plan describes a goal of 50 flycatcher territories in the Roosevelt Management Unit (Service 2002, p. 85).

We identified a large flycatcher nesting population surrounding the Roosevelt Lake area along Tonto Creek, the Salt River, and Pinal Creek in Gila and Pinal Counties, Arizona. Flycatchers were first detected nesting on Tonto Creek and the Salt River within the conservation space of Roosevelt Lake in 1993 (Sogge and Durst 2008).

Because of the anticipated water level fluctuations at Roosevelt Lake, which inundates many flycatcher territories and limits the number of territories that can be sustained over time, this is the only Management Unit within the

flycatcher's range where the recovery goal was smaller than the known number of territories at the time of the Recovery Plan completion. As a result, river segments and the lakebed together provide habitat that allow flycatcher territories to persist over time due to dynamic river and lake flooding events. For example, a high of 196 flycatcher territories occurred in 2004 (mostly within the conservation space of Roosevelt Lake), but in the following years after the lake level was raised, the known number of territories declined to 75 in 2007 (Sogge and Durst 2008). Since the raising of the water level in Roosevelt Lake, flycatchers have expanded their known distribution throughout adjacent areas along Tonto Creek, Salt River, and Pinal Creek (Sogge and Durst 2008).

We are designating as flycatcher critical habitat a segment of lower Tonto Creek and a segment of the upper Salt River. The lower Tonto Creek segment extends for 49.0-km (30.5-mi) and occurs from the south end of the Town of Gisela downstream to the western high-water-mark side of the conservation space of Roosevelt Lake. On the eastern side of Roosevelt Lake, we are designating a 38.9-km (24.2-mi) segment from the Salt River confluence with Cherry Creek downstream to the high water mark of the conservation space of Roosevelt Lake. These segments are within the geographical area known to be occupied by flycatchers at the time of listing, and contain the physical or biological features essential to the conservation of the species which may require special management considerations or protection, as described above.

The segments of Tonto Creek and the Salt River were identified as having substantial recovery value in the Recovery Plan (Service 2002, p. 91). These segments are anticipated to provide flycatcher habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

The confluence of Tonto Creek and the Salt River (29.1 km, 18 mi) that make up Roosevelt Lake below the elevation of 2151 feet, occurs within the planning area of the Roosevelt Lake HCP. As a result of the conservation provided the flycatcher within the

Roosevelt Lake HCP planning area through the implementation of this HCO and the management support from the Tonto National Forest, the length of Roosevelt Lake is being excluded from this critical habitat designation under section 4(b)(2) of the Act (see Exclusions section below).

Essential flycatcher habitat along Pinal Creek (5.8 km, 3.6 mi), not within the geographical area known to be occupied at the time of listing, managed by FMC, is being excluded under section 4(b)(2) of the Act due to our conservation partnership and their implementation of a management plan specific to protecting flycatcher habitat (see Exclusions section below).

#### Middle Gila and San Pedro Management Unit, Arizona

The Recovery Plan describes a goal of 150 flycatcher territories in the Middle Gila and San Pedro Management Unit (Service 2002, p. 85).

We identified a large flycatcher nesting population surrounding the Gila and San Pedro River confluence area within Cochise, Pima, Pinal, and Gila Counties, Arizona. Flycatchers were first detected nesting in this Management Unit in 1993, with abundant breeding sites occurring throughout this Management Unit. A high of 195 territories was detected in 2005 (Sogge and Durst 2008).

We are designating as flycatcher critical habitat the lowest 126.2-km (78.4-mi) segment of the middle and lower San Pedro River across portions of Cochise, Pima, and Pinal Counties, Arizona, and a 80.6-km (50.1-mi) Gila River segment that extends from near Dripping Springs Wash downstream past the San Pedro and Gila River confluence to the Ashehurst Hayden Diversion Dam in Gila and Pinal Counties, Arizona. The Gila and San Pedro Rivers are within the geographical area known to be occupied by flycatchers at the time of listing, and contain the physical or biological features essential to the conservation of the species which may require special management considerations or protection, as described above.

The San Pedro and Gila Rivers were the only two rivers identified within this Management Unit as having substantial recovery value in the Recovery Plan (Service 2002, p. 91). These river segments are anticipated to provide flycatcher habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river

segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

Parcels of San Carlos Apache lands, totaling about 0.9 km (0.6 mi) and 75 ha (185 ha) occur along the lower San Pedro River between the Aravaipa Creek and Gila River confluence. Because of our partnership with the San Carlos Apache Tribe toward wildlife conservation, and their development, completion, and implementation of actions described in their Flycatcher Management Plan, we have excluded these parcels along the San Pedro River that occur on their tribal lands under section 4(b)(2) of the Act (see Exclusions section below).

#### Upper Gila Management Unit, Arizona and New Mexico

The Recovery Plan describes a goal of 325 flycatcher territories in the Upper Gila Management Unit (Service 2002, p. 85). Flycatcher territories are known throughout the Gila River in New Mexico and Arizona within this Management Unit.

We identified a large flycatcher nesting population across a broad area of the upper Gila River occurring within Gila, Pinal, Graham, and Greenlee Counties, Arizona, and Grant and Hidalgo Counties, New Mexico. Flycatchers were first detected nesting in this Management Unit in 1993 (Sogge and Durst 2008). Flycatcher territories at 22 breeding sites occur throughout three separate river segments of the Gila River, with a high of 329 territories estimated following the 2007 breeding season (Durst *et al.* 2008, p. 12). A single breeding site along the most upstream segment in the Cliff-Gila Valley in Grant County, New Mexico, has held over 200 flycatcher territories in a single season (Sogge and Durst 2008). The Gila River is within the geographical area known to be occupied by flycatchers at the time of listing, and contains the physical or biological features essential to the conservation of the species which may require special management considerations or protection, as described above.

We are designating four Gila River stream segments as flycatcher critical habitat between the Turkey Creek-Gila River confluence on the Gila National Forest, New Mexico, and the San Carlos Apache tribal Land boundary, Arizona. There are three segments we are designating as flycatcher critical habitat that occur almost entirely on the upper Gila River in southwestern New Mexico (Grant and Hidalgo Counties). Within a

stretch of stream in the Cliff-Gila Valley, New Mexico, which extends into the Gila National Forest, there are checker-boarded lands that occur within the final designation and are excluded from critical habitat (U-Bar Ranch). A fourth Arizona Gila River segment occurs through the Safford Valley in Gila, Graham, and Pinal Counties.

The most upstream Gila River flycatcher critical habitat segment extends for 16.9 km (10.5 mi) from the Turkey Creek-Gila River confluence on the Gila National Forest, New Mexico, downstream to the upstream boundary of the U-Bar Ranch in the Cliff-Gila Valley, New Mexico. We are excluding the U-Bar Ranch from this point downstream for approximately 26.4 km (16.4 mi) to the last U-Bar Ranch parcel, which occurs just within the Gila National Forest Boundary. Along this approximate 26.4 km (16.4 mi) stretch of the Gila River, the U-Bar Ranch contains about 13.6 km (8.6 mi) of check-boarded property which is not included in the final designation; a 12.8 km (8.0 mi) portion of stream is included within the final designation. The second Gila River segment extends from the downstream boundary of the U-Bar Ranch within the Gila National Forest for 6.0 km (3.7 mi) to the upstream end of the middle Gila Box, New Mexico. The third segment begins at the Gila River gauging station above the Town of Red Rock in Grant County, New Mexico, at the downstream end of the middle Gila Box and extends for 65.3 km (40.6 mi) into Hidalgo County, New Mexico, and just across the New Mexico-Arizona State line through the town of Duncan in Greenlee County, Arizona. A fourth Gila River segment extends for 76.4 km (47.5 mi) from the upper end of Earven Flat in Arizona, above the Town of Safford, through the Safford Valley to the San Carlos Apache tribal boundary in Gila, Graham, and Pinal Counties, Arizona.

These Gila River segments were identified in the Recovery Plan as areas with substantial recovery value (Service 2002, p. 91) and are anticipated to provide flycatcher habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

Because of our partnership with the San Carlos Apache Tribe and their development, completion, and

implementation of actions described in their Flycatcher Management Plan, we have excluded the 31.3 km (19.5 mi) portion of the Gila River (upstream of the San Carlos Reservoir) that occurs within their tribal lands under section 4(b)(2) of the Act (see Exclusions section below). Also because of our tribal trust responsibilities with both the San Carlos Apache Tribe and Gila River Indian Community (GRIC), we are excluding the Federal land that occurs along the Gila River (26.8 km, 16.6 mi) within the conservation space of San Carlos Reservoir under section 4(b)(2) of the Act (see Exclusions section below).

Because of the development, completion, and implementation of actions described in FMC's Flycatcher Management Plan for the U-Bar Ranch in the Cliff-Gila Valley, New Mexico, we are excluding the 13.8 km (8.6 mi) portions of the Gila River occurring on these lands under section 4(b)(2) of the Act due to our conservation partnership and their implementation of a management plan specific to protecting flycatcher habitat (see Exclusions section below).

#### Santa Cruz Management Unit, Arizona

The Recovery Plan describes a goal of 25 flycatcher territories in the Santa Cruz Management Unit (Service 2002, p. 84).

There were no large flycatcher nesting populations in the Santa Cruz Management Unit to help guide us toward a critical habitat area, and no areas were known to be occupied at the time of listing. Therefore, to identify the areas that would contribute to meeting recovery goals for this Management Unit, we used information based on known flycatcher territories and breeding sites, guidance from the Recovery Plan, and knowledge about stream habitat to determine critical habitat segments that may be essential for flycatcher conservation. A single flycatcher territory was detected on Cienega Creek in 2001 (Sogge and Durst 2008) and Empire Gulch in 2011 (a tributary to Cienega Creek). No flycatcher territories have been detected on the Santa Cruz River.

Within Pima and Santa Cruz Counties, Arizona, we are designating flycatcher critical habitat along Cienega Creek, Empire Gulch, and the Santa Cruz River. Within Las Cienegas National Conservation Area in Pima County, we are designating a 17.9-km (11.1-mi) segment of Cienega Creek and two segments of Empire Gulch; an isolated 0.4-km (0.3-mi) upper segment of Empire Gulch and a second 1.3-km (0.8-mi) lower segment of Empire Gulch that connects to Cienega Creek. Along

the Santa Cruz River, we are designating a 26.7-km (16.6-mi) segment from the Nogales Waste Water Treatment Plant to Chavez Siding Road in Santa Cruz County, Arizona. These segments were not within the geographical area known to be occupied at the time of listing; however, they are essential to flycatcher conservation because they may be able to develop and sustain flycatcher habitat and territories to help meet recovery goals in this Management Unit.

The Santa Cruz River and Cienega Creek segments were identified in the Recovery Plan as areas with substantial recovery value (Service 2002, p. 91), while the adjacent Empire Gulch was only recently detected as having a flycatcher territory. These segments are anticipated to provide flycatcher habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

San Francisco Management Unit,  
Arizona and New Mexico

The Recovery Plan describes a goal of 25 flycatcher territories in the San Francisco Management Unit (Service 2002, p. 84). Small numbers of flycatcher territories are known to occur along the San Francisco River in this Management Unit in both Arizona and New Mexico.

There were no known large flycatcher nesting populations in the San Francisco Management Unit to help guide us toward a critical habitat area. Therefore, to identify the areas that would contribute to meeting recovery goals for this Management Unit, we used information based on known flycatcher territories and breeding sites, guidance from the Recovery Plan, and knowledge about stream habitat to determine critical habitat segments for flycatcher conservation (see below). Four flycatcher breeding sites have been detected on these river segments, with the first territories found in 1993 (Sogge and Durst 2008). The number of territories detected has fluctuated annually between one and seven from 1993 to 2007 (Sogge and Durst 2008). The San Francisco River is within the geographical area known to be occupied by flycatchers at the time of listing, and contains the physical or biological features essential for the conservation of the species which may require special

management considerations or protection, as described above.

We are designating as flycatcher critical habitat four segments of the San Francisco River in Arizona and New Mexico. We are designating two segments of the San Francisco River between the Town of Alpine, Arizona, and Centerfire Creek in Catron County, New Mexico, that are separated by a 2.7 km (1.7 mi) area at Luna Lake, Arizona. These two segments extend for 11.3-km (7.0-mi) west of Luna Lake in Apache County, Arizona, and beginning just downstream of Luna Lake, for 28.2-km (17.5-mi) in Apache County and Catron County. A third 36.4-km (22.6-mi) segment extends from the Deep Creek confluence to San Francisco Hot Springs, in Catron County, New Mexico. The fourth, 36.7-km (22.8-mi) segment extends from the Arizona and New Mexico State line border to the western boundary of the Apache-Sitgreaves National Forest, in Apache County, Arizona.

These San Francisco River segments were identified in the Recovery Plan as having substantial recovery value (Service 2002, pp. 90–91). These San Francisco River segments are anticipated to provide flycatcher habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

Hassayampa and Agua Fria Management Unit, Arizona

The Recovery Plan describes a goal of 25 flycatcher territories in the Hassayampa and Agua Fria Management Unit (Service 2002, p. 84).

There were no large flycatcher nesting populations in the Hassayampa and Agua Fria Management Unit to help guide us toward a critical habitat area. Therefore, to identify the areas that would contribute to meeting recovery goals for this Management Unit, we used information based on known flycatcher territories and breeding sites, guidance from the Recovery Plan, and knowledge about stream habitat to determine critical habitat segments that may be essential for flycatcher conservation (see below). A single breeding site along the Hassayampa River was detected within this Management Unit, with the number of

territories ranging from one and three (Sogge and Durst 2008).

We are designating as flycatcher critical habitat a 7.4-km (4.6-mi) segment of the Hassayampa River that occurs south of the Highway 60 Bridge in the Town of Wickenburg in Maricopa County, Arizona. This segment was not within the geographical area known to be occupied at the time of listing; however, it is essential for flycatcher conservation because it will help meet recovery goals in this Management Unit.

The Hassayampa River was identified in the Recovery Plan as having substantial recovery value (Service 2002, p. 91). This river segment is anticipated to provide flycatcher habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, this segment and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

The 8.7 km (5.4 mi) Gila River segment that occurs within the Tres Rios Safe Harbor Agreement Area will be excluded under section 4(b)(2) of the Act (see Exclusions section below) as a result of the habitat development and management by the City of Phoenix associated with their Safe Harbor Agreement with the Service.

Rio Grande Recovery Unit

This Recovery Unit primarily includes the Rio Grande watershed from its headwaters in southern Colorado downstream to the Pecos River confluence in Texas. Other areas and drainages that occur within this Recovery Unit include the Rio Grande in Texas and Pecos watershed in New Mexico and Texas. No recovery goals were established for Management Units in those areas, so no critical habitat is being designated in those areas.

There have been large increases in the number of estimated and known territories within the Rio Grande Recovery Unit, primarily due to increasing population numbers within the Middle Rio Grande Management Unit. In 2002, a total of 197 territories (17 percent of the rangewide total) were estimated to occur within the Recovery Unit, primarily occurring along the mainstem Rio Grande (Sogge *et al.* 2003). At the end of the 2007 breeding season, the Recovery Unit had increased to an estimated 230 territories (17 percent of the rangewide total), primarily due to territory increases in the Middle Rio Grande (Durst *et al.*

2008, p.13). In the subsequent years, the number of known territories has continued to increase within the Middle Rio Grande Management Unit with approximately 350 territories detected in 2009, with most territories detected within the San Marcial reach near Elephant Butte Reservoir (Moore and Ahlers 2010, p. 1).

Both the San Luis Valley Management Unit in southern Colorado and Middle Rio Grande Management Unit in New Mexico have surpassed their numerical territory goals. A total of 50 territories are needed in the San Luis Valley Management Unit and 56 territories were estimated to occur in 2007 (Durst *et al.* 2008, p. 13). In the Middle Rio Grande Management Unit, the numerical goal of 100 territories has been surpassed with about 350 territories detected in 2009 (Moore and Ahlers 2010, p.1).

Most sites are in habitats dominated by native plants, while habitat dominated by exotic plants include primarily tamarisk or Russian olive (Service 2002, p. 65). In 2001, 43 of the 56 nests (77 percent) that were described in the middle and lower Rio Grande in New Mexico, used tamarisk as the nest substrate (Service 2002, p. 65). In 2001, government-managed lands accounted for 63 percent of the territories in this unit; tribal lands supported an additional 23 percent (Service 2002). While the number of territories has increased, the known distribution of sites is similar. As a result, we expect a larger proportion of territories to occur on government-managed lands in the Middle Rio Grande Management Unit.

This Recovery Unit contains the San Luis Valley, Upper Rio Grande, Middle Rio Grande, and Lower Rio Grande Management Units.

Based upon our occupancy criteria (see above), within the Rio Grande Recovery Unit, the Rio Grande (1993), Rio Grande del Rancho (1993), and Coyote Creek (1993) are streams that were within the geographical area known to be occupied at the time of listing (1991–1994) (Sogge and Durst 2008) where we are designating critical habitat segments. These streams have the physical or biological features of critical habitat that may require special management considerations or protection.

At the time of listing, only specific sites on the Rio Grande within the Upper, Middle, and Lower Rio Grande Management Units were known to be specifically occupied by nesting birds, but based upon our criteria and the wide-ranging nature of this neotropical migrant, the Rio Grande within the San

Luis Valley Management Unit is also considered occupied at the time of listing. Below we identify that each listed item described in our *Special Management Considerations or Protection* section (see above) applies to the streams described in each Management Unit within the Rio Grande Recovery Unit.

#### San Luis Valley Management Unit, Colorado

The Recovery Plan describes a goal of 50 flycatcher territories in the San Luis Valley Management Unit (Service 2002, p. 85).

We identified a large flycatcher nesting population in the San Luis Valley in Costilla, Conejos, Alamosa, and Rio Grande Counties, Colorado. Flycatchers were first detected nesting in this Management Unit in 1997, and a high of 71 territories were detected along the Rio Grande and Conejos River in 2003 (Sogge and Durst 2008).

We are designating as flycatcher critical habitat two segments of the Rio Grande, which are within close proximity to each other, within the San Luis Valley. The northern-most segment on the Rio Grande is an 18.4-km (11.4-mi) segment constituting 3,377 ha (8345 ac) within the Alamosa NWR. The more southerly segment is on BLM land (on the west side of the Rio Grande) and is 20.4 km (12.7 mi) long constituting 182.8 ha (451.7 ac). The Rio Grande is within the geographical area known to be occupied by flycatchers at the time of listing, and contains the physical or biological features essential for the conservation of the species that may require special management considerations or protection, as described above.

We are also designating as flycatcher critical habitat three segments in close proximity on the Conejos River that, in total, are 4.7-km (2.9-mi) long constituting 502.9 ha (1242.7 ac). The Conejos River was not within the geographical area known to be occupied at the time of listing; however, it is essential for flycatcher conservation because it will help meet recovery goals in this Management Unit.

The Rio Grande and the Conejos River segments were identified within this Management Unit as having substantial recovery value in the Recovery Plan (Service 2002, p. 92). These river segments are anticipated to provide flycatcher habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated

flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

Large sections of non-federal lands occur along both the Rio Grande and Conejos River within the conservation planning area established by the San Luis Valley Partnership and within their HCP; as a result, we excluded 184.5 km (114.7 mi) constituting 27,566.6 ha (68,118.2 ac) of habitat along the Conejos River and Rio Grande within this conservation and planning area under section 4(b)(2) of the Act (see Exclusions).

#### Upper Rio Grande Management Unit, New Mexico

The Recovery Plan describes a goal of 75 flycatcher territories in the Upper Rio Grande Management Unit (Service 2002, p. 85).

We identified a large flycatcher nesting population on the upper Rio Grande in Taos, Santa Fe, and Mora Counties, New Mexico. Flycatchers were first detected nesting in this Management Unit in 1993, and a high of 39 territories were detected in 2000 along the Rio Grande, Rio Grande del Rancho, and Coyote Creek (Sogge and Durst 2008). These segments are within the geographical area known to be occupied by flycatchers at the time of listing, and contain the physical or biological features essential for the conservation of the species which may require special management considerations or protection. Flycatcher territories were recently detected on the Rio Fernando, which was not within the geographical area known to be occupied by flycatchers at the time of listing, but is considered essential for conservation.

We are designating as flycatcher critical habitat a collection of Upper Rio Grande Management Unit river segments along the Rio Grande, Rio Grande del Rancho, Coyote Creek, and Rio Fernando. We are designating a 46.8-km (29.1-mi) Rio Grande segment that extends from the Taos Junction Bridge (State Route 520) downstream to the northern boundary of the San Juan (Ohkay Ohwingeh) Pueblo, and a 1.1 km (0.4 mi) segment of the Rio Grande between the San Juan (Ohkay Ohwingeh) and Santa Clara Pueblos. We are also designating as flycatcher critical habitat an 11.9-km (7.4-mi) segment of the Rio Grande del Rancho from Sarco Canyon downstream to the Arroyo Miranda confluence, and a 10.7-km (6.6-mi) segment of Coyote Creek from above Coyote Creek State Park downstream to the second bridge on State Route 518, upstream from Los Cocas. Additionally,

we are designating a 0.4-km (0.2-mi) segment of the Rio Fernando that is located about 3.2 km (2.0 mi) upstream from the Rio Lucero confluence.

Rio Grande, Rio Grande del Rancho, and Coyote Creek were identified within this Management Unit as having substantial recovery value in the Recovery Plan (Service 2002, p. 92). These three segments, along with the essential Rio Fernando segment, are anticipated to provide flycatcher habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

Due to our partnership with the Santa Clara, San Juan, and San Ildefonso Pueblos and their conservation efforts on the Rio Grande, we are excluding these pueblos from the final flycatcher critical habitat designation under section 4(b)(2) of the Act (see Exclusions section below).

Middle Rio Grande Management Unit, New Mexico

The Recovery Plan describes a goal of 100 flycatcher territories in the Middle Rio Grande Management Unit (Service 2002, p. 85).

We identified a large flycatcher nesting population on the middle Rio Grande in Valencia and Socorro Counties, New Mexico. Flycatcher territories were first detected in this Management Unit in 1993. In 2007, a high of 230 territories were detected (Sogge and Durst 2008), and since then the population has grown to about 350 territories (Moore and Ahlers 2010, p. 1). The Rio Grande is within the geographical area known to be occupied by flycatchers at the time of listing, and contains the physical or biological features essential for the conservation of the species which may require special management considerations or protection, as described above.

We are designating as critical habitat a 180.4-km (112.1-mi) segment of the Rio Grande that extends from below Isleta Pueblo and the Bernalillo and Valencia County line downstream past Bosque del Apache and Sevilleta NWRs and into the upper part of Elephant Butte Reservoir ending in Socorro County about 3.2 km (2.0 mi) north of the Sierra County line, New Mexico (about 14.4 km, 9.0 mi of the upper part of Elephant Butte Reservoir,

downstream of the power-line crossing is included within the designation).

This Rio Grande segment was identified as having substantial recovery value in the Recovery Plan (Service 2002, p. 92). This segment of the Rio Grande is anticipated to provide flycatcher habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, this river segment and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

Lower Rio Grande Management Unit, New Mexico

The Recovery Plan describes a goal of 25 flycatcher territories in the Lower Rio Grande Management Unit (Service 2002, p. 84).

There were no large flycatcher nesting populations in the lower Rio Grande Management Unit to help guide us toward a critical habitat area. Therefore, to identify the areas that would contribute to meeting recovery goals for this Management Unit, we used information based on known flycatcher territories and breeding sites, guidance from the Recovery Plan, and knowledge about stream habitat to determine critical habitat segments that may be essential for flycatcher conservation (see below). Between 1993 and 2007, three breeding sites had been detected along the lower Rio Grande in Sierra and Dona Ana Counties, New Mexico, with the first territories found in 1993 (Sogge and Durst 2008). During this time period the number of known flycatcher territories detected annually fluctuated between zero and eight (Sogge and Durst 2008). However, in 2011 the number of territories detected within the Lower Rio Grande Management Unit increased due to improved survey effort (Service 2012, p. 32) and in 2012 is believed to have reached 25 territories (Hill, D. 2012, pers. comm.). The Rio Grande is within the geographical area known to be occupied by flycatchers at the time of listing, and contains the physical or biological features essential for the conservation of the species which may require special management considerations or protection, as described above.

The lower Rio Grande, from Caballo Dam to Leasburg Dam (74.2 km, 46.1 mi), was also proposed as critical habitat in this management unit. However, as a result of the commitment to comprehensively manage flycatcher

habitat, through development and protection of habitat and water transaction agreements, we are excluding this segment from the final designation of revised flycatcher critical habitat under section 4(b)(2) of the Act (see Exclusions section below).

## Effects of Critical Habitat Designation

### Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

Decisions by the 5th and 9th Circuit Courts of Appeals have invalidated our regulatory definition of "destruction or adverse modification" (50 CFR 402.02) (see *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service*, 378 F. 3d 1059 (9th Cir. 2004) and *Sierra Club v. U.S. Fish and Wildlife Service et al.*, 245 F.3d 434, 442 (5th Cir. 2001)), and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under the statutory provisions of the Act, we determine destruction or adverse modification on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions that are subject to the section 7 consultation process are actions on State, tribal, local, or private lands that require a Federal permit (such as a permit from the Corps under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded or

authorized, do not require section 7 consultation.

As a result of section 7 consultation, we document compliance with the requirements of section 7(a)(2) through our issuance of:

(1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or

(2) A biological opinion for Federal actions that may affect and are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define “reasonable and prudent alternatives” (at 50 CFR 402.02) as alternative actions identified during consultation that:

(1) Can be implemented in a manner consistent with the intended purpose of the action,

(2) Can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction,

(3) Are economically and technologically feasible, and

(4) Would, in the Director’s opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinstitute consultation on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or control over the action (or the agency’s discretionary involvement or control is authorized by law). Consequently, Federal agencies sometimes may need to request reinstitution of consultation with us on actions for which formal consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

#### Application of the “Adverse Modification” Standard

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species. Activities that may destroy or adversely modify critical habitat are those that alter the physical or biological features to an extent that appreciably reduces the conservation value of critical habitat for the flycatcher. As discussed above, the role of critical habitat is to support life-history needs of the species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may destroy or adversely modify such habitat, or that may be affected by such designation.

Activities that may affect critical habitat, when carried out, funded, or authorized by a Federal agency, should result in consultation for the flycatcher. These activities include, but are not limited to:

(1) Actions that would remove, thin, or destroy riparian flycatcher habitat, without implementation of an effective riparian habitat management plan resulting in the development of riparian vegetation of equal or better flycatcher quality in abundance and extent. Such activities could include, but are not limited to, removing, thinning, or destroying riparian vegetation by mechanical (mowing, cutting), chemical (herbicides or burning), or biological (grazing, biocontrol agents) means. These activities could reduce the amount or extent of riparian habitat needed by flycatchers for sheltering, feeding, breeding, and migrating.

(2) Actions that would appreciably diminish habitat value or quality through direct or indirect effects. Such activities could include, but are not limited to, degradation of watershed and soil characteristics; diminishing river surface and subsurface flow; negatively altering river flow regimes; introduction of exotic plants, animals, or insects; or habitat fragmentation from recreation activities. These activities could reduce or fragment the amount or extent of riparian habitat needed by flycatchers for sheltering, feeding, breeding, and migrating.

(3) Actions that would negatively alter the surface or subsurface river flow. Such activities could include, but are not limited to, water diversion or

impoundment, groundwater pumping, dam construction and operation, or any other activity which negatively changes the frequency, magnitude, duration, timing, or abundance of surface flow (and also subsurface groundwater elevation). These activities could permanently eliminate available riparian habitat and food availability or degrade the general suitability, quality, structure, abundance, longevity, and vigor of riparian vegetation and microhabitat components necessary for nesting, migrating, food, cover, and shelter.

(4) Actions that permanently destroy or alter flycatcher habitat. Such activities could include, but are not limited to, discharge of fill material, draining, ditching, tiling, pond construction, and stream channelization (due to roads, construction of bridges, impoundments, discharge pipes, stormwater detention basins, dikes, levees, and others). These activities could permanently eliminate available riparian habitat and food availability or degrade the general suitability, quality, structure, abundance, longevity, and vigor of riparian vegetation and microhabitat components necessary for nesting, migrating, food, cover, and shelter.

(5) Actions that result in alteration of flycatcher habitat from improper livestock or ungulate management. Such activities could include, but are not limited to, unrestricted ungulate access and use of riparian vegetation; excessive ungulate use of riparian vegetation during the non-growing season (i.e., leaf drop to bud break); overuse of riparian habitat and upland vegetation due to insufficient herbaceous vegetation (low-growing, non-woody plants) available to livestock; and improper herding, water development, or other livestock management actions. These activities can reduce the volume and composition of riparian vegetation, prevent regeneration of riparian plant species, physically disturb nests, alter floodplain dynamics, facilitate brood parasitism (laying eggs in flycatcher nests) by brown-headed cowbirds, alter watershed and soil characteristics, alter stream shape, and facilitate the growth of flammable exotic plant species.

#### Exemptions

##### *Application of Section 4(a)(3) of the Act*

The Sikes Act Improvement Act of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an INRMP by November 17, 2001. An INRMP

integrates implementation of the military mission of the installation with stewardship of the natural resources found on the base. Each INRMP includes:

- (1) An assessment of the ecological needs on the installation, including the need to provide for the conservation of listed species;
- (2) A statement of goals and priorities;
- (3) A detailed description of management actions to be implemented to provide for these ecological needs; and
- (4) A monitoring and adaptive management plan.

Among other things, each INRMP must, to the extent appropriate and applicable, provide for fish and wildlife

management; fish and wildlife habitat enhancement or modification; wetland protection, enhancement, and restoration where necessary to support fish and wildlife; and enforcement of applicable natural resource laws.

The National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108–136) amended the Act to limit areas eligible for designation as critical habitat. Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) now provides: “The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared

under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.”

We consult with the military on the development and implementation of INRMPs for installations with listed species. We analyzed INRMPs developed by military installations located within the range of the critical habitat designation for the flycatcher to determine if they meet the criteria for exemption from critical habitat under section 4(a)(3) of the Act. The following areas are Department of Defense lands with completed, Service-approved INRMPs within the proposed revised critical habitat designation.

TABLE 3—AREAS EXEMPTED FROM CRITICAL HABITAT UNDER SECTION 4(B)(3) OF THE ACT BY CRITICAL HABITAT UNIT

Management unit	Specific area	Areas meeting the definition of critical habitat in km (mi)	Areas exempted in km (mi)
Santa Ynez .....	Vandenberg AFB INRMP .....	14.7 km (9.1 mi) .....	14.7 km (9.1 mi).
San Diego .....	Camp Pendleton INRMP .....	76.1 km (47.3 mi) .....	76.1 km (47.3 mi).
San Diego .....	Camp Pendleton INRMP/Fallbrook Naval Base INRMP shared boundary .....	7.5 km (4.7 mi) .....	7.5 km (4.7 mi).
San Diego .....	Fallbrook Naval Base INRMP .....	3.2 km (2.0 mi) .....	3.2 km (2.0 mi).

#### Vandenberg AFB—Santa Ynez Management Unit, California

Vandenberg AFB has an approved INRMP. The U.S. Air Force is committed to working closely with the Service and California Department of Fish and Game to continually refine the existing INRMP as part of the Sikes Act’s INRMP review process. Based on our review of the INRMP for this military installation, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that the portion of the Santa Ynez River within this installation, identified as meeting the definition of critical habitat, is subject to the INRMP, and that conservation efforts identified in this INRMP will provide a benefit to the flycatcher. Therefore, lands within this installation are exempt from critical habitat designation under section 4(a)(3)(B) of the Act. We are not including approximately 14.7 km (9.1 mi) of riparian habitat on VAFB in this revised critical habitat designation because of this exemption.

VAFB completed an INRMP in 2011, which includes benefits for flycatchers through: (1) Avoidance of flycatchers and their habitat, whenever possible, in project planning; (2) scheduling of activities that may affect flycatchers outside of the peak breeding period; (3) measures for protection of riparian zones (see Wetlands and Riparian Habitats Management Plan Section in

INRMP); (4) removal of exotic plant species; and (5) implementation of brown-headed cowbird management. Further, VAFB’s environmental staff reviews projects and enforces existing regulations and orders that, through their implementation, avoid and minimize impacts to natural resources, including flycatchers and their habitat. In addition, VAFB’s INRMP provides protection to riparian habitats for flycatchers by excluding cattle from wetlands and riparian areas through the installation and maintenance of fencing. VAFB’s INRMP specifies periodic monitoring of the distribution and abundance of flycatcher populations on the base.

Habitat features essential to flycatcher conservation exist on VAFB; however, designating critical habitat on this military installation may impact its mission of launching and tracking of satellites and testing and evaluating missile systems, and therefore affect the nation’s military readiness. Activities occurring on VAFB are currently being conducted in a manner that minimizes impacts to flycatchers. This military installation has an approved INRMP that provides a benefit to the flycatcher, and VAFB has committed to work closely with the Service and the State wildlife agency to continually refine their existing INRMP as part of the Sikes Act’s INRMP review process.

Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that conservation efforts identified in the 2011 INRMP for VAFB provide a benefit to the flycatcher and its habitat. Therefore, lands subject to the INRMP for VAFB, which includes the lands leased from the Department of Defense by other parties, are exempt from critical habitat designation under section 4(a)(3) of the Act, and we are not including approximately 14.7 km (9.1 mi) of the Santa Ynez River in this revised critical habitat designation because of this exemption.

#### Marine Corps Base Camp Pendleton (MCB Camp Pendleton)—San Diego Management Unit, California

The primary mission of Marine Corps Base Camp Pendleton (MCB Camp Pendleton) is military training. It is the Marine Corps’ premier amphibious training installation and its only west coast amphibious assault training center. The installation has been conducting air, sea, and ground assault training since World War II. MCB Camp Pendleton occupies over 50,586 ha (125,000 ac) of coastal southern California in the northwest corner of San Diego County. Aside from nearly 4,047 ha (10,000 ac) that is developed, most of the installation is largely undeveloped land that is used for training. MCB Camp Pendleton is



situated between two major metropolitan areas: Los Angeles, 132 km (82 mi) to the north; and San Diego, 61 km (38 mi) to the south. Nearby urban areas include the City of Oceanside to the south, the unincorporated community of Fallbrook to the east, and the City of San Clemente to the northwest. Aside from a portion of the MCB Camp Pendleton's border that is shared with the San Mateo Canyon Wilderness Area on the Cleveland National Forest and the Naval Weapons Station Seal Beach—Detachment Fallbrook (Fallbrook Naval Weapons Station), surrounding land use is urban development, rural residential development, and agricultural farming and ranching. In addition to military training and associated activities and infrastructure to support training, portions of MCB Camp Pendleton are leased to private and public entities and agencies. The largest single leaseholder on the installation is California State Parks, which includes a 50-year real estate lease granted on September 1, 1971, for 809 ha (2,000 ac) that encompasses San Onofre State Beach. Requirements to the lessees are to manage natural resources on leased lands in support of objectives and consistent with the philosophies of MCB Camp Pendleton's INRMP (USMC 2007, pp. 2–29).

The MCB Camp Pendleton INRMP was prepared to assist installation staff and users in their efforts to rehabilitate and conserve natural resources while maintaining consistency with the use of MCB Camp Pendleton to train Marines, and sets the agenda for managing natural resources on MCB Camp Pendleton (USMC 2007, p. ES–1). The INRMP also provides ecosystem-based management to preserve, improve, and enhance ecosystem integrity on the installation (USMC 2007, pp. 1–13). MCB Camp Pendleton completed its INRMP in 2001, followed by a revised and updated version in 2007 (USMC 2007), to address conservation and management recommendations within the scope of the installation's military mission, including conservation measures for flycatchers (USMC 2007, Appendix F, Section F.1, pp. F1–F5). Additionally, Marine Corps Air Station Camp Pendleton (MCAS Camp Pendleton) is fully encompassed within MCB Camp Pendleton and recognizes itself as a separate installation with its own INRMP that also provides a benefit to the flycatcher and its habitat. MCAS Camp Pendleton and its INRMP is assumed part of this discussion within the remainder of this exemption discussion for flycatcher due to its

overlapping and close association with MCB Camp Pendleton and its INRMP, and both reference and inclusion of conservation described in MCB Camp Pendleton's riparian biological opinion (1–6–95–F–02; see USMC 2006, pp. 2–4 and discussion below).

The MCB Camp Pendleton INRMP incorporates measures outlined in a riparian biological opinion (Service 1995), which includes addressing the installation's Riparian Ecosystem Conservation Plan (USMC 2007, Appendix C). The Riparian Ecosystem Conservation Plan was designed to maintain and enhance the biological diversity of the riparian ecosystem on MCB Camp Pendleton, including habitat areas used by flycatchers. The conceptual approach behind this conservation plan is to sustain and restore riparian ecosystem dynamics so that natural plant and animal communities on MCB Camp Pendleton are sufficiently resilient to coexist with current and future military training activities (Service 1995, Appendix 1, p. 44). Under the reasonable and prudent measures of the riparian biological opinion, implementation of the Riparian Ecosystem Conservation Plan by the Marine Corps is nondiscretionary (Service 1995, p. 31; USMC 2007, Appendix L; USMC 2006, Appendix E, pp. 63–64). Areas or habitat containing features essential to the conservation of flycatchers addressed by the conservation plan, the Riparian BO, or MCB Camp Pendleton's INRMP include the Santa Margarita River and portions of the following creeks: Cristianitos, San Mateo, San Onofre, Los Flores, Las Pulgas, Fallbrook, Pilgrim, and DeLuz (70 FR 60886; October 19, 2005).

As described in Appendix F of the MCB Camp Pendleton INRMP (USMC 2007, pp. F–58–F–67), the following management practices and conservation measures provide an indirect or direct benefit for the flycatcher:

- (1) Annual monitoring of population levels and distributions of the flycatcher;

- (2) Incorporating survey data into the GIS species distribution database to update the Environmental Operations Maps and utilize in conservation awareness and education programs;

- (3) Exotic vegetation control including *Arundo donax* (giant reed) and *Tamarix* spp. removal and control;

- (4) Exotic animal control (annual cowbird control activities);

- (5) Programmatic instructions that limit impacts to flycatcher and its habitat; and

- (6) Monitoring groundwater levels and basin withdrawals managed to

avoid degradation and loss of habitat quality.

These measures are established or ongoing aspects of existing programs, Base directives (such as the Riparian Ecosystem Conservation Plan), or measures that are being implemented as a result of previous consultations. MCB Camp Pendleton implements installation directives to avoid and minimize adverse effects to the flycatcher, such as:

- (1) Assuring that aircraft operations shall not be conducted lower than an altitude of 300 ft (91 m) over occupied riparian areas, to the maximum extent practical;

- (2) Limiting vehicle operations to existing roads in riparian areas;

- (3) Requiring helicopters to operate in excess of 61 m (200 ft) above ground level over riparian areas except during take-off or landing, from March 15 to August 31;

- (4) Restricting ground troops movement in riparian areas to existing crossings, trails, and roads; and

- (5) Prohibiting bivouacking in riparian areas.

Current environmental regulations and restrictions apply to all endangered and threatened species on the installation (including flycatcher) and are provided to all users of ranges and training areas to guide activities and protect the species and its habitat. First, specific conservation measures are applied to flycatcher and its habitat (as outlined above). Second, MCB Camp Pendleton's environmental security staff reviews projects and enforces existing regulations and orders that, through their implementation, avoid and minimize impacts to natural resources, including the flycatcher and its habitat. Third, MCB Camp Pendleton provides training to personnel on environmental awareness for sensitive resources on the base, including the flycatcher and its habitat. As a result of these regulations and restrictions, activities occurring on MCB Camp Pendleton are currently conducted in a manner that minimizes impacts to flycatcher habitat.

Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that conservation efforts identified in the 2007 INRMP for MCB Camp Pendleton (and MCAS Camp Pendleton INRMP as outlined above) will provide a benefit to the flycatcher and riparian habitat on MCB Camp Pendleton. Therefore, lands within this installation are exempt from critical habitat designation under section 4(a)(3) of the Act. We are not including approximately 76.1 km (47.3 mi) of habitat on MCB Camp Pendleton and an

additional 7.5 km (4.7 mi) area shared with the adjacent Naval Weapons Station Seal Beach—Detachment Fallbrook Naval Weapons Station) in this revised critical habitat designation because of this exemption.

Naval Weapons Station Seal Beach—Detachment Fallbrook (Fallbrook Naval Weapons Station)—San Diego Management Unit, California

Fallbrook Naval Weapons is the primary west coast supply point of ordnance for the U.S. Marine Corps and the large deck amphibious assault ships of the Pacific Fleet. Fallbrook Naval Weapons Station also has the only west coast maintenance facility for air-launched missiles for the Pacific Fleet. The installation encompasses approximately 3,582 ha (8,852 ac) and is located within the southern foothills of the Santa Ana Mountains of northern San Diego County, adjacent to the unincorporated community of Fallbrook, California. It is bounded to the north, west, and much of the south by MCB Camp Pendleton, with the Santa Margarita River forming the common border on the north between the two properties. Other than training lands on MCB Camp Pendleton, surrounding land use includes semi-rural agricultural lands that include plant nurseries, avocado and citrus groves, vineyards, and limited urban development.

In the previous final critical habitat designation for flycatcher, we exempted Fallbrook Naval Weapons Station from the designation under section 4(a)(3)(B) of the Act because it was subject to an INRMP prepared under section 101 of the Sikes Act (16 U.S.C. 670a) that we determined to provide a benefit to the flycatcher (70 FR 60886; October 19, 2005). The INRMP was prepared to assist installation staff and users in their efforts to support mission operations and accommodate increased military mission requirements for national security and emergency homeland security, while meeting all environmental compliance responsibilities. The INRMP also provides ecosystem-based management to preserve, protect, and enhance natural resources on the installation, and provides the organizational support and communication links necessary for effective planning, implementation, and administration of the installation's natural resources. The Fallbrook Naval Weapons Station completed its INRMP in 2006 (which was updated from an INRMP developed by the Naval Ordnance Center Pacific Division in 1996) to address conservation and management of its natural resources, including conservation measures for the

flycatcher (Navy 2006, Chapter 3, pp. 110–112). Areas or habitat containing features essential to the conservation of flycatchers within the boundaries of Fallbrook Naval Weapons Station occur along portions of Pilgrim Creek and the Santa Margarita River.

The flycatcher primarily receives protection from activities at Fallbrook Naval Weapons Station because no training occurs on the installation. The INRMP's management and conservation measures for the flycatcher consist of avoidance and minimization measures, applied to infrastructure development and maintenance to protect the flycatcher, that are part of the NEPA (42 U.S.C. 4321 *et seq.*) approval process (Navy 2006, Chapter 3, pp. 110–112). The flycatcher also receives indirect protection through management and conservation measures for the least Bell's vireo such as: (1) Protection of flycatcher habitat through protection of a subset of least Bell's vireo priority management areas; (2) fencing that protects priority areas from cattle grazing; (3) a Fire Management Plan that provides a higher priority protection for riparian habitat, due to the limited amount of riparian habitat on Fallbrook Naval Weapons Station, such as core areas of least Bell's vireo and flycatcher habitat; (4) consideration of prescribed burns and livestock grazing as tools for the establishment of a buffer area between riparian habitat and shrublands; (5) timing and location protections associated with prescribed burns; (6) assessment and mapping of riparian habitat to determine suitability for least Bell's vireo occupation; and (7) implementation of nonnative vegetation control measures, including removal of *Arundo donax* (giant reed) (Navy 2006, pp. 3–118).

Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that conservation efforts identified in the 2006 INRMP for Fallbrook Naval Weapons Station provide a benefit to the flycatcher and riparian habitat on the installation. Therefore, lands subject to the INRMP for the Fallbrook Naval Weapons Station are exempt from critical habitat designation under section 4(a)(3) of the Act. We are not including approximately 3.2 km (2.0 mi) of habitat on Pilgrim Creek and portions of the Santa Margarita River that lie within the boundaries of the Fallbrook Naval Weapons Station in this revised critical habitat designation because of this exemption.

## Exclusions

### *Application of Section 4(b)(2) of the Act*

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. In making that determination, the statute on its face, as well as the legislative history are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor.

In considering whether to exclude a particular area from the designation, we identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and evaluate whether the benefits of exclusion outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise his discretion to exclude the area only if such exclusion would not result in the extinction of the species.

When identifying the benefits of inclusion for an area, we consider the additional regulatory benefits that area would receive from the protection from adverse modification or destruction as a result of actions with a Federal nexus; the educational benefits of mapping essential habitat for recovery of the listed species; and any benefits that may result from a designation due to State or Federal laws that may apply to critical habitat.

The principal benefit of including an area in a critical habitat designation is the requirement for Federal agencies to ensure actions they fund, authorize, or carry out are not likely to result in the destruction or adverse modification of any designated critical habitat, the regulatory standard of section 7(a)(2) of the Act under which consultation is completed. Federal agencies must also consult with us on actions that may affect a listed species to ensure their proposed actions are not likely to jeopardize the continued existence of such species. The analysis of effects to critical habitat is a separate step and different standard from that of the

effects to the species. Therefore, the difference in outcomes of these two analyses represents the regulatory benefit of critical habitat.

The two regulatory standards are different and, significantly, the factors that are reviewed under each standard are different as well. The jeopardy analysis investigates the action's impact to survival and recovery of the species with a focus on how the action affects attributes such as numbers, distribution, and reproduction of the species. On the other hand, the adverse-modification analysis investigates the action's effects to the designated habitat's contribution to recovery with a focus on the conservation role the habitat plays for the listed species. This difference in the two consultation standards and focus of review, in some instances, will lead to different conclusions. Thus, critical habitat designations may provide greater benefits to the recovery of a species than would listing alone because it will provide another and alternative focus on factors affecting listed species.

Nonetheless, for many species (in at least some locations) the outcome of these analyses in terms of any required habitat protections will be similar because effects to habitat will often also result in effects to the species.

When identifying the benefits of exclusion, we consider, among other things, whether exclusion of a specific area is likely to result in conservation; the continuation, strengthening, or encouragement of partnerships; or implementation of a management plan

that provides equal to or more conservation than a critical habitat designation would provide.

In the case of the flycatcher, the benefits of critical habitat include public awareness of flycatcher presence and the importance of habitat protection. Where a Federal nexus exists, the designation of critical habitat may also increase habitat protection for the flycatcher, which may, in some cases, allow the species to move into currently unoccupied areas.

In practice, a Federal nexus exists primarily on Federal lands or for projects undertaken by Federal agencies or permits issued by Federal agencies. Since the flycatcher was listed in 1995, we have been consulting with Federal agencies on their effects to the flycatcher both for projects on Federal lands, and for projects on privately owned lands that had a Federal nexus to trigger consultation under section 7 of the Act. These consultations have, in some instances, resulted in comprehensive conservation planning for specific areas across the species' range (i.e., Sprague Ranch in Kern Management Unit). These plans can provide sufficient flycatcher habitat protection for recovery of the species.

When we evaluate the existence of a conservation plan when considering the benefits of exclusion, we consider a variety of factors, including but not limited to, whether the plan is finalized; how it provides for the conservation of the essential physical or biological features; whether there is a reasonable

expectation that the conservation management strategies and actions contained in a management plan will be implemented into the future; whether the conservation strategies in the plan are likely to be effective; and whether the plan contains a monitoring program or adaptive management to ensure that the conservation measures are effective and can be adapted in the future in response to new information.

After identifying the benefits of inclusion and the benefits of exclusion, we carefully weigh the two sides to evaluate whether the benefits of exclusion outweigh those of inclusion. If our analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, we then determine whether exclusion would result in extinction. If exclusion of an area from critical habitat will result in extinction, we will not exclude it from the designation.

Based on the information provided by entities seeking exclusion, as well as any additional public comments we received, we evaluated whether certain lands in the proposed critical habitat were appropriate for exclusion from this final designation pursuant to section 4(b)(2) of the Act. Table 4 below provides the areas, streams, and approximate stream lengths (km, mi) of lands that meet the definition of critical habitat but are being excluded under section 4(b)(2) of the Act from the final critical habitat rule. An explanation of the basis for each exclusion is provided below.

TABLE 4—PLAN TYPE, STREAM SEGMENTS, AND APPROXIMATE STREAM LENGTH EXCLUDED FROM FLYCATCHER CRITICAL HABITAT UNDER SECTION 4(b)(2) OF THE ACT BY MANAGEMENT UNIT

Management unit and basis for exclusion	Streams segments excluded	Approximate stream length excluded in km (mi)
<b>Santa Clara Management Unit</b>		
Newhall Land and Farm Conservation Easement .....	Santa Clara River .....	4.4 (2.7)
<b>Santa Ana Management Unit</b>		
Western Riverside County Multiple Species HCP .....	Santa Ana River .....	30.0 (18.6)
	San Timoteo Creek .....	21.4 (13.3)
	Bautista Creek (two segments) .....	3.1 (1.9)
	Temecula Creek (see San Diego Management Unit).	
Ramona Band of Cahuilla Partnership .....	Bautista Creek .....	0.4 (0.3)
<b>San Diego Management Unit</b>		
San Diego County Multiple Species HCP .....	San Dieguito River .....	9.2 (5.7)
	San Diego River .....	9.6 (6.0)
	Santa Ysabel Creek (upper) .....	2.4 (1.5)
	Santa Ysabel Creek (lower) .....	1.1 (0.7)
	Sweetwater River .....	2.1 (1.3)
	Temecula Creek (including Vail Lake) .....	18.7 (11.6)
Orange County Southern Subregional HCP .....	Cañada Gobernadora Creek .....	4.7 (2.9)
City of Carlsbad Habitat Management Plan .....	Agua Hedionda Creek (two segments) .....	3.2 (2.0)
		2.1 (1.3)

TABLE 4—PLAN TYPE, STREAM SEGMENTS, AND APPROXIMATE STREAM LENGTH EXCLUDED FROM FLYCATCHER CRITICAL HABITAT UNDER SECTION 4(b)(2) OF THE ACT BY MANAGEMENT UNIT—Continued

Management unit and basis for exclusion	Streams segments excluded	Approximate stream length excluded in km (mi)
La Jolla Band of Luiseño Indians Management Plan .....	San Luis Rey River .....	11.6 (7.2)
Rincon Band of Luiseño Mission Indians Management Plan ....	San Luis Rey River .....	4.3 (2.7)
Pala Band of Luiseño Mission Indians Partnership .....	San Luis Rey River 6.9 km (4.3 mi) segment plus four separate nearby parcels totaling an additional 1.4 km (0.9 mi).	8.3 (5.2)
The Barona and Viejas Groups of Capitan Grande Band of Diegueno Mission Indians Partnership.	San Diego River .....	0.9 (0.6)
<b>Owens Management Unit</b>		
Los Angeles Department of Water and Power Management Plan.	Owens River .....	128.5 (79.8)
<b>Kern Management Unit</b>		
Sprague Ranch Management Plan .....	South Fork Kern River (north side) .....	4.0 (2.5)
Hafenfeld Ranch Management Plan .....	South Fork Kern River (south side) .....	0.30 (0.20)
<b>Salton Management Unit</b>		
Ilipay Nation of Santa Ysabel Partnership .....	San Felipe Creek .....	1.6 (1.0)
<b>Little Colorado Management Unit</b>		
Zuni Pueblo Management Plan .....	Rio Nutria .....	35.8 (22.2)
	Zuni River .....	55.4 (34.4)
<b>Middle Colorado Management Unit</b>		
LCR MSCP, including Hualapai Nation .....	Colorado River, including upper Lake Mead .....	74.1 (46.0)
<b>Pahranagat Management Unit</b>		
Key Pittman State Wildlife Area Management Plan .....	Pahranagat River (two segments) .....	2.5 (1.6)
		1.4 (0.9)
Overton State Wildlife Area Management Plan .....	Muddy River .....	3.1 (1.9)
<b>Bill Williams Management Unit</b>		
LCR MSCP .....	Bill Williams River .....	8.9 (5.6)
<b>Hoover to Parker Dam Management Unit</b>		
LCR MSCP, including Fort Mojave and Chemehuevi Tribes ....	Colorado River .....	107.0 (66.4)
LCR MSCP .....	Bill Williams River .....	1.7 (1.0)
<b>Parker Dam to Southerly International Border Management Unit</b>		
LCR MSCP, including Colorado River Indian Tribes and Quechan (Fort Yuma) Indian Tribe.	Colorado River (two segments) .....	65.0 (40.4)
		148.0 (92.0)
<b>San Juan Management Unit</b>		
Navajo Nation Management Plan .....	San Juan River (New Mexico) .....	3.5 (2.2)
	San Juan River, (Utah)—43.5 km (27.0 mi) of south bank plus 8.1 km (5.1 mi) of both banks on eastern most portion of segment.	51.6 (32.1)
Southern Ute Tribe Management Plan .....	Los Pinos River .....	25.9 (16.1)
<b>Verde Management Unit</b>		
Salt River Project Horseshoe and Bartlett Dams HCP .....	Verde River (Horseshoe Lake) .....	9.6 (6.0)
Yavapai-Apache Management Plan .....	Verde River (two segments) .....	2.1 (1.3)
		0.7 (0.4)
<b>Roosevelt Management Unit</b>		
Salt River Project Roosevelt Lake HCP .....	Tonto Creek (Roosevelt Lake) .....	12.8 (7.9)
	Salt River (Roosevelt Lake) .....	16.3 (10.1)
Freeport McMoRan Pinal Creek Management Plan .....	Pinal Creek .....	5.8 (3.6)

TABLE 4—PLAN TYPE, STREAM SEGMENTS, AND APPROXIMATE STREAM LENGTH EXCLUDED FROM FLYCATCHER CRITICAL HABITAT UNDER SECTION 4(b)(2) OF THE ACT BY MANAGEMENT UNIT—Continued

Management unit and basis for exclusion	Streams segments excluded	Approximate stream length excluded in km (mi)
<b>Middle Gila and San Pedro Management Unit</b>		
San Carlos Apache Tribal Management Plan .....	San Pedro River (dispersed parcels) .....	0.9 (0.6)
<b>Upper Gila Management Unit</b>		
U-Bar Ranch Management Plan .....	Gila River (dispersed parcels) .....	13.8 (8.6)
San Carlos Apache Tribal Management Plan .....	Gila River .....	31.3 (19.5)
San Carlos Reservoir .....	Gila River (San Carlos Reservoir) .....	26.8 (16.6)
<b>Hassayampa and Agua Fria Management Unit</b>		
Tres Rios Safe Harbor Agreement .....	Gila River .....	8.7 (5.4)
<b>San Luis Valley Management Unit</b>		
San Luis Valley Partnership .....	Rio Grande .....	119.5 (74.3)
	Conejos River .....	64.9 (40.4)
<b>Upper Rio Grande Management Unit</b>		
San Ildefonso Pueblo Management Plan .....	Rio Grande .....	7.7 (4.8)
Santa Clara Pueblo Partnership .....	Rio Grande .....	10.2 (6.4)
San Juan Pueblo (Ohkay Owingeh) Partnership .....	Rio Grande .....	9.3 (5.8)
<b>Lower Rio Grande Management Unit</b>		
Elephant Butte Irrigation District Canalization and Conservation Project.	Rio Grande .....	74.2 (46.1)
	Total .....	1,270.4 (789.6)

**Note:** Because of the odd shape of some properties excluded, the exclusion of just the south bank of a portion of the San Juan River, and other areas adjusted described in the Summary of Changes section, this total will not, when added to the amount of designated critical habitat, equal the total overall amount of stream length proposed as critical habitat.

Please note that we identified some areas within our proposed rule and subsequent July 12, 2012, publication that we considered for exclusion under section 4(b)(2) of the Act, but after further analysis, we did not exclude from this flycatcher critical habitat revision. In some instances, we did not exclude an entire area we considered (Clark County HCP–Virgin River; Alamo Lake State Wildlife Area–Big Sandy, Santa Maria, and Bill Williams River; South Fork Kern River Wildlife Area–Kern River, including upper Lake Isabella; and Elephant Butte Reservoir–Rio Grande) and in others, we did not exclude a portion of the lands we identified for consideration (Overton Wildlife Area–Virgin River, and Newhall Farm and Land–Santa Clara River and Castaic Creek). Explanations for our conclusions can be found in the Summary of Comments and Recommendations section of this final rule.

#### Exclusions Based on Economic Impacts

Under section 4(b)(2) of the Act, we consider the economic impacts of

specifying any particular area as critical habitat. In order to consider economic impacts, we prepared a draft economic analysis of the entire proposed critical habitat designation (which include areas we were considering for exclusion) and related factors (Industrial Economics 2012, entire).

The intent of the final economic analysis (FEA) is to quantify the economic impacts of all potential conservation efforts for the flycatcher; some of these costs will likely be incurred regardless of whether we designate critical habitat (baseline). The economic impact of the final critical habitat designation is analyzed by comparing scenarios both “with critical habitat” and “without critical habitat.” The “without critical habitat” scenario represents the baseline for the analysis, considering protections already in place for the species (e.g., under the Federal listing and other Federal, State, and local regulations). The baseline, therefore, represents the costs incurred regardless of whether critical habitat is designated. The “with critical habitat” scenario describes the incremental

impacts associated specifically with the designation of critical habitat for the species. The incremental conservation efforts and associated impacts are those not expected to occur absent the designation of critical habitat for the species. In other words, the incremental costs are those attributable solely to the designation of critical habitat above and beyond the baseline costs; these are the costs we consider in the final designation of critical habitat. The analysis looks retrospectively at baseline impacts incurred since the species was listed, and forecasts both baseline and incremental impacts likely to occur with the designation of critical habitat. For a further description of the methodology of the analysis, see Chapter 2, “Framework for the Analysis,” of the economic analysis.

The FEA also addresses how potential economic impacts are likely to be distributed, including an assessment of any local or regional impacts of habitat conservation and the potential effects of conservation activities on government agencies, private businesses, and individuals. The FEA measures lost

economic efficiency associated with residential and commercial development and public projects and activities, such as economic impacts on water management and transportation projects, Federal lands, small entities, and the energy industry. Decision-makers can use this information to assess whether the effects of the designation might unduly burden a particular group or economic sector. The economic analysis provides estimated costs of the foreseeable potential economic impacts of the critical habitat designation for the flycatcher over the next 20 years (2012–2031), which, for most parts of the analysis, was determined to be the appropriate period for analysis. This is because limited planning information is available for most activities to forecast activity levels for projects beyond a 20-year timeframe. The economic analysis estimates impacts to water management activities, however, over a 30-year period (2012–2041).

The FEA quantifies economic impacts of flycatcher conservation efforts associated with the following categories of economic activity: (1) Water management activities; (2) livestock grazing; (3) residential and related development; (4) tribal activities; (5) transportation; (6) mining and oil and gas development; and (7) recreation activities. The total potential incremental economic impacts for all of the categories in areas proposed as revised critical habitat over the next 20 years range from \$11 million to \$19 million (\$950,000 to \$1.7 million annualized), assuming a 7 percent discount rate. A very brief summary of the estimated impacts within each category is provided below. Please refer to the draft economic analysis for a comprehensive discussion of the potential impacts.

#### Transportation

Our analysis suggests that transportation activities, such as road and bridge construction and maintenance, may experience the largest impacts. Transportation projects were more difficult to forecast, resulting in potential overstatement of the impacts. Our impact estimates were based on an increased level of consultation activity (and resulting project modifications for flycatcher conservation efforts) that is higher than the historical record of past activities. Transportation agencies at the Federal, State, and local level could incur costs associated with monitoring and education activities, fencing, habitat management and creation, timing restrictions, and administrative

activities. Incremental impacts may reach \$5.8 million over 20 years.

#### Water Management

Impacts to water management activities may be the next largest of any of the affected economic activities; however, the majority of the impact of conservation efforts to protect flycatcher will occur even if critical habitat is not designated (they are baseline impacts). All but two of the major dams and reservoirs within flycatcher proposed revised critical habitat, the Hansen Dam and the Mojave Dam, are located along river segments where the species' presence is either currently addressed, or otherwise well known to project proponents and managing agencies. Associated impacts in these areas are therefore assumed to be baseline, where most conservation activities and associated costs will occur regardless of whether critical habitat is designated.

Incremental impacts over the next 30 years (assuming a 7 percent discount rate) range from \$1.4 million to \$9.6 million. These incremental impacts include the costs of conservation efforts associated with section 7 consultations or the development of HCPs, as well as administrative efforts to consider potential adverse modification of habitat as part of future section 7 consultations.

#### Livestock Grazing

Impacts to grazing activities are likely to be smaller relative to water and transportation activities, but are anticipated to affect a broader geographic area. Grazing currently occurs in nearly all of the Management Units that are included in this final critical habitat revision. As a result, some impacts may be experienced in most units. On Federal lands, reductions in grazing allotments are possible depending on the specific conditions within the unit. The estimated potential, present value incremental costs range from \$2.2 million to \$3.5 million over the 20-year time period of the analysis. Impacts include the administrative costs of consultation with the Service, the lost value of grazing permits associated with reductions in authorized Animal Unit-Months, costs of constructing and maintaining fencing, and costs of cowbird trapping.

#### Residential and Commercial Development

Residential and related development activities are likely to be smaller in magnitude than grazing impacts; however estimated impacts are concentrated over a smaller geographic area. Nearly all impacts to development

activities are estimated to occur in the California Management Units. Areas likely to see the greatest development pressure include Santa Barbara, Ventura, Los Angeles, Riverside, San Bernardino, and San Diego Counties, California, and Mohave County, Arizona.

Because the revised critical habitat is located within the 100-year floodplain, the Federal Emergency Management Agency will regulate real estate development in any critical habitat we eventually designate. As a result, additional restrictions may be imposed by individual or local jurisdictions. The restrictions or regulations may require flood control facilities or other special engineering, often making development in floodways impractical and prohibitively expensive. Due to existing development restrictions, lands within critical habitat that can be feasibly developed will be limited to areas where real estate demand is high enough to justify the costs associated with developing the floodplain.

Incremental impacts to residential development are estimated at \$810,000 over 20 years. These are related to reduced land value associated with the need to set aside land on-site for the flycatcher; the need to implement additional project modifications, such as cowbird trapping, fencing, monitoring, and habitat management; time delays; and administrative costs. Because of the availability of alternative lands that are not designated as critical habitat in these regions, these costs are likely to be borne by existing landowners in the form of reduced value for their existing properties. The estimated impacts would be felt immediately, in 2012, upon the effective date of this final rule (see **DATES**), and reflect the change in the future, productive use of the properties.

#### Tribal Activities

Incremental impacts to tribal activities of approximately \$660,000 are estimated to be associated with administrative impacts over the 20-year time frame of the analysis. However, tribal concerns focus on the potential impact that the designation could have on their ability to make use of natural resources, including water rights, on their sovereign lands. The absence of some cost information related to potential impacts of flycatcher critical habitat on tribal lands results in a probable underestimate of future costs to tribal entities. Lands belonging to 19 tribes included within the boundaries of proposed revised critical habitat under consideration for exclusion from the final designation, are subsequently

excluded under section 4(b)(2) of the Act (see Exclusions section).

#### Mining, and Oil and Gas Development

In 2005, potential impacts to oil and gas development were not identified as a significant issue and thus were not considered in the previous economic analysis. However, proposed revised critical habitat in the San Juan Management Unit in San Juan County, Utah, and La Plata County, Colorado, generated concern, because this area serves as a highly developed source of oil and natural gas, with hundreds of existing wells. Due to the level of existing protections in riparian areas required by, or agreed to by, oil and gas developers and land and resource managers, no project modification costs are expected as a result of the designation of revised flycatcher critical habitat. However, baseline administrative costs of \$33,000 for one formal and six informal consultations are expected due to limited oil and gas activities, including seismic studies and pipeline construction and maintenance. In addition to baseline costs, the analysis forecasts \$11,000 in incremental administrative costs to consider adverse modification as part of these consultations.

While few active mineral mining activities occur within revised critical habitat, the mining industry has expressed concern that water use by existing or potential mining operations could be affected by flycatcher conservation activities, particularly the designation of critical habitat. There are currently no data that indicate whether existing or future diversions of water for mining activities (including groundwater pumping) reduce stream flow or modify hydrologic conditions to the degree that adversely impacts the flycatcher and its riparian habitat. As such, the analysis does not quantify the probability or extent to which water use for mining purposes would need to be curtailed or modified to remedy impacts to flycatcher. Additionally, impacts to extractive mining operations, such as sand and gravel pits, that cause direct habitat loss may occur as the result of critical habitat designation. However, project modification costs associated with these operations are uncertain due to the limited consultation history, and, as a result, our analysis is unable to forecast economic impacts for mining activities.

#### Recreation

Incremental impacts to recreational activities are unlikely to result from the designation. In the baseline, activities may be affected at Lake Isabella and

Lake Roosevelt; however, baseline economic impacts in these areas are likely to be limited to \$1.9 million over 20 years. In addition, management activities at a picnic site in the San Bernardino National Forest results in present value baseline costs of \$39,000.

A copy of the FEA with supporting documents may be obtained by contacting the Arizona Ecological Service's Office (see **ADDRESSES**) or by downloading from the Internet at <http://www.regulations.gov> at Docket No. FWS-R2-ES-2011-0053.

#### Exclusions Based on National Security Impacts

Under section 4(b)(2) of the Act, we consider whether there are lands owned or managed by the Department of Defense where a national security impact might exist. All Department of Defense lands that met the definition of flycatcher critical habitat were exempted from designation (see Exemptions section above). In addition we found no other proposed areas that had national security impacts. Consequently, the Secretary is not exercising his discretion to exclude any areas from this final designation based on impacts on national security.

#### Exclusions Based on Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security. We consider a number of factors including whether the landowners have developed any HCPs or other management plans for the area, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at any tribal issues, and consider the government-to-government relationship of the United States with tribal entities. We also consider any social impacts that might occur because of the designation.

We have excluded areas from critical habitat based on land and resource management plans, conservation plans or agreements, or other conservation partnerships where the benefits of exclusion from critical habitat outweigh the benefits of including an area from critical habitat. We consider a current land management or conservation plan (HCPs as well as other types) to provide adequate management or protection if it meets the following criteria:

(1) The plan is complete and provides the same or better level of protection from adverse modification or destruction than that provided through

a consultation under section 7 of the Act;

(2) There is a reasonable expectation that the conservation management strategies and actions will be implemented for the foreseeable future, based on past practices, written guidance, or regulations; and

(3) The plan provides conservation strategies and measures consistent with currently accepted principles of conservation biology.

We believe that the following HCPs, plans, agreements, and partnerships fulfill the above criteria or otherwise provide benefits that outweigh the benefits from inclusion as critical habitat and are excluding these areas. We organize the following discussion of exclusions below by Management Unit. We will note below where a discussion will occur if HCPs occur across multiple Management Units or we consolidate multiple lands into a single discussion.

#### Summary of Exclusions

##### Santa Clara Management Unit

##### Newhall Land and Farming Company Natural River Management Plan

Newhall Land and Farming Company (Newall LFC) has developed a Natural River Management Plan (NRMP) (Valencia Company 1998, entire) for the long-term conservation and management of the biological resources within their lands, including a portion of the Santa Clara River (including the Santa Clara-San Francisquito Creek confluence) that we proposed as flycatcher critical habitat. The Corps and CDFG approved the NRMP in 1998. The NRMP provides management measures designed to protect, restore, monitor, manage, and enhance habitat for multiple species, including the flycatcher, that occur along the main stem of the Santa Clara River within the Santa Clara Management Unit. Protective measures for flycatcher habitat in the NRMP include: (1) The creation of new riverbed areas, including planting wetland mitigation sites; (2) revegetation of riparian areas; (3) removal of invasive plants such as giant reed (*Arundo donax*) and tamarisk (*Tamarix* sp.); (4) protecting wetlands from urban runoff by establishing a revegetated upland buffer between developed areas and the river; (5) implementing a Drainage Quality Management Plan with Best Management Practices to ensure water quality within the river corridor; and (6) implementing the biological mitigation measures for the Newhall Ranch Specific Plan that includes restricting pets and off-road vehicles from the area and restricting access to the river



corridor by limiting hiking and biking to the river trail system.

Of particular importance to the conservation of the flycatcher and its habitat under the NRMP is the inclusion of substantial conservation easements. Conservation easements within the proposed Santa Clara Management Unit boundaries that have already been conveyed to the CDFG over approximately 4.4 km (2.7 mi) of the Santa Clara River corridor east of Interstate 5 (I–5). These easements will ensure substantial protection and provide for long-term management of flycatcher habitat so it will remain in a natural condition in perpetuity. Use of the easement is limited to the preservation and enhancement of native species and their habitats, including the flycatcher and its habitat. Based on the placement of the conservation easement, the physical and biological features that are essential to flycatcher conservation are protected along this 4.4-km (2.7-mi) segment of the Santa Clara River within the proposed Santa Clara Management Unit. Three flycatcher breeding sites are known to occur along the Santa Clara River and the stream was known to be occupied at the time of listing.

The NRMP combined with the completed conservation easements provides for the flycatcher and the physical and biological features essential to flycatcher habitat conservation, and addresses conservation issues from a coordinated, integrated perspective rather than a piecemeal, project-by-project approach, thus resulting in coordinated landscape-scale conservation that can contribute to genetic diversity by preserving covered species populations, habitat, and interconnected linkage areas that support recovery of the flycatcher and other listed species. Additionally, we have completed section 7 consultation under the Act on the effects of the NRMP on the flycatcher and found that it would not jeopardize the continued existence of the species.

The conservation easement under the NRMP provides permanent protection to approximately 4.4 km (2.7 mi) of the Santa Clara River, or about 15 percent of Newhall LFC lands proposed as critical habitat within the Santa Clara Management Unit. Approximately 689 ha (1,702 ac), or 85 percent, of Newhall LFC lands in the Santa Clara Management Unit, representing other portions of the Santa Clara River (12.2 km, 8.8 mi) and Castaic Creek (4.8 km, 3.0 mi), were also proposed as critical habitat, but because they are not currently conserved and managed through finalized easements, they are designated as critical habitat (see

Summary of Comments and Recommendations section below). Below is an analysis of the relative benefits of inclusion and exclusion of 4.4 km (2.7 mi) of the Santa Clara Management Unit for which the Secretary is exercising his discretion to exclude from this final revised critical habitat designation under section 4(b)(2) of the Act.

#### Benefits of Inclusion—Newhall LFC

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

The Santa Clara River is known to have flycatcher territories and the portion of the river that is being evaluated for exclusion has undergone section 7 consultation under the jeopardy standard related to the NRMP and conservation easements. Critical habitat along the Santa Clara River may provide a regulatory benefit for the flycatcher under section 7 of the Act when there is a Federal nexus present for a project that might adversely modify critical habitat. Because these lands are privately owned, future Federal actions would likely be limited. Yet, projects in wetland areas could require a 404 Corps permit under the Clean Water Act (33 U.S.C. 1251 et seq.) and evaluation under section 7 of the Act for both jeopardy and adverse modification since flycatchers are known to occur along the Santa Clara River.

However, as a result of the establishment and implementation of protections associated with the conservation easement managed under Newhall LFC's NRMP (which include the involvement of the Corps), it is unlikely that future Federal actions would impact the overall goal of the easements for 4.4 km (2.7 mi) of the Santa Clara River and cause adverse modification of flycatcher critical habitat. If actions that could affect flycatchers and their habitat do occur, it is likely that the protections provided the species and its habitat under section 7(a)(2) of the Act would be largely redundant with the protections offered by the NRMP and conservation easement. Thus, we expect the incremental regulatory benefit of

including these areas in critical habitat would be minimal.

Another important benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners, agencies, tribes, and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the flycatcher that reaches a wide audience, including parties engaged in conservation activities, is valuable. The designation of critical habitat may also strengthen or reinforce some Federal laws, such as CEQA, or the Clean Water Act. These laws analyze the potential for projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental laws.

We believe that there would be little educational and informational benefit gained from including these portions of the Santa Clara River within the designation because this area is well known as an important area for flycatcher management and recovery. The process of proposing and finalizing revised critical habitat provided the opportunity for peer review and public comment; this process is valuable to land owners and managers, such as Newhall LFC, in prioritizing conservation and management of identified areas. Additionally, because managing agencies and partners such as the Corps, CDFG, and Newhall LFC's developed and are implementing a long-term conservation easement that addresses flycatcher habitat, minimal additional educational benefits or additional support for implementing other environment regulations are expected to be realized in these areas.

In summary, we believe that designating critical habitat would provide minimal regulatory benefits under section 7(a)(2) of the Act for these 4.4 km (2.7 mi) along the Santa Clara River because of the long-term protection and management established through Newhall LFC's conservation easement. Because Newhall LFC and the managing agencies not only expressly addressed flycatcher conservation in the easement, but also were fully engaged in the rulemaking process for designating critical habitat, few additional educational benefits or support for other environmental regulations would be realized under these circumstances.

#### Benefits of Exclusion—Newhall LFC

A considerable benefit from excluding a portion of Newhall LFC along the

Santa Clara River as flycatcher critical habitat is the maintenance and strengthening of ongoing conservation partnerships. We believe conservation benefits would be realized by: (1) Continuing and strengthening of our effective working relationship with Newhall LFC to promote voluntary, proactive conservation of the flycatcher and its habitat as opposed to reactive regulation; (2) allowance for continued meaningful collaboration and cooperation in working toward species recovery, including conservation benefits that might not otherwise occur; and (3) encouragement of additional conservation easements and other conservation and management plan development in the future on Newhall LFC's other lands for this and other federally listed and sensitive species.

The NRMP and associated conservation easement provides substantial protection and management for the flycatcher and the physical and biological features essential to the conservation of the species, and addresses conservation issues from a coordinated, integrated perspective rather than a piecemeal, project-by-project approach (as would occur under section 7 of the Act), thus resulting in coordinated landscape-scale conservation that can contribute to genetic diversity by preserving covered species populations, habitat, and interconnected linkage areas that support recovery of the flycatcher and other listed species.

Additionally, many landowners perceive critical habitat as an unfair and unnecessary regulatory burden given the expense and time involved in developing and implementing conservation and management plans on private lands. Exclusion of Newhall LFC lands that are in conservation easements and managed by the NRMP will also strengthen the partnership between the Service and Newhall LFC, which may encourage other conservation partnerships between our two entities in the future.

In summary, we believe excluding lands from critical habitat that are covered by the NRMP conservation easements could provide the significant benefit of maintaining our existing partnership and fostering new ones.

#### Weighing Benefits of Exclusion Against Benefits of Inclusion—Newhall LFC

We reviewed and evaluated the benefits of inclusion and benefits of exclusion for all lands owned by Newhall LFC proposed as critical habitat for the flycatcher. The benefits of including conserved and managed lands in the final flycatcher critical habitat

designation are small. The conservation easement on portions of the Santa Clara River that encompass approximately 4.4 km (2.7 mi) of the Santa Clara Management Unit, are already managed and conserved under the NRMP, and provide a long-term benefit to the flycatcher. There is also minimal educational or ancillary benefit of designating critical habitat in this conservation easement; education information regarding the importance of the easement was identified during the development and implementation of Newhall LFC's NRMP. Similarly, the incremental regulatory benefit provided by a critical habitat designation is minimized because it is partially redundant with the existing protection within the conservation easement under the NRMP. Therefore, we do not believe critical habitat designation for the flycatcher within the conservation easement will provide significant regulatory, educational, or ancillary benefits for these areas.

The exclusion of NRMP conserved and managed areas in the Santa Clara Management Unit will benefit the partnership that we have with Newhall LFC and other participating property owners, and encourage the conservation of lands associated with the development and implementation of future conservation management plans.

In summary, we find that excluding areas from critical habitat that are receiving both long-term conservation and management for the purpose of protecting the flycatcher in the Santa Clara Management Unit will preserve our partnership with Newhall LFC and encourage the conservation of lands associated with development. These partnership benefits are significant and outweigh the small potential regulatory, educational, and ancillary benefits of including these portions of the Santa Clara Management Unit in final revised critical habitat for the flycatcher. Therefore, this conservation easement provides greater protection of flycatcher breeding and foraging habitat than could be gained through the project-by-project analysis through a designation of critical habitat.

#### Exclusion Will Not Result in Extinction of the Species—Newhall LFC

We determined that exclusion of 4.4 km (2.7 mi) of the Santa Clara River in the Santa Clara Management Unit from the final revised critical habitat designation for the flycatcher will not result in extinction of the species. These areas are permanently conserved and managed to provide a benefit to the flycatcher and its habitat, thus providing assurances that the species

will not go extinct as a result of exclusion from critical habitat designation. Therefore, based on the above discussion, the Secretary is exercising his discretion to exclude approximately 4.4 km (2.7 mi) of land in the Santa Clara Management Unit from this final revised critical habitat designation.

#### Santa Ana Management Unit

##### Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

The Western Riverside County MSHCP is a comprehensive, multi-jurisdictional plan encompassing approximately 510,000 ha (1,260,000 ac) of the County of Riverside west of the San Jacinto Mountains (Dudek and Associates Inc. 2003, p. 1.1). The Western Riverside County MSHCP is a subregional plan under the State's Natural Community Conservation Planning Act (NCCP) and was developed in cooperation with the CDFG (Dudek and Associates Inc. 2003, p. 1.1). The Western Riverside County MSHCP is a multi-species conservation program designed to minimize and mitigate the effects of expected habitat loss and associated incidental take of 146 listed and nonlisted "covered species", including the flycatcher (Dudek and Associates Inc. 2003, p. 1.17). Conservation of the flycatcher is addressed in the Western Riverside County MSHCP. A section 10(a)(1)(B) permit for the Western Riverside County MSHCP was issued to 22 permittees on June 22, 2004, for a period of 75 years (Service 2004, p. 1). Currently, there are 27 permittees for the Western Riverside County MSHCP.

When fully implemented, the Western Riverside County MSHCP will conserve approximately 61,917 ha (153,000 ac) of new conservation lands (Additional Reserve Lands) in addition to the approximately 140,246 ha (347,000 ac) of pre-existing natural and open space areas (Public/Quasi-Public (PQP) lands) (Dudek and Associates Inc. 2003, p. 1.16–1.17). The PQP lands include those under the ownership of public or quasi-public agencies, primarily the USFS, Corps, and Bureau of Land Management (BLM), as well as permittee-owned or controlled open-space areas managed by the State of California, Riverside County, and Orange County Water District. The Additional Reserve Lands are not fully mapped or precisely delineated ("hard-lined"); rather they are textual descriptions of habitat necessary to meet the conservation goals for all covered species within the boundaries of the approximately

202,343 ha (500,000 ac) Western Riverside County MSHCP Conservation Area and are determined as implementation of the Western Riverside County MSHCP occurs.

In our analysis of the effects to flycatcher for the issuance of the Western Riverside County MSHCP permit, we acknowledged that specific conservation objectives would be provided in the Western Riverside County MSHCP to ensure that suitable habitat and known populations of flycatcher would persist (Service 2004, p. 326). To this effect the specific conservation objectives in the Western Riverside County MSHCP for the flycatcher include conserving at least 4,282 ha (10,580 ac) of core habitat (breeding and migration habitat) and linkage areas (connection between core areas) in the Western Riverside County MSHCP Conservation Area (Dudek and Associates Inc. 2003, p. B.475). The Western Riverside County MSHCP will provide for conservation of 100 percent of breeding habitat for the flycatcher, including a 100-m (328-ft) buffer adjacent to breeding areas (Dudek and Associates Inc. 2003, p. B.475; Service 2004, pp. 27–28). In addition, the Western Riverside County MSHCP requires compliance with a Riparian-Riverine Areas and Vernal Pool policy that contains provisions requiring 100 percent avoidance and long-term management and protection of breeding habitat not included in the conservation areas, unless a Biologically Equivalent or Superior Preservation Determination can demonstrate that a proposed alternative will provide equal or greater conservation benefits than avoidance (Dudek and Associates Inc. 2003, p. B.475; Service 2004, pp. 26–28). In addition to these efforts, monitoring efforts would occur at least every 3 years to identify breeding and nesting sites; cowbird trapping would occur, if necessary; and harmful nonnative vegetation, such as giant reed (*Arundo donax*) would be removed.

In our 2004 biological opinion we evaluated the effects of the Western Riverside County MSHCP on the flycatcher and its habitat that is found within the plan boundaries, and determined the plan will not jeopardize the continued existence of the flycatcher (Service 2004, p. 227). In addition, we acknowledged in section 14.10 of the Implementing Agreement (IA) for the Western Riverside County MSHCP that the plan provides a comprehensive, habitat-based approach to the protection of covered species, including the flycatcher, by focusing on lands essential for the long-term conservation of the covered species and appropriate

management for those lands (Western Riverside County Regional Conservation Authority *et al.* 2003, p. 51). The 1995 final listing rule for the flycatcher identified the most significant threats to the species are the loss, modification, and fragmentation of its habitat, and brood-parasitism by the brown-headed cowbird (60 FR 10694; February 27, 1995). The Western Riverside County MSHCP helps to address these threats through a regional planning effort, and outlines species-specific objectives and criteria for flycatcher conservation.

In summary, the Western Riverside County MSHCP provides a comprehensive habitat-based approach to the protection of covered species, including the flycatcher, by focusing on lands essential for the long-term conservation of the covered species and appropriate management of those lands (Western Riverside County Regional Conservation Authority *et al.* 2003, p. 51).

#### Benefits of Inclusion—Western Riverside County MSHCP

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

The streams being evaluated are known to be occupied by flycatchers and have undergone section 7 consultation under the jeopardy standard related to the Western Riverside County MSHCP. Portions of the proposed stream segments of the Santa Ana River, Temecula Creek and San Timoteo Creek, and the entirety of the proposed Bautista Creek segment, occur within the Western Riverside County MSHCP boundary. These stream segments were not within the geographical area known to be occupied at the time of listing. Following listing, flycatcher territories were detected within these segments. As a result of those territory detections and the criteria we established, based upon flycatcher dispersal, migration, and movement behaviors, these segments are now considered occupied.

Therefore, regardless of critical habitat designation, these segments will be subject to section 7 consultation under the jeopardy standard as well as the take prohibitions in section 9 of the

Act. Thus, it is difficult to differentiate meaningfully between measures implemented solely to minimize impacts to critical habitat from those implemented to minimize impacts to the flycatcher. Therefore, in the case of the flycatcher, we believe any additional regulatory benefits of critical habitat designation are minimized because the regulatory benefits from designation can be essentially indistinguishable from the benefits already afforded through sections 7 and 9 of the Act.

Another possible benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the flycatcher and its habitat that reaches a wide audience, including parties engaged in conservation activities, is valuable. In the case of the flycatcher, however, there have already been multiple occasions when the public has been educated about the species. The Western Riverside County MSHCP was developed over a 5-year period, and has been in place for almost a decade. Implementation of the subarea plans is formally reviewed yearly through publicly available annual reports, again providing extensive opportunity to educate the public and landowners about the location of, and efforts to conserve, essential flycatcher habitat. As discussed above, the permittees and stakeholders of the Western Riverside County MSHCP are aware of the value of these lands to flycatcher conservation, and conservation measures are already in place to protect essential occurrences of the flycatcher and its habitat.

Furthermore, essential habitat covered by the Western Riverside County MSHCP was included in the previous proposed designation of critical habitat published in the **Federal Register** on October 12, 2004 (69 FR 60706) and the proposed designation published in the **Federal Register** on August 15, 2011 (76 FR 50542). Additionally, this publication was announced in a press release and information was posted on the Service's Web site, which ensured that the proposal reached a wide audience. Therefore, much of the educational benefits of critical habitat designation (such as providing information to the County of Riverside and other stakeholders on areas important to the long-term conservation of this species) have largely been realized through development and ongoing implementation of the Western Riverside County MSHCP, through both

rules proposing these areas as critical habitat, and through the Service's public outreach efforts.

Critical habitat designation can also result in ancillary conservation benefits to the flycatcher by triggering additional review and conservation through other Federal and State laws such as the Clean Water Act and CEQA. These laws analyze the potential for projects to significantly affect the environment. However, essential habitat within western Riverside County has been identified in the Western Riverside County MSHCP and is either already protected or targeted for protection under the plans and thus we conclude the potential regulatory benefits resulting from designation of critical habitat would be negligible. Thus review of development proposals affecting essential habitat under CEQA by the County of Riverside already takes into account the importance of this habitat to the species and the protections required for the species and its habitat under the MSHCP. As discussed above, we conclude the potential regulatory benefits resulting from designation of critical habitat would be negligible because the outcome of a future section 7 consultation would not result in greater conservation for flycatcher essential habitat than currently is provided under the Western Riverside County MSHCP.

Based on the above discussion, we believe section 7 consultations for critical habitat designation conducted under the standards required by the Ninth Circuit Court in the *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service* decision would provide little conservation benefit and would be largely redundant with those benefits attributable to listing as well as those already provided by the Western Riverside County MSHCP. Therefore, we determine the regulatory benefits of designating those stream segments as flycatcher critical habitat, such as protection afforded through the section 7(a)(2) consultation process, are minimal. We also conclude that the educational and ancillary benefits of designating essential habitat covered by the Western Riverside County MSHCP would be minor because the location of essential habitat for this species within Western Riverside County and the importance of conserving such habitat is well known through development and implementation of the MSHCP and the independent regulatory protection already provided under CEQA and the Western Riverside County MSHCP.

#### Benefits of Exclusion—Western Riverside County MSHCP

The benefits of excluding from critical habitat designation the stream segments within the boundaries of the Western Riverside County MSHCP are significant and include: (1) Conservation management objectives for the flycatcher and its habitat identified in the MSHCP, described above; (2) continued and strengthened effective working relationships with all Western Riverside County MSHCP permittees and stakeholders to promote the conservation of the flycatcher and its habitat; (3) continued meaningful collaboration and cooperation in working toward recovery of this species, including conservation benefits that might not otherwise occur; (4) encouragement of other entities within the range of the flycatcher to complete HCPs; and (5) encouragement of additional HCPs and other conservation plan development in the future on other private lands that include the flycatcher and other federally listed species.

Additionally, the Orange County Water District (OCWD) and the Corps cooperatively manage the lands within the Prado Flood Control Basin. Prado Basin is a core habitat area and supports the largest known population of the flycatcher within the boundaries of the Western Riverside County MSHCP (Service 2004, p. 49). The benefits of excluding non-Federal lands within the Prado Flood Control Basin from critical habitat designation are significant and include: (1) That the conservation management objectives for the flycatcher and its habitat identified by the OCWD, described above; (2) continued and strengthened effective working relationships with all Western Riverside County MSHCP's jurisdictions and stakeholders to promote the conservation of the flycatcher and its habitat; (3) continued meaningful collaboration and cooperation in working toward recovering this species, including conservation benefits that might not otherwise occur; and (4) encouragement of additional HCP and other conservation plan development in the future on other private lands.

We developed close partnerships with the County of Riverside and other stakeholders through the development of the Western Riverside County MSHCP, which incorporates appropriate protections and management (described above) for the flycatcher and its habitat, and the physical or biological features essential to the conservation of this species. Those protections are consistent with statutory mandates under section 7 of the Act to avoid

destruction or adverse modification of critical habitat. Furthermore, this plan goes beyond that requirement by including active management and protection of essential habitat areas. By excluding the stream segments within the boundaries of the Western Riverside County MSHCP from critical habitat designation, we are eliminating a redundant layer of regulatory review for projects covered by the Western Riverside County MSHCP and encouraging new voluntary partnerships with other landowners and jurisdictions to protect the flycatcher and other listed species. As discussed above, the prospect of potentially avoiding a future designation of critical habitat provides a meaningful incentive to plan proponents to extend voluntary protections to endangered and threatened species and their habitats under a conservation plan. Achieving comprehensive landscape-level protection for listed species, such as the flycatcher through their inclusion in regional conservation plans, provides a key conservation benefit to the species. Our ongoing partnerships with the County of Riverside and permittees and stakeholders of the regional Western Riverside County MSHCP, and the landscape-level multiple species conservation planning efforts they promote, are essential to achieve long-term conservation of the flycatcher.

As noted earlier, some permittees and stakeholders of the Western Riverside County MSHCP permittees have expressed the view that critical habitat designation of lands covered by the Western Riverside County MSHCP devalues the conservation efforts of plan proponents and the partnerships fostered through the development and implementation of the plans, and would discourage development of additional HCPs and other conservation plans in the future. Permittees and stakeholders of the Western Riverside County MSHCP have repeatedly stated that exclusion of lands covered by the plan would prove beneficial to our partnership (WRCRCA 2011, p. 7). The Service has previously found that: (1) Implementation of the avoidance, minimization, and mitigation measures identified in the Western Riverside County MSHCP will reduce impacts to the flycatcher; (2) the conservation objectives for the flycatcher, as described above, will be met; (3) the proposed action is not likely to jeopardize the continued existence of the species; and (4) the Western Riverside County MSHCP provides a comprehensive, habitat-based approach to the protection of Covered Species,

including the flycatcher (WRCRA *et al.* 2003, p. 51; Service 2004, p. 227). The Service finds this plan is currently being implemented. Where an existing HCP provides protection for a species and its essential habitat within the plan area, the benefits of preserving existing partnerships by excluding the covered lands from critical habitat are most significant. Under these circumstances, excluding lands owned by or under the jurisdiction of the permittees of the Western Riverside County MSHCP and other stakeholders within the boundary of the Western Riverside County MSHCP promotes positive working relationships and eliminates impacts to existing and future partnerships while encouraging development of additional HCPs for other species.

Large-scale HCPs, such as the Western Riverside County MSHCP, take many years to develop, and foster a strategic ecosystem-based approach to habitat conservation planning by addressing conservation issues through a coordinated approach. If local jurisdictions were to require landowners to individually obtain incidental take permits (ITPs) under section 10 of the Act prior to the issuance of a building permit, the local jurisdiction would incur no costs associated with the landowner's need for an ITP. However, this approach would result in uncoordinated, project-by-project conservation that would be less likely to achieve listed species recovery as conservation measures would be determined on a project-by-project basis instead of on a comprehensive, landscape-level scale. We, therefore, believe that fostering with local jurisdictions to encourage the development of regional HCPs affords proactive landscape-level conservation for multiple species. The exclusion from critical habitat designation of covered lands subject to protection and management under such plans will promote these partnerships and result in greater protection for listed species, including the flycatcher, than would be achieved through section 7 consultation.

#### Benefits of Exclusion Outweigh the Benefits of Inclusion—Western Riverside County MSHCP

We reviewed and evaluated the exclusion of stream segments within the boundaries of the Western Riverside County MSHCP from our revised designation of critical habitat, and we determined the benefits of excluding these lands outweigh the benefits of including them. The benefits of including these lands in the designation are small because the regulatory, educational, and ancillary benefits that

would result from critical habitat designation are largely redundant with the regulatory, educational, and ancillary benefits already afforded through the Western Riverside County MSHCP and under Federal and State law. The outcome of any future section 7 consultation would not result in greater conservation for flycatcher essential habitat than currently is provided under the Western Riverside County MSHCP.

In contrast to the minor benefits of inclusion, the benefits of excluding lands covered by the Western Riverside County MSHCP from critical habitat designation are significant. Exclusion of these lands will help preserve the partnerships we developed with local jurisdictions and project proponents through the development and ongoing implementation of the Western Riverside County MSHCP, and aid in fostering future partnerships for the benefit of listed species. Designation of lands covered by the Western Riverside County MSHCP and cooperating stakeholders may discourage other partners from seeking, amending, or completing NCCP–HCP plans that cover the flycatcher and other listed species. Designation of critical habitat does not require that management or recovery actions take place on the lands included in the designation. However, the Western Riverside County MSHCP will provide significant conservation and management of the flycatcher and its habitat, and help achieve recovery of this species through habitat enhancement and management, functional connections to adjoining habitat, and species monitoring efforts. Additional HCPs or other species-habitat plans potentially fostered by this exclusion would also help to recover this and other federally listed species.

In consideration of the relevant impact to current and future partnerships, as summarized in the *Benefits of Exclusion—Western Riverside County MSHCP* section above, we determine the significant benefits of exclusion outweigh the minor benefits of critical habitat designation, because any section 7 consultations for critical habitat designation conducted under the standards required by the Ninth Circuit Court in the *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service* decision would provide little conservation benefit and would be largely redundant with those benefits attributable to listing as well as those already provided by the Western Riverside County MSHCP. Therefore, we determine the regulatory benefits of designating those stream segments as flycatcher critical habitat, such as

protection afforded through the section 7(a)(2) consultation process, are minimal. We also conclude that the educational and ancillary benefits of designating essential habitat covered by the Western Riverside County MSHCP would be minor because the location of essential habitat for this species within Western Riverside County and the importance of conserving such habitat is well known through development and implementation of the MSHCP and the independent regulatory protection already provided under CEQA and the Western Riverside County MSHCP.

#### Exclusion Will Not Result in Extinction of the Species—Western Riverside County MSHCP

We determine that the exclusion of stream segments within the boundaries of the Western Riverside County MSHCP from the designation of critical habitat for the flycatcher will not result in extinction of the species. The Service continues to review all Federal project proposals impacting riparian habitat occupied by the flycatcher through the section 7 process, and will ensure that all development carried out does not jeopardize the continued existence of the flycatcher. Thus, the section 7 process and protection provided by the Western Riverside County MSHCP and cooperating stakeholders provide assurances that this species will not go extinct as a result of excluding these lands from the critical habitat designation. Therefore, based on the protections outlined above and per the provisions laid out in the Implementation Agreement, to the extent consistent with the requirements of section 4(b)(2) of the Act, the Secretary is exercising his discretion to exclude from critical habitat, 30.0 km (18.6 mi) of non-Federal lands on the Santa Ana River (including Prado Basin), 21.4 km (13.3 mi) of San Timoteo Creek (Canyon), 3.5 km (2.2 mi) of non-Federal lands on Bautista Creek, and 18.7 km (11.6 mi) of Temecula Creek (including Vail Lake) within the planning area boundary of the Western Riverside County MSHCP.

#### Ramona Band of Cahuilla Partnership

Please see the end of this section for a discussion about our partnership with tribes from the Santa Ana, San Diego, and Salton Management Units.

#### San Diego Management Unit

San Diego Multiple Species Conservation Program (MSCP)—County of San Diego Subarea Plan

The San Diego MSCP is a comprehensive, multi-jurisdictional plan encompassing approximately

235,626 ha (582,243 ac) of the County of San Diego (County of San Diego 1997, p. 2.1). The San Diego MSCP is a subregional plan under the State's NCCP and was developed in cooperation with the County of San Diego and CDFG (County of San Diego 1997, p. 1.1). The San Diego MSCP is a multi-species conservation program designed to minimize and mitigate the effects of expected habitat loss and associated incidental take of 85 federally listed and sensitive species, including the flycatcher (County of San Diego 1997, p. 1.1). Conservation of the flycatcher is addressed in the San Diego MSCP. A section 10(a)(1)(B) permit was issued to the County of San Diego under the San Diego MSCP on March 12, 1998, for a period of 50 years (Service 1998, pp. 1–14). When fully implemented, the San Diego MSCP will conserve approximately 69,574 ha (171,920 ac) of preserve lands within the Multi-Habitat Planning Area (MHPA) (City of San Diego Subarea Plan), Pre-Approved Mitigation Areas (PAMA) (County of San Diego Subarea Plan), and Mitigation Area (City of Poway Subarea Plan).

The County of San Diego has both “hardline” boundaries as well as preserve areas that without “hardline” boundaries. In areas where the “hardline” boundaries are not defined, the County’s Subarea Plan identifies areas where mitigation activities should be focused to assemble its preserve areas or the PAMA. Those areas of the County of San Diego Subarea preserve, and other San Diego MSCP subarea preserves that are either conserved or designated for inclusion in the preserves under the plan, are referred to as the MSCP preserve in this discussion. When completed the public sector (Federal, State, and local government) and private landowners will have contributed 44,010 ha (108,750 ac) to the MSCP preserve. Currently and in the future, Federal and State governments, local jurisdictions and special districts, and managers of privately owned lands will manage and monitor their lands in the MSCP preserve for species and habitat protection (County of San Diego 1997, p. 2–1).

Specific conservation objectives in the County of San Diego Subarea Plan for the flycatcher include preserving and managing 1,344 ha (3,322 ac) of riparian habitat within the preserve planning area (Service 1998, p. 36). Additionally, the County of San Diego Subarea Plan requires surveys for the species, and occupied habitat will be identified and avoided to the maximum extent practicable (Service 1998, p. 37). Direct effects to the flycatcher will be minimized through the requirement of

avoidance, minimization, and mitigation including restrictions on clearing of occupied habitat during breeding season (Service 1998, p. 36). Unavoidable impacts will be mitigated to ensure no net loss of wetlands (Service 1998, p. 37). Area specific management directives will include measures to provide appropriate successional habitat, upland buffers for all known populations, cowbird control, specific measures to protect against detrimental edge effects to this species, and monitoring (Service 1998, p. 37).

In our 1998 biological opinion, we evaluated the effects of the plan on the flycatcher and its habitat that is found within the plan boundaries, and we determined the anticipated take is not likely to jeopardize the flycatcher (Service 1998, p. 64). Furthermore, section 1.7 of the Implementation Agreement for the County of San Diego Subarea Plan states that the plan provides comprehensive, long-term habitat conservation for the protection of multiple species, including the flycatcher, and the preservation of natural vegetation communities (County of San Diego 1998, p. 2). The 1995 listing rule for the flycatcher identified the most significant threats to the species are the loss, modification, and fragmentation of its habitat, and brood-parasitism by the brown-headed cowbird (60 FR 10694; February 27, 1995).

In summary, the County of San Diego Subarea Plan incorporates special management considerations necessary to manage the covered species, including the flycatcher, in a manner that will provide for the conservation of the species within the plan area (County of San Diego 1998, p. 23).

#### Benefits of Inclusion—San Diego County MSCP

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

The streams we evaluated are known to be occupied by flycatchers and have undergone section 7 consultation under the jeopardy standard related to the San Diego County MSCP. Portions of the San Diego River’s and Santa Ysabel Creek’s stream segments and entire proposed

segments of the Sweetwater and San Dieguito Rivers that we proposed to designate as flycatcher critical habitat occur within the San Diego MSCP boundary. All of these segments were not within the geographical area known to be occupied at the time of listing. Following listing, flycatcher territories were detected within these stream segments. As a result of those territory detections and the criteria we established, based upon flycatcher dispersal, migration, and movement behaviors, these segments are now considered occupied.

Therefore, regardless of critical habitat designation, the segments will be subject to a section 7 consultation under the jeopardy standard as well as the take prohibitions in section 9 of the Act. Thus, it is difficult to differentiate meaningfully between measures implemented solely to minimize impacts to critical habitat from those implemented to minimize impacts to the flycatcher. Therefore, in the case of the flycatcher, we believe any additional regulatory benefits of critical habitat designation would be minimal because the regulatory benefits from designation are essentially indistinguishable from the benefits already afforded through sections 7 and 9 of the Act.

Another possible benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the flycatcher and its habitat that reaches a wide audience, including parties engaged in conservation activities, is valuable. In the case of the flycatcher, however, there have already been multiple occasions when the public has been educated about the species. The framework of the regional San Diego MSCP was developed over a 7-year period, while the City and County subarea plans have been in place for over a decade. Implementation of the subarea plans is formally reviewed yearly through publicly available annual reports and a public meeting, again providing extensive opportunity to educate the public and landowners about the location of, and efforts to conserve essential flycatcher habitat. As discussed above, the permit holders of the City and County Subarea Plans are aware of the value of these lands to flycatcher conservation, and conservation measures are already in place to protect essential occurrences of the flycatcher and its habitat.

Furthermore, essential habitat within the boundaries of the County of San

Diego Subarea Plan was included in the proposed designation published in the **Federal Register** on August 15, 2011 (76 FR 50542). This publication was announced in a press release and information was posted on the Service's Web site, which ensured that the proposal reached a wide audience. Therefore, the educational benefits of critical habitat designation (such as providing information to the County of San Diego and other stakeholders on areas important to the long-term conservation of this species) have largely been realized through development and ongoing implementation of the HCP, by proposing these areas as critical habitat, and through the Service's public outreach efforts.

Critical habitat designation can also result in ancillary conservation benefits to the flycatcher by triggering additional review and conservation through other Federal and State laws. Critical habitat designation can also result in ancillary conservation benefits to the flycatcher by triggering additional review and conservation through other Federal and State laws such as the Clean Water Act and CEQA. These laws analyze the potential for projects to significantly affect the environment. However, essential habitat within San Diego County has been identified in the Subarea Plan and is either already protected or targeted for protection under the plans and thus we conclude the potential regulatory benefits resulting from designation of critical habitat would be negligible. Thus review of development proposals affecting essential habitat under CEQA by the San Diego County already takes into account the importance of this habitat to the species and the protections required for the species and its habitat under the Subarea Plan. As discussed above, we conclude the potential regulatory benefits resulting from designation of critical habitat would be negligible because the outcome of a future section 7 consultation would not result in greater conservation for flycatcher essential habitat than currently is provided under the County of San Diego Subarea Plan.

Based on the above discussion, we believe section 7 consultations for critical habitat designation conducted under the standards required by the Ninth Circuit Court in the *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service* decision would provide little conservation benefit and would be largely redundant with those benefits attributable to listing as well as those already provided by the County of San Diego Subarea Plan. Therefore, we

determine the regulatory benefits of designating those stream segments as flycatcher critical habitat, such as protection afforded through the section 7(a)(2) consultation process, are minimal. We also conclude that the educational and ancillary benefits of designating essential habitat covered by the County of San Diego Subarea plan would be minor because the location of essential habitat for this species within San Diego County and the importance of conserving such habitat is well known through development and implementation of the subarea plans and the independent regulatory protection already provided under CEQA and the County of San Diego Subarea Plan.

#### Benefits of Exclusion—San Diego County MSCP

The benefits of excluding from designated flycatcher critical habitat the collection of streams totaling approximately 24.5 km (15.2 mi) within the boundaries of the County of San Diego Subarea Plan are significant and include: (1) Conservation management objectives for the flycatcher and its habitat identified in the MSCP, summarized above; (2) continued and strengthened effective working relationships with all San Diego MSCP permittees and stakeholders to promote the conservation of the flycatcher and its habitat; (3) continued meaningful collaboration and cooperation in working toward recovery of this species, including conservation benefits that might not otherwise occur; (4) encouragement of other entities within the range of the flycatcher to complete HCPs or subarea plans under the MSCP; and (5) encouragement of additional HCP and other conservation plan development in the future on other private lands that include the flycatcher and other federally listed species.

We developed close partnerships with the County of San Diego and several other stakeholders through the development of the San Diego MSCP, which incorporates appropriate protections and management (described above) for the flycatcher, its habitat, and the physical or biological features essential to the conservation of this species. Those protections are consistent with statutory mandates under section 7 of the Act to avoid destruction or adverse modification of critical habitat. Furthermore, this plan goes beyond that requirement by including active management and protection of essential habitat areas. Additionally, the San Diego County Water Authority (SDCWA) has also completed an HCP, which includes

areas within the boundaries of the County of San Diego Subarea Plan. The SDCWA HCP is a multi-species conservation program designed to minimize and mitigate the effects of expected habitat loss and associated incidental take of 63 listed and nonlisted "covered species," including the flycatcher (SDCWA 2011, p. ES.1). By excluding the approximately 24.5 km (15.2 mi) of stream segments within the boundaries of the County of San Diego Subarea Plan from critical habitat designation, we are eliminating a redundant layer of regulatory review for projects covered by the County of San Diego Subarea Plan and encouraging new voluntary partnerships with other landowners and jurisdictions to protect the flycatcher and other listed species. As discussed above, the prospect of potentially avoiding a future designation of critical habitat provides a meaningful incentive to plan proponents to extend voluntary protections to endangered and threatened species and their habitats under a conservation plan. Achieving comprehensive landscape-level protection for listed species, such as the flycatcher through their inclusion in regional conservation plans, provides a key conservation benefit to the species. Our ongoing partnerships with the County of San Diego, SDCWA, other MSCP participants, and the landscape-level multiple species conservation planning efforts they promote, are essential to achieve long-term conservation of the flycatcher.

As noted earlier, some MSCP permittees have expressed the view that critical habitat designation of lands covered by the MSCP devalues the conservation efforts of plan proponents and the partnerships fostered through the development and implementation of the plans, and would discourage development of additional HCPs and other conservation plans in the future. Permittees of the County of San Diego Subarea Plan have repeatedly stated that exclusion of lands covered by the plan would prove beneficial to our partnership (SDCWA 2011a, pp. 1–5). The Service has previously found that: (1) Implementation of the avoidance, minimization, and mitigation measures identified in the County of San Diego Subarea Plan will reduce impacts to the flycatcher; (2) the conservation objectives for the flycatcher, summarized above, will be met; (3) the proposed action is not likely to jeopardize the continued existence of the species; and (4) the County of San Diego Subarea Plan incorporates special management considerations necessary



to manage the “covered species,” including the flycatcher, in a manner that will provide for the conservation of the species within the plan area (County of San Diego 1998, p. 23; Service 1998, pp. 36, 60). Where an existing HCP provides protection for a species and its essential habitat within the plan area, the benefits of preserving existing partnerships by excluding the covered lands from critical habitat are most significant. Under these circumstances, excluding lands owned by or under the jurisdiction of the permittees of an HCP promotes positive working relationships and eliminates impacts to existing and future partnerships while encouraging development of additional HCPs for other species.

Large-scale HCPs, including the County of San Diego Subarea Plan, take many years to develop, and foster a strategic ecosystem-based approach to habitat conservation planning by addressing conservation issues through a coordinated approach. If local jurisdictions were to require landowners to individually obtain ITPs under section 10 of the Act prior to the issuance of a building permit, the local jurisdiction would incur no costs associated with the landowner's need for an ITP. However, this approach would result in uncoordinated, project-by-project conservation that would be less likely to achieve listed species recovery as conservation measures would be determined on a project-by-project basis instead of on a comprehensive, landscape-level scale. We, therefore, want to continue to foster partnerships with local jurisdictions to encourage the development of regional HCPs that afford proactive landscape-level conservation for multiple species. We believe the exclusion from critical habitat designation of covered lands subject to protection and management under such plans will promote these partnerships and result in greater protection for listed species, including the flycatcher, than would be achieved through section 7 consultation.

#### Benefits of Exclusion Outweigh the Benefits of Inclusion—San Diego County MSCP

We reviewed and evaluated the exclusion of approximately 24.5 km (15.2 mi) of stream segments within the boundaries of the County of San Diego Subarea Plan from our revised designation of critical habitat, and we determined the benefits of excluding these lands outweigh the benefits of including them. The benefits of including these lands in the designation are small because the regulatory, educational, and ancillary benefits that

would result from critical habitat designation are largely redundant with the regulatory, educational, and ancillary benefits already afforded through the County of San Diego Subarea Plan and under Federal and State law. In contrast to the minor benefits of inclusion, the benefits of excluding lands covered by the County of San Diego Subarea Plan from critical habitat designation are significant. Exclusion of these lands will help preserve the partnerships we developed with local jurisdictions and project proponents through the development and ongoing implementation of the County of San Diego Subarea Plan, and aid in fostering future partnerships for the benefit of listed species. Designation of lands covered by the County of San Diego Subarea Plan may discourage other partners from seeking, amending, or completing NCCP–HCP plans that cover the flycatcher and other listed species. Designation of critical habitat does not require that management or recovery actions take place on the lands included in the designation. The County of San Diego Subarea Plan, however, will provide significant conservation and management of the flycatcher and its habitat, and help achieve recovery of this species through habitat enhancement and management, functional connections to adjoining habitat, and species monitoring efforts. Additional HCPs or other species habitat plans potentially fostered by this exclusion would also help to recover this and other federally listed species. Therefore, in consideration of the relevant impact to current and future partnerships, as summarized in the *Benefits of Exclusion—County of San Diego Subarea Plan under the San Diego MSCP* section above, we determine the significant benefits of exclusion outweigh the minor benefits of critical habitat designation.

#### Exclusion Will Not Result in Extinction of the Species—San Diego County MSCP

We determine that the exclusion of 24.5 km (15.2 mi) of stream segments within the boundaries of the County of San Diego Subarea Plan from the designation of critical habitat for the flycatcher will not result in extinction of the species. The Service continues to review all Federal project proposal impacting riparian habitat occupied by the flycatcher through the section 7 process, and will ensure that all development carried out does not jeopardize the continued existence of the flycatcher. Thus, the section 7 process and protection provided by the County of San Diego Subarea Plan

provide assurances that this species will not go extinct as a result of excluding these lands from the critical habitat designation. Therefore, based on the above discussion and to the extent consistent with the requirements of section 4(b)(2) of the Act, the Secretary is exercising his discretion to exclude from critical habitat, 9.2 km (5.7 mi) of the San Dieguito River, 9.6 km (6.0 mi) of the San Diego River, 2.1 km (1.3 mi) of non-Federal lands on the Sweetwater River, 2.4 km (1.5 mi) of upper Santa Ysabel Creek, and 1.1 km (0.7 mi) of lower Santa Ysabel Creek within the planning area boundary for County of San Diego Subarea lands.

#### Western Riverside County Multiple Species HCP

For the analysis of the exclusion of streams in the San Diego Management Unit under the Western Riverside County Multiple Species HCP, see the related discussion under the *Summary of Exclusions*, Santa Ana Management Unit.

#### Orange County Southern Subregional HCP

The Orange County Southern Subregion HCP is a comprehensive, large-scale plan encompassing approximately 34,811 ha (86,021 ac) of land in southern Orange County. This HCP is a subregional plan under the State's NCCP and was developed in cooperation with the CDFG. The Orange County Southern Subregion HCP was developed in support of applications for incidental take permits by Orange County, Rancho Mission Viejo (RMV), and the Santa Margarita Water District in connection with proposed residential development and related actions in southern Orange County. The Orange County Southern Subregion HCP is a multi-species conservation program that minimizes and mitigates the effects of expected habitat loss and associated incidental take of 32 covered species, including the flycatcher. Conservation of the flycatcher is addressed in the Orange County Southern Subregion HCP. A section 10(a)(1)(B) permit for the Orange County Southern Subregion HCP on January 10, 2007, was issued for a period of 75 years (Service 2007, p. 1).

When fully implemented, the Orange County Southern Subregion HCP will conserve approximately 12,313 ha (30,426 ac) of Habitat Reserve and 1,803 ha (4,456 ac) of supplemental open space areas, which will consist primarily of land owned by Rancho Mission Viejo and three pre-existing County parks (Service 2007, pp. 10, 19). The Orange County Southern Subregion HCP provides for a large, biologically

diverse and permanent habitat reserve that will protect: (1) Large blocks of natural vegetation communities that provide habitat for the covered species; (2) “important” and “major” populations of the covered species in key locations; (3) wildlife corridors and habitat linkages that connect the large habitat blocks and covered species populations to each other, the Cleveland National Forest, and the adjacent Orange County Central-Coastal NCCP–HCP; and (4) the underlying hydrogeomorphic processes that support the major vegetation communities providing habitat for the covered species, including the flycatcher (Service 2007, p. 10).

Specific conservation objectives in the Orange County Southern Subregion HCP for the flycatcher include preserving and managing 249 ha (615 ac) of nesting and foraging habitat within the Habitat Reserve (Service 2007, p. 120). Conserved land in the Habitat Reserve will be maintained and managed in perpetuity for the benefit of the flycatcher and other species covered by the plan. To offset any loss of riparian habitat for the flycatcher at the Prima Deshecha Landfill and within the Habitat Reserve, an additional 4 ha (10 ac) of willow riparian habitat within the Landfill will be created and managed, in perpetuity, for species covered by the Orange County Southern Subregion HCP, including the flycatcher. Therefore, 100 percent of flycatcher locations in the Lower Cañada Gobernadora “important” population in a “key” location will be included in the Habitat Reserve (Service 2007, p. 123). Management actions for the flycatcher within the Habitat Reserve will include the control of nonnative species through implementation of a control plan, including cowbird trapping and management of nonnative plant species that occur in riparian habitats (Service 2007, p. 121). Any clearing of riparian habitat will occur outside of breeding season; however, if clearing must take place during breeding season, focused surveys will be conducted and measures implemented to avoid impacts to flycatcher nests and young (Service 2007, p. 121). The Orange County Southern Subregion HCP requires periodic reviews to assess the effects of grazing for fuel modification purposes and make recommendations to maximize benefit to covered species, including the flycatcher (Service 2007, p. 121). Monitoring for the flycatcher will also be conducted on county parklands within the Habitat Reserve (Service 2007, p. 121).

In our 2007 biological opinion, we evaluated the effects of the Orange

County Southern Subregion HCP on the flycatcher and its habitat found within the plan boundaries, and determined the plan will not jeopardize the continued existence of the flycatcher (Service 2007, p. 123). In addition, we acknowledged in section 10.3.4 of the IA for the Orange County Southern Subregion HCP that the plan provides a comprehensive habitat-based approach to the protection of covered species and their habitats by focusing on the lands and aquatic resource areas essential for the long-term conservation of the covered species (including the flycatcher), and by providing for appropriate management for those lands (Service 2007, p. 64).

In summary, the Orange County Southern Subregion HCP provides a comprehensive, habitat-based approach to the protection of covered species and their habitats, including the flycatcher, by focusing on lands and aquatic resources essential for the long-term conservation of the covered species and appropriate management of those lands (Orange County Southern Subregion HCP 2003, p. 64).

#### Benefits of Inclusion—Orange County Southern Subregion HCP

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

The stream we evaluated is known to be occupied by flycatchers and has undergone section 7 consultation under the jeopardy standard related to the Orange County Southern Subregion HCP. The proposed stream segment of Cañada Gobernadora Creek is entirely located within the HCP boundary. Cañada Gobernadora Creek was not within the geographical area known to be occupied at the time of listing. Following listing, flycatcher territories were detected within this stream segment. As a result of those territory detections and the criteria we established, based upon flycatcher dispersal, migration, and movement behaviors, this segment is now considered occupied.

Therefore, regardless of critical habitat designation, this segment will be subject to a section 7 consultation under the jeopardy standard as well as the take

prohibitions in section 9 of the Act. Thus, it is difficult to differentiate meaningfully between measures implemented solely to minimize impacts to critical habitat from those implemented to minimize impacts to the flycatcher. Therefore, in the case of the flycatcher, we believe any additional regulatory benefits of critical habitat designation would be minimal because the regulatory benefits from designation are essentially indistinguishable from the benefits already afforded through sections 7 and 9 of the Act.

Another possible benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the flycatcher and its habitat that reaches a wide audience, including parties engaged in conservation activities, is valuable. In the case of the flycatcher, however, there have already been multiple occasions when the public has been educated about the species. The planning process for the Orange County Southern Subregion HCP began in 1992, when the County of Orange formally enrolled its unincorporated area in the NCCP program, and then signed a Planning Agreement with CDFG and the Service in 1993. Planning efforts were delayed for a time, but scoping and planning meetings continued. The Orange County Southern Subregion HCP was finalized in 2006. As discussed above, the permit holders of the Orange County Southern Subregion HCP are aware of the value of these lands to the conservation the flycatcher, and conservation measures are already in place to protect essential occurrences of the flycatcher and its habitat.

Furthermore, essential habitat covered by the Orange County Southern Subregion HCP was included in the proposed designation published in the **Federal Register** on August 15, 2011 (76 FR 50542). This publication was announced in a press release and information was posted on the Service's Web site, which ensured that the proposal reached a wide audience. Therefore, the educational benefits of critical habitat designation (such as providing information to the County of Orange and other stakeholders on areas important to the long-term conservation of this species) have largely been realized through development and ongoing implementation of the Orange County Southern Subregion HCP, by proposing these areas as critical habitat,

and through the Service's public outreach efforts.

Critical habitat designation can also result in ancillary conservation benefits to the flycatcher by triggering additional review and conservation through other Federal and State laws such as the Clean Water Act and CEQA. These laws analyze the potential for projects to significantly affect the environment. However, essential habitat within the County of Orange has been identified in the Orange County Southern Subregion HCP and is either already protected or targeted for protection under the plans, and thus we conclude the potential regulatory benefits resulting from designation of critical habitat would be negligible. Thus review of development proposals affecting essential habitat under CEQA by the County of Orange already takes into account the importance of this habitat to the species and the protections required for the species and its habitat under the Subregion plan. As discussed above, we conclude the potential regulatory benefits resulting from designation of critical habitat would be negligible because the outcome of a future section 7 consultation would not result in greater conservation for flycatcher essential habitat than currently is provided under the Orange County Southern Subregion HCP.

Based on the above discussion, we believe section 7 consultations for critical habitat designation conducted under the standards required by the Ninth Circuit Court in the *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service* decision would provide little conservation benefit and would be largely redundant with those benefits attributable to listing as well as those already provided by the Orange County Southern Subregion HCP. Therefore, we determine the regulatory benefits of designating the stream segment of Cañada Gobernadora Creek as flycatcher critical habitat, such as protection afforded through the section 7(a)(2) consultation process, are minimal. We also conclude that the educational and ancillary benefits of designating essential habitat covered by the Orange County Southern Subregion HCP would be minor because the location of essential habitat for this species within Orange County and the importance of conserving such habitat is well known through development and implementation of the Subregional plan and the independent regulatory protection already provided under CEQA and the Orange County Southern Subregion HCP.

#### Benefits of Exclusion—Orange County Southern Subregion HCP

The benefits of excluding from designated critical habitat the approximately 4.7 km (2.9 mi) of Cañada Gobernadora Creek within the boundaries of the Orange County Southern Subregion HCP are significant and include: (1) Conservation management objectives for the flycatcher and its habitat identified in the HCP, described above; (2) continued and strengthened effective working relationships with all Orange County Southern Subregion HCP permittees and stakeholders to promote the conservation of the flycatcher and its habitat; (3) continued meaningful collaboration and cooperation in working toward recovery of this species, including conservation benefits that might not otherwise occur; (4) encouragement of other entities within the range of the flycatcher to complete HCPs; and (5) encouragement of additional HCP and other conservation plan development in the future on other private lands that include the flycatcher and other federally listed species.

We developed close partnerships with the County of Orange and several other stakeholders through the development of the Orange County Southern Subregion HCP, which incorporates appropriate protections and management (described above) for the flycatcher, its habitat, and the physical or biological features essential to the conservation of this species. Those protections are consistent with statutory mandates under section 7 of the Act to avoid destruction or adverse modification of critical habitat. Furthermore, this plan goes beyond that requirement by including active management and protection of essential habitat areas. By excluding the approximately 4.7 km (2.9 mi) of Cañada Gobernadora Creek within the boundaries of the Orange County Southern Subregion HCP from critical habitat designation, we are eliminating a redundant layer of regulatory review for projects covered by the Orange County Southern Subregion HCP and encouraging new voluntary partnerships with other landowners and jurisdictions to protect the flycatcher and other listed species. As discussed above, the prospect of potentially avoiding a future designation of critical habitat provides a meaningful incentive to plan proponents to extend voluntary protections to endangered and threatened species and their habitats under a conservation plan. Achieving comprehensive landscape-level protection for listed species, such as the

flycatcher through their inclusion in regional conservation plans, provides a key conservation benefit to the species. Our ongoing partnerships with the County of Orange and the subregional Orange County Southern Subregion HCP participants, and the landscape-level multiple species conservation planning efforts they promote, are essential to achieve long-term conservation of the flycatcher.

As noted earlier, some Orange County Southern Subregion HCP permittees have expressed the view that critical habitat designation of lands covered by an HCP devalues the conservation efforts of plan proponents and the partnerships fostered through the development and implementation of the plans, and would discourage development of additional HCPs and other conservation plans in the future. Permittees of the Orange County Southern Subregion HCP have repeatedly stated that exclusion of lands covered by the plan would prove beneficial to our partnership (RMV 2011, pp. 1–7). The Service has previously found that: (1) Implementation of the avoidance, minimization, and mitigation measures identified in the Orange County Southern Subregion HCP will reduce impacts to the flycatcher; (2) the conservation objectives for the flycatcher, as summarized above, will be met; (3) the proposed action is not likely to jeopardize the continued existence of the species; (4) the Orange County Southern Subregion HCP provides a comprehensive, habitat-based approach to the protection of covered species and their habitats, including the flycatcher, by focusing on lands and aquatic resources essential for the long-term conservation of the covered species and appropriate management of those lands (Southern Orange County Subregion HCP 2003, p. 64; Service 2007, pp. 123–124).

Where an existing HCP provides protection for a species and its essential habitat within the plan area, the benefits of preserving existing partnerships by excluding the covered lands from critical habitat are most significant. Under these circumstances, excluding lands owned by or under the jurisdiction of the permittees of an HCP promotes positive working relationships and eliminates impacts to existing and future partnerships while encouraging development of additional HCPs for other species.

Large-scale HCPs, such as the Orange County Southern Subregion HCP, take many years to develop, and foster an ecosystem-based approach to habitat conservation planning by addressing

conservation issues through a coordinated approach. If local jurisdictions were to require landowners to individually obtain ITPs under section 10 of the Act prior to the issuance of a building permit, the local jurisdiction would incur no costs associated with the landowner's need for an ITP. However, this approach would result in uncoordinated, patchy conservation that would be less likely to achieve listed species recovery, and almost certainly would result in less protection for listed plant species, which do not require an ITP. We, therefore, want to continue to foster partnerships with local jurisdictions to encourage the development of regional HCPs that afford proactive landscape-level conservation for multiple species, including voluntary protections for covered plant species. We believe the exclusion from critical habitat designation of covered lands subject to protection and management under such plans will promote these partnerships and result in greater protection for listed species, including the flycatcher, than would be achieved through section 7 consultation.

#### Benefits of Exclusion Outweigh the Benefits of Inclusion—Orange County Southern Subregion HCP

We reviewed and evaluated the benefits of inclusion and exclusion of approximately 4.7 km (2.9 mi) of Cañada Gobernadora Creek from critical habitat designation for the flycatcher for lands owned by or under the jurisdiction of Orange County Southern Subregion HCP permittees. The benefits of including these lands in the designation are small because the regulatory, educational, and ancillary benefits that would result from the critical habitat are largely redundant with the regulatory, educational, and ancillary benefits already afforded through the Orange County Southern Subregion HCP and under Federal and State laws. In contrast to the minor benefits of inclusion, the benefits of excluding lands covered by the Orange County Southern Subregion HCP from critical habitat designation are significant. Exclusion of these lands will help preserve the partnerships we developed with local jurisdictions and project proponents through the development and ongoing implementation of the Orange County Southern Subregion HCP. Designation of critical habitat does not require that management or recovery actions take place on the lands included in the designation. The Orange County Southern Subregion HCP, however, will provide significant conservation and

management of the flycatcher and its habitat, and help achieve recovery of this species through habitat enhancement and management, functional connections to adjoining habitat, and species monitoring efforts. Additional HCPs or other species-habitat plans potentially fostered by this exclusion would also help to recover this and other federally listed species. Therefore, in consideration of the relevant impact to current and future partnerships, as summarized in the *Benefits of Exclusion—Orange County Southern Subregion HCP* section above, we determine the significant benefits of exclusion outweigh the minor benefits of critical habitat designation.

#### Exclusion Will Not Result in Extinction of the Species—Orange County Southern Subregion HCP

We determine that the exclusion of 4.7 km (2.9 mi) of Cañada Gobernadora Creek within the boundaries of the Orange County Southern Subregion HCP from the designation of critical habitat for the flycatcher will not result in extinction of the species. The Service continues to review all Federal project proposals review all Federal project proposals impacting riparian habitat occupied by the flycatcher through the section 7 process, and will ensure that all development carried out does not jeopardize the continued existence of the flycatcher. Thus, the section 7 process and protection provided by the Orange County Southern Subregion HCP provide assurances that this species will not go extinct as a result of excluding these lands from the critical habitat designation. Therefore, based on the above discussion, the Secretary is exercising his discretion to exclude 4.7 km (2.9 mi) of stream segment within the boundaries of Orange County Southern Subregion HCP from this final critical habitat designation.

#### San Diego Multiple Habitat Conservation Program (MHCP)—Carlsbad Habitat Management Plan (HMP)

The San Diego MHCP is a comprehensive, large-scale, and multijurisdictional planning program encompassing approximately 45,279 ha (111,908 ac) of land within seven jurisdictions in northwestern San Diego County, California, including the cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista. The San Diego MHCP is a subregional plan under the State of California's NCCP and was developed in cooperation with CDFG. The San Diego MHCP is a multi-species conservation program that minimizes and mitigates

the effects of expected habitat loss and associated incidental take of 77 federally listed and sensitive species, including the flycatcher. Conservation of the flycatcher is addressed in the subregional plan and in the Carlsbad HMP. A section 10(a)(1)(B) permit for Carlsbad HMP was issued on November 9, 2004, for a period of 50 years (Service 2004a, p. 19).

When fully implemented, the Carlsbad HMP will conserve approximately 9,943 ha (24,570 ac) of land within the City of Carlsbad and proposes to establish approximately 2,746 ha (6,786 ac) of habitat preserve to mitigate the impacts of public and private development (Service 2004a, p. 19). The majority of the preserve (2,399 ha, 5,928 ac) consists of "hard-lined" areas designated for 100 percent conservation (Service 2004a, p. 19). Up to 223 ha (550 ac) would be conserved on lands designated as standards areas, which are areas that have established assured levels of conservation through applying biological criteria (rather than delineating the project footprint by a "hard-line"). Additionally, approximately 125 ha (308 ac) would be conserved outside of the City of Carlsbad's Subarea to help offset impacts that would occur within the City's Subarea and outside of the City, but within the San Diego MHCP planning area (Service 2004a, p. 19).

Specific conservation objectives in the Carlsbad HMP for the flycatcher include conserving 200 ha (494 ac) of riparian habitat and 10 ha (25 ac) of oak woodland within the preserve (Service 2004a, p. 174). Mandatory surveys will be conducted for proposed projects in or adjacent to suitable habitat outside of preserve areas (Service 2004a, p. 175). Flycatcher habitat will be managed to restrict activities that cause degradation, including livestock grazing, human disturbance, clearing or alteration of riparian vegetation, brown-headed cowbird parasitism, and insufficient water levels leading to loss of riparian habitat and surface water (Service 2004a, pp. 175–176). Area-specific management directives shall include measures to provide appropriate flycatcher habitat, cowbird control, and specific measures to protect against detrimental edge effects, and removal of nonnative plant species (Service 2004a, p. 176). Human access to flycatcher-occupied breeding habitat is restricted during the breeding season (May 1—September 15) except for qualified researchers or land managers performing essential preserve management, monitoring, or research functions (Service 2004a, p. 176). Additionally, any projects that require

placing equipment or personnel in or adjacent to sensitive habitats would also include restrictions on timing to ensure that any impacts to breeding habitat would occur prior to the initiation of the breeding season (Service 2004a, p. 176).

In our 2004 biological opinion, we evaluated the effects of the Carlsbad HMP on the flycatcher and its habitat that is found within the plan boundaries, and determined the HMP will not adversely affect proposed critical habitat for the flycatcher (Service 2004a, p. 52). We also determined that the plan will not jeopardize the continued existence of the flycatcher (Service 2004a, p. 59). Furthermore, we acknowledged in section 1.8 of the IA for the Carlsbad HMP that the plan provides a comprehensive, long-term approach for the conservation and management of species, including the flycatcher, and their habitat (Service 2004a, p. 2). The 1995 final listing rule for the flycatcher identified the most significant threats to the species are the loss, modification, and fragmentation of its habitat, and brood parasitism by the brown-headed cowbird (60 FR 10693; February 27, 1995). The Carlsbad HMP helps to address these threats through a regional planning effort, and outlines species-specific objectives and criteria for the conservation of flycatcher.

In summary, the Carlsbad HMP incorporates special management actions necessary to manage “covered species” and their habitats, including the flycatcher, in a manner that will provide for the conservation of the species (City of Carlsbad 2004, p. 17).

#### Benefits of Inclusion—Carlsbad HMP

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

The stream we evaluated is known to be occupied by flycatchers and has undergone section 7 consultation under the jeopardy standard related to the Carlsbad HMP. The proposed Agua Hedionda Creek stream segment occurs within, but extends beyond the HCP boundary. Agua Hedionda Creek was not within the geographical area known to be occupied at the time of listing. Following listing, flycatcher territories

were detected within this stream segment. As a result of those territory detections and the criteria we established, based upon flycatcher dispersal, migration, and movement behaviors, this segment is now considered occupied.

Therefore, regardless of critical habitat designation, the segment will be subject to a section 7 consultation under the jeopardy standard as well as the take prohibitions in section 9 of the Act. Thus, it is difficult to differentiate meaningfully between measures implemented solely to minimize impacts to critical habitat from those implemented to minimize impacts to the flycatcher. Therefore, in the case of the flycatcher, we believe any additional regulatory benefits of critical habitat designation would be minimal because the regulatory benefits from designation are essentially indistinguishable from the benefits already afforded through sections 7 and 9 of the Act.

Another possible benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the flycatcher and its habitat that reaches a wide audience, including parties engaged in conservation activities, is valuable. In the case of the flycatcher, however, there have already been multiple occasions when the public has been educated about the species. The framework of the regional San Diego MHCP was developed over a 6-year period and both the San Diego MHCP and the Carlsbad HMP have been in place for almost a decade. Implementation of the subarea plans is formally reviewed yearly through publicly available annual reports and a public meeting, again providing extensive opportunity to educate the public and landowners about the location of, and efforts to conserve, essential flycatcher habitat. As discussed above, the permit holders of the Carlsbad HMP are aware of the value of these lands to the conservation the flycatcher, and conservation measures are already in place to protect essential occurrences of the flycatcher and its habitat.

Furthermore, essential habitat covered by the Carlsbad HMP was included in the proposed designation published in the **Federal Register** on August 15, 2011 (76 FR 50542). This publication was announced in a press release and information was posted on the Service’s Web site, which ensured that the proposal reached a wide audience.

Therefore, the educational benefits of critical habitat designation (such as providing information to the City of Carlsbad and other stakeholders on areas important to the long-term conservation of this species) have largely been realized through development and ongoing implementation of the Carlsbad HMP, by proposing these areas as critical habitat, and through the Service’s public outreach efforts.

Critical habitat designation can also result in ancillary conservation benefits to the flycatcher by triggering additional review and conservation through other Federal and State laws such as the Clean Water Act and CEQA. These laws analyze the potential for projects to significantly affect the environment. However, essential habitat within the City of Carlsbad has been identified in the Carlsbad HMP and is either already protected or targeted for protection under the plans and thus we conclude the potential regulatory benefits resulting from designation of critical habitat would be negligible. Thus review of development proposals affecting essential habitat under CEQA by the City of Carlsbad already takes into account the importance of this habitat to the species and the protections required for the species and its habitat under the Subregion plan. However, as discussed above, we conclude the potential regulatory benefits resulting from designation of critical habitat would be negligible because the outcome of a future section 7 consultation would not result in greater conservation for flycatcher essential habitat than currently is provided under the Carlsbad HMP.

Based on the above discussion, we believe section 7 consultations for critical habitat designation conducted under the standards required by the Ninth Circuit Court in the *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service* decision would provide little conservation benefit and would be largely redundant with those benefits attributable to listing as well as those already provided by the Carlsbad HMP. Therefore, we determine the regulatory benefits of designating a segment of Agua Hedionda Creek as flycatcher critical habitat, such as protection afforded through the section 7(a)(2) consultation process, are minimal. We also conclude that the educational and ancillary benefits of designating essential habitat covered by the Carlsbad HMP would be minor because the location of essential habitat for this species within San Diego County and the importance of conserving such habitat is well known through

development and implementation of the Subregional Plan and the independent regulatory protection already provided under CEQA and the Carlsbad HMP.

#### Benefits of Exclusion—Carlsbad HMP

The benefits of excluding from designated critical habitat the approximately 5.3 km (3.3 mi) of Agua Hedionda Creek within the boundaries of the Carlsbad HMP are significant and include: (1) Conservation management objectives for the flycatcher and its habitat identified in the HCP, described above; (2) continued and strengthened effective working relationships with all HCP permittees and stakeholders to promote the conservation of the flycatcher and its habitat; (3) continued meaningful collaboration and cooperation in working toward recovery of this species, including conservation benefits that might not otherwise occur; (4) encouragement of other entities within the range of the flycatcher to complete HCPs; and (5) encouragement of additional HCP and other conservation plan development in the future on other private lands that include the flycatcher and other federally listed species.

We developed close partnerships with the city of Carlsbad and several other stakeholders through the development of the HMP, which incorporates appropriate protections and management (described above) for the flycatcher its habitat, and the physical or biological features essential to the conservation of this species. Those protections are consistent with statutory mandates under section 7 of the Act to avoid destruction or adverse modification of critical habitat. Furthermore, this plan goes beyond that requirement by including active management and protection of essential habitat areas. By excluding the approximately 5.3 km (3.3 mi) of stream within the boundaries of the Carlsbad HMP from critical habitat designation, we are eliminating a redundant layer of regulatory review for projects covered by the Carlsbad HMP and encouraging new voluntary partnerships with other landowners and jurisdictions to protect the flycatcher and other listed species. As discussed above, the prospect of potentially avoiding a future designation of critical habitat provides a meaningful incentive to plan proponents to extend voluntary protections to endangered and threatened species and their habitats under a conservation plan. Achieving comprehensive landscape-level protection for listed species, such as the flycatcher through their inclusion in regional conservation plans, provides a

key conservation benefit to the species. Our ongoing partnerships with the City of Carlsbad and the landscape-level multiple species conservation planning efforts they promote, are essential to achieve long-term conservation of the flycatcher.

As noted earlier, some HCP permittees have expressed the view that critical habitat designation of lands covered by an HCP devalues the conservation efforts of plan proponents and the partnerships fostered through the development and implementation of the plans, and would discourage development of additional HCPs and other conservation plans in the future. The Service has previously found that: (1) Implementation of the avoidance, minimization, and mitigation measures identified in the Carlsbad HMP will reduce impacts to the flycatcher; (2) the conservation objectives for the flycatcher, as stated above, will be met; (3) the proposed action is not likely to jeopardize the continued existence of the species; and (4) the Carlsbad HMP incorporates special management actions necessary to manage “covered species” and their habitats, including the flycatcher, in a manner that will provide for the conservation of the species (City of Carlsbad 2004, p. 17; Service 2004, pp. 69).

Where an existing HCP provides protection for a species and its essential habitat within the plan area, the benefits of preserving existing partnerships by excluding the covered lands from critical habitat are most significant. Under these circumstances, excluding lands owned by or under the jurisdiction of the permittees of an HCP promotes positive working relationships and eliminates impacts to existing and future partnerships while encouraging development of additional HCPs for other species.

Large-scale HCPs, such as the San Diego MHCP, and subregional plans in development under its framework, such as the Carlsbad HMP, take many years to develop and foster an ecosystem-based approach to habitat conservation planning by addressing conservation issues through a coordinated approach. If local jurisdictions were to require landowners to individually obtain ITPs under section 10 of the Act prior to the issuance of a building permit, the local jurisdiction would incur no costs associated with the landowner's need for an ITP. However, this approach would result in uncoordinated, patchy conservation that would be less likely to achieve listed species recovery, and almost certainly would result in less protection for listed plant species, which do not require an ITP. We,

therefore, want to continue to foster partnerships with local jurisdictions to encourage the development of regional HCPs that afford proactive landscape-level conservation for multiple species, including voluntary protections for covered plant species. We believe the exclusion from critical habitat designation of covered lands subject to protection and management under such plans will promote these partnerships and result in greater protection for listed species, including the flycatcher, than would be achieved through section 7 consultation.

#### Benefits of Exclusion Outweigh the Benefits of Inclusion—Carlsbad HMP

We reviewed and evaluated the benefits of inclusion and exclusion of approximately 5.3 km (3.3 mi) of Agua Hedionda Creek from critical habitat designation for the flycatcher for lands owned by or under the jurisdiction of Carlsbad HMP permittees. The benefits of including these lands in the designation are small because the regulatory, educational, and ancillary benefits that would result from the critical habitat are largely redundant with the regulatory, educational, and ancillary benefits already afforded through the Carlsbad HMP and under Federal and State laws. In contrast to the minor benefits of inclusion, the benefits of excluding lands covered by the Carlsbad HMP from critical habitat designation are significant. Exclusion of these lands will help preserve the partnerships we developed with local jurisdictions and project proponents through the development and ongoing implementation of the Carlsbad HMP. Designation of critical habitat does not require that management or recovery actions take place on the lands included in the designation. The Carlsbad HMP, however, will provide significant conservation and management of the flycatcher and its habitat, and help achieve recovery of this species through habitat enhancement and management, functional connections to adjoining habitat, and species monitoring efforts. Additional HCPs or other species-habitat plans potentially fostered by this exclusion would also help to recover this and other federally listed species. Therefore, in consideration of the relevant impact to current and future partnerships, as summarized in the *Benefits of Exclusion—Carlsbad HMP under the MHCP* section above, we determine the significant benefits of exclusion outweigh the minor benefits of critical habitat designation.

#### Exclusion Will Not Result in Extinction of the Species—Carlsbad HMP

We determine that the exclusion of 5.3 km (3.3 mi) of Agua Hedionda Creek within the boundaries of the Carlsbad HMP from the designation of critical habitat for the flycatcher will not result in extinction of the species. The Service continues to review all Federal project proposals impacting riparian habitat occupied by the flycatcher through the section 7 process, and will ensure that all development carried out does not jeopardize the continued existence of the flycatcher. Thus, the section 7 process and protection provided by the Carlsbad HMP provide assurances that this species will not go extinct as a result of excluding these lands from the critical habitat designation. Therefore, based on the above discussion, the Secretary is exercising his discretion to exclude 5.3 km (3.3 mi) of stream within the boundaries of Carlsbad HMP from this final critical habitat designation.

#### La Jolla Band of Luiseño Indians Management Plan

Please see the end of this section for a discussion about our partnership with tribes from the Santa Ana, San Diego, and Salton Management Units.

#### Rincon Band of Luiseño Mission Indians Management Plan

Please see the end of this section for a discussion about our partnership with tribes from the Santa Ana, San Diego, and Salton Management Units.

#### Pala Band of Luiseño Mission Indians Partnership

Please see the end of this section for a discussion about our partnership with tribes from the Santa Ana, San Diego, and Salton Management Units.

#### The Barona and Viejas Groups of Capitan Grande Band of Diegueno Mission Indians Partnership

Please see the end of this section for a discussion about our partnership with tribes from the Santa Ana, San Diego, and Salton Management Units.

#### Owens Management Unit

#### Los Angeles Department of Water and Power Management Plan

The LADWP manages about 126,262 ha (312,000 ac) of upland, aquatic, and riparian habitat in Inyo and Mono Counties, California. Their land management responsibilities include much of the riparian habitat along the Owens River and many of its tributaries. We proposed a 128.5-km (79.8-mi) continuous segment of flycatcher critical habitat along the Owens River

(from Long Valley Dam to just north of Tinemaha Reservoir).

In 2005, the LADWP, in partnership with the Service, developed a Conservation Strategy for the Southwestern Willow Flycatcher (Conservation Strategy) (LADWP 2005, pp. 1–12) and signed a Memorandum of Understanding (MOU) with the Service (LADWP and Service 2005, pp. 1–3) to implement this Conservation Strategy in the Owens Management Unit. Consistent with the recommendations in the Recovery Plan (Service 2002), the LADWP has and continues to implement measures in the Conservation Strategy with the goal of promoting the establishment of 50 flycatcher territories in the Owens Management Unit. These measures, which would enhance and maintain riparian habitat for the flycatcher, include establishing riparian pastures and managing grazing utilization rates, prohibiting grazing in riparian pastures during the breeding season for the flycatcher and the growing season for riparian plants, monitoring the condition of riparian habitat annually, prohibiting overnight camping in riparian habitat in the Owens Management Unit, prohibiting cutting or gathering of firewood in riparian habitat along the Owens River, substantially reducing vehicle access along and to the Owens River and providing walkthrough access only to the river, supplying personnel and equipment for fire suppression activities with the goal of avoiding or minimizing impacts to riparian habitat during suppression activities, placing a high priority on fire suppression in riparian habitat, and implementing management actions in burned riparian areas to facilitate quick recovery of these habitats. Through the Conservation Strategy, the LADWP also prohibits dumping on its lands and cleans up unauthorized dumpsites as soon as they are identified, treats and monitors exotic weed infestations on LADWP lands, and has a policy to limit urban or agricultural development within riparian habitat along the Owens River. The LADWP has consistently implemented and continues to implement the Conservation Strategy to benefit the flycatcher.

Subsequent to the Conservation Strategy and MOU with the Service, the LADWP has prepared and is implementing two additional land management plans, the Lower Owens River Plan (LORP) and the Owens Valley Land Management Plan (OVLMP). These management plans incorporated the measures in the Conservation Strategy. Although each planning area covers a portion of the

Owens Valley, when combined they include the entire Owens Management Unit.

The LORP is a large-scale habitat management project that includes the Owens River from south of Tinemaha Reservoir to the Owens River Delta. The goal of the LORP is to establish a healthy, functioning Lower Owens River riverine-riparian ecosystem to benefit biodiversity and threatened and endangered species, with the intent of achieving sufficient recovery to warrant delisting while providing for the continuation of sustainable uses including recreation, livestock grazing, agriculture, and other activities (LADWP and Inyo County 2011, Chap. 1 p.11, Chap. 2 p. 51). LORP implementation includes the release of water from the Los Angeles Aqueduct to the Lower Owens River to enhance riparian habitats along the Owens River, flooding approximately 202 ha (500 ac) in the Blackrock Waterfowl Management Area, and maintenance of several lakes and ponds. The LORP requires annual monitoring of hydrologic flows of the Owens River, water quality, and certain vegetation types such as riparian scrub, riparian forest, tamarisk, etc. (LADWP and Inyo County 2011, Chap. 6 pp. 2–3). It also requires adaptive management; if monitoring indicates the LORP goals are not being achieved, management actions can change to attain the goals. The LORP also requires the preparation of annual reports to document the progress in achieving the project's goals. The 2010 annual report provided the following information on woody riparian habitat in the LORP area. The first seasonal habitat flow was released in 2010, and was timed to occur with seed release of woody riparian vegetation. There was an increase of 252 ha (626 ac) inundated above base flow conditions that provided areas for recruitment of woody riparian species. During the seasonal habitat flow, about 78.9 percent of floodplains and 29.9 percent of low terraces of the Lower Owens River were inundated (LADWP and Inyo County 2011, Chap. 3 p. 23). Recruitment of woody riparian vegetation is occurring slowly along the Lower Owens River (Chap. 4 p. 19).

The development and implementation of the LORP included and continues to include extensive public and stakeholder involvement. Because a Draft Environmental Impact Report (EIR)-Environmental Impact Statement (EIS) was prepared to comply with the CEQA and NEPA, public involvement included the publication of a Notice of Preparation of an EIR and a Notice of Intent for an EIS. A public scoping



meeting was held. The Draft EIR-EIS was distributed for public review and comment and two public meetings were held. In addition, the annual reports are distributed for information and comment. Numerous stakeholders have been involved in the project's development and implementation, and the public has been and continues to be informed about the LORP through extensive media coverage.

In 2010, the LADWP incorporated the measures in the Conservation Strategy into the Owens Valley Land Management Plans (OVLMP). The Owens Valley Land Management Plans (OVLMP) provide management direction for resources on about 101,172 ha (250,000 ac) of non-urban City of Los Angeles-owned lands in Inyo County, California, excluding the LORP area. The OVLMP are overarching resource management plans that with the LORP Plan require monitoring and managing resources from Pleasant Valley Reservoir to Owens Lake.

The OVLMP describes the management of key resource areas on lands managed by the LADWP, such as River-Riparian Management, Grazing Management, Recreation Management, Habitat Conservation Plan (HCP), Fire Management, Commercial Use Management, and Monitoring and Adaptive Management. Riparian areas, irrigated meadows, and sensitive plant or animal habitats were a priority in the development of the OVLMP (LADWP and Ecosystem Sciences 2010, Chap. 1 p. 4). The development of the OVLMP included public review and public and stakeholder meetings. The HCP chapter is currently being reviewed prior to its release for public comment under section 10(a)(1)(B) of the Act. The flycatcher, endangered least Bell's vireo, and candidate yellow-billed cuckoo (*Coccyzus americanus*) are three obligate riparian species addressed in the HCP.

The OVLMP's goals include the sustainable uses and health of the Owens Valley ecosystem and the protection and enhancement of endangered and threatened species' habitat (LADWP and Ecosystem Sciences 2010, p. Chap. 1, 4, 10), which includes habitat for the flycatcher. These goals are based on the premise that sustainable land and water use management will protect existing resources and lead to more desirable ecological conditions for upland and riverine-riparian systems on LADWP-managed lands in Inyo County (LADWP and Ecosystem Sciences 2010, Chap 1 p. 7). The OVLMP also requires monitoring and adaptive management to ensure that the goals of the plans are achieved

(LADWP and Ecosystem Sciences 2010, Chap. 1 p. 11). A team of scientists from the LADWP and others will, in consultation with scientists from the California Department of Fish and Game and other agencies and individual experts, analyze the data from reference sites between years and baseline conditions to: (1) Identify problems or conditions which are not meeting goals or expectations; (2) determine if contingency monitoring is needed; (3) determine the most appropriate adaptive management action(s); (4) compile this information and present the team's conclusions and recommendations to the LADWP managers; and (5) oversee the implementation of adaptive management measures (LADWP and Ecosystem Sciences 2010, Chap. 9 p. 3).

#### Benefits of Inclusion—Los Angeles Department of Water and Power Lands

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

The Owens River is known to be occupied by flycatchers and therefore, if a Federal action or permitting occurs, there is a catalyst for evaluation under section 7 of the Act. Because the Owens River and surrounding land is privately owned by the City of Los Angeles and managed by the LADWP, there may only be limited benefits from the designation of flycatcher critical habitat along the Owens River, because no Federal agency manages land along this section of the Owens River and few Federal agencies carry out discretionary actions.

Within the past decade, we are aware of one Federal agency that funded a discretionary action (Environmental Protection Agency grant) and one that permitted a discretionary action (Corps section 404 permit under the Clean Water Act). Under section 404 of the Clean Water Act, the Corps authorizes the deposition of dredged or fill material into waters of the United States through issuance of a permit. Although there was a Federal nexus for both of these actions, the section 7 consultation process resulted in a determination that their implementation would not affect species listed under the Act. Therefore, because these lands are privately

owned, with little Federal involvement, there are few catalysts for evaluation of actions under section 7 of the Act and a potential critical habitat designation.

The Service is reviewing a developing HCP from the LADWP and associated incidental take permit under section 10 of the Act that includes actions along the Owens River and the flycatcher as a covered species. During the permit authorization process, the Service would complete section 7 consultation for the issuance of this section 10 HCP permit, evaluating the impacts to listed species and designated critical habitat. However, little if any conservation benefit from a critical habitat designation would be provided through this process because the LADWP is already implementing actions in the Conservation Strategy, which include applicable tasks in the Recovery Plan. If additional conservation actions were identified, they would be incorporated in the incidental take permit. They would not be obtained through the section 7 consultation process. Therefore, we are not aware of any Federal agency that has recently or is likely to authorize, fund, or carry out a discretionary action in the Owens Management Unit in the foreseeable future with the exception of the Service. The designation of critical habitat will likely provide minimal conservation benefit to the flycatcher because the Owens River is privately owned and therefore, there are few catalysts for federal actions to occur (which our record supports), and because the flycatcher and its habitat is being conserved through the implementation of their Conservation Strategy.

Another benefit of including lands in a critical habitat designation is the designation can serve to educate the landowner and the public regarding the potential conservation value of an area, and may help focus conservation efforts to designated areas of high conservation value for those species. The process of proposing and finalizing the original and this revised critical habitat rule provided the Service with the opportunity to evaluate and refine the physical and biological features essential to the conservation of the species within the geographic area occupied by it at the time of listing and evaluate whether there are other areas essential for the conservation of the species. The designation process included peer review and public comment on the identified physical and biological features and geographic areas. This process is valuable to landowners and managers in developing conservation management plans for identified areas, other occupied habitat,

and suitable habitat that may not have been included in the Service's determination of essential habitat.

The educational benefits of designating lands managed by the LADWP are small because, as discussed above, the LADWP is aware of the value of its lands to flycatcher conservation has worked with the Service, California Department of Fish and Game, other agencies and organizations, and the public, and currently implements management measures to conserve this species and its habitat. Further, much of the LADWP lands were included in both the original October 12, 2004, proposed designation (69 FR 60706) and the August 15, 2011, revised proposed designation (76 FR 50542), which reached a wide audience. In addition, there have been and continue to be processes that involve and educate stakeholders and the public in the development and implementation of the LORP and OVLMP, which have a goal of benefiting the flycatcher and its habitat. The educational benefits that might follow critical habitat designation (such as providing information to LADWP managers on areas important to the long-term conservation of the flycatcher) were largely provided by the Conservation Strategy, the original designation process in 2004–2005 and publication of the revised critical habitat in 2011 (76 FR 50542).

Because of the continued commitment by the LADWP to manage their lands in a manner that promotes flycatcher conservation, and because monitoring and adaptive management are conducted to ensure the goals of the Conservation Strategy, LORP, and OVLMP are being met, we believe the designation of lands managed by the LADWP in the Owens Management Unit as critical habitat would provide few if any additional regulatory and conservation benefits to the species.

#### Benefits of Exclusion—Los Angeles Department of Water and Power Lands

The benefits of excluding about 128.5 km (79.8 mi) of LADWP lands from critical habitat designation are considerable. They include: (1) A strong likelihood for the continued implementation of objectives identified in the SWWF Conservation Strategy, Owens Valley Management Plan, and Lower Owens River Management Plan; (2) continued and strengthened working relationship with the LADWP and stakeholders to promote the conservation of the flycatcher and its habitat; (3) continued meaningful collaboration and cooperation in working toward recovering the flycatcher, including conservation

benefits that might not otherwise occur; (4) encouragement of other local agencies, organizations, and private landowners to complete conservation plans that benefit the flycatcher and other federally listed species; (5) encouragement of additional conservation plan development in the future on other private lands that include the flycatcher and other federally listed species, and (6) relieving landowners from any additional regulatory burden that might be imposed by critical habitat designation.

LADWP's implementation of their Conservation Strategy, LORP, and OVLMP, are consistent with the recovery objectives for the flycatcher. The LORP and OVLMP took years to develop in cooperation with several local and State agencies, organizations, and the public. Additionally, these plans provide conservation benefits for other listed species and unlisted sensitive species.

Imposing an additional regulatory review by designating critical habitat may undermine many of these conservation efforts and may undermine the conservation efforts and partnerships with State and local agencies, organizations, and private landowners that would otherwise benefit the flycatcher in this and other Management Units and benefit other species.

Designation of critical habitat on lands managed by the LADWP in the Owens Management Unit could also be viewed as a disincentive to those entities currently developing or considering developing similar plans. One of the incentives for undertaking conservation is greater ease of permitting where listed species are affected. Excluding LADWP lands in the Owens Management Unit will also preserve a partnership between the Service and the LADWP, which may encourage other conservation partnerships between our two entities in the future.

#### Benefits of Exclusion Outweigh the Benefits of Inclusion—Los Angeles Department of Water and Power Lands

As discussed in the *Benefits of Inclusion—Los Angeles Department of Water and Power Lands* section above, we believe the regulatory benefits of designating critical habitat along the Owens River would be minimized because of the implementation of LADWP's Conservation Strategy, LORP, and OVLMP. These plans address conservation issues from a coordinated, integrated perspective rather than a piecemeal, project-by-project approach and will achieve more flycatcher

conservation than we would achieve by multiple site-by-site, project-by-project section 7 consultations involving consideration of critical habitat.

There is limited Federal involvement in the Owens Management Unit. In the past, the EPA provided grants that were applied to implementing environmental compliance; constructing the pump station, water control and measuring facilities, and fences; and modifying the river intake structure for LORP implementation. The Corps issued a permit under the Clean Water Act to construct and modify some of these facilities and to conduct maintenance activities in wetland areas for LORP implementation (EPA and LADWP 2004, entire). Although there was a Federal nexus, the section 7 consultation process for these proposed actions resulted in a determination that their implementation would not affect species listed under the Act including the flycatcher. Since the implementation of these activities for the LORP, we are not aware of any other discretionary actions with a Federal nexus in the Owens Management Unit. Therefore, we anticipate there will also likely be limited future section 7 consultations under the Act. The exception is the LADWP's request for an incidental take permit from the Service under section 10(a)(1)(B) of the Act from the development of a HCP. As part of the permit evaluation process, the Service must conduct an internal section 7 consultation. Therefore, we do not expect the consultation process under section 7 of the Act to occur in this management unit in the future except with the Service under section 10(a)(1)(B) of the Act. We believe the conservation benefits for the flycatcher that would occur as a result of designating 128.5 km (79.8 mi) along the Owens River as critical habitat is minimal compared to the overall conservation benefits for the species that are and will be realized through the continued implementation of the Conservation Strategy, LORP, and OVLMP.

Furthermore, the educational benefits of critical habitat designation, including informing the LADWP and the public of areas important for the long-term conservation of the species, have been and continue to be accomplished through notices of public comment periods associated with the original flycatcher critical habitat rule (69 FR 60706), the revised proposed rule (76 FR 50542), and the extensive public involvement process associated with the development and implementation of the LORP and OVLMP. For these reasons, we believe that designating critical

habitat has little benefit in areas covered by the Conservation Strategy, LORP, and OVLMP.

The exclusion of the LADWP lands from flycatcher critical habitat will help preserve the partnerships that we developed with the LADWP. Much of the historic and current range and habitat of the flycatcher occurs on non-federal lands. Our goal of recovering the flycatcher cannot occur without the help of numerous non-federal landowners. Therefore, these partnerships with non-federal landowners are critical for flycatcher conservation. In the Owens Management Unit, the major landowner is the LADWP. Recovering the flycatcher in this unit cannot occur without their help and cooperation. This partnership may also help encourage new partnerships with other landowners and jurisdictions.

We reviewed and evaluated the exclusion of 128.5 km (79.8 mi) of the Owens River from final revised critical habitat designation for the flycatcher, and based on the above considerations and consistent with the direction provided in section 4(b)(2) of the Act, we have determined that the benefits of excluding the Owens River within the Owens Management Unit outweigh the benefits of including them. As discussed above, LADWP's Conservation Strategy, LORP, and OVLMP will provide for the enhancement and management of habitat for and features essential to flycatcher conservation.

**Exclusion Will Not Result in Extinction of the Species—Los Angeles Department of Water and Power Lands, Owens River, California**

We do not believe that this exclusion would result in the extinction of the species because the implementation of the Conservation Strategy, LORP, and OVLMP conserve the flycatcher and its habitat along the Owens River through the management, monitoring, and adaptive management practices described above. As a result of ongoing management and conservation of the flycatcher and its habitat on LADWP lands in Inyo and Mono Counties through development and implementation of the Conservation Strategy, LORP, and OVLMP, the Secretary has determined to use his discretion to exclude the 128.5 km (79.8 mi) of the Owens River managed by the LADWP in the Owens Management Unit from critical habitat under section 4(b)(2) of the Act.

#### Kern Management Unit

##### Sprague Ranch Management Plan

Section 4(b)(2) of the Act requires us to consider other relevant impacts, in addition to economic impacts, of designating critical habitat. The Sprague Ranch, included in the Kern Management Unit, warrants exclusion from the final designation of critical habitat under section 4(b)(2) of the Act because we have determined that the benefits of excluding Sprague Ranch from flycatcher critical habitat designation will outweigh the benefits of including it in the final designation based on the long-term protections afforded for flycatcher habitat. The following represents our rationale for excluding the Sprague Ranch from the final designated critical habitat for the flycatcher in the Kern Management Unit.

The Sprague Ranch is an approximately 1,772-ha (4,380-ac) parcel which was purchased in a public-private partnership by Audubon, CDFG, and the Corps in 2005. Approximately 672 ha (1,662 ac) of the Sprague Ranch are owned in fee by Audubon and approximately 1,100 ac (2,718 ac) owned in fee by CDFG. The proposed critical habitat designation included approximately 4.0 km (2.5 mi) or 313 ha (774 ac) of the Sprague Ranch. The Corps funding used to purchase and manage Sprague Ranch was as a result of biological opinions for the long-term operation of Lake Isabella Dam and Reservoir (Service 1996, 2000, 2005) specifically to provide habitat for and conservation of the flycatcher. The vegetation on the Sprague Ranch is willow (*Salix* sp.) and Fremont cottonwood, open water, wet meadows, and grasslands. During the periods of time flycatcher habitat is not available as result of periodic inundation from Isabella Dam and Reservoir operations, Sprague Ranch is expected to provide habitat for the flycatcher. The Corps funding was used to generate partnership challenge funding from the State of California Wildlife Conservation Board (WCB) and resulted in the acquisition of the larger ranch property, which provides additional benefits to the flycatcher.

The Sprague Ranch is located immediately north and adjacent to the Kern River Preserve (KRP), which is owned and operated by Audubon, and shares a common border with the KRP of over 4.8 km (3 mi). Together these co-managed lands provide opportunities for flycatcher breeding, feeding, and sheltering. The flycatcher occurs throughout the Kern Management Unit, which includes portions of the Sprague

Ranch. The Sprague Ranch contains existing riparian forest that can support and maintain nesting territories and migrating and dispersing flycatchers. Other portions of the Ranch require management in order to become nesting flycatcher habitat. Activities such as cowbird trapping, exotic vegetation control, and native tree plantings are other management activities expected to occur. The Ranch is currently being managed in accordance with the terms and conditions of the biological opinions (cited above) specifically for the benefit of the flycatcher and a management plan prepared cooperatively by the agencies and Audubon.

The Sprague Ranch is managed pursuant to a conservation plan dated January 25, 2005. This plan was prepared in partnership with the Service, National Fish and Wildlife Foundation (NFWF), CDFG, WCB, the Packard Foundation and Audubon to provide consistent management of lands acquired in the Kern Management Unit in compliance with the biological opinions issued by the Service. Management actions required for the Sprague Ranch include: Demographic surveys, cowbird trapping, nonnative vegetation removal, livestock exclusion, hydrologic improvement, planting of native vegetation, noxious weed control activities, flood irrigating low-lying areas, upgrading of fencing, upgrading irrigation systems, monitoring, and reporting. These measures will assist in improvement, management, and conservation of flycatcher habitat. Habitat assessments have been conducted on the property which concluded that approximately 168 ha (414 ac) of land are currently available as potential breeding habitat, and another approximately 227 ha (561 ac) were identified as potentially restorable to support a mosaic of habitat that could be used by flycatchers during post-breeding dispersal and migration. By using the available water supply and distribution system, managing grazing practices, removing invasive non-native plant species, and planting riparian vegetation, the Sprague Ranch has the potential for improvement of approximately 395 ha (975 ac) into a mosaic of habitat similar to the Kern River Preserve (KRP) and the South Fork Wildlife Area (SFWA). In addition, the water supply and distribution system of the Sprague Ranch has a beneficial effect on the hydrology that supports the riparian habitats within the KRP and the SFWA.

### Benefits of Inclusion—Sprague Ranch

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

The Kern River is known to be occupied by flycatchers and therefore, if a Federal action or permitting occurs, there is a catalyst for evaluation under section 7 of the Act. Through section 7 consultation, some minimal benefit could occur from a critical habitat designation at the Sprague Ranch. The Sprague Ranch may have additional conservation value above sustaining existing populations because it is being managed to not only maintain existing habitat, but also to improve, protect, and possibly expand upon the amount of nesting habitat that would provide for growth of existing populations. Expansion of existing populations in these areas would be an element of recovering the flycatcher. However, because this piece of land was purchased and is being managed specifically for flycatcher habitat, federal actions are unlikely to occur to which would prevent these goals from occurring. The implementation of future management actions to improve flycatcher habitat on Sprague Ranch are unlikely to require section 7 consultation between the Corps (the likely federal action agency) and the Service, because all habitat improvement and management actions are not likely to result in adverse effects to the flycatcher or its habitat (Tolleffson, R. 2012, pers. comm.). As a result, any rare Federal action that may result in formal consultation will likely result in only discretionary conservation recommendations (i.e., adverse modification threshold is not likely to be reached). Therefore, we believe there is an extremely low probability of mandatory elements (i.e., reasonable and prudent alternatives) arising from formal section 7 consultations that include consideration of designated flycatcher critical habitat, and as a result, the benefits of inclusion are minimized.

Another important benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners, agencies,

tribes, and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the flycatcher that reaches a wide audience, including parties engaged in conservation activities, is valuable. The designation of critical habitat may also strengthen or reinforce some Federal laws such as the Clean Water Act and CEQA. These laws analyze the potential for projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental laws.

We believe that there would be little educational and informational benefit gained from including this portion of the Kern River within the designation because the Sprague Ranch was purchased specifically for flycatcher habitat, and therefore it is well known as an important area for flycatcher management and recovery. Also, managing agencies such as the Corps, CDFG, and Audubon are implementing a long-term management plan that addresses flycatcher habitat, therefore the educational benefits or additional support for implementing other environment regulations from a critical habitat designation are not expected to be realized in this area.

### Benefits of Exclusion—Sprague Ranch

We believe the conservation benefits that would be realized by foregoing designation of critical habitat for the flycatcher on the Sprague Ranch include: (1) Continuation and strengthening of our effective working relationship with the Corps, CDFG, and Audubon to promote flycatcher conservation and its habitat as opposed to reactive redundant regulation; (2) allowance for continued meaningful collaboration and cooperation in working toward species recovery; and (3) encouragement of additional conservation for the flycatcher and other federally listed and sensitive species.

The flycatcher occurs on both public and private lands throughout the Kern Management Unit, but the Sprague Ranch is somewhat unique in that it is a partnership between the Corps, CDFG, Audubon, and the Service. The management of Sprague Ranch is conducted in accordance with the terms and conditions of a biological opinion, which require actions for the conservation of flycatchers.

Proactive conservation efforts and partnerships with private or non-Federal entities are necessary to prevent the extinction and promote the recovery

of the flycatcher in the Kern Management Unit. Therefore, we believe that flycatcher habitat located within properties covered by management plans or conservation strategies that protect or enhance its habitat will benefit substantially from voluntary landowner management actions.

Because the conservation benefits of critical habitat are primarily regulatory or prohibitive in nature, the Service contends that where consistent with the discretion provided by the Act, it is necessary to implement policies that provide positive incentives to private landowners to voluntarily conserve natural resources and that remove or reduce disincentives to conservation (Wilcove *et al.* 1996, pp. 1–15; Bean 2002, pp. 1–7). Thus, we believe it is essential for the recovery of the flycatcher to build on continued conservation activities such as these with proven partners, and to provide positive incentives for other private landowners who might be considering implementing voluntary conservation activities but have concerns about incurring incidental regulatory or economic impacts.

### The Benefits of Exclusion Outweigh the Benefits of Inclusion—Sprague Ranch

Based on the above considerations we have determined that the benefits of excluding the Sprague Ranch from critical habitat in the Kern Management Unit outweigh the benefits of including it as critical habitat for the flycatcher.

The Sprague Ranch was purchased specifically to manage habitats for the flycatcher and is jointly managed by the Corps, CDFG, and Audubon in accordance with the terms and conditions of the biological opinions that have resulted in a positive working partnership. The strategy of the managing partnership is to implement management and habitat improvement measures to achieve flycatcher conservation goals. There are little additional educational or regulatory benefits of including these lands as critical habitat. The Kern River is well known by the public and managing agencies for its value and importance to the flycatcher. Likewise, there will be little additional Federal regulatory benefit to the species because (a) there is a low likelihood that the Sprague Ranch will be negatively affected to any significant degree by Federal activities that were not consulted on in the existing biological opinions pursuant to section 7 consultation requirements, and (b) the Sprague Ranch is being managed in accordance with the terms and conditions of the biological opinions and we believe that based on

ongoing management activities there would be no additional requirements pursuant to a consultation that addresses critical habitat.

We believe the conservation measures for the flycatcher that are occurring or will be used in the future on the Sprague Ranch (i.e., demographic surveys, cowbird trapping, nonnative vegetation removal, livestock exclusion, hydrologic improvement, planting of native vegetation, monitoring, and reporting) provide as many, and likely more, overall benefits than would be achieved through implementing section 7 consultations on a project-by-project basis under a critical habitat designation. This is because management that is occurring or that is planning to occur will be the same activities that would be implemented in order to maintain or improve flycatcher habitat.

In conclusion, we find that the exclusion of critical habitat on the Sprague Ranch would most likely have a net positive conservation effect on the recovery and conservation of the flycatcher when compared to the positive conservation effects of a critical habitat designation. As described above, the overall benefits to the flycatcher of a critical habitat designation for this property is relatively small. In contrast, we believe that this exclusion will enhance our existing partnership with the Corps, CDFG, and Audubon, and it will set a positive example and could provide positive incentives to other non-Federal landowners who may be considering implementing voluntary conservation activities on their lands. We conclude there is a higher likelihood of beneficial conservation activities occurring in these and other areas for the flycatcher without designated critical habitat than there would be with designated critical habitat on the Sprague Ranch.

#### Exclusion Will Not Result in Extinction of the Species—Sprague Ranch

We believe that exclusion of these lands will not result in the extinction of the subspecies because the flycatcher already occupies the Sprague Ranch and other portions of the Kern River and there is a long-term commitment by proven land management partners to manage this property specifically for the flycatcher. Actions that might adversely affect the subspecies, while not anticipated to occur within this property, are expected to have a Federal nexus, and would thus undergo a section 7 consultation with the Service. The jeopardy standard of section 7 and routine implementation of habitat preservation through the section 7

process provide assurance that the species will not go extinct. In addition, the flycatcher is protected from take under section 9 of the Act. The exclusion leaves these protections unchanged from those that would exist if the excluded areas were designated as critical habitat.

Another reason that exclusion of these lands will not result in extinction of the species is that critical habitat is being designated for the flycatcher in other areas along the Kern River that will be accorded the protection from adverse modification by Federal actions using the conservation standard based on the Ninth Circuit decision in *Gifford Pinchot*. Additionally, the flycatcher occurs on other adjacent lands protected and managed either explicitly for the subspecies, or indirectly through more general objectives to protect natural habitat values. This provides protection from extinction while conservation measures are being implemented.

#### Hafenfeld Ranch Management Plan

Hafenfeld Ranch is approximately 100 ha (247 ac) in size and lies on and adjacent to the South Fork Kern River. Within the larger ranch are two perpetual conservation easements that were placed for the purposes of riparian and wetland vegetation protection and flycatcher conservation. The landowner granted these easements willingly and in partnership with Department of Agriculture-Natural Resource Conservation Service (NRCS), the Service, Corps, and California Rangeland Trust (CRT). Approximately 0.3 km (0.2 mi) or about 49 ha (122 ac) of the Hafenfeld Ranch was proposed for designation of flycatcher critical habitat.

The Hafenfeld Ranch is part of a continuous corridor of flycatcher habitat along the south fork of the Kern River that connects the east and west segments of the KRP. The dominant vegetation in the Kern Management Unit is willow (*Salix sp.*) and cottonwood (*Populus fremontii*). Other plant communities of the Kern Management Unit include open water, wet meadow, and riparian uplands. Portions of the Hafenfeld Ranch are seasonally flooded, forming a mosaic of wetland communities throughout the area. The remainder of the property consists of wet meadow and riparian upland habitats, consistent with the character of habitat along the south fork Kern River and the Kern Management Unit. Flycatchers have been recorded throughout the south fork Kern River and the Hafenfeld Ranch.

The first conservation easement of approximately 38 ha (93 ac) was

recorded in 1996, between the landowner and the NRCS under authority of the Wetland Reserve Program. The purpose of the easement is to “\* \* \* restore, protect, manage, maintain, and enhance the functional values of wetlands and other lands, and for the conservation of natural values including fish and wildlife habitat, water quality improvement, flood water retention, groundwater recharge, open space, aesthetic values, and environmental education. It is the intent of NRCS to give the Landowner the opportunity to participate in restoration and management activities in the easement area.”

The second conservation easement of approximately 57 ha (140 ac) was recorded in 2007, between the landowner and CRT as a result of biological opinions for the long-term operation of Lake Isabella Dam and Reservoir (Service 1996, 2000, 2005) specifically to provide habitat and conservation for the flycatcher. The purposes of the easement includes: (1) Protection of the riparian area historically used by breeding flycatchers; (2) continuation of flows into the riparian area; and (3) protection of riparian habitat. An endowment to implement these purposes was granted by the Corps to the National Fish and Wildlife Foundation to be utilized by CRT.

The Hafenfeld conservation easement, recorded in favor of CRT under authorities of the biological opinion issued to the Corps, is managed pursuant to a conservation plan dated January 25, 2005. This plan was prepared in partnership with the Service, NFWF, CDFG, WCB, the Packard Foundation, and Audubon to provide consistent management of lands acquired in the Kern Management Unit. Management activities that will protect, maintain, and improve flycatcher habitat include: (1) Limiting public access to the site, (2) managing grazing, (3) protection of the site from development or encroachment, (4) maintenance of the site as permanent open space that has been left predominantly in its natural vegetative state, and (5) the spreading of flood waters which promotes the moisture regime and wetland and riparian vegetation determined to be essential for flycatcher conservation. Other prohibitions of the easements which would benefit flycatcher conservation include: (1) Haying, mowing or seed harvesting; (2) altering the grassland, woodland, wildlife habitat, or other natural features; (3) dumping refuse, wastes, sewage, or other debris; (4) harvesting wood products; (5) draining,

dredging, channeling, filling, leveling, pumping, diking, or impounding water features or altering the existing surface water drainage or flows naturally occurring within the easement area; and (6) building or placing structures on the easement. Funding for the implementation of the conservation plan is assured by an endowment held by NFWF and through commitments by NRCS, CRT, and the Hafenfeld Ranch under provisions of the Conservation Easement.

#### Benefits of Inclusion—Hafenfeld Ranch

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

The Kern River is known to be occupied by flycatchers and therefore, if a Federal action or permitting occurs, there is a catalyst for evaluation under section 7 of the Act. Through section 7 consultation, some minimal benefit could occur from a flycatcher critical habitat designation at the Hafenfeld Ranch. The Hafenfeld Ranch may have additional conservation value above sustaining existing flycatcher populations because it is being managed to not only maintain existing habitat, but also to improve, protect, and possibly expand upon the amount of nesting habitat that would provide for growth of existing populations. Expansion of existing populations in these areas would be an element of recovering the flycatcher. However, because these lands are privately owned and not under federal management, the occurrence of federal actions that would generate evaluation under section 7 and a critical habitat designation are expected to be limited. Additionally, the established conservation easements goals (“\* \* \* restore, protect, manage \* \* \* the functional values \* \* \* for the conservation of \* \* \* fish and wildlife habitat \* \* \*”) are intended to protect riparian vegetation and the flycatcher. As result, it is not likely that federal actions or the easement holder would allow actions that would result in depreciable diminishment or a long-term reduction of the capability of the habitat to recover existing populations. As a result, any rare Federal action that may result in formal consultation will

likely result in only discretionary conservation recommendations (i.e., adverse modification threshold is not likely to be reached). Therefore, we believe there is an extremely low probability of mandatory elements (i.e., reasonable and prudent alternatives) arising from formal section 7 consultations that include consideration of designated flycatcher critical habitat, and as a result, the benefits of inclusion are minimized.

Another important benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners, agencies, tribes, and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the flycatcher that reaches a wide audience, including parties engaged in conservation activities, is valuable. The designation of critical habitat may also strengthen or reinforce some Federal laws such as the Clean Water Act and CEQA. These laws analyze the potential for projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental laws.

We believe that there would be little educational and informational benefit gained from including this portion of the Kern River within the designation because the Hafenfeld Ranch established conservation easements that addressed the flycatcher and its habitat, and therefore it is well known as an important area for flycatcher management and recovery. Also, managing agencies such as the Corps, NRCS, Service, CRT, and CDFG were involved with establishing these easements and development of a long-term management plan that addresses flycatcher habitat; therefore the educational benefits or additional support for implementing other environment regulations from a critical habitat designation are not expected to be realized in this area.

#### Benefits of Exclusion—Hafenfeld Ranch

We believe conservation benefits would be realized by foregoing designation of critical habitat for the flycatcher at the Hafenfeld Ranch include: (1) Continuance and strengthening of our effective working relationship with the Hafenfeld Ranch and the Corps, CRT, and CDFG to promote voluntary, proactive conservation of the flycatcher and its habitat as opposed to reactive regulation; (2) allowance for continued

meaningful collaboration and cooperation in working toward species recovery, including conservation benefits that might not otherwise occur; and (3) encouragement of additional conservation easements and other conservation and management plan development in the future on the Hafenfeld Ranch and other lands for the flycatcher and other federally listed and sensitive species.

The flycatcher occurs on public and private lands throughout the Kern Management Unit. Proactive voluntary conservation efforts by private or non-Federal entities are necessary to prevent the extinction and promote the recovery of the flycatcher in the Kern Management Unit.

Proactive conservation efforts and partnerships with private or non-Federal entities are necessary to prevent the extinction and promote the recovery of the flycatcher in the Kern Management Unit. Therefore, we believe that flycatcher habitat located within private properties, like the Hafenfeld Ranch, covered by management plans or conservation strategies that protect or enhance its habitat will benefit substantially from voluntary landowner management actions.

Because the conservation benefits of critical habitat are primarily regulatory or prohibitive in nature, the Service believes that where consistent with the discretion provided by the Act, it is necessary to implement policies that provide positive incentives to private landowners to voluntarily conserve natural resources and that remove or reduce disincentives to conservation (Wilcove *et al.* 1996, 1–15; Bean 2002, 1–7). Thus, we believe it is essential for the recovery of the flycatcher to build on continued conservation activities such as these with proven partners, like the Hafenfeld Ranch, and to provide positive incentives for other private landowners who might be considering implementing voluntary conservation activities but have concerns about incurring incidental regulatory or economic impacts.

#### The Benefits of Exclusion Outweigh the Benefits of Inclusion—Hafenfeld Ranch

Based on the above considerations, we have determined that the benefits of excluding the Hafenfeld Parcel from critical habitat in the Kern Management Unit outweigh the benefits of including it as critical habitat for the flycatcher. The Hafenfeld Parcel is currently operating under a conservation plan to implement conservation measures and achieve important conservation goals through the conservation measures described above, as well as land and

water management efforts such as willow planting and management of surface flows to achieve the optimal flooding regime for the enhancement of important riparian and wetland habitat for the flycatcher.

The Service believes the additional regulatory and educational benefits of including these lands as critical habitat are relatively small. The Service anticipates that the conservation strategies will continue to be implemented in the future, and that the funding for these activities will be apportioned in accordance with the provisions of the Conservation Plan. The designation of critical habitat can serve to educate the general public as well as conservation organizations regarding the potential conservation value of an area, but this goal is already being accomplished through the identification of this area in the Conservation Plan described above. Likewise, there will be little additional Federal regulatory benefit to the species because (a) there is a low likelihood that the Hafenfeld Parcel will be negatively affected to any significant degree by Federal activities requiring section 7 consultation, and (b) we believe that based on ongoing management activities there would be no additional requirements pursuant to a consultation that addresses critical habitat.

Excluding these privately owned lands with conservation strategies from critical habitat may, by way of example, provide positive social, legal, and economic incentives to other non-Federal landowners who own lands that could contribute to listed species recovery if voluntary conservation measures on these lands are implemented.

We believe the conservation measures for the flycatcher on the Hafenfeld Ranch that include the activities described above that include land and water management actions to enhance important riparian and wetland habitat provide as much, and likely more comprehensive benefits as would be achieved through implementing section 7 consultation on a project-by-project basis under a critical habitat designation. This is because they land managers are already implementing actions that improve and maintain flycatcher habitat.

In conclusion, we find that the exclusion of critical habitat on the Hafenfeld Parcel would most likely have a net positive conservation effect on the recovery and conservation of the flycatcher when compared to the positive conservation effects of a critical habitat designation. As described above, the overall benefits to the flycatcher

from a critical habitat designation on the Hafenfeld Ranch are relatively small. In contrast, we believe that this exclusion will enhance our existing partnership with these landowners, and it will set a positive example and provide positive incentives to other non-Federal landowners who may be considering implementing voluntary conservation activities on their lands. We conclude there is a higher likelihood of beneficial conservation activities occurring in these and other areas for the flycatcher without designated critical habitat than there would be with designated critical habitat on these properties.

#### Exclusion Will Not Result in Extinction of the Species—Hafenfeld Ranch

We believe that exclusion of these lands will not result in the extinction of the subspecies because the flycatcher already occupies the Hafenfeld Ranch and other portions of the Kern River and there is a long-term commitment by proven land management partners to manage this property for the flycatcher. Actions that might adversely affect the subspecies, while not anticipated to occur within this property, are expected to have a Federal nexus, and would thus undergo a section 7 consultation with the Service. The jeopardy standard of section 7 and routine implementation of habitat preservation through the section 7 process provide assurance that the species will not go extinct. In addition, the flycatcher is protected from take under section 9 of the Act. The exclusion leaves these protections unchanged from those that would exist if the excluded areas were designated as critical habitat.

Another reason that exclusion of the Hafenfeld Ranch will not result in extinction of the species is that critical habitat is being designated for the flycatcher in other areas along the Kern River that will be accorded the protection from adverse modification by Federal actions using the conservation standard based on the Ninth Circuit decision in *Gifford Pinchot*. Additionally, the flycatcher occurs on other adjacent lands protected and managed either explicitly for the subspecies, or indirectly through more general objectives to protect natural habitat values. This provides protection from extinction while conservation measures are being implemented.

#### Salton Management Unit

##### Lipay Nation of Santa Ysabel Partnership

Please see the end of this section for a discussion about our partnership with tribes from the Santa Ana, San Diego, and Salton Management Units.

#### Little Colorado Management Unit Zuni Pueblo Management Plan

Please see the end of this section for a discussion about tribes from the Little Colorado, San Juan, Verde, Upper Gila, and Upper Rio Grande Management Units that submitted Management Plans.

Middle Colorado, Bill Williams, Hoover to Parker Dam, and Parker Dam to Southerly International Boundary Management Units, Arizona, California, and Nevada.

#### Lower Colorado River Multi-Species Conservation Plan

The LCR MSCP (2004, entire) was developed for areas along the LCR along the borders of Arizona, California, and Nevada from the conservation space of Lake Mead to Mexico (and a small portion of the lower Bill Williams River in Arizona), in the Counties of La Paz, Mohave, and Yuma in Arizona; Imperial, Riverside, and San Bernardino Counties in California; and Clark County in Nevada. The LCR MSCP primarily addresses activities associated with water storage, delivery, diversion, and hydroelectric production (water management), and the conservation of species affected by those actions. The Secretary of the Interior (Secretary) signed the Record of Decision on April 2, 2005. Discussions began on the development of this HCP in 1994, but an important catalyst was a 1997 jeopardy biological opinion for the flycatcher issued to the USBR for LCR operations (Service 1997, entire). As a result, flycatcher conservation and development of flycatcher habitat is a significant part of the LCR MSCP. The LCR MSCP covers a 50-year period of time from 2005 to 2055.

The Federal agencies whose water management activities are addressed through the LCR MSCP are the USBR, Bureau of Indian Affairs (BIA), National Park Service (NPS), BLM, Western Area Power Administration, and Service. The non-Federal permittees covered in Arizona are: The Arizona Department of Water Resources; Arizona Electric Power Cooperative Inc.; Arizona Game and Fish Department (AGFD); Arizona Power Authority; Central Arizona Water Conservation District; Cibola Valley Irrigation and Drainage District; City of Bullhead City; City of Lake Havasu City; City of Mesa; City of Somerton; City of Yuma; Electrical District No. 3, Pinal County, Arizona; Golden Shores Water Conservation District; Mohave County Water Authority; Mohave Valley Irrigation and Drainage District; Mohave Water Conservation District; North Gila Valley Irrigation and Drainage District; Salt River Project Agricultural



Improvement and Power District; Town of Fredonia; Town of Thatcher; Town of Wickenburg; Unit "B" Irrigation and Drainage District; Wellton-Mohawk Irrigation and Drainage District; Yuma County Water Users' Association; Yuma Irrigation District; and Yuma Mesa Irrigation and Drainage District. The permittees covered in California are: The City of Needles, the Coachella Valley Water District, the Colorado River Board of California, the Imperial Irrigation District, the Los Angeles Department of Water and Power, the Palo Verde Irrigation District, the San Diego County Water Authority, the Southern California Edison Company, the Southern California Public Power Authority, Bard Water District, and The Metropolitan Water District of Southern California. The permittees covered in Nevada are: The Colorado River Commission of Nevada, the Nevada Department of Wildlife (NDOW), Basic Water Company, and the Southern Nevada Water Authority.

The LCR MSCP also addresses the BIA's water management activities on the multiple tribal lands that are part of the LCR MSCP's planning area (Hualapai, Fort Mojave, Chemehuevi, Colorado River, Quechan, and Cocopah Tribes).

The Secretary is vested with the responsibility to manage the main-stem waters of the LCR pursuant to a body of law commonly referred to as the "Law of the River" (LOR). The LOR includes, but is not limited to a variety of Federal and State laws, interstate compacts, an international treaty, court decisions, Federal contracts, Federal and State regulations, and multi-party agreements extending at least as far back as 1899 with the River and Harbors Act of 1899. The most relevant components of the LOR for this discussion are the Colorado River Compact of 1922, the Boulder Canyon Project Act of 1928, the California Seven Party Agreement of 1931, the 1944 Water Treaty between the United States and Mexico, The Upper Colorado River Basin Compact of 1948, the Colorado River Storage Project Act of 1956, the 1964 Supreme Court Decree in *Arizona v. California*, and the Colorado River Basin Project Act of 1968. The Secretary serves as "Watermaster" related to LCR operations and management of the and has vested those discretionary and non-discretionary actions with the USBR for implementation. Principally, these actions include river regulation, improvement of navigation, flood control, providing for storage, delivery and accounting of Colorado River water to entities within the state apportionments (entities with present

perfected rights, water delivery contracts, or other Federal or Secretarial reservations of water), and generation of hydroelectric power. The extent of these actions and their status as discretionary or non-discretionary was discussed in the LCR MSCP Biological Assessment (LCR MSCP 2004a, pp. 2–1—2–68).

The Law of the River, discussed above, came into play during the 1997 section 7 consultation between USBR and the Service (Service 1997, entire). The underlying facts of this 1997 section 7 consultation illustrate the kind of environmental issues which occur along the LCR due to BOR's lack of discretion to modify its water management duties. The decline of Lake Mead water levels during several years of drought created conditions for flycatcher habitat to become established in the exposed lakebed. This flycatcher habitat, used by nesting flycatchers, was later partially inundated as the lake water levels rose in years with more rainfall and/or snowmelt. Some flycatcher nests fell into Lake Mead when the willows supporting them gave way due to being inundated by water for long periods. During the 1997 section 7 consultation, the Service found that USBR's continued operations on the LCR would jeopardize the continued existence of the flycatcher. The Service provided USBR with a reasonable and prudent alternative that called upon USBR to release water from Lake Mead to avoid inundating the willows. USBR then advised the Service that USBR did not have legal discretion to release water from Lake Mead due to its legal requirements to store water for various other parties. The Service then provided a different reasonable and prudent alternative to USBR, which required USBR to procure and protect 567 ha (1,400 ac) of alternative habitat, preferably on the LCR, no later than January 1, 2001. The reasonable and prudent alternative also required USBR to provide additional long-term mitigation measures through (1) acquisition of additional flycatcher habitat and (2) continued development of the LCR MSCP. The Secretary of Interior's reliance on this second reasonable and prudent alternative was upheld by the Ninth Circuit Court of Appeals in *Southwest Center for Biological Diversity v. U.S. Bureau of Reclamation*, 143 F.3d 515 (9th Cir. 1998).

Because of requirements under the Law of the River that protect the regulation and delivery of Colorado River water to the western United States, the most challenging task for the LCR MSCP partners is to overcome the environmental impacts from decades of

dam operations and channel maintenance without the ability to change dam operations to re-create the physical river conditions needed for flycatcher riparian habitat. The regulation of the Colorado River alters the magnitude, frequency, duration, and timing of river flow, thereby impacting the ability to replenish aquifers, elevate groundwater, move sediment, and grow extensive riparian forests (Poff *et al.* 1997, pp. 769–781). The effect of this river regulation, combined with stream channelization, has further armored stream banks, incised the river channel, and thus disconnected the stream from the floodplain. Under existing conditions, dams prevent flood flows from occurring and existing regulated flows cannot extend beyond the river channel onto the floodplain. The Flycatcher Recovery Team recognized these challenges along the LCR and understood that creating and managing nesting habitat was a viable recovery strategy because of the flexibility the flycatcher demonstrated in using habitat created in manmade altered situations (reservoir inflows, agriculture return flows, irrigation ditches). As a result, the LCR MSCP partners are using agricultural fields adjacent to the river channel with existing water rights to cultivate and manage riparian habitat specifically for the benefit of nesting and migrating flycatchers.

The flycatcher is a key species in the LCR MSCP where the permittees will create and maintain 1,639 ha (4,050 ac) of flycatcher habitat within the planning area, which includes NWRs, tribal lands, and other Federal and private lands (from Lake Mead to Mexico). The intent is to create, within the Lake Mead to Mexico LCR MSCP planning area, thousands of acres of protected and managed riparian habitat that can be used by territorial, breeding, non-breeding, foraging, dispersing, and migrating flycatchers and reach the conservation goals established in the Recovery Plan within the legal and physical limitations existing along the LCR. The development of flycatcher habitat will primarily occur within the Management Units (Hoover to Parker and Parker to Southerly International Border) that are the most significant portion of the LCR MSCP action area. Streams in the Middle Colorado (Colorado River-Lake Mead), Virgin (Virgin River), Pahranaagat (Muddy River), and Bill Williams (Bill Williams River) Management Units in Arizona, Utah, and Nevada, are briefly represented within the LCR planning area. Management and tasks associated with the development of these habitats

will result in improving and maintaining essential migration stopover habitat, improving meta-population stability of nesting populations, and reducing the risk of catastrophic losses due to wildfire. Overall, these 1,639 ha (4,050 ac) are anticipated to meet the flycatcher conservation goals recommended in the Recovery Plan.

In addition to flycatcher habitat creation, provisions are made in the LCR MSCP to provide funds to ensure the maintenance of flycatcher habitat in suitable nesting conditions through the Habitat Management Fund and to conduct additional survey, research, management, monitoring of flycatchers, flycatcher habitat, and flycatcher-related issues.

Since implementing the LCR MSCP in 2005, the partners have conducted multiple flycatcher projects to satisfy the MSCP's goals and objectives. Flycatcher surveys and monitoring has been conducted annually throughout the LCR MSCP planning area (McLeod *et al.* 2008, pp. 77–92, 113–122; McLeod and Pelligrini 2011, pp. 13–51, 77–91; 2012, pp. 7–43, 71–84). Research has been completed evaluating cowbird control and the effects of nest predation (Ryan and White 2006, entire; Theimer *et al.* 2010, entire); the flycatcher's insect prey base (Wiesenborn and Heydon 2007, entire; Wiesenborn *et al.* 2008, entire; Wiesenborn 2010, entire); and the subspecies identity of migrating flycatchers (Paxton *et al.* 2005, entire). Additionally, flycatcher habitat evaluations have been conducted to assist in the development of mitigation sites (BioWest 2006, entire; Calvert 2008, entire; USBR 2012, p. 208). In 2011, an attempt to improve flycatcher nesting habitat at Topock Marsh on the Havasu NWR occurred by attempting to improve moist soil conditions and vegetation quality by pumping water onto the ground's surface underneath vegetation (USBR 2012, p. 208).

To date, 547 ha (1,352 ac) have been acquired and managed to develop riparian habitat through the LCR planning area in parts of Arizona and California (USBR 2012, p. 72). Migrant flycatchers have been found using these riparian habitats, but nesting territories have yet to be detected. The LCR MSCP partners continue to acquire, develop, study, manage, and enhance riparian mitigation habitat sites to meet the MSCP's flycatcher goals. Another benefit of the LCR MSCP is that other covered and sensitive riparian obligate bird species have been found nesting in these mitigation sites such as yellow-billed cuckoo, yellow warbler, and Bell's vireo (USBR 2012, pp. 237–249).

Since implementation of the LCR MSCP in 2005, flycatchers have occurred in abundance as migrants throughout the length of the LCR; however territories along the LCR within the Lake Mead to Mexico planning area have been detected only at the Havasu and Bill Williams River NWRs and within the Lake Mead National Recreation Area (MacLeod *et al.* 2008, pp. 89–92). A few lone flycatcher territories, with no nesting recorded, were detected at various other locations along the LCR below Hoover Dam prior to the LCR MSCP's implementation (Service 2002, Fig. 8). As a result of implementing updated survey protocols and with additional information, these lone territories (primarily south of the Bill Williams River) have yet to be detected (McLeod *et al.* 2008, pp. 89–92; McLeod and Koronkiewicz 2009, pp. 54–56; 2010, pp. 46–47; McLeod and Pelligrini 2011, pp. 51–52; 2012, pp. 43–44).

In 2011, flycatcher surveys occurred at 64 sites along 15 study areas throughout the entire LCR planning area and its tributaries (USBR 2012, p. 207). Flycatchers (migrants and territorial flycatchers) were detected at 47 of the 64 sites (USBR 2012, p. 208). From 2009 to 2011, along the main-stem of the LCR a maximum of two flycatcher territories occurred at Topock Marsh at Havasu NWR.

Conservation and development of flycatcher habitat is also a priority for land managers within the MSCP planning area. In particular, the Bill Williams River, Havasu, Cibola, and Imperial NWRs and the Hualapai, Chemehuevi, Fort Mojave, CRIT, and Quechan Tribes are implementing conservation strategies to manage existing riparian resources (see below). Similarly, the land management strategies of the BLM (Service 2006, pp. 12–13; 2007, p. 15; 2009, pp. 20–21) and NPS (Service 2004b, pp. 47–49) (also LCR MSCP partners) have focused on preserving existing riparian habitat. All of these entities face similar challenges individually as the LCR MSCP partners do collectively; the alteration of Colorado River flow provides a considerable hurdle in improving riparian habitat quality.

U.S. Fish and Wildlife Service National Wildlife Refuges—Bill Williams River, Havasu, Cibola, and Imperial NWRs

The Bill Williams, Havasu, Cibola, and Imperial NWRs currently operate under a Comprehensive Management Plan (Service 1994, entire) that has been evaluated under NEPA and section 7 of the Act. Some of the goals included in the LCR NWRs Comprehensive

Management Plan (1994–2014) (Service 1994, pp. 137–156) are to: “\* \* \* restore and maintain the natural diversity \* \* \*”; “\* \* \* achieve threatened and endangered species recovery \* \* \*”; “\* \* \* revegetate substantial amounts of habitat with native mixes of vegetation leading to biological diversity”; “\* \* \* enhance use of Colorado River water and protect existing water rights holdings \* \* \*”; “\* \* \* ensure only compatible and appropriate activities occur \* \* \* and \* \* \* regulate all activities \* \* \* that are potentially harmful to refuge resources”; and to “\* \* \* effect improvements to funding and staffing that will result in long lasting enhancements to habitat and wildlife resources \* \* \* leading to achievement of the goals of this plan and the goals of the NWR System.”

#### Service—Bill Williams NWR

The Bill Williams NWR consists of 2,471 ha (6,105 ac) (Service 1994, p. 34) and as a tributary of the LCR located below Alamo Dam, includes the largest flood-regenerated riparian forest on the LCR. The Bill Williams NWR contains approximately 931 ha (2,300 ac) of cottonwood, willow, mesquite, and salt cedar woodlands and terrace shrublands. It is described by the Executive Order establishing the area “\* \* \* as a refuge and breeding ground for migratory birds and other wildlife.” From 1994 to 2007, 1 to 15 flycatcher territories (and migrant flycatchers) were detected on the NWR annually (USGS 2008). Habitat goals are to protect, maintain, and, if possible, enhance habitats, particularly those for neo-tropical migrants, endangered species, and other species of concern.

#### Service—Havasu NWR

The Havasu NWR consists of 15,551 ha (38,427 ac) (Service 1994, p. 33) and some of the NWRs goals have been to identify specific areas where flycatcher habitat will be maintained, improved, protected, and managed, because as keystone woody riparian species, its habitat is a specific NWR goal.

Havasu NWR riparian habitat management and maintenance projects are underway and will continue in order to provide a flycatcher conservation benefit. For example, approximately 40 ha (100 ac) in the Beal Unit and 20 ha (50 ac) in the Pintail Unit are being restored and managed for woody riparian vegetation. During the 2004 fiscal year, a total of 8,765 cottonwoods, 4,800 Goodding's willows, 4,065 Coyote willow, and 940 mesquites were planted in the Beal Unit. In the Pintail Unit, during the 2004 fiscal year, 1,650

cottonwoods and 1,175 willows were planted. In the 1,619 ha (4,000 ac) Topock Unit, habitat exists and is being managed for nesting flycatchers and wading birds, and the 202 ha (500 ac) Whiskey Slough Unit is also targeted for flycatcher management.

In addition to the specific Havasu NWR vegetation management, additional NWR tasks occur in order to improve habitat quality and persistence. Specific water management to mimic the natural hydrology is needed for woody vegetation and to maintain conditions and prey for nesting flycatchers. Management of feral pigs that can harm and destroy vegetation is needed to protect habitat. Additionally, management of exotic woody and weed species such as salt cedar and Johnson grass occurs to reduce risks of fire in riparian areas.

#### Service—Cibola NWR

The Cibola NWR consists of approximately 6,745 ha (16,667 ac) (Service 1994, p. 34) and some of their main objectives are the development of wetland, riverine, riparian, moist soil, and agricultural habitat in order to maintain the natural abundance and diversity of native species, habitats and communities which are found in the LCR floodplain (with emphasis on trust resources, endangered and threatened species, and other species of concern). As a result, flycatcher migratory and nesting habitat, as well as habitat for other passerine species is specifically identified as important to maintain, preserve, and restore. A single flycatcher territory and migrating flycatchers have been detected on the Cibola NWR.

Some primary Cibola NWR goals are to maintain existing native riparian woodland and establish and manage an average of 20 ha (50 ac) annually through seeding and planting native mesquite, cottonwood, and willow trees, and associated understory plants. Three different NWR Management Units that contain approximately 323 ha (800 ac), 6 ha (15 ac), and 40 ha (100 ac) of habitat are designated for development to native mesquite, cottonwood, and willows. Between the fall of 2010 and spring of 2011, several management activities occurred to improve and enhance wildlife and riparian habitats within the NWR with over 12,000 trees planted over 20 ha (50 ac) (Rimer 2011, p. 1).

Previous plantings and habitat maintenance has occurred, which has resulted in improved flycatcher habitat conditions. At one 7 ha (17.8 ac) field where about 7,100 one-gallon cottonwood and willow trees were

planted in 2003, the area has shown use by migrant flycatchers and has continued to be maintained and monitored (Strickland 2005, pp. 2–3; Seese 2006, p. 1).

Protection of existing sites through fire management and replacement of poor quality salt cedar to less flammable and higher quality native plant species is occurring as part of Cibola NWR's management efforts. Reducing the amount of unsuitable salt cedar and replacing it with native mesquite, cottonwoods, and willows, provides improved habitat value for flycatchers and other passerines and reduces the risk of wildfire. In 2006 and 2007, the NWR began to assess, plan, and rehabilitate riparian vegetation that burned from the lightning caused 2,145 ha (5,300 ac) Cibola and Walter fires (Seese 2006, p. 14).

#### Service—Imperial NWR

The Imperial NWR consists of 10,168 ha (25,125 ac) (Service 1994, pp. 34–35) and manages for a variety of habitat types that provide locations for waterfowl, wading birds, passerines, and other species. Fifteen Management Units (totaling about 648 ha, 1,600 ac) are targeted for riparian obligate passerines obligate. Not all areas of these Units are dedicated specifically to woody riparian habitat. Flycatcher habitat management includes maintenance of woody riparian vegetation, and development and protection of habitat through methods such as planting, salt cedar control, and prescribed burns. The Backwater Riversedge Management Unit has an additional 2,270 ha (5,609 ac) of salt cedar, willow, remnant cottonwoods, and scattered marshes for flycatchers. One to five flycatcher territories were detected over 3 years on the NWR between 1996 and 2003 (Sogge and Durst 2008) as well as migrating flycatchers (Macleod *et al.* 2008, pp. 73–76).

#### Bureau of Land Management—Yuma, Havasu, and Arizona Strip Resource Districts

Parts of the Yuma, Havasu, and Arizona Strip BLM Districts occur within the LCR MSCP planning area from Lake Mead to Mexico (and the lower Bill Williams River). These Districts have consulted with the Service under section 7 of the Act on the implementation of their resource plans (Service 2006, pp. 12–13; 2007a, p. 15; 2009, pp. 20–21). These plans provide the broad flycatcher conservation measures originating in other guidance documents such as the Recovery Plan and the LCR MSCP plan.

The conservation measures proposed in these plans are similar and include tasks such as: Flycatcher surveys; monitoring; research; education; implementing laws, policies, and agreements; minimizing disturbance; habitat protection; fire management; maintaining and improving flycatcher nesting habitat; implementing small-scale habitat enhancement projects; minimizing unauthorized recreational impacts; and cowbird trapping (if appropriate).

#### National Park Service—Lake Mead National Recreation Area

The NPS's Lake Mead National Recreation Area's Land Management Plan (Service 2002a, p. 6) and Fire Management Plan (Service 2004b, pp. 47–49; 2011, p. 23) include flycatcher management goals within the LCR MSCP planning area. In and around Lake Mead, flycatcher habitat is limited to tributary inflow and the Colorado River inflow where the lake rises and lowers. The NPS's management strategies, first identified in the 2004 Fire Management Plan, include the identification and survey of flycatcher habitat, breeding site closures, and avoidance of these suitable and occupied sites from adverse impacts associated with fire management. Due to the remote nature of flycatcher areas and the limited watercraft access, recreation and fire risk is anticipated to be low (no fires have occurred within flycatcher habitat since 1976). Also included is the overall strategy of riparian habitat protection, the seeding and management to improve habitat quality of sites, and control of cowbird populations.

#### Native American Tribes—Hualapai, Fort Mojave, Chemehuevi, Colorado Indian Tribes, and Quechan

##### Tribes—Hualapai Tribe

The Hualapai Tribe occurs alongside the Colorado River on the south side of the channel in the Middle Colorado Management Unit at the upper most portion of the Lake Mead conservation space within the LCR MSCP planning area. The Tribe completed a Flycatcher Management Plan in 2005 (Hualapai Tribe 2004, entire) and developed a 2012 update (Hualapai Tribe 2012, entire). The Hualapai Tribal Council has adopted the implementation of their Flycatcher Management Plan.

The Hualapai's Flycatcher Management Plan's objectives are to preserve riparian vegetation, conduct habitat improvement activities with available funds, ensure that existing land uses (which presently include recreational activities) will not disturb

flycatchers or reduce habitat quality, and conduct flycatcher surveys.

The Hualapai Tribe has been implementing their Flycatcher Management Plan, which has the overall goal to support conservation of the flycatcher on Hualapai lands. Like other locations along the Middle and LCR, riparian habitat quality is affected by river regulation. While riparian habitat has been preserved within tribal lands, they note that recent drought combined with a decline in Lake Mead water level has reduced overall flycatcher habitat quality. The Tribe has prevented habitat degradation and flycatcher disturbance from recreationists and helicopter tour operators through implementation of signs and buffer zones. Surveys for flycatchers occurred annually from 1997 through 2008, but no surveys have occurred since due to lack of funding. The Tribe will continue to seek funding to continue surveys and habitat improvement activities.

#### Tribes—Fort Mojave Tribe

The Fort Mojave Tribe occurs within the LCR MSCP planning area along the Colorado River in the Hoover to Parker Management Unit above Lake Havasu. The Fort Mojave Tribe completed a Flycatcher Management Plan in 2005 (Fort Mojave Tribe 2005, entire), and modified that plan with a 2012 update (Fort Mojave Tribe 2012, entire). The Fort Mojave Tribal Council authorized and approved the implementation of the updated Flycatcher Management Plan and the continued management of lands that do or can support flycatchers.

The Fort Mojave Indian Tribe has committed to continue riparian habitat protection and described portions of seven different areas of tribal land, totaling about 991 ha (2,448 ac), that have or could have flycatcher habitat. The Tribe identified the intent to continue to establish and developing riparian habitat improvement sites, to manage for native riparian plant species in appropriate locations, and to continue to provide wildfire response to protect riparian habitats.

The Tribe commented in their submitted comments and updated Flycatcher Management Plan that implementation of their 2005 Management Plan was effective and since its completion, no net loss in riparian habitat has occurred. A 321-ha (794-ac) section of tribal land, in cooperation with the USBR, is specifically being managed to support flycatcher habitat.

#### Tribes—Chemehuevi Tribe

The Chemehuevi Tribe occurs within the LCR MSCP planning area along the

Colorado River within the Hoover to Parker Management Unit. The Chemehuevi Tribe completed a Flycatcher Management Plan in 2005 (Chemehuevi Indian Tribe 2005, entire).

The Chemehuevi Tribe committed to flycatcher conservation actions such as controlling wild fire, improving native plant presence through habitat improvement and management projects, minimizing recreational habitat impacts, and collaborating with the Service to improve flycatcher habitat conditions. The Flycatcher Management Plan addresses the management of tamarisk and native willow, cottonwood, and mesquite to maximize native plant presence. Management will be done in cooperative work effort with the Service to identify habitat improvement sites and provide early control response to wild fires that would result in no net loss or permanent changes detrimental to flycatcher or its habitat as specified by the Recovery Plan. Any permanent river or lakeshore land use changes, such as recreational or other developments, will take flycatcher habitat into account and will be done in mutual consultation with the Service so as to design plans that minimize detrimental impacts to habitat requirements. Their Flycatcher Management Plan identifies continued cooperation between the Tribe and Service to ensure continued management of or to improve habitat conditions. Continued monitoring of habitat and flycatchers and long-term management of native plants (e.g., cottonwood, mesquite, and willow), within funding constraints, will result in no net habitat loss or permanent habitat modification and will avoid detrimental impacts to the flycatcher as specified in the Recovery Plan.

#### Tribes—Colorado River Indian Tribe (CRIT)

The CRIT occurs within the LCR MSCP planning area along the Colorado River within the Parker to Southerly International Border Management Unit. The CRIT completed a 2005 Flycatcher Management Plan (CRIT 2005, entire) and produced a draft 2012 update (CRIT 2012, entire).

The CRIT's Flycatcher Management Plan describes a collection of flycatcher management tasks. CRIT biologists have attended flycatcher survey training and expect to assess habitat quality, conduct breeding bird surveys and identify and protect flycatcher migration habitat. Migration habitat will be managed through fire restrictions, fire suppression, restrictions on the use of gasoline-powered boats in sensitive

backwater areas, limitations on grazing, and campsite placement.

The Flycatcher Management Plan identifies the continued management of the Ahakhav Tribal Preserve, a 546-ha (1,350-ac) area of riparian vegetation. This Preserve was established in 1995 and is managed to conserve the CRITs biological and cultural resources, promote environmental education, and provide recreational opportunities for the tribal community and general public. The Ahakhav Tribal Preserve possesses the highest potential for eventual colonization by nesting flycatchers. The Tribe is actively converting tamarisk-dominated vegetation within the Preserve to combinations of cottonwood, willow, and mesquite.

#### Tribes—Quechan (Fort Yuma) Indian Tribe

The Quechan Tribe occurs within the LCR MSCP planning area along the Colorado River within the Parker to Southerly International Border Management Unit. The Quechan Tribe completed a Flycatcher Management Plan in 2005 (Quechan Tribe 2005, entire).

The Quechan Tribe will manage riparian saltcedar that is intermixed with cottonwood, willow, mesquite, and arrowweed to maximize potential value for nesting flycatchers. Any permanent land use changes for recreation or other reasons will consider the biological needs of the flycatcher and support flycatcher conservation needs as long as consistent with tribal cultural and economic needs. The Tribe will consult with the Service to develop and design plans that minimize impacts to flycatcher habitat. The intent of these measures is to ensure no net loss of flycatcher habitat.

#### Benefits of Inclusion—Lower Colorado River Multi-Species Conservation Plan

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

The streams being evaluated within the LCR MSCP planning area are known to be occupied by flycatchers and have undergone section 7 consultation under the jeopardy standard related to the LCR

MSCP. There may be some minor benefits by the designation of critical habitat along the length of the LCR for land management actions because of the additional review required by federal actions; most likely those occurring on Service NWRs, BLM, and NPS land (the most prominent Federal land managers within the action area). The flycatcher is well known as a listed species using the LCR for migration and for nesting. Because these Federal agencies manage open space for public use and wildlife, the types of actions evaluated would mostly be associated with recreation, habitat management, and public access, and possibly some land resource use.

The benefits of flycatcher critical habitat designation on lands managed by Federal partners within the LCR MSCP planning area are limited. USBR manages lower Colorado River water storage, river regulation, and channel maintenance such that the river stays within its incised channel and can no longer flow onto the adjacent floodplain. As a result of the “Law of The River,” USBR has no discretion to change these water management actions to allow a better functioning stream to improve the riparian forest. Improving the duration, magnitude, and timing of river flow would generate overbank flooding, create and recycle riparian habitat, and, therefore, improve the quality and abundance of flycatcher habitat. Because of the lack of flooding and the prevention of overbank flows, the floodplain can no longer support the pre-dam riparian forest. While land managers (BLM, NPS, and Service NWRs) along the LCR floodplain do exercise discretionary actions on their lands, the success of their conservation actions and impacts of other actions to restore pre-dam riparian forests are limited by the impacts of water management. Overall, the riparian forest and flycatcher habitat managed by these land management agencies are not expected to be harmed further by site-specific land management actions because the quality of vegetation has already been degraded. To the extent that remaining patches of riparian habitat and flycatcher habitat continue to exist, they are of great value for flycatcher conservation. As a result, past section 7 consultations on land management agency actions within the proposed critical habitat along the LCR show that land management agencies conserve existing riparian vegetation and explore innovative strategies outside of the restrictions on water management to improve vegetation quality that could be used by flycatchers. Because the regulated

stream flow has caused habitat degradation and the “Law of The River” prevents any change in water management that can improve the riparian forest, land management agencies are unable to impact these river flow conditions, nor are they able to impact river flow conditions through non-discretionary mandatory reasonable and prudent measures or alternatives resulting from any possible future section 7 consultation.

We also believe there would be few additional benefits would be derived from including the five tribes within the LCR MSCP planning area as flycatcher critical habitat, beyond what will be achieved through the implementation of their management plans. The principal benefit of any designated critical habitat is that activities in and affecting such habitat require consultation under section 7 of the Act. Such consultation would ensure that adequate protection is provided to avoid destruction or adverse modification of critical habitat. No different than our description above, we expect that the degraded environmental baseline caused by water storage, river regulation, and channel maintenance would cause similar evaluations and conclusions in section 7 consultations on tribal lands within the LCR MSCP planning area. However, our consultation history to date shows that other than development of the LCR MSCP and accompanying section 7 consultation, no formal consultations with the BIA or other agencies on flycatchers or its habitat have occurred on tribal lands within the LCR MSCP planning area. Additionally, because these tribes are also implementing their Flycatcher Management Plans that preserves existing habitat, similarly within the limitations caused by regulation of the Colorado River, there are likely few regulatory benefits to be gained from a designation of flycatcher critical habitat.

Another important benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners, agencies, tribes, and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the flycatcher that reaches a wide audience, including parties engaged in conservation activities, is valuable. The designation of critical habitat may also strengthen or reinforce some Federal laws such as the Clean Water Act. These laws analyze the potential for projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise

be missed in the review process for these other environmental laws.

We believe that there would be little educational and information benefit or conservation from reinforcing other environmental laws and regulations gained from including the LCR MSCP planning area within the flycatcher critical habitat designation, because this is a well-known flycatcher management and recovery area. Through the development and implementation of the LCR MSCP, the development and completion of the Recovery Plan, the 2005 flycatcher critical habitat proposal, the development of land management plans, and the creation of flycatcher specific tribal management plans, the value of the LCR and riparian habitat for the flycatcher is well established. Consequently, we believe that the informational benefits have already occurred through past actions even though the LCR MSCP planning area is not designated as critical habitat. The importance of the LCR MSCP planning area for flycatcher conservation and to meet conservation goals established for the LCR Recovery and Management Units is well understood by managing agencies, Native American tribes, private industry, and public, State, and local governments.

The conservation and enhancement of riparian habitat is a primary land management target of the LCR MSCP partners, land management agencies, and tribal governments along the LCR MSCP planning area because of the previous and long-term impacts attributed to LCR regulation. These land management agencies and LCR MSCP partners represent a large proportion of the land ownership and management within the LCR MSCP planning area and land surrounding the Colorado River. Additionally, water delivery to western States is one of the uses of the Colorado River, and those providers are LCR MSCP partners. As a result, of the broad land ownership along and surrounding the Colorado River, and water delivery interests, each of these entities is well aware of the importance of the LCR for the flycatcher, the importance of maintaining water quality, and the challenges to improve riparian habitat as a result of river regulation, and therefore the educational benefit and support of other laws and regulations is minimized. For the reasons described above and more specifically, because formal section 7 consultations will likely result in only discretionary conservation recommendations due to existing management efforts, we believe there is a low probability of mandatory elements arising from formal section 7 consultations. Therefore, we find the

section 7 consultation process for a designation of critical habitat is unlikely to result in additional protections for the flycatcher on lands within the LCR MSCP planning area (which includes NPS, Service, BLM, tribal lands, and non-Federal lands).

#### Benefits of Exclusion—Lower Colorado River Multi-Species Conservation Plan

The benefits of excluding the LCR from the Lake Mead high water mark to Mexico (including a small portion of the lower Bill Williams River in Arizona) from being designated as critical habitat are considerable, and include the conservation measures described above (land acquisition, management, and development) and those associated with implementing conservation through enhancing and developing partnerships.

A small benefit of excluding the LCR from critical habitat includes some reduction in administrative costs associated with engaging in the critical habitat portion of section 7 consultations. Administrative costs include time spent in meetings, preparing letters and biological assessments, and in the case of formal consultations, the development of the critical habitat component of a biological opinion. However we anticipate that the costs to perform the additional critical habitat and associated adverse modification analysis would not be significant.

The exclusion of the LCR from critical habitat as a result of the LCR MSCP can help facilitate other cooperative conservation activities with other similarly situated dam operators or landowners. Continued cooperative relations with the three States and a myriad of stakeholders is expected to influence other future partners and lead to greater conservation than would be achieved through multiple site-by-site, project-by-project efforts, and associated section 7 consultations. With the current degraded condition of the environmental baseline and limitations associated with changes to dam operations, the commitment to develop and manage over 1,600 ha (4,000 ac) of flycatcher habitat is significant. The benefits of excluding lands within the LCR MSCP plan area from critical habitat designation include recognizing the value of conservation benefits associated with these HCP actions; encouraging actions that benefit multiple species; encouraging local participation in development of new HCPs; and facilitating the cooperative activities provided by the Service to landowners, communities, and counties in return for their voluntary adoption of the HCP.

The LCR MSCP will help generate important status and trend information for flycatcher recovery. In addition to specific flycatcher conservation actions, the development and implementation of this HCP provides regular monitoring of flycatcher habitat, distribution, and abundance over the 50-year permit.

Failure to exclude the LCR MSCP planning area could be a disincentive for other entities contemplating partnerships as it would be perceived as a way for the Service to impose additional regulatory burdens once conservation strategies have already been agreed to. Private entities are motivated to work with the Service collaboratively to develop voluntary HCPs because of the regulatory certainty provided by an incidental take permit under section 10(a)(1)(B) of the Act with the No Surprises Assurances. This collaboration often provides greater conservation benefits than could be achieved through strictly regulatory approaches, such as critical habitat designation. The conservation benefits resulting from this collaborative approach are built upon a foundation of mutual trust and understanding. It has taken considerable time and effort to establish this foundation of mutual trust and understanding, which is one reason it often takes several years to develop a successful HCP. Excluding this area from critical habitat would help promote and honor that trust by providing greater certainty for permittees that once appropriate conservation measures have been agreed to and consulted on for listed and sensitive species additional consultation will not be necessary.

HCP permittees and stakeholders submitted comments that they view critical habitat designation along the LCR as unwarranted and an unwelcome intrusion to river operations, and an erosion of the regulatory certainty that is provided by their incidental take permit and the No Surprises assurances. Additionally, the LCR MSCP partners and stakeholders sent comments of support for exclusion of all the LCR MSCP partners within the planning area, specifically Service NWRs because they were not initially identified as locations we were considering for exclusion. Having applicants understand the Service's commitment will encourage continued partnerships with these permittees that could result in additional conservation plans or additional lands enrolled in HCPs.

Our collaborative relationships with the LCR MSCP permittees clearly make a difference in our partnership with the numerous stakeholders involved and influence our ability to form

partnerships with others. Concerns over perceived added regulation potentially imposed by critical habitat harms this collaborative relationship by leading to distrust. Our experience has demonstrated that successful completion of one HCP has resulted in the development of other conservation efforts and HCPs with other landowners. Partners associated with the LCR MSCP also established HCPs with the Service in central Arizona.

There are additional considerable benefits from excluding the five tribes along the LCR, and other than landowners and partners within the LCR MSCP planning area. The benefits of excluding tribal Lands from designated critical habitat specifically include the advancement of our Federal Indian Trust obligations and our deference to tribes to develop and implement tribal conservation and natural resource management plans for their lands and resources, which includes the flycatcher. Benefits associated with excluding tribes and other land owners and managers also include: (1) The maintenance of effective working relationships to promote the conservation of the flycatcher and its habitat; (2) the allowance for continued meaningful collaboration and cooperation; (3) the provision of conservation benefits to riparian ecosystems and the flycatcher and its habitat that might not otherwise occur; and (4) the reduction or elimination of administrative and/or project modification costs as analyzed in the economic analysis.

During the development of the 2011 flycatcher critical habitat proposal, our previous 2005 flycatcher critical habitat proposal, and other previous efforts such as development of the Recovery Plan, we have met and communicated in other ways with tribes to discuss how they might be affected by the regulations associated with flycatcher management, flycatcher recovery, and the designation of critical habitat. As such, we established relationships specific to flycatcher conservation. As part of our relationship, we provided technical assistance to each of these tribes to develop measures to conserve the flycatcher and its habitat on their lands. These measures are contained within the management and conservation plans that we have in our supporting record for this decision (see discussion above). These proactive actions were conducted in accordance with Secretarial Order 3206, "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act" (June 5, 1997); the relevant provision of the Departmental Manual of the Department

of the Interior (512 DM 2); and Secretarial Order 3317, "Department of Interior Policy on Consultation with Indian Tribes" (December 1, 2011). We believe that these tribes should be the governmental entities to manage and promote flycatcher conservation on their lands. During our communication with these tribes, we recognized and endorsed their fundamental right to provide for tribal resource management activities, including those relating to riparian ecosystems.

The benefits of excluding this HCP from critical habitat designation include relieving Federal agencies, State agencies, landowners, tribes, communities, and counties of any additional regulatory burden for water management actions that might be imposed by critical habitat. The LCR MSCP took many years to develop and, upon completion, became a river long conservation plan that is consistent with the flycatcher recovery objectives within the planning area. This HCP provides flycatcher conservation benefits and commitments toward habitat development and management, and flycatcher surveys and studies that could not be achieved through project-by-project section 7 consultations. Imposing an additional regulatory review after the HCP is completed, solely as a result of the designation of critical habitat, may undermine conservation efforts and partnerships in many areas. In fact, it could result in the loss of species' benefits if future participants abandon the voluntary HCP process. Designation of critical habitat along the LCR could be viewed as a disincentive to those entities currently developing HCPs or contemplating them in the future.

#### Benefits of Exclusion Outweigh the Benefits of Inclusion—Lower Colorado River Multi-Species Conservation Plan

We have determined that the benefits of excluding the LCR MSCP planning area along the LCR within the States of Arizona, California, and Nevada from the conservation space of Lake Mead to Mexico (and a small portion of the lower Bill Williams River in Arizona) from the designation of flycatcher critical habitat on all Federal, State, tribal, and non-Federal lands outweigh the benefits of inclusion, and will not result in extinction of the flycatcher.

Under section 7 of the Act, critical habitat designation will provide little additional benefit to the flycatcher within the boundaries of the LCR MSCP. The catalyst for the LCR MSCP was largely a result of the jeopardy biological opinion (Service 1997, entire) for the flycatcher to the USBR for its

LCR operations. The Law of the River, which protects the regulation and delivery of Colorado River water to the western United States, prevents altering the regulation of the Colorado River for the benefit of a more naturally functioning system, which can create and recycle flycatcher habitat. As a result, the development of the LCR MSCP and its Implementing Agreement are designed to ensure flycatcher conservation within the planning area and includes management measures to protect, restore, enhance, manage, and monitor flycatcher habitat (along the Colorado River and at mitigation sites). The adequacy of LCR MSCP conservation measures to protect the flycatcher and its habitat have undergone evaluation under section 7 consultation under the Act, including proposed critical habitat in 2005 prior to approval of the plan, reaching a non-jeopardy and no adverse modification conclusion. Therefore, the benefit of including the LCR MSCP planning area to require section 7 consultation for critical habitat is minimized.

The commitment by the LCR MSCP partners to flycatcher conservation throughout the Lake Mead to Mexico planning area (and a portion of the lower Bill Williams River) is considerable. The LCR MSCP commits to developing, managing, and protecting 1,639 ha (4,050 ac) of flycatcher nesting habitat within the boundaries of their planning area. As described above, much of these habitats are expected to occur within agricultural fields adjacent to river. The culmination of these efforts is anticipated to surpass goals recommended in the Recovery Plan; maintain, develop and improve migration, dispersal, sheltering, and foraging habitat; develop metapopulation stability; and protect against catastrophic losses.

Additional riparian habitat along the river that can be used by flycatchers, mostly as migratory habitat and also as nesting habitat, occurring across thousands of hectares (acres), will collectively be restored, managed, and maintained on NWRs (Havas, Cibola, Imperial, and Bill Williams River), Federal lands (NPS and BLM), and tribal lands (Hualapai, Colorado River, Chemehuevi, Fort Mojave, and Quechan—Fort Yuma) along the LCR within the area covered by the LCR MSCP.

This HCP involved public participation through public notices and comment periods associated with the NEPA process prior to being approved. Additionally, this HCP is one of the largest HCPs in the country, with an extensive list of stakeholders and

permittees from California, Arizona, and Nevada that took about a decade to complete. Therefore, managing agencies, States, counties, cities, and other stakeholders are aware of the importance of the LCR for the flycatcher. For these reasons, we believe that designation of critical habitat along the LCR MSCP planning area would provide little additional educational benefit or benefit from other laws and regulations.

Covered activities under the LCR MSCP are not the only possible impacts to flycatcher habitat along the LCR. There are continued projects developed, carried out, funded, and permitted by Federal agencies such as USBR and BLM that are not covered by the LCR MSCP. Fire management, habitat restoration, recreation, and other activities have the ability to adversely affect the flycatcher and critical habitat. Minor changes in habitat restoration, fire management, and recreation could occur as result of a critical habitat designation in the form of additional discretionary conservation recommendations to reduce impacts to critical habitat. Therefore, if the LCR was designated as critical habitat, there may be some benefit through consultation under the adverse modification standard for actions not covered by the LCR MSCP. But, as explained above, the habitat along the LCR is so degraded that it is unlikely that a section 7 consultation under an adverse modification standard would result in mandatory elements (i.e., reasonable and prudent alternatives) within the LCR MSCP planning area.

In reaching the conclusion that benefits of exclusion of the LCR MSCP planning area outweigh the benefits of inclusion as flycatcher critical habitat, we have weighed the benefits of including these lands as critical habitat with an operative HCP and management by NWRs, tribal Lands, and others, and without critical habitat. Implementation of flycatcher conservation included within the LCR MSCP planning area, combined with the conservation efforts of other land managers, is anticipated to result in over 1,639 ha (4,050 ac) of flycatcher habitat. Excluding the LCR within the LCR MSCP planning area would eliminate some small additional administrative effort and cost during the consultation process pursuant to section 7 of the Act. Excluding the LCR MSCP planning area would continue to help foster development of future HCPs and strengthen our relationship with Arizona, California, and Nevada permittees and stakeholders, eliminating regulatory uncertainty associated with permittees and



stakeholders. Excluding the LCR MSCP planning area eliminates any possible risk to water storage, delivery, diversion and hydroelectric production to Arizona, California, and Nevada, and therefore significant potential economic costs due to a critical habitat designation. We have therefore concluded that the benefits to the flycatcher and its habitat as result of the improvement, maintenance, and management activities attributed to the LCR MSCP, and those additional efforts conducted by NWRs, tribes, and other land managers, outweigh those that would result from the addition of a critical habitat designation. We have therefore excluded these lands from the final critical habitat designation pursuant to section 4(b)(2) of the Act.

#### Exclusion Will Not Result in Extinction of the Species—Lower Colorado River Multi-Species Conservation Plan

Exclusion of the Colorado River within the LCR MSCP planning area will not result in extinction of the flycatcher. The amount of land being established as result of implementing the LCR MSCP, combined with management by other land managers, is anticipated to be able to reach recovery goals established for these LCR Management Units. The Implementation Agreement establishes a 50-year commitment to accomplish these tasks. Overall, we expect greater flycatcher conservation through these commitments than through project-by-project evaluation implemented through a critical habitat designation. As a result of the commitment toward flycatcher conservation, we do not expect that exclusion will result in extinction of the flycatcher.

#### Pahranagat Management Unit

##### Key Pittman State Wildlife Area Management Plan

Key Pittman Wildlife Management Area (Key Pittman) is located in Pahranagat Valley in Lincoln County, Nevada, and encompasses 539 ha (1,332 ac) of diverse habitats. The entirety of the water in Key Pittman originates at Hiko Springs and is delivered to Frenchy Lake, Nesbitt Lake, impoundments, and irrigated fields via pipes and ditches. The majority of Pahranagat Valley is in private ownership with modified systems of springs, outflow ditches, agricultural fields, ponds, and urban development. We proposed 3.9 km (2.5 mi) of area occurring in Key Pittman as critical habitat.

The NDOW owns and manages Key Pittman. The Nevada Fish and Game

Commission purchased portions of the area in 1962 and 1966, using Federal Aid in Wildlife and Sport Fish Restoration Act funds, primarily for waterfowl hunting, and as a secondary goal, to improve habitat for waterfowl and other wetland species. Pursuant to Federal Aid regulations, the property must continue to serve the purpose for which it was purchased (16 U.S.C. 669–669i; 50 Stat. 917).

The NDOW first conducted flycatcher surveys at Key Pittman in 1999, and observed the successful nesting of two pairs of flycatchers. At that time, approximately 0.57 ha (1.4 ac) of suitable coyote willow habitat existed. Over the last decade, the vegetation has matured and now provides 1.4 ha (3.6 ac) of suitable habitat consisting of 15 small stands of coyote willow patches surrounded by dry upland scrub and bulrush marsh along the western edge of Nesbitt Lake.

A management plan for Key Pittman, which included strategies for managing flycatcher habitat, was completed in April 2005, to provide a framework for implementing management actions for the next 10 years (NDOW 2005, entire). Specific strategies identified in the plan to maintain and enhance riparian systems to benefit the flycatcher and other neotropical migratory birds include: (1) Fencing of willow habitat patches along Nesbitt Lake; (2) maintenance of high water levels at Nesbitt Lake from April 15 through August 1 to inundate the flycatcher habitat and to encourage the establishment of willows; (3) commitment to monitor the population status of the flycatcher at Key Pittman; and (4) planting of cottonwood, coyote willow, and ash throughout Key Pittman.

This management plan has been effectively implemented to improve flycatcher habitat at Key Pittman. In 2008, NDOW completed fencing to exclude livestock grazing from the coyote willow patches along the west side of Nesbitt Lake, and currently maintains the fence annually. Since the fencing was completed, monitoring of the willows has shown an increase in health, vigor, and expansion of the patches.

NDOW implements a water management plan that typically inundates the willow patches with water from the lake in mid-April to ensure habitat conditions are suitable for breeding flycatchers. As water is slowly lowered from the lake throughout the breeding season, the water recedes 20 to 30 m from the willow patches, leaving moist soil by the end of June or July.

Annual flycatcher surveys at Key Pittman continue to be coordinated by NDOW through the Endangered Species Act Traditional Section 6 Funds Program. A total of 11 to 18 flycatcher territories per year have been documented at Key Pittman from 2007 to 2011, a large increase from the 2 pairs documented in 1999. Flycatcher territories at Key Pittman are important for the recovery of the species as they account for approximately half of the total number of known territories throughout the Pahranagat Management Unit.

Although active plantings have not yet been completed, NDOW may plan future habitat enhancement projects dependent on funding opportunities. NDOW has successfully managed to increase the health of existing willow patches, which has encouraged the recruitment of willows. As previously described, NDOW has enhanced existing willows with the completion of their fencing project.

#### Benefits of Inclusion—Key Pittman State Wildlife Area

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

The stream within the Key Pittman Wildlife Area being addressed is known to be occupied by flycatchers and has been evaluated under section 7 of the Act related to the receipt of Federal funding toward land management. We believe there is minimal benefit from designating critical habitat for the flycatcher at Key Pittman. As previously discussed, the principal benefit of designated critical habitat is that activities affecting that habitat require consultation under section 7 of the Act if a Federal action is involved. Such consultation would ensure adequate protection is provided to avoid destruction or adverse modification of critical habitat. Annually, NDOW consults with the Service regarding the distribution of federal funds to NDOW under the Wildlife and Sport Fish Restoration Program and Endangered Species Act Traditional Section 6 Funds Program. During these consultations, NDOW coordinates with the Service to incorporate conservation measures to

protect flycatcher habitat at Key Pittman and to ensure population status monitoring continues. Beyond these consultations, NDOW has not initiated any section 7 consultations or implemented any projects that may negatively affect flycatchers or their habitat at Key Pittman. Based on the limited consultation history, and land management commitments to support flycatcher habitat, any additional benefit afforded to flycatcher habitat from consulting on designated critical habitat at Key Pittman is negligible.

Another important benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners, agencies, tribes, and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the flycatcher that reaches a wide audience, including parties engaged in conservation activities, is valuable. The designation of critical habitat may also strengthen or reinforce some Federal laws such as the Clean Water Act. These laws analyze the potential for projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental laws.

The Service and NDOW are familiar with the flycatcher within Key Pittman. The Service and NDOW have addressed the flycatcher in prior section 7 consultations for Federal Aid toward funding for Key Pittman management actions. NDOW conducts flycatcher surveys within Key Pittman and addressed the flycatcher and protecting and improving its habitat within their Management Plan. Because of the overall conservation awareness and implementation of conservation actions associated with the Key Pittman management plan, we believe there is little educational benefit or support for other laws and regulations attributable to critical habitat beyond those benefits already achieved from listing the flycatcher under the Act.

#### Benefits of Exclusion—Key Pittman State Wildlife Area

A considerable benefit from excluding Key Pittman as flycatcher critical habitat is the maintenance and strengthening of ongoing conservation partnerships. In addition to the effort for Key Pittman, NDOW has a significant partnership role by developing and implementing flycatcher management guidance, conducting project assessment, implementing recovery strategies, conducting flycatcher surveys and

research, managing property, and working with private landowners towards wildlife conservation. The NDOW has demonstrated a willingness to develop, maintain, and manage Key Pittman flycatcher habitat, as well as habitat for other sensitive and non-listed species.

The success of NDOW's Key Pittman management of habitat protection and development has resulted in flycatcher habitat protection, an increase in territories, and a large portion of the known territories within the Pahranaagat Management Unit. NDOW has also effectively partnered with private landowners in the Pahranaagat Valley. These positive partnerships between private, State, and Federal organizations will encourage conservation practices for flycatcher habitat across land management boundaries. Exclusion of this area from the designation will maintain and strengthen the partnership between the Service and the NDOW and further flycatcher conservation efforts.

Our collaborative relationship with NDOW makes a difference in our partnership with the numerous stakeholders involved with flycatcher management and recovery and also influences our ability to form partnerships with others. Concerns over perceived added regulation potentially imposed by critical habitat could harm this collaborative relationship.

The benefits of excluding Key Pittman include some minimal reduction in administrative costs associated with engaging in section 7 consultations for critical habitat where NDOW may receive Federal funding. Administrative costs include additional time spent in meetings and preparing letters, and in the case of biological assessments and informal and formal consultations, the development of those portions of these documents that specifically address the critical habitat designation. The NDOW and FWS staff can, more appropriately, use these limited funds toward continuing to manage and improve NDOW lands for their stated purpose: wildlife conservation.

Because so many important flycatcher areas occur on lands managed by non-Federal entities, collaborative relationships are essential for flycatcher recovery. The flycatcher and its habitat are expected to benefit substantially from voluntary land management actions that implement appropriate and effective conservation strategies. The conservation benefits of critical habitat are primarily regulatory or prohibitive in nature. Where consistent with the discretion provided by the Act, the Service believes it is necessary to implement policies that provide

positive incentives to non-Federal landowners and land managers to voluntarily conserve natural resources and to remove or reduce disincentives to conservation (Wilcove *et al.* 1996, pp. 1–14; Bean 2002, p. 2). Thus, we believe it is vital for flycatcher recovery to build on continued conservation activities such as these with a proven partner, and to provide positive incentives for other non-Federal land managers who might be considering implementing voluntary conservation activities but have concerns about incurring incidental regulatory, administrative, or economic impacts. Flycatcher habitat conservation at Key Pittman is established through planning documents, has a long record of success, and resulted in successful flycatcher breeding sites.

#### Benefits of Exclusion Outweigh Benefits of Inclusion—Key Pittman State Wildlife Area

We have determined that the benefits of exclusion of all Key Pittman lands within the Pahranaagat Management Unit, which include the 3.9 km (2.5 km) stream segment beginning at Hiko Springs that travels down through Frenchy and Nesbitt Lakes outweigh the benefits of inclusion and will not result in extinction of the flycatcher. In making this exclusion, we have weighed the benefits of including these lands as critical habitat and the benefits without critical habitat.

The benefits of designating critical habitat for the flycatcher within Key Pittman are relatively small in comparison to the benefits of exclusion. We find that including this stream segment as critical habitat would result in minimal, if any additional benefits to the flycatcher. Because any potential impacts to flycatcher habitat from future projects with a Federal nexus will be addressed through a section 7 consultation with the Service under the jeopardy standard, we believe that the incremental conservation and regulatory benefit of designated critical habitat on Key Pittman would largely be redundant with the combined benefits of listing and existing management. We believe past, present, and future coordination with NDOW has provided and will continue to provide sufficient education regarding flycatcher habitat conservation needs on these lands, such that there would be minimal additional educational benefit or support from other laws and regulations from designation of critical habitat. Therefore, the incremental conservation and regulatory benefits of designating critical habitat within Key Pittman are minimal.

Because Key Pittman is a State-managed wildlife area, it is not expected that land use changes would occur that would alter the preservation of these lands. NDOW has provided assurance through conservation actions and consultations that the habitat at Key Pittman will be protected and enhanced. As previously described, NDOW's existing management plan has effectively guided the implementation of projects to ensure the protection of key flycatcher habitat at Key Pittman. NDOW strategies to protect and improve flycatcher habitat have resulted in an increase in the abundance of territories at Key Pittman since exclusion from critical habitat designation in 2005. Also, commitments through NDOW's implementation of their Key Pittman Management Plan will continue to foster the maintenance, development, and survey of flycatcher habitat. Also, because the flycatcher occurs on these lands with these management actions and conservation in place, we anticipate that any formal section 7 consultations conducted on critical habitat would only likely result in discretionary conservation recommendations.

The benefits of excluding Key Pittman from critical habitat are considerable. Key Pittman management, in cooperation and coordination with the Service, are based on appropriate land and water management strategies described in the Recovery Plan. These land and water management strategies of protecting and improving flycatcher and wildlife habitat within Key Pittman demonstrate an ongoing management commitment. Exclusion of these lands from critical habitat will help preserve and strengthen the conservation partnership we have developed with NDOW, reinforce those we are building with other entities, and foster future partnerships and development of management plans. In contrast, inclusion as critical habitat may negatively impact our relationships with NDOW and other existing or future partners. We are committed to working with NDOW to further flycatcher conservation and other endangered and threatened species. Therefore, in consideration of the relevant impact to our partnership and NDOW's ongoing conservation management practices, we determine that the considerable benefits of exclusion outweigh the benefits of inclusion in the critical habitat designation.

After weighing the benefits of including the 3.9-km (2.5-mi) stream segment within Key Pittman as flycatcher critical habitat against the benefit of exclusion, we have concluded that the benefits of excluding this

stream segment under the NDOW management pursuant to section 4(b)(2) of the Act outweigh any benefits that would result from designating these areas as critical habitat.

#### Exclusion Will Not Result in Extinction of the Species—Key Pittman State Wildlife Area

We find that the exclusion of this stream segment within Key Pittman will not lead to the extinction of the flycatcher. Flycatcher habitat protection and recovery is supported due to NDOW's long-term management of Key Pittman. NDOW has a long track record of Key Pittman management that has resulted in an increase in flycatcher territories. Additionally, the long-term protection of flycatcher habitat at Key Pittman is supported because the landscape will be preserved as open space due to its inclusion within a Wildlife Area. As a result of these conservation and management actions, exclusion of streams with Key Pittman will not result in extinction of the flycatcher.

#### Overton State Wildlife Area (Muddy River) Management Plan

The Overton Wildlife Management Area (OWMA) is located in Clark County, Nevada, and is managed by the State of Nevada's Department of Wildlife (NDOW). Stretches of both the Muddy River and Virgin River run through OWMA. OWMA encompasses a wide diversity of habitats within its 7,146 ha (17,657 ac). Approximately 20 percent of lands comprising OWMA are owned by the State of Nevada, and 80 percent are lands leased from BOR and NPS. Funding for the operation and maintenance of OWMA results primarily (74 percent) from Federal Aid in Wildlife Restoration Act funds with an additional 25 percent funded by the State, and 1 percent funded by Federal Aid in Sport Fish Restoration Act funds. Pursuant to Federal Aid regulations, the property must continue to serve the purpose for which it is funded, in this case for waterfowl as well as other wetland species (16 U.S.C. 669–669i; 50 Stat. 917).

Within the OWMA, we identified segments of both the Muddy River (3.1 km, 1.9 mi) included the Pahranaagat Management Unit and Virgin River (6.5 km, 4.0 mi) included in the Virgin Management Unit as proposed critical habitat and segments we were considering for exclusion. Following our analysis, we concluded that we would not exclude the Virgin River segment under section 4(b)(2) of the Act (see Summary of Issues and Recommendations section).

The Muddy River area of OWMA is managed in part for intensive development, agriculture, and wildlife. Water from the Muddy River is controlled on the north side of OWMA by a diversion structure that releases water through a channel to ditches that distribute water to fields. Regular maintenance is conducted to keep the channel clear of silt and debris in order to reduce water from backing up above OWMA during flood events. Water management on the Muddy River side of OWMA is guided by a plan that is adjusted each year based on projected water supplies and is highly controlled by Lake Mead water levels as managed by BOR.

Occupied breeding flycatcher habitat on the Muddy River side of OWMA occurs primarily within a 200-meter (660-ft) span of the main channel of the Muddy River and consists of mixed tamarisk and willow habitat. Prior to 2005, limited surveys for flycatchers were conducted. From 2005 to 2011, 4 to 7 flycatcher territories per year have been documented in these riparian areas.

An OWMA management plan, which included strategies for managing flycatcher habitat, was completed in December 2000, to provide a framework for implementing management actions for the next 10 years (Nevada Department of Conservation and Wildlife Resources, 2000, entire). This plan is targeted for revision in the near future. Specific strategies identified in the plan to maintain and enhance riparian systems to benefit the flycatcher and other neotropical migratory birds at OWMA include: (1) Selecting sites with dependable water sources to plant a minimum of one willow patch per year at least 0.10 ha (0.25 ac) in size; establish native black and coyote willow in patches and inundate them at 2 to 3 week intervals; and (2) use volunteer groups of native riparian and upland riparian species to establish plantings.

Between 2000 and 2002, willow plantings were implemented along several ponds and fields on the Muddy River side of OWMA. Two of the three plantings were impacted due to beavers, but one planting survived and currently provides migratory habitat for flycatchers. An additional 2 acres of willows were established around various ponds and are flooded periodically throughout the growing season. Future sites will be considered for plantings and seeding as water delivery systems are improved and funding opportunities become available.

During the flycatcher breeding season in 2005, NDOW bulldozed a 0.30-ha

(0.74-ac) area along the Muddy River to repair damage to a water control system caused by floods occurring in the winter of 2004 to 2005. This work occurred mostly in occupied flycatcher habitat, where one known territory was located. Additional repair work was implemented over the winter of 2007 to 2008, and involved using heavy equipment to dredge two stretches of the channel of the Muddy River. This resulted in the removal of a 10-to 15-m (30-to 50-ft) swath of vegetation along a 0.75-km (0.47-mi) long stretch of the western bank of the river. Although not completed during the breeding season, the dredging ended upstream within 10 m (30 ft) of a nest area that had been active from 2005 to 2007, and then resumed downstream within 5 m (16 ft) of another nest.

Since the winter 2007 to 2008 repair work, NDOW has worked closely with the Service through section 7 consultations to develop conservation measures to ensure future operations and maintenance activities along the Muddy River of OWMA do not negatively impact occupied flycatcher habitat. NDOW also intends to incorporate these conservation measures in future revisions of the OWMA management plan.

#### Benefits of Inclusion—Overton State Wildlife Area

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

The stream within the OWMA being addressed is known to be occupied by flycatchers and has been evaluated under section 7 of the Act related to the receipt of Federal funding toward land management. We believe there is minimal benefit from designating critical habitat for the flycatcher along the Muddy River within OWMA. As previously discussed, the principal benefit of designated critical habitat is that activities affecting that habitat require consultation under section 7 of the Act if a Federal action is involved. Such consultation would ensure adequate protection is provided to avoid destruction or adverse modification of critical habitat. Annually, NDOW has consulted with the Service regarding the

distribution of Federal funds to OWMA under the Wildlife Sport Fish Restoration Program and Endangered Species Act Traditional Section 6 Funds Program. During these informal consultations, NDOW has coordinated with the Service to incorporate conservation measures to protect flycatcher habitat at OWMA and to ensure population status monitoring continues. These procedures generated the opportunity to discuss the land management actions that altered flycatcher habitat in 2005, and put in place procedures to prevent them from occurring in the future. Beyond these informal consultations, NDOW has not initiated any formal section 7 consultations at OWMA. Based on the limited formal consultation history, close coordination, and the overall management success of flycatcher habitat along the Muddy River, any additional benefit afforded to flycatcher habitat from consulting on designated critical habitat at OWMA is likely negligible. Beyond these consultations, NDOW has not sought any section 7 consultations with the Service at OWMA. Based on the limited formal consultation history, any additional benefit afforded flycatcher habitat from consulting on designated critical habitat at Overton is negligible.

Another important benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners, agencies, tribes, and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the flycatcher that reaches a wide audience, including parties engaged in conservation activities, is valuable. The designation of critical habitat may also strengthen or reinforce some Federal laws such as the Clean Water Act. These laws analyze the potential for projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental laws.

The Service and NDOW are familiar with the flycatcher within OWMA. The Service and NDOW have addressed the flycatcher in prior section 7 consultations for Federal Aid toward funding for OWMA management actions. NDOW conducts flycatcher surveys within OWMA and addressed the flycatcher and protecting and improving its habitat within their Management Plan. NDOW manages flycatcher habitat and conducts flycatcher surveys at both the OWMA and Key Pittman Wildlife Area. Because

of the need to address and correct the situation that led to alteration flycatcher habitat in 2005, OWMA has increased its overall flycatcher conservation awareness. With the continued implementation of conservation actions associated with their OWMA management plan, we believe there is little educational benefit or support for other laws and regulations attributable to critical habitat beyond those benefits already achieved from listing the flycatcher under the Act.

#### Benefits of Exclusion—Overton State Wildlife Area

A considerable benefit from excluding OWMA as flycatcher critical habitat is the maintenance and strengthening of ongoing conservation partnerships. In addition to the effort for OWMA, NDOW has a significant partnership role by developing and implementing flycatcher management guidance, conducting project assessment, implementing recovery strategies, conducting flycatcher surveys and research, managing property, and working with private landowners towards wildlife conservation. The NDOW has demonstrated a willingness to develop, maintain, and manage portions of the Muddy River for flycatcher habitat, as well as habitat for other sensitive and non-listed species.

Our collaborative relationship with NDOW makes a difference in our partnership with the numerous stakeholders involved with flycatcher management and recovery and also influences our ability to form partnerships with others. Concerns over perceived added regulation potentially imposed by critical habitat could harm this collaborative relationship.

Exclusion of this area from the designation would maintain and strengthen the partnership between the Service and the NDOW and further flycatcher conservation efforts. The success of NDOW's OWMA management of habitat protection and development has resulted in a persistent population of flycatcher territories, an important component to the recovery of flycatchers in the Pahrangat Management Unit and the LCR Recovery Unit. NDOW is a key partner to the Service in species conservation throughout the State of Nevada and manages important flycatcher habitat at OWMA. Because some of the lands at OWMA are leased, NDOW partners with BOR and NPS to manage OWMA for multiple-use objectives. Additionally, NDOW coordinates with private landowners to address wildlife and habitat management concerns that cross ownership boundaries. These positive

partnerships between private, State, and Federal organizations will encourage conservation practices for flycatcher habitat across land management boundaries. Excluding OWMAs from critical habitat designation will enhance these existing working relationships. These positive partnerships between private, State, and Federal organizations will encourage conservation practices for flycatcher habitat across land management boundaries.

Because so many important flycatcher areas occur on lands managed by non-Federal entities, collaborative relationships are essential for flycatcher recovery. The flycatcher and its habitat are expected to benefit substantially from voluntary land management actions that implement appropriate and effective conservation strategies. The conservation benefits of critical habitat are primarily regulatory or prohibitive in nature. Where consistent with the discretion provided by the Act, the Service believes it is necessary to implement policies that provide positive incentives to non-Federal landowners and land managers to voluntarily conserve natural resources and to remove or reduce disincentives to conservation (Wilcove *et al.* 1996, pp. 1–14; Bean 2002, p. 2). Thus, we believe it is vital for flycatcher recovery to build on continued conservation activities such as these with a proven partner, and to provide positive incentives for other non-Federal land managers who might be considering implementing voluntary conservation activities but have concerns about incurring incidental regulatory, administrative, or economic impacts. Flycatcher habitat conservation at Key Pittman is established through planning documents, has a long record of success, and resulted in successful flycatcher breeding sites.

The benefits of excluding OWMAs include some minimal reduction in administrative costs associated with engaging in section 7 consultations for critical habitat where NDOW may receive Federal funding. The costs associated with section 7 consultation for critical habitat would include a small increase in time and money spent in preparing the applicable documents required during the Federal Aid funding cycle. Administrative costs also include additional time spent in meetings and preparing letters, and in the case of biological assessments and informal and formal consultations, the development of those portions of these documents that specifically address the critical habitat designation. The NDOW and FWS staff can, more appropriately, use these limited funds toward continuing to manage and improve NDOW land for

their stated purpose, wildlife conservation.

#### Benefits of Exclusion Outweigh Benefits of Inclusion—Overton State Wildlife Area

We have determined that the benefits of excluding 3.1 km (1.9 mi) of the Muddy River on OWMAs lands within the Pahranaagat Management Unit outweigh the benefits of inclusion and will not result in extinction of the flycatcher. In making this exclusion, we have weighed the benefits of including these lands as critical habitat and the benefits without critical habitat.

The benefits of designating critical habitat for the flycatcher within OWMAs are relatively small in comparison to the benefits of exclusion. We find that including the Muddy River stream segment as critical habitat would result in minimal, if any additional benefits to the flycatcher. Because any potential impacts to flycatcher habitat from future projects with a Federal nexus will be addressed through a section 7 consultation with the Service under the jeopardy standard, we believe that the incremental conservation and regulatory benefit of designated critical habitat on OWMAs would largely be redundant with the combined benefits of listing and existing management. We believe past, present, and future coordination with NDOW has provided and will continue to provide sufficient education regarding flycatcher habitat conservation needs on these lands, such that there would be minimal additional educational benefit or support from other laws and regulations from designation of critical habitat. Therefore, the incremental conservation and regulatory benefits of designating critical habitat within OWMAs are minimal.

Because OWMAs is a State-managed wildlife area, the preservation of these lands for wildlife is not expected to change. NDOW has provided assurance through conservation actions and consultations that the habitat at OWMAs will be protected and enhanced. As previously described, NDOW's existing management plan has effectively guided the implementation of projects to ensure the maintenance of flycatcher populations at OWMAs. Commitments through NDOW's implementation of their OWMAs Management Plan will continue to foster the maintenance, development, and survey of flycatcher habitat. Also, because the flycatcher occurs on these lands with these management actions and conservation in place, we anticipate that any formal section 7 consultations conducted on critical habitat would only likely result

in discretionary conservation recommendations.

The benefits of excluding OWMAs from critical habitat are considerable. OWMAs management, in cooperation and coordination with the Service, are based on appropriate land and water management strategies described in the Recovery Plan. These land and water management strategies of protecting and improving flycatcher and wildlife habitat within OWMAs demonstrate an ongoing management commitment. Exclusion of these lands from critical habitat will help preserve and strengthen the conservation partnership we have developed with NDOW, reinforce those we are building with other entities, and foster future partnerships and development of management plans. In contrast, inclusion as critical habitat may negatively impact our relationships with NDOW and other existing or future partners. We are committed to working with NDOW to further flycatcher conservation and other endangered and threatened species. Therefore, in consideration of the relevant impact to our partnership and NDOW's ongoing conservation management practices, we determine that the considerable benefits of exclusion outweigh the benefits of inclusion in the critical habitat designation.

After weighing the benefits of including 3.1 km (1.9 mi) of the Muddy River within OWMAs as flycatcher critical habitat against the benefit of exclusion, we have concluded that the benefits of excluding this stream segment under the NDOW management pursuant to section 4(b)(2) of the Act outweigh any benefits that would result from designating these areas as critical habitat.

#### Exclusion Will Not Result in Extinction of the Species—Overton State Wildlife Area

We find that the exclusion of this Muddy River stream segment within OWMAs will not lead to the extinction of the flycatcher. Flycatcher habitat protection and recovery is supported due to NDOW's long-term management. NDOW has a long track record of OWMAs management that has resulted in the maintenance of flycatcher territories and the development of additional habitat. Additionally, the long-term protection of flycatcher habitat at OWMAs is supported because the landscape will be preserved as open space due to its inclusion within a Wildlife Area. As a result of these conservation and management actions, exclusion of the Muddy River will not result in extinction of the flycatcher.

## San Juan Management Unit

## Navajo Nation Management Plan

Please see the end of this section for a discussion about tribes from the Little Colorado, San Juan, Verde, Upper Gila, and Upper Rio Grande Management Units that submitted Management Plans.

## Southern Ute Tribe Management Plan

Please see the end of this section for a discussion about tribes from the Little Colorado, San Juan, Verde, Upper Gila, and Upper Rio Grande Management Units that submitted Management Plans.

## Verde Management Unit

## Salt River Project Horseshoe and Bartlett Dams HCP

Pursuant to the 1917 contract between Salt River Project (SRP) and the United States of America, the United States set aside land along the Verde River in Maricopa and Gila Counties, Arizona, for the purpose of developing irrigation facilities for SRP. Bartlett Dam was constructed in the 1930s, and Horseshoe Dam was completed in 1945. The United States turned over and vested in SRP the authority to care for, operate, and maintain all project facilities, of which Horseshoe and Bartlett Dams became integral components. SRP is two entities: the Salt River Project Agricultural Improvement and Power District, a political subdivision of the state of Arizona; and the Salt River Valley Water Users' Association, a private corporation. The District provides electricity to nearly 934,000 retail customers in the Phoenix area. It operates or participates in 11 major power plants and numerous other generating stations, including thermal, nuclear, natural gas and hydroelectric sources. SRP delivers an average of 1 million acre-feet of water each year for use on more than 97,000 ha (240,000 acres) or 970 square km (375 square mi) of shareholder lands, plus additional contract lands with water rights to the Salt and Verde rivers. Most of SRP's deliveries are to cities and urban irrigation uses, supplying much of the water for the Phoenix metropolitan population of more than 2.6 million people.

We proposed a 9.6 km (6.0 mi) segment of the Verde River within the conservation space of Horseshoe Lake as flycatcher critical habitat.

The Service issued an HCP permit to SRP under section 10(a)(1)(B) of the Act in 2008 for the operation of Horseshoe and Bartlett Dams. For the flycatcher specifically, incidental take is authorized as a result of the impacts to nesting habitat and breeding attempts from raising and lowering of the water

stored behind Horseshoe Dam for a period of 50 years.

The action area, as described in the Horseshoe Bartlett HCP, prepared for SRP by ERO Resources Corporation (ERO and SRP 2008, entire), extends farther from the location of these dams to areas where the impacts of water storage and delivery may occur because of the impacts to other species caused by water regulation. Specific flycatcher-related impacts were only identified within the high water mark of the Horseshoe Lake conservation space between 2,026 feet in elevation and Horseshoe Dam. The area within Horseshoe Lake is Federal land managed by the USFS. A tri-party agreement between SRP, USFS, and USBR (1979, entire) establishes a framework to maintain these water storage areas for their intended purpose.

Periodic changes in the level of the lake water of the Horseshoe Lake conservation space due to dam operations and water storage can result in the establishment and maintenance of nesting flycatcher habitat. This is because flycatchers nest or otherwise use vegetation that grows in the dry lakebed within the conservation space. Rising water levels or excessive drying can cause temporary losses and unavailability of this nesting habitat. The amount and timing of water stored in Horseshoe Lake can vary widely from year-to-year because of the relatively small amount of water storage space in Horseshoe Lake, the erratic nature of precipitation and run-off, and the arid nature of the Sonoran Desert.

It is estimated that between 24 to 182 ha (60 to 450 ac) of flycatcher nesting habitat will occur annually within the high water mark of Horseshoe Lake over the 50-year permit period of this HCP (ERO and SRP 2008, p. 120). The annual average of flycatcher habitat estimated to occur within the lake is 105 ha (260 ac) (ERO and SRP 2008, p. 120).

Since completion of the Horseshoe and Bartlett Dams HCP, a Horseshoe Lake fill-event occurred and confirmed our expectations about the continued persistence of flycatcher habitat and territories. While Horseshoe Lake water levels and flycatcher territory numbers fluctuate, territories continue to persist; the number of territories at Horseshoe Lake ranged from 6 territories in 2003, to a high of 20 in 2005, and most recently 10 in 2011 (SRP 2012, p. 16).

Under more favorable low water storage lake conditions, the area between the existing pool and the high water mark has supported the largest population of flycatchers known on the Verde River (approximately 20 territories). Along with the other

portions of the Verde River upstream and downstream of Horseshoe Lake, flycatcher populations at Horseshoe Lake will help to meet the 50 territory and habitat-related recovery goals recommended in the Recovery Plan (Service 2002, p. 85).

The 50-year Horseshoe Bartlett HCP conservation strategy focuses primarily on the protection and management of flycatcher habitat within the Horseshoe Lake conservation space through modified dam operations; acquisition and management of flycatcher habitat outside of Horseshoe Lake; and the implementation of measures to conserve Verde River water. SRP will modify dam operations to make flycatcher habitat available earlier in the nesting season and to maintain riparian vegetation at higher elevations within the conservation space whenever possible. A 61-ha (150-ac) parcel of flycatcher habitat was acquired along the upper Gila River near Fort Thomas, outside of the Verde Management Unit, and an additional 20 ha (50 ac) is being pursued for acquisition nearby. SRP's water supply protection program will focus on special projects to specifically benefit mitigation habitat such as ground water testing and modeling in the vicinity of mitigation lands, development and support of instream flow water rights, and research on the relationship between hydrology, habitat, and covered species under the HCP.

The non-jeopardy conclusion provided in our intra-service section 7 biological opinion, required in order to issue the Horseshoe Bartlett HCP permit, was based upon the persistence of varying degrees of occupied nesting flycatcher habitat within the Horseshoe Lake conservation space (under full operation of Horseshoe and Bartlett Dams with an HCP) that, along with other areas within the Verde Management Unit, could reach the numerical (50 territories) and habitat-related goals established in the Recovery Plan. Sections of the Verde River upstream and downstream of Horseshoe Lake along the Verde River within the Tonto National Forest and farther upstream throughout the Verde Valley also occur within the Verde Management Unit and can contribute areas with flycatcher habitat toward reaching recovery goals (Service 2002, p. 91).

## Benefits of Inclusion—Horseshoe and Bartlett Dams HCP

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the

continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

The Horseshoe Lake area being evaluated is known to be occupied by flycatchers and has undergone section 7 consultation under the jeopardy standard related to the Horseshoe and Bartlett Dams HCP and USFS actions. There may be some minor benefits by the designation of critical habitat within Horseshoe Lake, primarily because of the additional review required by USFS management of the lake bottom. However, the USFS management has appropriately managed recreation, access, land use, and wildfire that has conserved flycatcher habitat since the flycatcher was listed. The remote location of Horseshoe Lake makes it a destination that is difficult for the public to get to, and therefore reduces its public popularity and potential land-use stressors. Within the conservation space of Horseshoe Lake, there is no cattle grazing, or road and camping developments; recreation activities at the lake is mostly focused on angling. Additionally, because the purpose of the conservation space of Horseshoe Lake is to store water, it prevents significant land and water altering actions, such as the development of permanent structures within this open space area. We recently evaluated Tonto National Forest's Land Resource Plan (Service 2012, entire) and concluded that the majority of the USFS's standards and guidelines were found to benefit the flycatcher, and they would not jeopardize the flycatcher or adversely modify critical habitat. As a result, because of the conservation associated with implementing the HCP, flycatcher territories occurring within the Horseshoe Lake conservation space, and supporting USFS management, we believe these incremental benefits of a critical habitat designation are minimized. Formal consultations will likely result in only discretionary conservation recommendations due to existing appropriate management; therefore we believe there is a low probability of mandatory elements (i.e., reasonable and prudent alternatives) arising from formal section 7 consultations evaluating flycatcher critical habitat at Horseshoe Lake.

We have evaluated Horseshoe Lake Dam operations through implementation of the Horseshoe and Bartlett Dams HCP, and considered

impacts to flycatchers and flycatcher habitat, including how these may affect flycatcher recovery within the Verde Management Unit. The conservation strategies in the Horseshoe and Bartlett Dams HCP included habitat acquisition to account for each hectare (acre) of flycatcher habitat affected, management, and monitoring (see above). We concluded that Horseshoe Dam operations, while causing incidental take of flycatchers periodically, will support the development of flycatcher habitat over time, creating conditions that, along with the other portions of the Verde River within the Management Unit, can be anticipated to reach goals established in the Recovery Plan. Because of the non-jeopardy analysis completed in our section 7 consultation, continued function of Horseshoe Lake to establish flycatcher habitat for recovery, and the comprehensive conservation strategies implemented in the HCP, we believe there is a low probability of mandatory elements (i.e., reasonable and prudent alternatives) arising from formal section 7 consultations that include consideration of Horseshoe Dam operations on designated flycatcher critical habitat at Horseshoe Lake.

Another important benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners, agencies, tribes, and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the flycatcher that reaches a wide audience, including parties engaged in conservation activities, is valuable. The designation of critical habitat may also strengthen or reinforce some Federal laws such as the Clean Water Act. These laws analyze the potential for projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental laws.

We believe that there would be little educational and informational benefit gained from including Horseshoe Lake within the designation, because this area is well known as an important area for flycatcher management and recovery. For example, flycatcher habitat research has occurred at Horseshoe Lake by Arizona State University and SRP; the Horseshoe Bartlett HCP was developed over multiple years and was completed in 2008; and the Horseshoe Lake area was proposed as flycatcher critical habitat in 2004 and excluded in 2005. Additionally, since the early 2000s, Horseshoe Lake flycatchers have been

discussed by management agencies while meeting to discuss the status of the flycatcher and current management issues occurring in Roosevelt Lake and other nearby areas. Consequently, we believe that the informational benefits have already occurred through past actions even though this area is not designated as critical habitat. The importance of Horseshoe Lake for conservation of the flycatcher, its importance to the Verde Management Unit, and to the population of flycatchers in the State of Arizona has already been realized by managing agencies, including the public, State and local governments, and Federal agencies.

#### Benefits of Exclusion—Horseshoe and Bartlett Dams HCP

The benefits of excluding the area within the high-water mark (below an elevation of 618 m, 2026 feet) of Horseshoe Lake from being designated as critical habitat are considerable, and include the conservation measures described above (dam operation modifications, land acquisition and management, and water conservation efforts) and those associated with implementing conservation through enhancing and developing partnerships.

The Horseshoe Bartlett HCP has and will continue to help generate important status and trend information and conservation toward flycatcher recovery. SRP will modify dam operations to make flycatcher habitat available earlier in the nesting season, purchase and manage 81 ha (200 ac) of habitat for flycatcher recovery, and implement water protection programs on the Verde River. In addition to those specific flycatcher conservation actions, the development and implementation of this HCP provides regular monitoring of flycatcher habitat, distribution, and abundance over the 50-year permit at Horseshoe Lake. SRP is currently implementing innovative monitoring of riparian habitat abundance and flycatcher habitat suitability through satellite image-based models (Hatten and Paradzick 2003, entire; SRP 2012, pp. 13–14).

Because of the importance of the Horseshoe Lake conservation space for water storage, there is no expectation that any considerable development or changes to the landscape would result in reducing the overall water storage space, and therefore the overall ability to develop riparian vegetation. Horseshoe Dam operates in a way that continues moves water out of the reservoir downstream to Bartlett Lake and canals in order to continuously create water storage conservation space,



and therefore area for flycatcher habitat to grow. Constant lake levels, which are not the desired condition at Horseshoe Lake for water storage or flycatcher habitat development, will not create abundant flycatcher habitat. On the contrary, dynamic lake levels that mimic the function of flooding on river systems are essential for creating habitat conditions needed by nesting flycatchers within Horseshoe Lake.

We determined in our intra-Service section 7 consultation jeopardy analysis for issuance of the Horseshoe Bartlett HCP permit that dam operations would not result in jeopardy to the flycatcher. One of the primary conservation values of critical habitat is to help sustain existing flycatcher populations. The threshold for reaching destruction or adverse modification at Horseshoe Lake, in an area where nesting flycatchers occur, would typically result in the inability for the habitat to sustain populations. Similarly, the threshold to jeopardize the continued existence of the species would also typically result in the inability of the habitat to sustain local populations. Flycatcher populations have persisted within the high water mark at Horseshoe Lake throughout increases and decreases in water storage. Ever since nesting flycatchers were detected in 2002, flycatcher territories have persisted within the Horseshoe Lake and additional territories have been detected along the Verde River. The expanding and contracting flycatcher habitat within the lake combined with dynamic habitat upstream and downstream along the Verde River support the overall flycatcher population within the Verde Management Unit. Therefore, the outcome of consultation under section 7 of the Act on Horseshoe and Bartlett Dam operations with critical habitat designated would not likely be materially different compared to the listing of the species alone.

Failure to exclude Horseshoe Lake could be a disincentive for other entities contemplating partnerships, as it would be perceived as a way for the Service to impose additional regulatory burdens once conservation strategies have already been agreed to. Private entities are motivated to work with the Service collaboratively to develop voluntary HCPs because of the regulatory certainty provided by an incidental take permit under section 10(a)(1)(B) of the Act with the "No Surprises" assurances. This collaboration often provides greater conservation benefits than could be achieved through strictly regulatory approaches, such as critical habitat designation. The conservation benefits resulting from this collaborative

approach are built upon a foundation of mutual trust and understanding. It takes considerable time and effort to establish this foundation of mutual trust and understanding, which is one reason it often takes several years to develop a successful HCP. Excluding this area from critical habitat would help promote and honor that trust by providing greater certainty for permittees that once appropriate conservation measures have been agreed to and consulted on for the flycatcher that additional consultation will not be necessary.

Through the development of the Horseshoe Bartlett HCP, we have generated additional partnerships with SRP and its stakeholders by developing collaborative conservation strategies for the flycatcher and the habitat upon which it depends for breeding, sheltering, foraging, migrating, and dispersing. The strategies within the HCP seek to achieve conservation goals for the flycatcher and its habitat, and thus can be of greater conservation benefit than the designation of critical habitat, which does not require specific actions. Continued cooperative relations with SRP and its stakeholders is expected to influence other future partners and lead to greater conservation than would be achieved through multiple site-by-site, project-by-project, section 7 consultations. For example, soon after completing the Roosevelt HCP, we partnered with SRP and its stakeholders to develop the Horseshoe and Bartlett Dam HCP where the flycatcher conservation was a key component. The benefits of excluding lands within the Horseshoe and Bartlett Dam HCP area from critical habitat designation include recognizing the value of conservation benefits associated with HCP actions; encouraging actions that benefit multiple species; encouraging local participation in development of new HCPs; and facilitating the cooperative activities provided by the Service to landowners, communities, and counties in return for their voluntary adoption of the HCP. Concerns over perceived added regulation potentially imposed by critical habitat could harm this collaborative relationship.

A benefit of excluding Horseshoe Lake from critical habitat includes a small reduction in administrative costs associated with engaging in the critical habitat portion of section 7 consultations. Administrative costs include time spent in meetings, preparing letters and biological assessments, and in the case of formal consultations, the development of the critical habitat component of a

biological opinion. However, because the flycatcher occurs at Horseshoe Lake, consultations evaluating jeopardy to the flycatcher would be expected to occur regardless of a critical habitat designation, and those costs to perform the additional analysis are not expected to be significant.

#### Benefits of Exclusion Outweigh the Benefits of Inclusion—Horseshoe Bartlett Dams HCP

We have determined that the benefits of exclusion of the conservation space of Horseshoe Lake below 618 m (2,026 feet) in elevation from the designation of flycatcher critical habitat on Federal lands managed by the USFS, as identified in the Horseshoe Bartlett HCP, outweigh the benefits of inclusion and will not result in extinction of the flycatcher. This is because current dam operations, management, and conservation efforts maintain the physical or biological features necessary to develop, maintain, recycle, and protect flycatcher habitat essential to its conservation. In making this finding, we have weighed the benefits of including these lands as critical habitat with an operative HCP and management by the USFS, and without critical habitat.

The benefits of designating critical habitat for the flycatcher at Horseshoe Lake are relatively small in comparison to the benefits of exclusion. We find that including Horseshoe Lake would result in very minimal, if any additional benefits to the flycatcher, because Horseshoe Dam operations will continue to foster the maintenance, development, and necessary recycling of habitat for the flycatcher in the long-term due to the dynamic nature of water storage and delivery. USFS management fosters the presence of flycatcher habitat, and there is virtually no risk of changes to the landscape within the Horseshoe Lake conservation space. As a result, we anticipate that formal section 7 consultations conducted on critical habitat will only likely result in discretionary conservation recommendations.

The benefits of excluding Horseshoe Lake from inclusion as critical habitat are considerable and varied. Excluding Horseshoe Lake will continue to help foster development of future HCPs and strengthen our partnership with Horseshoe Bartlett HCP permittees and stakeholders. Excluding Horseshoe Lake also eliminates regulatory uncertainty associated with the permittees HCP and the operation of Horseshoe and Bartlett Dams for water storage and flood control. The conservation benefits of implementing the Horseshoe and Bartlett Dam HCP are considerable and

include acquisition and management of flycatcher habitat, modifications of Horseshoe Dam operations to facilitate the persistence of flycatcher habitat, and long-term monitoring of flycatcher habitat and territories. These conservation measures are substantial and will result in greater flycatcher conservation benefits than what could be accomplished from a project-by-project evaluation through the incremental benefits of a critical habitat designation. Excluding Horseshoe Lake will also eliminate some additional administrative effort and cost during the consultation process pursuant to section 7 of the Act.

After weighing the benefits of including Horseshoe Lake as flycatcher critical habitat against the benefit of exclusion, we have concluded that the benefits of excluding the conservation space of Horseshoe Lake below an elevation 618 m (2026 feet), underneath the coverage of the Horseshoe Bartlett HCP and with the support of USFS management, outweigh those that would result from designating this area as critical habitat. We have therefore excluded these lands from this final critical habitat designation pursuant to section 4(b)(2) of the Act.

As mentioned below in our evaluation of SRP's Roosevelt HCP, SRP requested that their flycatcher mitigation property along the upper Gila River purchased as part of the measures to implement the Horseshoe Bartlett Dams HCP be designated as critical habitat. The mitigation property is not located within the Horseshoe lakebed, and may benefit from section 7 consultation. Therefore, based upon the comments received from SRP and the likely benefit of future section 7 consultation, the Secretary exercises his discretion under section 4(b)(2) of the Act, and determines that the mitigation properties acquired by SRP along the Gila River are included in this final designation as flycatcher critical habitat.

#### Exclusion Will Not Result in Extinction of the Species—Horseshoe and Bartlett Dams HCP

We find that the exclusion of the conservation space of Horseshoe Lake will not lead to the extinction of the flycatcher, nor hinder its recovery because Horseshoe and Bartlett Dam operations combined with the preservation of open space within the lake and USFS land management will ensure the long-term persistence and protection of flycatcher habitat at Horseshoe Lake. We determined in our intra-Service section 7 biological opinion for the issuance of the Horseshoe and Bartlett Dams HCP

permit that operations would not result in jeopardy. We also determined that while Horseshoe Dam operations will cause incidental take of flycatchers and cause fluctuations in habitat abundance and quality, reservoir operations will also create a dynamic environment that fosters the long-term persistence of habitat. It was estimated that during the life of the permit, an annual average of 105 ha (260 ac) flycatcher habitat would persist, ranging from 24 to 182 ha (60 to 450 ac). The number of territories could fluctuate greatly, but considering the 4.5-ha (11-ac) neighborhood used during the HCP development to describe an area used per flycatcher territory (ERO and SRP 2008, p. 111), about 20 territories could be expected to persist about 50 percent of the time over the HCP permit period (ERO and SRP 2008, p. 121). USFS management has continued to foster the maintenance and development of flycatcher habitat through land management actions that protect habitat and reduce habitat stressors. Our recent evaluation of the Tonto National Forest's Land Management Resource Plan concluded that the majority of USFS standards and guidelines would benefit the flycatcher and their implementation would not jeopardize the flycatcher or adversely modify critical habitat.

#### Yavapai-Apache Management Plan

Please see the end of this section for a discussion about tribes from the Little Colorado, San Juan, Verde, Upper Gila, and Upper Rio Grande Management Units that submitted Management Plans.

#### Roosevelt Management Unit

##### Salt River Project Roosevelt Lake HCP

The Roosevelt Dam HCP was permitted to SRP under section 10(a)(1)(B) of the Act in 2003, for the operation of Roosevelt Dam in Gila and Maricopa Counties, Arizona. Pursuant to the 1917 contract between SRP and the United States of America, the United States turned over and vested in SRP the authority to care for, operate, and maintain all project facilities, of which Roosevelt Dam is an integral component. SRP is two entities: The Salt River Project Agricultural Improvement and Power District, a political subdivision of the State of Arizona; and the Salt River Valley Water Users' Association, a private corporation. The District provides electricity to nearly 934,000 retail customers in the Phoenix area. It operates or participates in 11 major power plants and numerous other generating stations, including thermal, nuclear, natural gas, and hydroelectric

sources. SRP delivers an average of 1 million acre-feet (AF) of water each year for use on more than 240,000 acres or 375 square miles of shareholder lands, plus additional contract lands with water rights to the Salt and Verde rivers. Most of SRP's deliveries are to cities and urban irrigation uses, supplying much of the water for the Phoenix metropolitan population of more than 2.6 million. The Record of Decision for the HCP was dated February 27, 2003. The associated incidental take permit authorizes incidental take of the flycatcher caused by the raising and lowering of the water stored by Roosevelt Dam for a period of 50 years.

The action area, as described in SRPs Roosevelt Dam HCP (SRP 2002, p. ES-1), is the perimeter of Roosevelt Lake's high water mark below the 2,151 foot elevation point. The land within the Roosevelt Lake perimeter is Federal land and managed by the USFS.

The Roosevelt Lake nesting flycatcher population, depending on the year, can be one of the largest across the subspecies range (approximately 150 territories, plus an unknown number of unmated floating/non-breeding flycatchers and fledglings). During lower water years, by moving water into downstream lakes, Roosevelt Dam can expose broad areas of flat gradient floodplain where riparian vegetation can grow at both the Salt River and Tonto Creek inflows. The areas at each end of the lake are estimated to be able to establish as much as 506 ha (1,250 ac) of occupied flycatcher nesting habitat within its high water mark.

The cycles of germination, growth, maintenance, and loss of flycatcher habitat within the perimeter of Roosevelt Lake are dependent on how and when the lake recedes due to the amount of water in-flow, and subsequent storage capacity and delivery needs caused by Roosevelt Dam operations. The process of flycatcher habitat inundation and drying through raising and lowering of lake levels can be more exaggerated than the dynamic flooding that occurs on free-flowing streams, yet those dynamic processes within the lake's high water mark mimic those that occur on a river and are important to develop and maintain expansive flycatcher habitat and populations. Even in the expected high-water years, some high quality riparian habitat would persist at Roosevelt Lake providing flycatcher nesting opportunities.

The 50-year Roosevelt Dam HCP conservation strategy focuses primarily on: (1) The acquisition and management of flycatcher habitat outside of Roosevelt Lake; (2) the protection of

existing habitat within the Roosevelt Lake conservation space; and (3) the creation of riparian habitat adjacent to Roosevelt Lake. Outside of the Roosevelt Management Unit, a minimum of 607 ha (1,500 ac) of flycatcher habitat is to be acquired and managed by SRP on the San Pedro, Verde, and Gila Rivers, along with implementation of conservation measures to protect up to an additional 304 ha (750 ac) of flycatcher habitat. Flycatcher habitat was to be created and maintained at Roosevelt Lake (outside of the impacts of water storage) at the adjacent Rock House Farm. Also, because the USFS has management authority over dry land within the lakebed, SRP would fund a USFS Forest Protection Officer to patrol and improve protection of flycatcher habitat in the Roosevelt lakebed from adverse activities such as fire ignition from human neglect, improper vehicle use, and other unauthorized actions that could harm habitat. As a result of these conservation commitments, the HCP provides an additional level of protection of flycatcher habitat at Roosevelt Lake that would not otherwise be available.

As identified in the HCP, flycatcher properties have been acquired along the lower San Pedro and Gila River (Middle Gila/San Pedro Management Unit) and along the Verde River (Verde Management Unit) (SRP 2012a, pp. 17–20). SRP has surpassed its required 910 ha-credits (2,250 ac) to date, by overall accruing 1,049 ha-credits (2,591 ac). They have acquired 745 ha (1,842 ac) of riparian habitat and 177 ha-credits (429 ac) of buffer lands and water rights. They have also developed 8 ha (20 ac) of flycatcher habitat at Rock House Farm (which holds flycatcher territories) and acquired 121 ha-credits (300 ac) from funding the USFS employee to help on-the-ground management Roosevelt Lake flycatchers (SRP 2012a, pp. 13–20).

The Service completed a section 7 consultation under the Act in order to issue the Roosevelt Section 10 HCP permit. The Service's conclusion that issuance of the section 10 permit for the HCP would not jeopardize the species was based upon the Service's determination that varying degrees of occupied nesting flycatcher habitat within the Roosevelt Lake conservation space (under full operation of Roosevelt Dam with an HCP) would persist, and when combined with other areas within the Roosevelt Lake Management Unit, could reach the numerical (50 territories) and habitat-related goals established in the Recovery Plan. An average of 121 to 162 ha (300 to 400 ac) of flycatcher habitat (thus about 60 to 81 ha, 150 to 200 ac of occupied flycatcher

nesting habitat) would be present within the Roosevelt Lake conservation space during the life of the permit, which could support 45 to 90 flycatcher territories (Service 2003, p. 51). Even in a worse case flood event, causing the lake to fill to capacity, 15 to 30 flycatcher territories are expected to persist. Under more favorable habitat conditions, the area between the existing pool and the high water mark could support one of the largest nesting flycatcher populations throughout the subspecies' range. Adjacent streams outside of the high water mark (Tonto Creek, Salt River, Cherry Creek, Rye Creek, etc.) also occur within the Roosevelt Management Unit and contribute areas with flycatcher habitat and territories toward reaching recovery goals.

When the Roosevelt Dam HCP was completed in 2003, lake levels were near their lowest and flycatcher populations were most abundant. Since completion of the HCP, a lake-fill event occurred and confirmed our expectations about the persistence of flycatcher habitat and territories. In 2005, water levels rose to nearly full capacity, which caused reductions and changes in the distribution and abundance of flycatcher populations in the Roosevelt Lake Management Unit consistent with the habitat estimations and conclusions developed in the Roosevelt HCP. During the 2011 breeding season SRP (2012a, pp. 7–8) ran the multi-scaled, satellite-image-based flycatcher habitat suitability model (Hatten and Paradzick 2003, entire) and estimated that 34 ha (85 ac) of potentially suitable flycatcher breeding habitat existed below the Roosevelt Lake high water mark. These changes in water storage resulted in a minimum of 26 flycatcher territories supported within the Roosevelt Lake high water mark in 2011, and additional territories on the Tonto Arm of Roosevelt Lake that are likely influenced by the elevated water levels (SRP 2012a, p. 9).

Once water recedes and uncovers the ground where flycatcher habitat can grow, the USFS is the primary land manager. Since the listing of the flycatcher, the Tonto National Forest has managed resource use, wildfire, and recreation, activities that can impact flycatcher habitat, through improved fencing and access management. Through the Roosevelt HCP, the USFS Protection Officer adds additional management to help monitor and manage authorized and unauthorized actions that could affect flycatcher habitat. A tri-party agreement between SRP, USFS, and USBR (1979, entire)

establishes a framework to maintain these water storage areas for their intended purpose.

During completion of the 2005 flycatcher critical habitat rule, SRP requested that all of their flycatcher mitigation properties purchased before the publication of our final 2005 critical habitat be designated as critical habitat. SRP has made the same request during this revision of critical habitat.

#### Benefits of Inclusion—Roosevelt Lake

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

The Roosevelt Lake area is known to be occupied by flycatchers and has undergone section 7 consultation under the jeopardy standard related to the Roosevelt Lake HCP and USFS actions. There may be some minor benefits from the designation of critical habitat within Roosevelt Lake, primarily because it would require the Service and USFS to perform additional review of USFS management within the exposed portion of the lake bottom through a critical habitat consultation under section 7 of the Act. These USFS management actions are typically associated with recreation management and access, as well as resource use. However, the types and extent of USFS actions within the Roosevelt Lake conservation space are somewhat limited because the purpose of the conservation space of Roosevelt Lake is to store water. Additionally, because of the persistence of abundant flycatcher territories at Roosevelt Lake, USFS management has appropriately managed recreation, access, land use, and wildfire in a manner that has conserved flycatcher habitat since listing. For example, the Tonto National Forest implements seasonal access restrictions surrounding flycatcher habitat at Roosevelt Lake to reduce habitat stressors such as wildfire, trampling, and unauthorized road use and creation. We recently evaluated Tonto National Forest's Land Resource Plan (Service 2012, pp. 29–44) and concluded that the majority of the USFS's standards and guidelines were found to benefit the flycatcher and they would not jeopardize the flycatcher or adversely modify critical habitat. For

these reasons and because formal consultations will likely result in only discretionary conservation recommendations due to existing appropriate management, we believe there is a low probability of mandatory elements (i.e., reasonable and prudent alternatives) arising from formal section 7 consultations that include consideration of designated critical habitat for the flycatcher at Roosevelt Lake.

We have evaluated Roosevelt Lake Dam operations through implementation of the Roosevelt HCP, and considered impacts to flycatchers and flycatcher habitat, including how these may affect flycatcher recovery within the Roosevelt Management Unit. The conservation strategies in the Roosevelt HCP included considerable habitat acquisition to account for each hectare (acre) of flycatcher habitat affected, management, and monitoring (see above). We concluded that Roosevelt Dam operations, while causing incidental take of flycatchers periodically, will support the development of flycatcher habitat over time, creating conditions that, along with the other streams within the Management Unit, can be anticipated to reach goals established in the Recovery Plan. Because of the non-jeopardy analysis completed in our section 7 consultation, the continued function of Roosevelt Lake to establish flycatcher habitat for recovery, and the comprehensive conservation strategies implemented in the HCP, we believe there is a low probability of mandatory elements (i.e., reasonable and prudent alternatives) arising from formal section 7 consultations that include consideration of Roosevelt Dam operations on designated flycatcher critical habitat at Roosevelt Lake.

Another important benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners, agencies, tribes, and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the flycatcher that reaches a wide audience, including parties engaged in conservation activities, is valuable. The designation of critical habitat may also strengthen or reinforce some Federal laws such as the Clean Water Act. These laws analyze the potential for projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental laws.

We believe that there would be little educational and informational benefit gained from including Roosevelt Lake within the designation because this area is well known as an important area for flycatcher management and recovery. For example, extensive flycatcher research has occurred at Roosevelt Lake through much of the late 1990s and early 2000s by USGS, USBR, and AGFD; the Roosevelt Dam HCP was developed in 2003; periodic news articles were published on the development of the Roosevelt Dam HCP; and the Roosevelt Lake area was proposed as flycatcher critical habitat in 2004 and excluded in 2005. Additionally, since the mid-1990s, SRP, USFS, USBR, AGFD, and the Service have met annually to discuss the status of the flycatcher and current management issues occurring in the Roosevelt Lake area. Consequently, we believe that the informational benefits have already occurred through past actions even though this area is not designated as critical habitat. The importance of Roosevelt Lake for conservation of the flycatcher, and its importance to the Roosevelt Management Unit and to the population of flycatchers in the State of Arizona has already been realized by managing agencies, including the public, State and local governments, and Federal agencies.

#### Benefits of Exclusion—Roosevelt Lake

The benefits of excluding the area within the high-water mark (below an elevation of 655 m, 2150 feet) of Roosevelt Dam from being designated as critical habitat are considerable, and include the conservation measures described above (land acquisition and management, and habitat development) and those associated with implementing conservation through enhancing and developing partnerships.

The implementation of the Roosevelt HCP has and will continue to help generate important status and trend information and conservation for flycatcher recovery. As described above, SRP has surpassed its required 910 ha-credits (2,250 ac) to date, by accruing 745 ha (1,842 ac) of riparian habitat and 174 ha-credits (429 ac) of buffer lands and water rights. They have also developed 8 ha (20 ac) of flycatcher habitat at Rock House Farm and funded a USFS employee to help on-the-ground management of Roosevelt Lake flycatchers (SRP 2012a, pp.15–16). In addition to these specific flycatcher conservation actions, the development and implementation of this HCP provides regular monitoring of flycatcher habitat, distribution, and abundance over the 50-year permit. SRP

is also currently implementing innovative monitoring of riparian habitat abundance and flycatcher habitat suitability through satellite image-based models (Hatten and Paradzick 2003, entire; SRP 2012a, pp. 7–8).

Because of the importance of the Roosevelt Lake conservation space for water storage, there is no expectation that any considerable development or changes to the landscape would result in reducing the overall water storage space, and therefore the overall ability to develop riparian vegetation. Roosevelt Dam operates in a way that continues to move water out of the reservoir to downstream lakes and canals in order to continuously create water storage conservation space at Roosevelt Lake, and therefore area for riparian vegetation (i.e., flycatcher habitat) to grow. Constant lake levels would not have resulted in the creation of the hundreds of acres of flycatcher habitat between 1995 and 2004 (Ellis *et al.* 2008, p. i). On the contrary, dynamic lake levels, similar to river systems, are important for the creation and maintenance of abundant flycatcher habitat at this location.

We determined in our intra-Service section 7 consultation jeopardy analysis for issuance of the Roosevelt Dam HCP permit that dam operations would not result in jeopardy to the flycatcher. One of the primary conservation values of critical habitat is to help sustain existing flycatcher populations. The threshold for reaching destruction or adverse modification at Roosevelt Lake, in an area where so many flycatchers occur, would typically result in the inability for the habitat to sustain populations for recovery. Similarly, the threshold to jeopardize the continued existence of the species would also typically result in the inability of the habitat to sustain local populations. Flycatcher populations have persisted within the high water mark at Roosevelt Lake throughout increases and decreases in water storage and have subsequently expanded along streams adjacent to Roosevelt Lake (Salt River, Tonto Creek, Pinal Creek, Cherry Creek, Rye Creek). In 2011, the Roosevelt Lake Management Unit supported at least 100 territories on these streams. The expanding and contracting flycatcher habitat within the lake combined with dynamic habitat along adjacent streams support the overall flycatcher population within the Roosevelt Management Unit and the Recovery Plan's 50-territory goal. Therefore, because Roosevelt Dam operations mimic the stream functions that support flycatcher habitat, and because of the

implementation of Roosevelt HCP conservation actions and management support from the USFS, the outcome of consultation under section 7 of the Act with the Roosevelt Lake conservation space with critical habitat designated would not likely be materially different compared to the listing of the species alone.

Failure to exclude Roosevelt Lake could be a disincentive for other entities contemplating partnerships, as it would be perceived as a way for the Service to impose additional regulatory burdens once conservation strategies have already been agreed to. Private entities are motivated to work with the Service collaboratively to develop voluntary HCPs because of the regulatory certainty provided by an incidental take permit under section 10(a)(1)(B) of the Act with the "No Surprises" assurances. This collaboration often provides greater conservation benefits than could be achieved through strictly regulatory approaches, such as critical habitat designation. The conservation benefits resulting from this collaborative approach are built upon a foundation of mutual trust and understanding. It takes considerable time and effort to establish this foundation of mutual trust and understanding, which is one reason it often takes several years to develop a successful HCP. Excluding this area from critical habitat will help promote and honor that trust by providing greater certainty for permittees that once appropriate conservation measures have been agreed to and consulted on for the flycatcher that additional consultation will not be necessary.

Through the development of the Roosevelt Dam HCP, we have generated additional partnerships with SRP and its stakeholders by developing collaborative conservation strategies for the flycatcher and the habitat upon which it depends for breeding, sheltering, foraging, migrating, and dispersing. The strategies within the Roosevelt HCP seek to achieve conservation goals for the flycatcher and its habitat, and will achieve greater conservation benefit than the designation of critical habitat and multiple site-by-site, project-by-project, section 7 consultations, which is unlikely to require specific actions. Continued cooperative relations with SRP and its stakeholders are expected to influence other future partners. Our experience has demonstrated that successful completion of one HCP has resulted in the development of other conservation efforts and HCPs with other landowners. For example, soon after completing the Roosevelt HCP, we partnered with SRP and its stakeholders

to develop the Horseshoe and Bartlett Dam HCP where the flycatcher conservation was a key component. The benefits of excluding lands within the Roosevelt Lake HCP area from critical habitat designation include recognizing the value of conservation benefits associated with HCP actions; encouraging actions that benefit multiple species; encouraging local participation in development of new HCPs; and facilitating the cooperative activities provided by the Service to landowners, communities, and counties in return for their voluntary adoption of the HCP. Concerns over perceived added regulation potentially imposed by critical habitat could harm this collaborative relationship.

A benefit of excluding Roosevelt Lake from critical habitat includes a small reduction in administrative costs associated with engaging in the critical habitat portion of section 7 consultations. Administrative costs include time spent in meetings, preparing letters and biological assessments, and in the case of formal consultations, the development of the critical habitat component of a biological opinion. However, because the flycatcher occurs at Roosevelt Lake, consultations are expected to occur regardless of a critical habitat designation, and those costs to perform the additional analysis are not expected to be significant.

#### Benefits of Exclusion Outweigh the Benefits of Inclusion—Roosevelt Lake

We have determined that the benefits of exclusion of the conservation space of Roosevelt Lake below 655 m (2,151 feet) in elevation from the designation of flycatcher critical habitat on Federal land managed by the USFS, as identified in the Roosevelt Dam HCP, outweigh the benefits of inclusion, and will not result in extinction of the flycatcher because current dam operations, management, and conservation efforts maintain the physical or biological features necessary to develop, maintain, recycle, and protect flycatcher habitat essential to its conservation. In making this finding, we have weighed the benefits of including these lands as critical habitat with an operative HCP and management by the USFS, and the same situation without critical habitat.

The benefits of designating critical habitat for the flycatcher at Roosevelt Lake are relatively small in comparison to the benefits of exclusion. We find that including Roosevelt Lake as critical habitat would result in very minimal, if any, additional benefits to the flycatcher. Roosevelt Dam operations

will continue to foster the maintenance, development, and necessary recycling of habitat for the flycatcher in the long term due to the dynamic nature of water storage and delivery. USFS management fosters the maintenance and development of flycatcher habitat, and there is virtually no risk of changes to the landscape within the Roosevelt Lake conservation space. As a result, we anticipate that formal section 7 consultations conducted on critical habitat would only likely result in discretionary conservation recommendations.

The benefits of excluding Roosevelt Lake from inclusion as critical habitat are considerable. Excluding Roosevelt Lake would continue to help foster development of future HCPs and strengthen our partnership with Roosevelt HCP permittees and stakeholders. Excluding Roosevelt Lake also eliminates regulatory uncertainty associated with the permittees' HCP and the operation of Roosevelt Dam for water storage and flood control. The conservation benefits of implementing the Roosevelt HCP are considerable and include significant acquisition and management of flycatcher habitat, creation of flycatcher habitat adjacent to Roosevelt Lake, on-the-ground protection of flycatcher habitat, and long-term monitoring of flycatcher habitat and territories. These conservation measures are substantial and will result in greater flycatcher conservation benefits than what could be accomplished from a project-by-project evaluation through the incremental benefits of a critical habitat designation. Also, excluding Roosevelt Lake will eliminate some additional, but minimal, administrative effort and cost during the consultation process pursuant to section 7 of the Act.

After weighing the benefits of including Roosevelt Lake as flycatcher critical habitat against the benefit of exclusion, we have concluded that the benefits of excluding the conservation space of Roosevelt Lake below an elevation 655 m (2151 feet), underneath the coverage of the Roosevelt HCP and with the support of USFS management, outweigh those that would result from designating this area as critical habitat. We have therefore excluded these lands from the final critical habitat designation pursuant to section 4(b)(2) of the Act.

As mentioned above, during development of the 2005 flycatcher critical habitat designation, SRP requested that all of their flycatcher mitigation properties purchased before the publication of our final 2005 critical habitat designation, be designated as

critical habitat. They have made the same request on mitigation properties in connection with this revision. The mitigation properties are not located within the Roosevelt lakebed, and may benefit from section 7 consultation on their management. Therefore, based upon the comments received from SRP and the likely benefit of future section 7 consultation, the Secretary exercises his discretion under section 4(b)(2) of the Act, and determines that the mitigation properties acquired by SRP along the San Pedro, Gila, and Verde Rivers are included in this final designation as flycatcher critical habitat.

#### Exclusion Will Not Result in Extinction of the Species—Roosevelt Lake

We find that the exclusion of the conservation space of Roosevelt Lake will not lead to the extinction of the flycatcher, nor hinder its recovery because Roosevelt Dam operations combined with the preservation of open space within the lake and USFS land management will ensure the long-term persistence and protection of flycatcher habitat at Roosevelt Lake. We determined in our intra-Service section 7 biological opinion for the issuance of the Roosevelt HCP permit that operations would not result in jeopardy. We determined that, while Roosevelt Dam operations will cause incidental take due to operations that cause fluctuations in habitat abundance and quality, reservoir operations also create a dynamic environment that fosters the long-term persistence of habitat. It was estimated that during the life of the permit, an average amount of habitat to support 45 to 90 flycatcher territories would be present throughout the life of the 50-year permit and even in a worst case flood event with maximum water storage, 15 to 30 territories could persist. USFS management has continued to foster the maintenance and development of flycatcher habitat through land management actions that reduce habitat stressors. Our recent evaluation of the Tonto National Forest's Land Management Resource Plan concluded that the majority of USFS standards and guidelines would benefit the flycatcher and their implementation would not jeopardize the flycatcher or adversely modify critical habitat.

#### Freeport McMoRan Pinal Creek Management Plan

FMC, a private mining company, which acquired Phelps Dodge Corporation in 2007, has ownership and management responsibility for the segment of Pinal Creek proposed as flycatcher critical habitat in Gila

County, Arizona. Along this Pinal Creek segment, FMC is actively implementing the Water Quality Assurance Revolving Fund (WQARF) Remedial Action Program required by the Arizona Department of Environmental Quality Consent Order issued in April 1998.

The primary purpose of this Remedial Action Program is the monitoring, extraction, and treatment of contaminated Pinal Creek groundwater. Groundwater contamination near the Towns of Globe and Miami was first discovered in the 1930s. The first area-wide investigation of groundwater and surface water contamination was initiated in 1979, and completed in 1981. In 1989, the site was listed on the WQARF Priority List by the State of Arizona. Also in 1989, the Pinal Creek Group (an alliance of local mining companies) was formed to conduct the remedial investigations and begin remedial actions in 1990. A groundwater feasibility study and recommended remedial action plan were completed by 1997.

The remedial action plan proposed groundwater extraction at two locations to provide upstream and downstream containment of the contamination plume. In November 1999, the Lower Pinal Creek Treatment Plant was completed, and contaminated groundwater extraction at the leading edge of the plume began. In January 2001, a groundwater barrier was constructed across lower Pinal Creek to provide downstream containment of the plume. Full-scale groundwater extraction for treatment began just above the barrier. In June 2001, a second groundwater well field was constructed to provide upstream containment of the contaminated groundwater plume, and a second treatment plant (the Diamond H Treatment Plant) was constructed to treat the water captured at Kiser Basin.

The Corps authorized the discharge of fill material to waters of the United States that was required to implement remediation activities using Nationwide Permit (NWP) 38. The Corps' authorization to use NWP 38 for remediation activities at Pinal Creek included project specific requirements to implement a mitigation and monitoring plan. The Corps permits required control of exotic riparian plant species and improved cattle management in order to foster the development of native riparian habitat.

As a result of the water remediation and land management actions associated with the Corps' permit, riparian habitat flourished in quality and quantity. From 1999 to 2007, these water and land management actions resulted in an 88 percent increase in

total riparian vegetation volume within the mitigation area (FMC 2012, p. 11). Soon after implementing these management actions and development of improved riparian habitat quality, territorial flycatchers were attracted to the site and have persisted from 2004 through 2011 (2 to 8 territories annually) (FMC 2012, p.14).

FMC submitted a flycatcher management plan for the proposed segment of Pinal Creek (FMC 2012, entire), committing to continue implementing the land management actions initiated through the Corps permit that have resulted in the improved abundance, distribution, and quality of riparian habitat for nesting flycatchers for the life of the water remediation project. The life of the water remediation project and accompanying land management actions are estimated to occur for at least the next 10 years and possibly longer (Tress J. 2012, pers. comm.). FMC will continue to eliminate cattle access to the riparian area during the spring and fall growing season in order to reduce the grazing pressure on flycatcher habitat. Also, exotic plant management will reduce the occurrence of flammable plants and reduce the potential impacts of wildfire within the riparian area. FMC will implement and enforce a strict "no trespassing" policy for Pinal Creek. Fencing and maintenance of fencing will minimize trespass recreational pressure on riparian vegetation. FMC will also monitor vegetation and conduct flycatcher surveys within this Pinal Creek segment.

#### Benefits of Inclusion—Pinal Creek

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

Pinal Creek is known to be occupied by flycatchers and therefore, if a Federal action or permitting occurs, there is a catalyst for evaluation under section 7 of the Act. It is possible that in the future, federal funding or permitting could occur on this privately owned and managed segment of Pinal Creek where a critical habitat designation may benefit flycatcher habitat. For example, a Corps permit was needed to implement FMC's remediation program

within Pinal Creek. At that time, Pinal Creek was not known to be a stream where flycatcher territories could occur and the riparian vegetation was not dense or abundant enough to expect territorial flycatchers to be present. Implementation of the habitat management conditions included in the Corps permit was a significant contributing factor in causing flycatcher habitat to become established. However, now that flycatchers are known to occur along Pinal Creek, the benefits of a critical habitat designation are reduced to the possible incremental benefit of critical habitat because the designation would no longer be the sole catalyst for initiating section 7 consultation. We do not have any previous records of section 7 consultations addressing flycatchers and their habitat along Pinal Creek. Also, because this stream segment is privately owned and is primarily being managed for environmental remediation and habitat improvement, we do not anticipate future Federal actions to impact the current remediation action or habitat improvements associated with the Corps permit and continued flycatcher management actions. Because of the lack of past section 7 consultations within this Pinal Creek segment of privately owned land, the reduced likelihood of future federal actions altering the current environment clean-up and management of this stream segment, the presence of flycatcher territories, and the commitment to continue implementing land management actions that maintain flycatcher habitat, the benefits of a critical habitat designation on this lower segment of Pinal Creek are minimized.

Another important benefit of including lands in a critical habitat designation is that it can serve to educate landowners, agencies, tribes, and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high value for certain species. Any information about the flycatcher that reaches a wide audience, including parties engaged in conservation activities, is valuable. The designation of critical habitat may also strengthen or reinforce some Federal laws such as the Clean Water Act. These laws analyze the potential for projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental laws.

At FMC properties in both Arizona and New Mexico, FMC has helped fund flycatcher studies, cooperated with conducting status surveys, and coordinated with the flycatcher

technical recovery team. The implementation of the Clean Water Act was a catalyst in generating flycatcher habitat along Pinal Creek. But now, because of FMC's existing conservation awareness and implementation of conservation actions, we believe there is little educational benefit or support for other environmental laws and regulations attributable to flycatcher critical habitat beyond those achieved from listing the species under the Act and FMC's continued conservation efforts.

Overall, the benefits of designating flycatcher critical habitat within FMC's privately owned lands along Pinal Creek are minimal. FMC and other managing agencies are aware of the occurrence of the flycatcher along Pinal Creek; therefore the educational benefits and support for implementation of other environmental laws and regulations from a critical habitat designation is minimized. Because this land is privately owned and is the target of environmental clean-up and habitat management improvements, there is little likelihood of Federal actions occurring and interfering with these efforts. Additionally, FMC has a long-term commitment to environmental clean-up and land management actions that helped create habitat to support flycatcher territories. Therefore, the incremental benefits of a flycatcher critical habitat designation along Pinal Creek would be minimal.

#### Benefits of Exclusion—Pinal Creek

A considerable benefit from excluding FMC-owned Pinal Creek lands as flycatcher critical habitat is the maintenance and strengthening of ongoing conservation partnerships. FMC has demonstrated a partnership with the Service by becoming a conservation partner in the development and implementation of the Recovery Plan, and by solidifying their conservation actions in management plans submitted to us for the flycatcher along the upper Gila River at the U-Bar Ranch in New Mexico (see below) and for the spikedace and loach minnow (2007 and 2011). They have also have demonstrated a willingness to conserve flycatchers and the flycatcher habitat at Pinal Creek and to partner with us by exploring the initial stages of a habitat conservation plan.

The success of FMC's management is demonstrated in the development of riparian areas that provide habitat for nesting flycatchers. Additional evidence of the partnership between FMC and the Service is shown by FMC's commitment to provide for adaptive management, such that if future flycatcher surveys

and habitat monitoring detect significant positive or negative changes in the numbers of nesting flycatchers or in key habitat parameters, they will confer with the Service regarding the impacts of such changes and will adopt alternative conservation measures to promote flycatcher habitat. Exclusion of this area from the designation will maintain and strengthen the partnership between the Service and FMC.

Our collaborative relationship with FMC makes a difference in our partnership with the numerous stakeholders involved with flycatcher management and recovery and influences our ability to form partnerships with others. Concerns over perceived added regulation potentially imposed by critical habitat could harm this collaborative relationship.

Because so many important areas with flycatcher habitat occur on private lands, collaborative relationships with private landowners will be essential in order to recover the flycatcher. The flycatcher and its habitat are expected to benefit substantially from voluntary landowner management actions that implement appropriate and effective conservation strategies. The conservation benefits of critical habitat are primarily regulatory or prohibitive in nature. Where consistent with the discretion provided by the Act, the Service believes it is necessary to implement policies that provide positive incentives to private landowners to voluntarily conserve natural resources and that remove or reduce disincentives to conservation (Wilcove *et al.* 1996, 1–15; Bean 2002, 1–7). Thus, we believe it is essential for the flycatcher recovery to build on continued conservation activities such as these with a proven partner, and to provide positive incentives for other private landowners who might be considering implementing voluntary conservation activities, but who have concerns about incurring incidental regulatory or economic impacts.

#### Weighing Benefits of Exclusion Against Benefits of Inclusion—Pinal Creek

We have determined that the benefits of exclusion of Pinal Creek on private lands managed by FMC, with the implementation of their management plan, outweigh the benefits of inclusion, and will not result in extinction of the flycatcher because current management efforts maintain the physical or biological features necessary to develop, maintain, recycle, and protect essential habitat essential for flycatcher conservation. In making this finding, we have weighed the benefits of exclusion



against the benefits of including these lands as critical habitat.

We believe past, present, and future coordination with FMC has provided and will continue to provide sufficient education regarding flycatcher habitat conservation needs on these lands, such that there would be minimal additional educational benefit from designation of critical habitat. Further, because any potential impacts to flycatcher habitat from future projects with a Federal nexus will be addressed through a section 7 consultation with the Service under the jeopardy standard, we believe that the incremental conservation and regulatory benefit of designated critical habitat on FMC-owned lands would largely be redundant with the combined benefits of listing and existing management. Therefore, the incremental conservation and regulatory benefits of designating critical habitat on FMC lands along Pinal Creek are minimal.

The benefits of designating critical habitat for the flycatcher along Pinal Creek are relatively small in comparison to the benefits of exclusion. The operation of the Lower Pinal Creek Treatment Plant remedial activities, long-term land management commitments, and continuation of a conservation partnership will continue to help foster the maintenance and development of flycatcher habitat. We anticipate that greater flycatcher conservation can be achieved through these management actions and relationships than through implementation of critical habitat designation on a project-by-project basis on private land where the occurrence of implementation of critical habitat designation due to federal funding or permitting is anticipated to be rare.

On the other hand, the benefits of excluding FMC-owned lands along Pinal Creek from critical habitat are considerable. FMC's management plan establishes a framework for cooperation and coordination with the Service in connection with resource management activities based on adaptive management principles. Most importantly, the management plan indicates a continuing commitment to ongoing management that has resulted in nesting flycatcher habitat. Exclusion of these lands from critical habitat will help preserve and strengthen the conservation partnership we have developed with FMC, reinforce those we are building with other entities, and foster future partnerships and development of management plans whereas inclusion will negatively impact our relationships with FMC and other existing or future partners. We are committed to working with FMC to

further flycatcher conservation and other endangered and threatened species. FMC will continue to implement their management plans and play an active role to protect flycatchers and their habitat. Therefore, in consideration of the relevant impact to our partnership with FMC, and the ongoing conservation management practices of FMC, we determined that the significant benefits of exclusion outweigh the benefits of inclusion in the critical habitat designation.

After weighing the benefits of including as flycatcher critical habitat against the benefit of exclusion, we have concluded that the benefits of excluding the approximate 5.8 km (3.6 mi) of Pinal Creek with long-term FMC management commitments outweigh those that would result from designating this area as critical habitat. We have therefore excluded these lands from this final critical habitat designation pursuant to section 4(b)(2) of the Act.

#### Exclusion Will Not Result in Extinction of the Species—Pinal Creek

We also find that the exclusion of these lands will not lead to the extinction of the flycatcher, nor hinder its recovery because long-term FMC water and land management commitments will ensure the long-term persistence and protection of flycatcher habitat at Pinal Creek. While future section 7 consultations along this Pinal Creek are likely to be rare, the jeopardy standard of section 7 of the Act and routine implementation of conservation measures through the section 7 process due to the occurrence of flycatchers on this property provide assurances that the flycatcher will not go extinct as a result of excluding these lands from the critical habitat designation.

#### Upper Gila Management Unit

##### Freeport McMoRan U-Bar Ranch Management Plan

FMC owns the U-Bar Ranch (Ranch) near the Town of Cliff, in Grant County, New Mexico, within the Upper Gila Management Area. This property was formerly owned by Phelps Dodge mining company. Through FMC and their long-time lessee, Mr. David Ogilvie, FMC has developed a Flycatcher Management Plan (Management Plan) for the Ranch which formalizes a long-term commitment and describes management practices to conserve one of the largest known flycatcher population's across its breeding range over the past decade (FMC 2012a, entire). In addition, FMC's Management Plan is intended to establish a framework for cooperation

and coordination with the Service in connection with future resource management activities based on adaptive management principles, including, if necessary, the development of additional flycatcher conservation measures in coordination with the Service at a total cost of up to \$500,000. We proposed a 13.8-km (8.6-mi) segment of the Gila River along FMC's Ranch as flycatcher critical habitat.

Flycatcher territories have been detected along the Gila River and the Upper Gila Management Unit since 1993. The distribution and configuration of flycatcher habitat is unique at the Ranch, with many of the territories found in the canopies of mature boxelder trees located along irrigation ditches outside of the river channel. At no other location throughout their breeding range do flycatchers nest nearly 20 m (60 feet) above the ground. In 1999, a high of 262 territories at 8 sites were detected along this portion of the upper Gila River; the Ranch had 209 of these territories. In 2003, 191 territories at 8 sites were detected on the Gila River stream segments proposed as critical habitat and the Ranch had 123 of these territories. In 2011, this area had 174 territories, and it remains an important site for the conservation and recovery of the flycatcher in the Upper Gila Management Area.

Because the Ranch is a working cattle and farming ranch, the management of cattle is a primary component of their Management Plan. Eight pastures that incorporate approximately 1,372 ha (3,390 ac) are managed annually for operation of livestock and farming enterprises. The management consists of a multifaceted and highly flexible rest-rotation system utilizing both native forage and irrigated fields, that can be modified based upon current conditions. Grazing use of river bottom pastures is monitored by daily visual inspections. Use of these pastures is limited to ensure that forage utilization levels are moderate and over-use does not occur. In addition, the riparian areas are monitored regularly, and riparian vegetation is allowed to propagate along the river as well as in irrigation ditches.

Some specific management practices, varying in different pastures, which relate to the flycatcher and its habitat are: (1) Grazing is limited to November through April to reduce impacts to vegetation and avoid negative impacts during migration and nesting season; (2) animal units are adjusted to protect and maintain the riparian vegetation needed by the flycatcher; (3) the irrigation ditches are maintained, along with the vegetation, to benefit the flycatcher; (4)

habitat management efforts follow flood events that destroy habitat; and (5) herbicide and pesticides are only used in rare circumstances and are not used near flycatcher territories during breeding season. Because much of the vegetation the flycatcher uses is located high above the ground in mature trees above the influence of cattle grazing, this provides greater compatibility of ranch operations and the maintenance of overstory flycatcher habitat. These flexible and adaptive management practices have resulted in the expansion, protection, and successful continuance of a large flycatcher population.

In 1995, flooding impacted the Bennett Farm Fields in the 162-ha (400-ac) River Pasture. The Ranch then implemented the Bennett Restoration Project, a creation of a mosaic of different-aged vegetation with dense patches of young willows and cottonwoods occurring in manmade oxbows situated between irrigated and dry-land pastures and the Gila River. Water is continuously present and the project has become a marshy habitat that now supports one of the higher number of flycatcher territories on the Ranch. The 2004 and 2011 surveys recorded 35 territories at the Bennett Restoration Site.

The second-most successful nesting site on the Ranch is in the Lower River Pasture. A feature of this riparian area is the amount of water it receives from adjacent irrigated fields. The Ranch has rehydrated ditches and no longer follows past land-use practices, which involved active clearing of woody vegetation from ditch banks. The Ranch has developed tree growth and a network of riparian habitat in connection with the ditch-banks that attract breeding flycatchers.

Besides implementing compatible land management practices, FMC and the Ranch have practiced annual flycatcher surveys and research in the Gila valley since 1994. Surveyors are trained and permitted in coordination with the Service and survey results are submitted to the Service in annual reports. Flycatcher research on the Ranch has included: nest monitoring (sites, substrate, and success), diet, microhabitat use, climatic influences on breeding, cowbird parasitism, and distribution and characteristics of territories. Permits for studies are coordinated with the Service and reports are submitted to us for review and comment.

#### Benefits of Inclusion—U-Bar Ranch

As discussed above under *Application of Section 4(b)(2) of the Act*,

Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

The U-Bar Ranch along the Gila River is known to be occupied by flycatchers and therefore, if a Federal action or permitting occurs, there is a catalyst for evaluation under section 7 of the Act. It is possible that in the future, Federal funding or permitting could occur on this privately owned and managed segment of the Ranch where a critical habitat designation may benefit flycatcher habitat. Because the Ranch is privately owned, only actions with a Federal nexus would result in an evaluation of critical habitat under section 7 of the Act. As discussed above, the principal benefit of any designated critical habitat is that activities affecting habitat require consultation under section 7 of the Act if a Federal action is involved. Such consultation would ensure that adequate protection is provided to avoid destruction or adverse modification of critical habitat. These actions would most likely occur from the Corps implementing the Clean Water Act, possibly Federal funding to help implement a cost-share project or grant funding, and maybe, less likely, actions occurring on the adjacent Gila National Forest. However, to date, we are not aware of any formal section 7 consultation that has occurred that addressed the flycatcher on the Ranch. Because of the Ranch's conservation actions in developing flycatcher habitat, the compatibility between existing ranch activities and flycatcher management, and their commitment to implement their Management Plan, it is unlikely that actions would be proposed that would alter the operation of this Ranch and the associated flycatcher habitat. Because of the lack of past section 7 consultations on this privately owned Ranch, the reduced likelihood of future federal actions altering the current management that supports flycatcher habitat, the presence of flycatcher territories, and the commitment to continue implementing land management actions that maintain flycatcher habitat, the benefits of a critical habitat designation on the Ranch are minimized.

Another important benefit of including lands in a critical habitat designation is that it can serve to

educate landowners, agencies, tribes, and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high value for certain species. Any information about the flycatcher that reaches a wide audience, including parties engaged in conservation activities, is valuable. The designation of critical habitat may also strengthen or reinforce some Federal laws such as the Clean Water Act. These laws analyze the potential for projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental laws.

At FMC properties in both Arizona and New Mexico, FMC has helped fund flycatcher studies, cooperated with conducting status surveys, and coordinated with the flycatcher technical recovery team. Because of FMC's existing conservation awareness and implementation of conservation actions, we believe there is little educational benefit or support for other environmental laws and regulations attributable to flycatcher critical habitat beyond those achieved from listing the species under the Act and FMC's continued Ranch conservation efforts.

#### Benefits of Exclusion—U-Bar Ranch

A considerable benefit from excluding FMC-owned Ranch lands as flycatcher critical habitat is the maintenance and strengthening of ongoing conservation partnerships. FMC has demonstrated a partnership with the Service by participating in the development and implementation of the Recovery Plan, and by solidifying their conservation actions in management plans submitted to us for the flycatcher at the Ranch (2005 and 2012) and Pinal Creek in Arizona (2012), and for the spikedeace and loach minnow (2007 and 2011). They have also have demonstrated a willingness and commitment to conserve the flycatchers and the flycatcher habitat at the Ranch with potential financial contribution of up to \$500,000.

The success of the Ranch's management is demonstrated in the maintenance of off-channel habitat and continued management and creation of other riparian areas that provide flycatcher nesting habitat. While the number of flycatcher territories can fluctuate over time, this area has consistently maintained a large number, typically exceeding 100 and in some years just over 250 territories. The Ranch continues to survey and evaluate territory numbers and share that important information with the Service.

Understanding the distribution and abundance of flycatcher territories is a key component to tracking recovery of the flycatcher. Exclusion of this area from the designation will maintain and strengthen the partnership between the Service and FMC.

Our collaborative relationship with FMC makes a difference in our partnership with the numerous stakeholders involved with flycatcher management and recovery, and influences our ability to form partnerships with others. Concerns over perceived added regulation potentially imposed by critical habitat could harm this collaborative relationship.

Because so many important areas with flycatcher habitat occur on private lands, collaborative relationships with private landowners will be essential in order to recover the flycatcher. The flycatcher and its habitat are expected to benefit substantially from voluntary landowner management actions that implement appropriate and effective conservation strategies. The conservation benefits of critical habitat are primarily regulatory or prohibitive in nature. Where consistent with the discretion provided by the Act, the Service believes it is necessary to implement policies that provide positive incentives to private landowners to voluntarily conserve natural resources and that remove or reduce disincentives to conservation (Wilcove et al. 1996, 1–15; Bean 2002, 1–7). Thus, we believe it is essential for the flycatcher recovery to build on continued conservation activities such as these with a proven partner, and to provide positive incentives for other private landowners who might be considering implementing voluntary conservation activities, but have concerns about incurring incidental regulatory or economic impacts.

#### Weighing Benefits of Exclusion Against the Benefits of Inclusion—U-Bar Ranch

We have determined that the benefits of exclusion of the Ranch on private lands managed by FMC along the Gila River in New Mexico, with the implementation of their management plan, outweigh the benefits of inclusion, and will not result in extinction of the flycatcher because current management and conservation efforts maintain the unique off-channel habitat and the physical or biological features necessary to develop, maintain, recycle, and protect flycatcher habitat essential to its conservation. In making this finding, we have weighed the benefits of exclusion against the benefits of including these lands as critical habitat.

We believe past, present, and future coordination with FMC and the Ranch has provided and will continue to provide sufficient education regarding flycatcher habitat conservation needs on these lands, such that there would be minimal additional educational benefit from designation of critical habitat. Further, because any potential impacts to flycatcher habitat from future projects with a Federal nexus will be addressed through a section 7 consultation with the Service under the jeopardy standard, we believe that the incremental conservation and regulatory benefit of designated critical habitat on FMC-owned Ranch lands would largely be redundant with the combined benefits of listing and existing management. Therefore, the incremental conservation and regulatory benefits of designating critical habitat on FMC lands at the Ranch are minimal.

The benefits of designating critical habitat for the flycatcher at the Ranch are relatively small in comparison to the benefits of exclusion. The existing and long-term land management commitments and continuation of a conservation partnership will continue to foster the maintenance and development of flycatcher habitat and flow of important recovery information. We anticipate that greater flycatcher conservation can be achieved through these management actions and relationships than through implementation of critical habitat designation on a project-by-project basis on private land where the occurrence of implementation of critical habitat designation due to federal funding or permitting is anticipated to be rare.

On the other hand, the benefits of excluding FMC-owned Ranch lands along the Gila River from critical habitat are considerable. FMC and the Ranch's management plan establishes a framework for cooperation and coordination with the Service in connection with resource management activities based on adaptive management principles. Most importantly, the management plan indicates a continuing commitment to ongoing management that has resulted in nesting flycatcher habitat. Exclusion of these lands from critical habitat will help preserve and strengthen the conservation partnership we have developed with FMC and the Ranch, reinforce those we are building with other entities, and foster future partnerships and development of management plans whereas inclusion will negatively impact our relationships with FMC and other existing or future partners. We are committed to working with FMC and the Ranch to further

flycatcher conservation and other endangered and threatened species. FMC and the Ranch will continue to implement their management plans and play an active role to protect flycatchers and their habitat. Therefore, in consideration of the relevant impact to our partnership with FMC and the Ranch, and their ongoing conservation management practices, we determined that the significant benefits of exclusion outweigh the benefits of inclusion in the critical habitat designation.

After weighing the benefits of including the Ranch along the Gila River as flycatcher critical habitat against the benefit of exclusion, we have concluded that the benefits of excluding the approximate 13.8-km (8.6-mi) segment of the Gila River with long-term FMC management commitments outweigh those that would result from designating this area as critical habitat. We have therefore excluded these Ranch lands from this final critical habitat designation pursuant to section 4(b)(2) of the Act.

#### Exclusion Will Not Result in Extinction of the Species—U-Bar Ranch

We also find that the exclusion of these Ranch lands will not lead to the extinction of the flycatcher, nor hinder its recovery because long-term FMC water and land management commitments will ensure the long-term persistence and protection of flycatcher habitat at the Ranch on the Gila River. While the expectation of abundant future section 7 consultations at Ranch are likely to be rare, the jeopardy standard of section 7 of the Act and routine implementation of conservation measures through the section 7 process due to the occurrence of flycatchers on this property provide assurances that the flycatcher will not go extinct as a result of excluding these lands from the critical habitat designation.

#### San Carlos Reservoir

We proposed 26.8 km (16.6 mi) of the Gila River within the conservation space of San Carlos Reservoir, impounded by Coolidge Dam, as critical habitat for the flycatcher. Coolidge Dam and the San Carlos Reservoir lake bottom (up to elevation 773 m, 2,535 ft) are located on Federal land within Pinal, Gila, and Graham Counties, Arizona (Service 2004c, p. 4). The BIA owns the San Carlos Reservoir land in fee simple title as the owner and operator of the San Carlos Irrigation Project. The Federal Government purchased the land for the Coolidge Dam site from the San Carlos Apache Tribe. Consequently, the dam sits on federal property, but lies within

the confines of the San Carlos Apache Reservation.

At the time of publication of our proposed rule (76 FR 50542, August 15, 2011, p. 50593) the land ownership of the conservation space of San Carlos Reservoir was mistakenly described as San Carlos Apache tribal land, and this was reflected in documents made available to the public for comment. The draft economic analysis prepared by Industrial Economics, Inc., discussed ownership and operation of the Reservoir by the BIA for the purposes of providing irrigation water to the GRIC and other downstream farmers. These ownership issues have been resolved with the help of public comments and our review of *San Carlos Apache Tribe v. United States*, 272 F. Supp. 2d 860 (D. Az. 2003), which discusses the Reservoir's creation and subsequent history.

Coolidge Dam was constructed in 1929, for the purpose of storing water to be used for agricultural irrigation of lands in the Casa Grande Valley in central Arizona for the Pima and Maricopa Indians (now known as GRIC) and the non-Indian farmers living in the San Carlos Irrigation and Drainage District (SCIDD) (Service 2004c, p.4). The rights to the water stored in the Reservoir were determined through water rights litigation brought by the United States in 1925, and defined in 1935, by what is known as the Globe Equity Decree. Under the Globe Equity Decree, a Gila Water Commissioner is charged to operate a "call system" that determines how much surface water each party to the Decree may use on any particular day, which determines whether water is to be stored in or released from the Reservoir. Coolidge Dam and the San Carlos Reservoir are operated by the BIA as part of the San Carlos Irrigation Project (SCIP), under the supervision of the Water Commissioner.

Major inflows into San Carlos Reservoir are from the Gila and San Carlos Rivers. Water released from Coolidge Dam flows approximately 109 km (68 mi) down the Gila River where it is diverted at the Ashurst-Hayden Diversion Dam into the Florence-Casa Grande Canal, which ultimately delivers irrigation water to both GRIC and SCIDD lands through a series of lateral and sub-lateral canals (Service 2004c, p. 4).

When at full capacity, 1.07 cubic km (867,400 acre-feet) of water, San Carlos Reservoir can be one of the largest lakes in Arizona with 254 km (158 mi) of shoreline. The conservation space of the reservoir is shallow, as a result, when full the stored water can spread over a very broad area. Irrigation demand and

the seasonal, flashy nature of river flows produce reservoir levels that can fluctuate dramatically (USBR 2004, p. 12). However, the reservoir rarely fills to capacity; flood flows have filled the reservoir to capacity 8 times during 5 years since storage began in 1928. Water levels have stayed above 0.06 cubic km (50,000 acre-feet) in 29 of the last 67 years, while drawdown to less than one percent of capacity has occurred in 27 years during the same period (USBR 2004, p. 12). Total dry-up of the Reservoir was recorded 21 times in 12 years between 1945 and 1972 (USBR 2004, p. 12). Since the onset of drought beginning in the mid-1990s, and especially from the early 2000s, the conservation pool of the reservoir has typically been low—often around 5 percent capacity (USBR 2004, p. 12). In January 2004, the Reservoir had dropped to its lowest level in 26 years (USBR 2004, p. 13). As a result, the Gila River often runs unaltered, and the reservoir are not inundated as a result of water storage through much of the conservation space of San Carlos Reservoir. Nevertheless, the conservation space within the Reservoir must remain open.

Release of water from Coolidge Dam is dependent on irrigation demand, the availability of SCIP-owned stored water, and the amount of water flowing from the San Carlos and Gila Rivers (USBR 2004, p. 12). Chronic drought since 1999 had severely reduced inflows to the Reservoir and depleted supplies of stored water available to downstream irrigators (USBR 2004, p. 13). On a seasonal basis, these effects are most pronounced in the weeks preceding the summer monsoon, when irrigation demand is high and natural river flow is low (USBR 2004, p. 13).

River flows in the Southwest are typically appropriated, which means that individuals, corporations, and government entities own, within State and Federal law, the rights to withdraw and use the water within a specific set of allocations and priorities (Service 2004c, p. 5). These rights may be bought and sold pursuant to State and Federal law. Such sales or exchanges are typically related to the use of water for municipal, industrial, or agricultural use, but there are certain instances wherein water may be purchased or exchanged for the benefit of fish and wildlife resources (Service 2004c, p. 5).

#### Status of the Flycatcher and San Carlos Reservoir

Flycatcher population size and territory information is the proprietary information of the San Carlos Apache Tribe and are based upon surveys

conducted by the San Carlos Apache Recreation and Wildlife Department since 2000 (Service 2004c, p. 13), with the support of USBR, AGFD, and USGS.

As result of Coolidge Dam and San Carlos Reservoir occurring near the border of the upper Gila Management Unit and Middle Gila and San Pedro Management Units, their operation plays a role in the overall development, persistence, and recycling of flycatcher habitat (Service 2004c, pp. 14–19). Similar to what occurs at other lakes in Arizona, such as Roosevelt and Horseshoe, Coolidge Dam can periodically store and release large amounts of water that can mimic flood flows within the lakebed, spreading water over a large area and stimulating the growth of abundant flycatcher habitat. Additionally, continuing to move water downstream, with periodic flooding, can help create and maintain flycatcher habitat. As of the most recent rangewide flycatcher report, these units contained 329 and 233 flycatcher territories on non-tribal land, respectively (Durst *et al.* 2008, p. 12). These numbers surpass the 325 (Upper Gila Management Unit) and 150 (Middle Gila and San Pedro Management Unit) numerical territory goals for each Management Unit. As of completion of USGS's 2007 Rangewide Report, the Gila River had the highest number of known breeding sites (50) and territories throughout the flycatcher's range (Durst *et al.* 2008, p. 11).

#### San Carlos Apache Tribe and Its Relationship to Waters in San Carlos Apache Reservation

Prior to 1992, there was no intent established by the Globe Equity Decree or legislation that Coolidge Dam be operated for any purpose other than irrigation (USBR 2004, p. 5). However, the San Carlos Apache Water Rights Settlement Act of 1992 allows the Tribe to exchange its Central Arizona Project water allocation for irrigation water releases from San Carlos Reservoir, and grants the Tribe permission to store exchanged water in the Reservoir to maintain a permanent pool for fish, wildlife, and recreation (USBR 2004, p. 5). All such water exchanges must be authorized by the Gila River Commissioner after consultation with other parties to the Globe Equity Decree, and are subject to approval by USBR acting on behalf of the Secretary (USBR 2004, p. 5).

The United States has an Indian trust responsibility to protect and maintain rights reserved by or granted to Indian tribes or individual Indians by treaties, statutes, and Executive Orders, which are sometimes further interpreted

through court decisions and regulations. This trust responsibility requires all Federal agencies ensure their actions afford reasonable protection of Indian trust assets (USBR 2004, p. 37).

A severe drawdown in 1990 was averted when Congress directed BIA to use SCIP power revenues to purchase 0.04 cubic km (30,000 acre-feet) of Central Arizona Project water (water diverted from the Colorado River and stored in Arizona) to exchange for San Carlos Reservoir water (USBR 2004, p. 12). Regional drought in 1997 and from 1999 through 2003 required additional water exchanges with SCIP users to establish and conserve a minimum pool (USBR 2004, p. 12).

Federal land within San Carlos Reservoir is surrounded by the 730,000 ha (1.8 million ac) of the San Carlos Apache Tribal Reservation. The BIA, who owns the lake bottom and operates Coolidge Dam, does not administer a permit, recreation, or access program for these Federal lands. Because recreationists must enter the San Carlos Apache Indian Reservation and acquire a recreation permit before reaching the San Carlos Reservoir lake bottom, access to the lakebed is largely regulated by the San Carlos Apache Tribe. The San Carlos Apache Tribe Recreation and Wildlife Department (SCATRWD) administers recreational use permits on San Carlos Apache tribal lands (SCATRWD 2009, entire). The SCATRWD describes specific numbered areas or units of their land where their various rules and regulations apply. A recreation permit is required for non-tribal members to allow entry except for hunting and fishing (specific permits are required for those activities) (SCATRWD 2009, entire). The SCATRWD administers fishing licenses for San Carlos Reservoir, but does not include Federal land within the conservation space of San Carlos Reservoir within any of their units for other recreational uses. Other than a store and marina located closer toward Coolidge Dam and adjacent to the reservoir, no paved roads, developed camping areas, or other designed recreation centers are known to occur within the San Carlos Reservoir conservation space.

#### Proposed 2003 CAP Water Exchange With the San Carlos Apache Tribe

USBR initiated consultation under section 7 of the Act with the Service on a proposed water exchange between the San Carlos Apache Tribe and the Central Arizona Project in 2003, and the Service completed a biological opinion (Service 2004c, entire). We concluded that stopping downstream Gila River flow in order to store more water at San

Carlos Reservoir would result in incidental take of the bald eagle and the flycatcher downstream of Coolidge Dam due to impacts to their habitat (Service 2004c, pp. 42–44); however because of the short-term nature of the impacts, the lack of water flowing from San Carlos Reservoir would not jeopardize either species (Service 2004c, pp. 19–20, 30). Because of the small amount of water storage within the reservoir, no effects to either species using habitat along the Gila River within the conservation space of San Carlos Reservoir or water stored behind Coolidge Dam were anticipated to be affected by the relatively small amount of additional water stored (Service 2004c, p. 17).

#### Gila River Riparian Areas Upstream of San Carlos Reservoir

We also proposed 14.0 km (8.7 mi) of the Gila River upstream of the San Carlos Reservoir as flycatcher critical habitat. That portion of the Gila River is located on San Carlos Apache tribal land (see Tribal Management Plans below).

#### Benefits of Inclusion—San Carlos Reservoir

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

The Gila River is known to be occupied by flycatchers and therefore, if a Federal action or permitting occurs, there is a catalyst for evaluation under section 7 of the Act. Should we designate critical habitat along the Gila River on Federal land within the San Carlos Reservoir conservation space on Federal land, our section 7 consultation history indicates that there may be some, but few regulatory benefits to the flycatcher. As described above, even with flycatchers occurring throughout this portion of the Gila River, the frequency of formal flycatcher-related section 7 consultations has been rare. Our records show that a single formal consultation on flycatchers occurred for actions associated with San Carlos Reservoir (Service 2004c, entire). As mentioned above, this formal consultation with the USBR was a discretionary proposed water exchange, between the Central Arizona Project and

the San Carlos Apache Tribe, to maintain a minimum pool in San Carlos Reservoir. The action, which never ended up occurring, would have led to the holding of water within San Carlos Reservoir to preserve the existing lake in exchange for the delivery of water to GRIC from the Central Arizona Project. As described above, we anticipated that while the action would result in short-term harm to the flycatcher, it would not result in jeopardy. Although this question has not been finally determined as a matter of law, the USBR's view is that because the San Carlos Reservoir and Coolidge Dam are owned and operated by the BIA solely for the benefit of SCIP water users (USBR 2004, p. 37), the operation of Coolidge Dam to meet the irrigation demand of SCIP is a nondiscretionary function provided for under the San Carlos Project Act of 1924 and the Decree (USBR 2004, p. 37). Furthermore, the BIA has never initiated section 7 consultation on the effects to listed species caused by the operation of Coolidge Dam. Additionally, because the lakebed is meant for water storage, we do not anticipate other agencies implementing a significant amount of Federal actions that would conflict with its goal or that could be affected by dynamic water levels. For example, the Federal Highway Administration is expected to not develop any rights-of-way within the lake bottom, and the Corps is not anticipated to frequently issue any Clean Water Act permits for dredge-and-fill actions. To date, no projects requiring formal section 7 consultation have been initiated by these two agencies or other Federal agencies implementing actions within the San Carlos Reservoir lakebed. Therefore, with the intended use of the conservation space within San Carlos Reservoir for water storage; the preservation of the reservoir's conservation space as open space; the limited, on-the-ground actions implemented by the BIA; the possibility that BIA dam operations are non-discretionary; and only a single formal section 7 consultation initiated since the flycatcher was listed, we anticipate that there is little, if any, additional benefit of a critical habitat designation within San Carlos Reservoir.

Another important benefit of including lands in a critical habitat designation is that it can serve to educate landowners, agencies, tribes, and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high value for certain species. Any information about the flycatcher that

reaches a wide audience, including parties engaged in conservation activities, is valuable. The designation of critical habitat may also strengthen or reinforce some Federal laws such as the Clean Water Act. These laws analyze the potential for projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental laws.

At San Carlos Reservoir, the SCATRWD, along with support from USGS, AGFD, and the USBR have conducted flycatcher surveys. USBR in administering the Central Arizona Project and the BIA as Coolidge Dam operators are fully aware of the importance of San Carlos Reservoir and Coolidge Dam to flycatcher habitat and recovery due to their involvement in the water transfer described above. Because of this overall awareness by tribal, Federal, and State entities, we believe there is little educational benefit or support for other environmental laws and regulations attributable to flycatcher critical habitat beyond those achieved from listing the species under the Act.

#### Benefits of Exclusion—San Carlos Reservoir

The benefits of excluding San Carlos Reservoir are unique because, while the San Carlos Reservoir lakebed is Federal land, it was acquired for the purpose of water storage for the GRIC. Additionally, San Carlos Reservoir has become an important part of the San Carlos Apache Tribe because it generates income through its recreational value, and nearby stores, lodging, and gaming facilities. Therefore, San Carlos Reservoir is a significant trust asset to both GRIC and the San Carlos Apache Tribe. As a result, the benefits from exclusion are more clearly attributed to our trust responsibility and overall conservation relationships with tribes. As a result, the benefits of excluding San Carlos Reservoir from designation of critical habitat primarily include: (1) The advancement of our Federal Indian Trust obligations; and (2) the maintenance of effective collaboration and cooperation to promote the conservation of the flycatcher and its habitat, and other species.

During the development of the flycatcher critical habitat proposal (and coordination for other critical habitat proposals) and other efforts such as development of the Recovery Plan, we have met and communicated with various tribes, including GRIC and the San Carlos Apache Tribe to discuss how they might be affected by the regulations

associated with flycatcher management, flycatcher recovery, and the designation of critical habitat. As such, we established relationships specific to flycatcher conservation. To further our conservation partnerships, we have provided technical assistance to tribes to develop measures to conserve the flycatcher and its habitat on their lands. While we did not propose any flycatcher critical habitat on GRIC lands, GRIC described their support for flycatcher recovery and the importance of the flycatcher to their traditions and culture (Lewis B. 2011, entire). The San Carlos Apache Tribe submitted a Flycatcher Management Plan (SCATRWD 2012, entire). These proactive actions were conducted in accordance with Secretarial Order 3206, “American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act” (June 5, 1997); the relevant provision of the Departmental Manual of the Department of the Interior (512 DM 2); and Secretarial Order 3317, “Department of Interior Policy on Consultation with Indian Tribes” (December 1, 2011). During our communication with these tribes, we recognized and endorsed their fundamental right to provide for tribal resource management activities, including those relating to riparian habitat.

The designation of critical habitat on this piece of Federal land would be expected to adversely impact our working relationship with these tribes, because the San Carlos Reservoir lakebed supports the storage of water, an important tribal resource for both GRIC and the San Carlos Apache Tribe. During our discussions and in the comments we received from tribes and their representatives on the proposed designation of critical habitat, we were informed that critical habitat would be viewed as an intrusion on their sovereign abilities to manage natural resources in accordance with their own policies, customs, and laws, and in the case of GRIC, a potential impact to their federally mandated water deliveries. The perceived future restrictions (whether realized or not) of a critical habitat designation could have a damaging effect to coordination efforts, possibly preventing actions that might maintain, improve, or restore habitat for the flycatcher and other species. To this end, we found that tribes would prefer to work with us on a government-to-government basis. For these reasons, we believe that our working relationships with these tribes would be better maintained if the San Carlos Reservoir lakebed is excluded from the

designation of flycatcher critical habitat. We view this as a substantial benefit since we have developed a cooperative working relationship with these tribes for the mutual benefit of flycatcher conservation and other endangered and threatened species.

We indicated in the proposed rule that our final decision regarding the exclusions of tribal lands under section 4(b)(2) of the Act would consider tribal management and the recognition of their capability to appropriately manage their own resources, and the government-to-government relationship of the United States with tribal entities (76 FR 50542, August 15, 2011, p. 50584). As noted above, while the San Carlos Reservoir lakebed is Federal land, the purpose of this reservoir is to store water for the GRIC. Additionally, water storage supports wildlife, jobs, and the economy at San Carlos Apache tribal land. We also acknowledged our responsibilities to work directly with tribes in developing programs for healthy ecosystems, our need to remain sensitive to Indian culture, and to make information available to tribes (76 FR 50542, August 15, 2011, p. 50596).

We coordinated and communicated with the San Carlos Apache Tribe throughout the revision of flycatcher critical habitat by providing them information on: Implementation of section 4(b)(2) of the Act; the Recovery Plan; Management Plan templates, guidance, and review; critical habitat schedules, related documents, and public hearings; and our interest in consulting with them on a government-to-government basis at their request. We also followed up our correspondence with telephone calls and electronic mail to assist with any questions. Because GRIC was not included within the areas proposed as critical habitat, the content of our coordination was not as detailed. However, we met with GRIC and discussed this unique situation with these Federal lands. During the comment period, we received input from many tribes noting that the beneficial cooperative working relationships between the Service and tribes have assisted in the conservation of listed species and other natural resources. GRIC representatives and the San Carlos Apache Tribe indicated that critical habitat designation on this Federal land would amount to additional regulation of tribal trust resources, and would be viewed as an unwarranted and unwanted. We conclude that our working relationships with these tribes on a government-to-government basis have been extremely beneficial in implementing natural resource programs of mutual interest,

and that these productive relationships would be compromised by critical habitat designation at San Carlos Reservoir.

#### Benefits of Exclusion Outweigh the Benefits of Inclusion—San Carlos Reservoir

The benefits of designating the Gila River within the San Carlos Reservoir lakebed as critical habitat are limited to the incremental benefits gained through the regulatory requirement to consult under section 7 and consideration of the need to avoid adverse modification of critical habitat, as well as agency and educational awareness, and implementation of other laws and regulations. However, as discussed in detail above, we believe these benefits are minimized because of the limitations of federal actions occurring within the conservation space of San Carlos Reservoir; the operation of Coolidge Dam that has allowed numerical flycatcher territory recovery goals to be achieved in the Management Units it influences; and the limited discretion BIA may have with Coolidge Dam operations.

The benefits of excluding the San Carlos Reservoir lakebed from designation as flycatcher critical habitat also include the importance of our partnerships and tribal lands for flycatcher recovery and our responsibility to afford reasonable protection of Native American trust assets. While the lakebed of San Carlos Reservoir is Federal land, the water resources it supports are essential components to both the San Carlos Apache Tribe and GRIC. These tribes play an important partnership role in managing their lands for flycatcher recovery. Without their cooperation, land management, and ability to share information, achieving flycatcher recovery goals will become much more difficult. Our conservation partnership with tribes also includes the advancement and support of our Federal Indian Trust obligations and the maintenance of effective collaboration and cooperation to promote the conservation of the flycatcher and its habitat. In conclusion, we find that the benefits of excluding Federal land within the Gila River lakebed of San Carlos Reservoir from a flycatcher critical habitat designation outweigh the benefits of including these areas.

#### Exclusion Will Not Result in Extinction of the Species—San Carlos Reservoir

The Secretary, under section 4(b)(2) of the Act may exclude areas from the critical habitat designation only if it is determined, “based on the best

scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned.” We have determined that exclusion of the Gila River within the San Carlos Reservoir lakebed from the critical habitat designation will not result in the extinction of the flycatcher. Discretionary Federal activities on these areas that may affect the flycatcher will still require consultation under section 7 of the Act. Section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species. Therefore, even without critical habitat designation on these lands, discretionary activities that occur on these lands cannot jeopardize the continued existence of the flycatcher.

Although flycatchers are known to occur within and downstream of San Carlos Reservoir, our record demonstrates that formal section 7 consultations rarely occur at San Carlos Reservoir. Because of the size of the San Carlos Reservoir conservation space and Coolidge Dam operations that mimic flood flows within the lake and deliver water downstream, the number of flycatcher territories has continued to remain high. Following the most recent rangewide assessment of the distribution and abundance of flycatcher territories, the Gila River upstream and downstream of San Carlos Reservoir supports the most number of breeding sites and flycatcher territories (over 550) throughout the flycatcher’s range (Durst *et al.* 2008, p. 11). The most recent estimate of the number of territories exceeds those needed to reach recovery goals (Durst *et al.* 2008, p. 11). This has occurred while San Carlos Reservoir has not been previously been designated as critical habitat.

Accordingly, we have determined that excluding San Carlos Reservoir will not result in the extinction of the flycatcher and that these Federal lands that were acquired to support a tribal trust resource should be excluded under subsection 4(b)(2) of the Act because the benefits of excluding these lands from critical habitat for the flycatcher outweigh the benefits of their inclusion, and the exclusion of these lands from the designation will not result in the extinction of the species.

#### San Carlos Apache Tribal Management Plan

Please see the end of this section for a discussion about tribes from the Little Colorado, San Juan, Verde, Upper Gila, and Upper Rio Grande Management Units that submitted Management Plans.

#### Hassayampa and Agua Fria Management Unit

##### City of Phoenix Safe Harbor Agreement for Tres Rios Ecosystem Restoration Site, Gila River

The City of Phoenix, in cooperation with the Corps, has developed a Project Cooperation Agreement (PCA), and in partnership with the Service, are finalizing a Safe Harbor Agreement (SHA) for the Tres Rios Ecosystem Restoration Project along the Gila River in Maricopa County, Arizona. The Tres Rios Ecosystem Restoration site is downstream of the Salt River, Agua Fria, and Gila River confluence. The goal of these agreements is to maintain and enhance riparian and wetland habitat, and manage roads, trails, water delivery systems, flood control capacity, and storm water facilities within 375 ha (927 ac) of City of Phoenix owned land.

Through the PCA the City of Phoenix signed with Corps in 2004, the Corps committed 6.2 million dollars towards project construction (which include riparian habitat and stream improvements), while the City of Phoenix committed to the long-term management of these habitats, including supplying treated wastewater at a cost of 1.3 million dollars annually. The SHA between the Service and the City of Phoenix establishes maintenance and management of these habitats for the conservation benefit of the flycatcher, without penalty under the Act. The initial stages of the habitat improvement project have already begun, and the notice of availability for public review of the draft SHA was published in the **Federal Register** on July 10, 2012 (77 FR 40628), and the final is anticipated to be signed in the winter of 2012 or 2013. The proposed term of the SHA is for a 50-year period.

Prior to the development and initiation of these conservation efforts, the enrolled lands were owned and operated by private landowners for a variety of resource uses. Predominant uses included sand and gravel mining, agricultural uses, and residences. These activities, in addition to the interruption of the river’s natural flood regime caused by upstream dams and diversions, have resulted in reduced quality and function of the river and associated riparian habitat. Flycatchers were detected within these private lands, but not with frequency. Some vegetation structurally suitable for nesting was present, but past land and water uses reduced the overall quality of riparian habitat. Between 1995 and 2003, individual migrant flycatchers were detected three times, and two



territorial males were detected a single time.

The enrolled lands are now owned by the City of Phoenix. The implementation of actions through the PCA by the Corps and the City of Phoenix and long-term habitat management by the City of Phoenix attempts to restore stream function, reliable water, and riparian vegetation to this segment of the Gila River. It also attempts to restore flood protection and passive recreation. Project construction within the Tres Rios area includes channel formation and habitat development. Improvements include creating wetland and riparian biotic communities, including mesquite bosque, cottonwood/willow forest, freshwater marsh, floodplain terrace, and open water. After the conservation measures are implemented, the lands will be managed with the primary goal of habitat conservation. Passive recreation activities will be managed with the goal of having minimal impact to the habitat.

#### Benefits of Inclusion—Tres Rios Ecosystem Restoration Site

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

Lands being evaluated for exclusion in this segment of the Gila River have been occupied by migrating and nesting flycatchers and are subject to section 7 consultation requirements of the Act under the jeopardy standard. The City of Phoenix owns and manages much of this reach of the Gila River. Because of the financial commitment by the Corps, the PCA between the Corps and City of Phoenix, and the upcoming SHA partnership with the Service, we do not anticipate there being many consultations along this section of river that would affect the long-term success of this habitat improvement project. It is possible that other projects impacting non-federally owned areas within the Tres Rios Area such as the State of Arizona lands might require section 7 consultation for effects to critical habitat if they require Federal permitting or use Federal funds. However, outside of the implementation of the stream and habitat restoration actions through the

PCA, no other consultations have been initiated for this area since the flycatcher has been listed under the Act. Because of the lack of past section 7 consultations in this area and the commitment by the City of Phoenix to improve and manage the Tres Rios Area, the benefit of implementing a critical habitat designation in this area through section 7 consultations is limited.

Another important benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners, agencies, tribes, and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the flycatcher that reaches a wide audience, including parties engaged in conservation activities, is valuable. The designation of critical habitat may also strengthen or reinforce some Federal laws such as the Clean Water Act. These laws analyze the potential for projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental laws.

The City of Phoenix, during the development of the SHA has conducted flycatcher surveys along this segment. The Corps and AGFD are also involved in the Tres Rios Area and are aware of the importance of this segment for flycatcher recovery. The City of Phoenix has also participated with the Service as a stakeholder in the development of the Roosevelt Dam and Horseshoe and Bartlett Dam HCPs, where the flycatcher was a primary species of conservation. The AGFD has been regularly involved with flycatcher surveys, management, and research Statewide, including the Tres Rios Area. The listing of the flycatcher and development of the Tres Rios Area and associated SHA has caused the managing agencies in this area to be fully aware of the inclusion of the flycatcher in implementing other environmental laws and regulations. Because of the City of Phoenix, Corps, and AGFD's conservation awareness and implementation of conservation actions associated with their PCA and development of the SHA, we believe there are minimal educational benefits attributable to critical habitat beyond those achieved from listing the species under the Act and the City of Phoenix's continued conservation efforts.

In summary, we do not believe that designating flycatcher critical habitat within the Tres Rios Ecosystem Restoration Area along the Gila River in Maricopa County, Arizona, will provide meaningful additional benefits. The City

of Phoenix and Corps have a long-term commitment to implement habitat improvement and land and water management actions at Tres Rios, which are the types of actions recommended in the Recovery Plan to conserve the flycatcher. Because of these long-term stream and riparian habitat improvement commitments, we do not anticipate future federally funded actions reversing these habitat improvements. As a result of the habitat improvement goals of the Tres Rios Project, there is a low probability of mandatory elements arising from formal section 7 consultations and therefore any outcome from a critical habitat designation would more likely result in discretionary conservation recommendations. We also believe that the informational benefits have already occurred through past actions and discussion of inclusion of the flycatcher within a SHA. Therefore, the incremental benefits of a flycatcher critical habitat designation for the Tres Rios Ecosystem Restoration Project would be minimal.

#### Benefits of Exclusion—Tres Rios Ecosystem Restoration Site

A considerable benefit from excluding the Tres Rios Restoration Site as flycatcher critical habitat is the maintenance and strengthening of ongoing conservation partnerships. In addition to the effort for Tres Rios Area, the City of Phoenix has demonstrated a partnership with the Service by developing and implementing a different SHA with the Service for the Rio Salado Habitat Restoration Project. Through these processes, they have demonstrated a willingness to develop, maintain, and manage Gila River flycatcher habitat, as well as habitat for other listed species.

The success of the City of Phoenix's riparian habitat management has yet to be realized because their project is just beginning; we estimate that it may take 5 years following implementation for flycatcher habitat to be established. The City of Phoenix's conservation strategy is a combination of water and land management actions that can be expected to maintain existing riparian habitat, reduce habitat stressors, and improve areas for nesting flycatchers. Overall, we expect greater flycatcher conservation through these commitments than through project-by-project evaluation implemented through a critical habitat designation.

Our collaborative relationship with the City of Phoenix makes a difference in our partnership with the numerous stakeholders involved with flycatcher management and recovery and

influences our ability to form partnerships with others. Additional evidence of the partnership between the City of Phoenix and the Service is shown by the City of Phoenix's willingness to agree to a long-term commitment, through implementation of the 50-year SHA, to assess habitat quality and survey flycatcher habitat on an annual basis. Concerns over perceived added regulation potentially imposed by critical habitat could harm this collaborative relationship. Exclusion of this area from the designation would maintain and strengthen the partnership between the Service and the City of Phoenix.

Because so many important lands with flycatcher habitat occur on non-federal lands, collaborative relationships with these landowners will be essential in order to recover the flycatcher. The flycatcher and its habitat are expected to benefit substantially from voluntary landowner management actions that implement appropriate and effective conservation strategies. The conservation benefits of critical habitat are primarily regulatory or prohibitive in nature. Where consistent with the discretion provided by the Act, the Service believes it is necessary to implement policies that provide positive incentives to non-federal landowners to voluntarily conserve natural resources and that remove or reduce disincentives to conservation (Wilcove et al. 1996, 1–15; Bean 2002, 1–7). Thus, we believe it is essential for flycatcher recovery to build on continued conservation activities such as these with a proven partner, and to provide positive incentives for other non-federal landowners who might be considering implementing voluntary conservation activities but have concerns about incurring incidental regulatory or economic impacts.

#### Weighing Benefits of Exclusion Against Benefits of Inclusion—Tres Rios Ecosystem Restoration Site

In reaching the conclusion that benefits of excluding lands within the Gila River Tres Rios Ecosystem Restoration Site managed by the City of Phoenix outweigh the benefits of inclusion as flycatcher critical habitat, we have weighed the benefits of including these lands as critical habitat with the implementation of their SHA management plan against the same situation without critical habitat.

Including this Tres Rios Ecosystem Restoration segment of the Gila River as flycatcher critical habitat would result in minimal, if any additional incremental regulatory benefits to the flycatcher. The long-term management

commitments through their PCA and developing SHA support the conservation goals established in the Recovery Plan by creating and managing flycatcher habitat. The principal benefit of including an area in a critical habitat designation is the requirement for Federal agencies to ensure actions they fund, authorize, or carry out are not likely to result in the destruction or adverse modification of any designated critical habitat. Our flycatcher section 7 consultation history shows that besides the implementation of this habitat restoration project, there have been no other flycatcher-related consultations for this location. We expect to complete a consultation for the completion of SHA in the winter of 2012 or 2013. We have no information to anticipate this limited amount of consultation would change in the future. Based upon the limited number of previous consultations in the Tres Rios Area, combined with the long-term commitment to improve stream and riparian habitat conditions, we anticipate that any formal section 7 consultations conducted on critical habitat would likely result in discretionary conservation recommendations.

We believe past, present, and future coordination with the City of Phoenix has provided and will continue to provide sufficient education regarding flycatcher habitat conservation needs on these lands, such that there would be minimal additional educational benefit or support of other laws and regulations from designation of critical habitat.

On the other hand, the benefits of excluding Tres Rios Ecosystem Restoration portion of the Gila River from critical habitat are considerable. The City of Phoenix's developing SHA establishes a framework for cooperation and coordination with the Service in connection with resource management activities based on appropriate land and water management strategies described in the Recovery Plan. Exclusion of these lands from critical habitat will help preserve and strengthen the conservation partnership we have developed with the City of Phoenix, reinforce those we are building with other entities, and foster future partnerships and development of management plans. We are committed to working with the City of Phoenix to further flycatcher conservation and other endangered and threatened species. Therefore, in consideration of the relevant impact to our partnership with the City of Phoenix, and their anticipated fulfillment of a long-term commitment to implement conservation management practices, we determine

that the benefits of exclusion outweigh the benefits of inclusion in the critical habitat designation.

After weighing the benefits of including the Tres Rios Ecosystem Restoration Site along the Gila River as flycatcher critical habitat against the benefit of exclusion, we have concluded that the benefits of excluding this Gila River segment outweigh those that would result from designating this area as critical habitat. We have therefore excluded these lands from this final critical habitat designation pursuant to section 4(b)(2) of the Act.

#### Exclusion Will Not Result in Extinction of the Species—Tres Rios Ecosystem Restoration Site

We find that the exclusion of the Gila River within the Tres Rios Ecosystem Restoration Site will not lead to the extinction of the flycatcher. The City of Phoenix has developed and committed through their PCA with the Corps to long-term management of this property for open space, and wildlife habitat and conservation. The City of Phoenix's developing SHA with the Service also commits to 50 years of land and water management to this habitat improvement project, and we anticipate the improved quality of riparian habitat will result in a conservation benefit for the flycatcher. Overall, we expect greater flycatcher conservation through these commitments than what could occur through project-by-project evaluation implemented through a critical habitat designation. As a result of the commitment toward flycatcher habitat improvement and conservation, we do not expect that exclusion will result in extinction of the flycatcher.

#### San Luis Valley Management Unit

##### San Luis Valley Conservation Partnerships and Habitat Conservation Plan

Two flycatcher critical habitat segments were proposed in the San Luis Valley Management Unit in Colorado: a 159.4-km (99.0-mi) segment of the Rio Grande constituting about 23,330 ha (57,650 ac), and a 69.8-km (43.4-mi) segment of the Conejos River constituting about 9,450 ha (23,352 ac) (76 FR 50542, August 15, 2011, p. 50576). The proposed critical habitat in the San Luis Valley included federal lands managed by the BLM and the Alamosa portion of the Alamosa, Monte Vista, and Baca NWR Complex. For the reasons explained below, we are excluding the non-Federal portions of proposed critical habitat (Rio Grande; 119.5 km, 74.3 mi and Conejos River; 64.9 km, 40.4 mi) in the San Luis Valley

Management Unit of the flycatcher based on conservation partnerships in the San Luis Valley evidenced by the newly completed San Luis Valley Regional Habitat Conservation Plan (SLVRHCP) and many additional conservation partnerships with numerous entities in the San Luis Valley. We are not excluding the federal lands within the San Luis Valley Management Unit.

#### San Luis Valley Regional Habitat Conservation Plan

The species covered in the SLVRHCP are the flycatcher and a candidate species, the western U.S. distinct population segment of the yellow-billed cuckoo (*Coccyzus americanus*). The SLVRHCP covers nearly 400 stream km (250 mi) constituting 1.17 million ha (2.9 million ac) and extends well beyond the stream segments on the Rio Grande and Conejos River that were proposed as critical habitat.

The SLVRHCP covers three categories of activities: (1) Routine agriculture activities (grazing, fence construction and maintenance, ditch clearing and maintenance, water facility maintenance, new small-scale water facility construction, and water management and administration); (2) small community infrastructure activities (vegetation removal from floodways, levee construction and maintenance, sediment removal, infrastructure construction, infrastructure maintenance, and road and bridge maintenance); and (3) riparian conservation and restoration activities (channel shaping and stabilization, habitat creation and restoration, weed management, and wetland creation and management). Large commercial or residential developments, large water development projects, sanitation or industrial water impoundments, new highway construction, and projects on non-Federal lands requiring a Federal permit are not covered by the SLVRHCP.

The Service cooperated with the SLVRHCP permittees for 9 years in development and review of the SLVRHCP. The permit applicants include the Rio Grande Water Conservation District (District); Alamosa, Conejos, Costilla, Rio Grande, Mineral and Saguache Counties; the municipalities of Alamosa, Del Norte, Monte Vista, and South Fork; and the State of Colorado Department of Natural Resources. The State of Colorado received section 6 planning grants under the Act on behalf of the District in 2004, 2005, and 2009 for the District and their consultants to complete the HCP and associated documents. The

District will be the administrator of the SLVRHCP, which was completed in November 2012.

The covered activities are estimated to impact 123 ha (304 ac) that will be mitigated at a 1:1 ratio by the applicants. Mitigation will be in the form of conservation easements, habitat restoration and enhancements, and management agreements. The majority of covered activities are expected to impact narrow habitat patches or otherwise marginal habitat for the flycatcher. Consequently, mitigation measures will conserve, restore, or enhance habitat to a higher quality for flycatchers than the impacted habitat. This mitigation strategy will provide riparian habitat essential to maintaining all physical or biological features or primary constituent elements necessary to sustain flycatcher populations.

As part of implementing the SLVRHCP, the District will actively provide outreach to landowners, local communities, private and public utilities, and other stakeholders to provide them with the information and tools to develop an understanding of this SLVRHCP. Outreach objectives include explaining the benefits to landowners and the community, reducing the long-term impacts of covered and non-covered activities on riparian habitat, and gaining support for SLVRHCP mitigation programs. Significant outreach efforts are to be carried out by the District within the first 6 months of implementation of the SLVRHCP.

Both compliance and effectiveness monitoring are built into the SLVRHCP. Valley-wide habitat monitoring as well as parcel-specific habitat monitoring and species monitoring will be conducted and will be used to determine if management needs to be adapted to successfully mitigate covered activities and maintain habitat into the future.

#### Additional San Luis Valley Conservation Partnerships

This section describes the many ongoing conservation partnership efforts (in addition to the SLVRHCP) in the San Luis Valley that protect and enhance wetland and riparian habitat, and contribute to the conservation and enhancement of habitat for the flycatcher. In total, the conservation partnerships discussed below cover the entire San Luis Valley and the entire extent of the two proposed critical habitat units, except for the Federal lands discussed above. Combined, there are 2,950.4 ha (7,290.4 ac) of non-federal lands designated as critical habitat under conservation easements along the

Rio Grande and 724.4 ha (1,797.4 ac) under conservation easements for the Conejos River, comprising about 11.2 percent of non-federal lands included in the designation within the San Luis Valley. Additionally, there are 984.7 ha (2,433.2 ac) of non-federal lands designated as critical habitat within State Wildlife Areas along the Rio Grande and 64.0 ha (158.1 ac) of the Conejos River within State Wildlife Areas, comprising about 3.2 percent of the non-federal lands included within the designation within the San Luis Valley. Other conservation partnerships actions are described in the text below.

The local communities of the San Luis Valley have a history of proactive and collaborative conservation dating back to the establishment of the Great Sand Dunes National Monument in 1932. These efforts have led to the establishment of the Alamosa and Monte Vista NWRs, local habitat protection efforts, numerous private conservation programs, and the acquisition of the Baca Ranch to allow the creation of the Baca NWR and Great Sand Dunes National Park and Preserve. The legacy of these ongoing efforts is found in the existing mosaic of protected lands that sustain the rare species such as the flycatcher in the San Luis Valley, and are enhanced through the SLVRHCP's strategic and collaborative conservation approach. In the following discussion, we describe ongoing conservation partnerships in four categories: conservation programs and initiatives, conservation easements, State Wildlife Areas, and riparian and wetlands restoration efforts.

#### Conservation Programs and Initiatives

##### Conservation Programs—San Luis Valley Wetlands Focus Area Committee

The San Luis Valley Wetlands Focus Area Committee (WFAC) was formed as an advisory group to the Colorado Department of Wildlife, now Colorado Parks and Wildlife (CPW) in 1990. When the CPW created its Statewide Colorado Wetlands Program and Wetlands Initiative (now Wetland Wildlife Conservation Program), WFAC groups were formed within the San Luis Valley to provide a Valley-wide forum for wetlands and riparian conservation ideas and research, raise funds, and optimize collaboration and avoid duplication amongst conservation groups. The WFAC group includes several local conservation organizations: the Federal, State, and local land management and wildlife agencies; water and soil conservation districts; and numerous local farmers, ranchers, and interested citizens. Since a large

extent of the Valley's water and wetlands are components of private agricultural operations, the WFAC works closely with private landowners to enhance and sustain wetlands and riparian areas. The collaborative work helps to conserve wetlands thus conserving essential riparian habitat for the flycatcher.

#### Conservation Programs—Rio Grande Initiative

In 2006, the WFAC and the Rio Grande Headwaters Land Trust (RiGHT) began a focused effort to protect and improve riparian and wetland habitat on private lands along the Rio Grande by implementing conservation easements or other means. The Rio Grande Initiative is a partnership between RiGHT, Ducks Unlimited, The Nature Conservancy (TNC), the Colorado Cattleman's Agricultural Land Trust (CCALT), and others. The goal of the Rio Grande Initiative is to work with individual landowners to voluntarily protect land and habitat along the Rio Grande corridor (see *Conservation Easements* section below for more details).

Since its initiation, the Rio Grande Initiative partners have raised more than \$10 million dollars in Federal, State, and private funding and have protected over 18 properties and 5,504 ha (13,600 ac) of land along the Rio Grande, some of which is within proposed critical habitat. Notable conservation successes within the area proposed as flycatcher critical habitat area include the River Valley Ranch I (237 ha, 585 ac) near the Rio Grande-Shriver-Wright SWA, the 415-ha (1,025-ac) Gilmore Ranch near Alamosa, and the 1,352-ha (3,341-ac) Cross Arrow Ranch at the confluence of the Rio Grande and Conejos River. These conservation easements will conserve flycatcher habitat.

#### Conservation Programs—Rio Grande Natural Area

On October 12, 1996, the Rio Grande Natural Area Act was signed into law (Pub. L. 109–337; 16 U.S.C. 460). The Rio Grande Natural Area Act established conservation along a 53-km (33-mi) stretch of the Rio Grande from the southern boundary of the Alamosa NWR to the New Mexico State line, extending 0.4 km (0.25 mi) on either side of the river. The purpose of the Natural Area is to conserve, restore, and protect the natural, historic, cultural, scientific, scenic, wildlife, and recreational resources along the Rio Grande. The Natural Area includes about 4,000 ha (10,000 ac) of both Federal (BLM) and private land. With regards to proposed critical habitat, the Natural Area

includes all 38.9 km (24.2 mi) south of Alamosa NWR, which includes 17.5 km (10.8 mi) of private land and 21.4 km (13.4 mi) of BLM land, constituting 1,833.3 ha (4,530.2 ac) of proposed critical habitat.

The Rio Grande Natural Area Act required assembly of a commission to facilitate implementation of the Natural Area Act. The Rio Grande Natural Area Commission is composed of nine members including the BLM Colorado State Director; Alamosa/Monte Vista/Baca NWR Complex Manager; representatives from the Colorado Division of Wildlife (CPW), Colorado Division of Water Resources, Rio Grande Water Conservation District; and four members of the public.

The Natural Area Act also calls for the development of Natural Area Management Plans. The BLM and the Commission are preparing two management plans, one for BLM land and one for private lands. The Natural Area Act directs the management plans to include the following:

- Consideration of other Federal, State, and local plans.
- Measures that encourage county governments (Costilla and Conejos Counties) to adopt and implement land use policies that are consistent with the management of the Natural Area.
- Measures to encourage and assist private landowners in the Natural Area with the implementation of the management plan.
- A list of property that should be preserved, restored, managed, developed, maintained, or acquired to further the purposes of the natural area.
- Policies for resource management to protect the resources and natural values of the Natural Area.

The Rio Grande Natural Area planning and implementation process will provide an additional framework for riparian habitat conservation and management along the Rio Grande, including the high-quality habitat areas south of the Alamosa NWR. Management of the Natural area serves to conserve flycatcher habitat in the area we proposed as critical habitat.

#### Conservation Easements

Conservation easements are restrictions that landowners voluntarily place on their properties to protect environmental resources and restrict future development. Easements are generally held by a qualified conservation organization (for example a land trust) or Federal or local government entity, and are usually granted in perpetuity. Conservation easements allow continued private ownership and use of the land, subject

to the specific parameters of the easement. Easement terms and management requirements vary between properties, and are developed on a case-by-case basis, although, at a minimum, the easements preclude development in riparian areas. Of the numerous conservation easements throughout the San Luis Valley, several include flycatcher habitat. The acreage of conservation easements within proposed flycatcher critical habitat is described above.

As of July 2012, 9,087.8 ac (3,677.8 ha) of riparian habitat within proposed critical habitat was protected by conservation easements (ERO Resources Corporation 2012). Out of this acreage, 7,290.4 ac (2,950.4 ha) is on the Rio Grande, and 1,797.4 (727.4 ha) is on the Conejos River. Protected riparian habitat within conservation easements on private lands constitutes about 11.2 percent of proposed critical habitat overall, or 12.7 percent on the Rio Grande and 7.7 percent on the Conejos River. These conservation easements provide long-term conservation flycatcher habitat in the areas where they occur. A further description of these conservation easement holders and the amount of land under easement is provided below.

#### Conservation Easements—Rio Grande Headwaters Land Trust (RiGHT)

RiGHT focuses on the protection of agricultural land and water resources, and is the only locally based land trust that operates in the San Luis Valley. Priority areas include the Rio Grande corridor and the Rock Creek corridor to the west of the Monte Vista NWR. RiGHT has been the lead entity in the Rio Grande Initiative and holds easements on about 213.5 ha (527.6 ac) of land within proposed critical habitat.

#### Conservation Easements—Ducks Unlimited

Ducks Unlimited currently holds easements on eight properties totaling about 225.5 ha (557.1 ac) within proposed critical habitat along the Rio Grande corridor. Ducks Unlimited is focusing on the Rio Grande corridor to protect its important wetland and riparian habitat and is a partner in the Rio Grande Initiative.

#### Conservation Easements—Other

Other conservation easements also exist within proposed critical habitat. TNC holds an easement on about 400 ha (1,000 ac) of the Gilmore Ranch near Alamosa on the Rio Grande. As part of the Rio Grande Initiative, the Colorado Cattleman's Agricultural Land Trust holds a 650-ha (1,600-ac) easement

within proposed critical habitat in Rio Grande County on the Rio Grande. The Natural Resources Conservation Service has several existing and numerous potential conservation easements on a variety of properties providing riparian habitat in the Valley. Most of these easements and potential easements are along the Rio Grande between Del Norte and the Conejos River confluence. The existing conservation easements cover about 26.9 ha (66.5 ac) of land in proposed critical habitat.

#### State Wildlife Areas

The State of Colorado has SWAs or other State lands that are covered under the SLVRHCP. SWAs are managed specifically for conservation of wildlife. SWA land within proposed critical habitat includes a total of 1,048.7 ha (2,591 ac), including 984.7 ha (2,433.2 ac) on the Rio Grande (two SWAs) and 64.0 ha (158.1 ac) on the Conejos River (one SWA). CPW does not have any flycatcher-specific management plans in their SWA plans, but their goal is to keep the riparian and wetland habitat on the SWAs intact and functioning (Basagoitia 2012, pers. comm.). This management will provide benefits by conserving flycatcher habitat.

#### Riparian and Wetlands Restoration Efforts

##### Restoration—Rio Grande Headwaters Restoration Project

The Rio Grande Headwaters Restoration Project (Restoration Project) has been active since 1999. In 2001, the Restoration Project completed a study to determine what was needed to improve the river. The focus of the study and restoration include the Rio Grande from the upstream corporate limit of the Town of South Fork, Colorado, to the Alamosa-Conejos County line. In 2004, a Rio Grande Watershed Strategic Plan was developed to implement needs identified in the 2001 study. The Strategic Plan takes a comprehensive approach to the river's functions; its goals include maintaining or improving water quality, timing stream flows to mimic a natural hydrograph, improving the function and reliability of diversion structures, protecting the 100-year floodplain from flood damage and development impacts, maintaining or enhancing river function to provide recreation opportunity, complementing efforts of other agencies and groups, and seeking funding to implement the projects. The Restoration Project has raised over \$2,000,000 in grants for six cost-share riparian stabilization projects at 29 sites within the area proposed as critical habitat. These efforts have

culminated in over 8.1 km (5 mi) of habitat restoration that has benefited the flycatcher. A diversion replacement project within proposed critical habitat has recently been initiated that will benefit flycatcher habitat by restoring 600 m (2,000 feet) of riparian habitat and a 0.8-ha (2-ac) wetland beneficial to the flycatcher (Rio Grande Headwaters Restoration Project 2012, entire).

#### Habitat Improvement—Partners for Fish and Wildlife

The Service's Partners for Fish and Wildlife program (PFW) has supported habitat protection and enhancement efforts, including conservation easements and habitat improvement projects, on numerous properties in the San Luis Valley. The PFW program uses Federal money to help private landowners restore, enhance, and conserve important wildlife habitat. A major focus of this program in the San Luis Valley is on conservation of riparian habitats, primarily in areas north of the Town of Alamosa. The Service enters into contracts with landowners to provide financial assistance in exchange for specified conservation measures such as excluding grazing and fencing riparian areas. The lengths of the contracts vary from a few years to perpetual easements; most contracts are for 10 years.

Within proposed critical habitat, PFW easements or contracts cover approximately 825.6 ha (2,040 ac), which includes 603 ha (1,490 ac) along the Rio Grande and 222.6 ha (550 ac) along the Conejos River. These projects typically involve habitat management efforts including riparian fencing, deferred grazing, and water control structures that allow for natural regeneration. Willow plantings are also conducted where warranted. Flycatcher habitat is conserved by these PFW agreements.

#### Benefits of Inclusion—San Luis Valley Conservation Partnerships

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

Because the flycatcher occurs within the Rio Grande and Conejos River corridors, project proponents with a

Federal nexus would likely have to evaluate the impacts of their future projects under a section 7 consultation using the jeopardy standard. The Corps, BLM, NRCS, and other Federal agencies have already addressed the flycatcher in past section 7 consultations concerning land management actions on federal and non-federal lands within the San Luis Valley. We expect these agencies would likely consult for future activities that would affect flycatcher critical habitat. These consultations are usually resolved at an "informal" level, as the Federal agencies typically design their projects to avoid adverse effects to the flycatcher. All of the area being considered for exclusion is either privately owned or is owned by a State or other non-Federal entity. In contrast to Federal lands, the occurrence of a federal nexus on private lands are less frequent and are typically more associated with site-specific actions permitted by the Corps or with project funding from the NRCS. As a result, this reduces the extent of the potential regulatory benefit of including these non-federal areas in the critical habitat designation. Therefore, in the case of the flycatcher habitat on non-Federal lands (State, local government, and private lands) in the San Luis Valley, we believe the incremental benefits of critical habitat designation are minimal when compared to the conservation and regulatory benefits already derived from the species being listed.

Another important benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners, agencies, tribes, and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the flycatcher that reaches a wide audience, including parties engaged in conservation activities, is valuable. The designation of critical habitat for the flycatcher in the San Luis Valley may strengthen or reinforce some Federal laws such as the Clean Water Act. These laws analyze the potential for projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental laws.

The areas being excluded have a long history of conservation, including for the benefit of the flycatcher. Therefore, most landowners are already aware of the need for the conservation of the species and its habitat. In addition, the outreach efforts that are forthcoming from the SLVRHCP will provide an enhanced effort for public outreach to

benefit flycatcher conservation. These existing and future outreach efforts minimize the educational benefits that would be gained by designating the areas as flycatcher critical habitat.

In summary, we do not believe that designating flycatcher critical habitat within the non-Federal lands of the San Luis Valley along the Rio Grande and Conejos River in Colorado will provide meaningful additional benefits. There already exists long-term commitment to implement habitat improvement and land and water management actions in the San Luis Valley, which were recently reinforced with the SLVRHCP. The ongoing efforts are the types of actions recommended in the Recovery Plan to conserve the flycatcher. Because of these long-term stream and riparian habitat improvement commitments, we do not anticipate future federally funded actions reversing these habitat improvements. As a result of the ongoing habitat conservation efforts, there is a low probability of mandatory elements arising from formal section 7 consultations and, therefore, any outcome from a critical habitat designation would more likely result in discretionary conservation recommendations. We also believe that the informational benefits have already occurred through past actions and inclusion of the flycatcher within the SLVRHCP. Therefore, the incremental benefits of a flycatcher critical habitat designation for the San Luis Valley would be minimal.

#### Benefits of Exclusion—San Luis Valley Conservation Partnerships

The proposed critical habitat segments on the Rio Grande and Conejos River have been the focus of conservation related activities for a number of years due to the species' listing, ongoing development of the SLVRHCP, and additional conservation partnerships in the area as described above. Excluding the non-Federal lands along the Rio Grande and the Conejos River in Colorado from the critical habitat designation will sustain and enhance the conservation partnerships between the Service and the applicants for the SLVRHCP. Both the District and the Conejos Water Conservancy District submitted public comment letters on the proposed critical habitat designation stating that designating critical habitat would harm these working relationships. The willingness of the District and other applicants to work with the Service through the SLVRHCP on ways to mitigate and manage habitat for the flycatcher will continue to reinforce incentives for conservation efforts and thus contribute towards

achieving recovery of the flycatcher. We will also learn more about the status of the flycatcher on non-Federal lands through implementing the SLVRHCP, providing a basis to pursue further recovery actions such as habitat protection, restoration, and other beneficial management actions for the flycatcher. Without the SLVRHCP, we likely would not have access to private lands to conduct surveys if the land was designated as critical habitat.

The efforts and funding to date in development of the SLVRHCP, as well as the history of conservation efforts through additional partnerships, demonstrate the commitments of the San Luis Valley residents to provide for flycatcher conservation and the growth and persistence of its habitat. A considerable benefit of excluding non-Federal lands in the San Luis Valley as flycatcher critical habitat is the maintenance and strengthening of ongoing conservation partnerships. These partnerships benefit the flycatcher as well as habitat for other sensitive and non-listed species by providing opportunities for conservation, management, and restoration on non-Federal lands that would not exist absent these strong partnerships.

The success of the CPW management on SWAs has resulted in flycatcher habitat protection and the occurrence of one of the largest nesting sites within the San Luis Valley Management Unit. Exclusion of SWAs or other State land from the designation would maintain, and strengthen the partnership between the Service and CPW.

The flycatcher and its habitat are expected to benefit substantially from voluntary landowner management actions that implement appropriate and effective conservation strategies. The conservation benefits of critical habitat are primarily regulatory or prohibitive in nature. Where consistent with the discretion provided by the Act, the Service believes it is necessary to implement policies that provide positive incentives to non-Federal landowners and land managers to voluntarily conserve natural resources and that remove or reduce disincentives to conservation (Wilcove et al. 1996, 1–15; Bean 2002, 1–7). Thus, we believe it is essential for flycatcher recovery to build on continued conservation activities such as these with proven partners, and to provide positive incentives for other non-Federal land managers who might be considering implementing voluntary conservation activities but have concerns about incurring incidental regulatory or economic impacts.

#### The Benefits of Exclusion Outweigh the Benefits of Inclusion—San Luis Valley Conservation Partnerships

The benefits of including the non-federal portions of the San Luis Valley critical habitat units in the designation are small and are outweighed by the regulatory, educational, and ancillary benefits already afforded through the SLVRHCP, CPW management, and partnership actions. The SLVRHCP provides for conservation and management of the areas that contain the physical or biological features essential to flycatcher conservation and will help achieve recovery of this species. Exclusion of these lands from critical habitat will help preserve the partnerships we have developed with the SLVRHCP applicants, other stakeholders, and project proponents and may foster future partnerships to the benefit of the flycatcher and other species. The SLVRHCP applicants and associated stakeholders have informed us that designating critical habitat within the SLVRHCP permit area will harm the working relationship created by the partnership and undermine the conservation efforts that are already underway. Thus, the San Luis Valley partnerships provide a greater benefit to the flycatcher than would be provided by designating critical habitat.

After weighing the benefits of including the non-Federal lands along the Rio Grande and Conejos River as flycatcher critical habitat against the benefit of exclusion, we have concluded that the benefits of excluding these segments outweigh those benefits that would result from designating this area as critical habitat. We have therefore excluded these lands from this final critical habitat designation pursuant to section 4(b)(2) of the Act.

#### Exclusion Will Not Result in Extinction of the Species—San Luis Valley Conservation Partnerships

We find that the exclusion of the non-Federal lands along the Rio Grande (119.5 km, 74.3 mi) and Conejos River (64.9 km, 40.4 mi) will not lead to the extinction of the flycatcher. The SLVRHCP has committed numerous entities to engage in management and conservation efforts that are expected to develop, maintain, and manage riparian habitat for the benefit of flycatchers. Overall, we expect greater flycatcher conservation through these commitments than what could occur through project-by-project evaluation implemented through a critical habitat designation. As a result of the commitment toward flycatcher habitat improvement and conservation, we do

not expect that exclusion will result in extinction of the flycatcher.

#### Upper Rio Grande Management Unit San Ildefonso Pueblo Management Plan

Please see the end of this section for a discussion about tribes from the Little Colorado, San Juan, Verde, Upper Gila, and Upper Rio Grande Management Units that submitted Management Plans.

#### Santa Clara Pueblo Partnership

Please see the end of this section for a discussion about our tribal conservation partnership from the Upper Rio Grande Management Unit.

#### San Juan Pueblo (Ohkay Owingeh) Partnership

Please see the end of this section for a discussion about our tribal conservation partnership from the Upper Rio Grande Management Unit.

#### Lower Rio Grande Management Unit Elephant Butte Irrigation District Canalization and Conservation Project

In New Mexico, along the lower Rio Grande downstream of Caballo Dam, the Elephant Butte Irrigation District (EBID) and the El Paso County Water Improvement District No. 1 (EP#1) manages the water from the Rio Grande stored in Elephant Butte Reservoir for agricultural use, and the International Boundary and Water Commission (IBWC) (a Federal Agency) is responsible for maintaining levees and channel irrigation facilities, and floodway management needed to deliver water from the Rio Grande to water rights holders downstream. Together, the EBID, EP#1, and IBWC are planning a large-scale riparian habitat improvement project along the lower Rio Grande from Percha Dam to American Dam (termed the lower Rio Grande Elephant Butte Irrigation District Canalization and Conservation Project). Within this portion of the lower Rio Grande, we proposed a 74.2-km (46.1-mi) segment from Caballo Dam to Ft. Selden as flycatcher critical habitat.

The lower Rio Grande south of Caballo Reservoir is managed by the IBWC, whose mission is to provide bi-national solutions to issues that arise during the application of United States-Mexico treaties regarding boundary demarcation, national ownership of waters, sanitation, water quality, and flood control in the border region. Water deliveries to downstream water users for irrigation and other purposes are managed by EBID (a quasi-municipal agency of the State of New Mexico). EBID operates, maintains, and owns the irrigation distribution system, which

was constructed by the USBR including the canals, laterals, drains, waste-ways, operation and maintenance roads on both riverbanks, and structures. State statutes provide for the equitable distribution of water from the Elephant Butte Reservoir to all of its water users and generally govern how EBID operates and manages the water it provides to its users.

Prior to the listing of the flycatcher, IBWC's management of the lower Rio Grande emphasized canalization to facilitate efficient water deliveries and flood control. As a result, the channel narrowed and degraded, with limited areas for overbank flooding to support expansive native riparian communities. The vast majority of floodplains, which would have formerly supported native riparian vegetation, including some flycatcher habitat, are now subject to substantial human impacts by agriculture, urbanization, recreation, vegetation encroachment and management, grazing, fire, and other stressors.

The lower Rio Grande Canalization and Conservation Project includes 30 riparian improvement sites, 12 of which are specifically designed to create flycatcher nesting habitat across 69 ha (171 ac). These habitat improvement sites are to be established by 2019. Additionally, the practice of mowing willow trees will cease, which should also add to the distribution and abundance of riparian vegetation. Plus, willow trees will be planted in areas with favorable hydrological conditions, and flycatcher surveys will occur, as will vegetation monitoring. Restoration efforts will also physically reconnect old river channels and lower incised banks to the main river channel where appropriate.

As part of the Canalization and Conservation Project, IBWC will work with other partners to implement a flycatcher management plan for the lower reach of the Rio Grande that requires flycatcher habitat goals be maintained throughout the reach. The goal is to provide flycatcher habitat in the Lower Rio Grande Management Unit, while still delivering water, as required by IBWC and EBID. IBWC, USBR, EP#1, and EBID, along with the San Andres NWR, New Mexico State Parks (NMSP), the New Mexico Interstate Stream Commission (ISC), and New Mexico Audubon have partnered to establish flycatcher habitat in this reach of the river. Several planting projects have placed hundreds of young cottonwood trees on the floodways between the levees. The concerted effort by multiple agencies and groups to improve habitat in this reach of the Rio

Grande is already providing habitat benefits to the flycatcher.

Although many organizations are currently partnering to implement flycatcher habitat improvement efforts, the key factor in creating and maintaining flycatcher habitat is the ability to periodically inundate the riparian vegetation with water from the Rio Grande. IBWC and other partners do not own the water rights necessary to provide water to the sites where restoration efforts are occurring. Therefore EBID and EP#1 are voluntarily working with the National Fish and Wildlife Foundation (NFWF) to develop a water transaction program that will allow IBWC and other partners to purchase or lease water that can be used to flood flycatcher riparian habitat similar to an agricultural crop. Because of the importance of water to develop and maintain flycatcher habitat, participation by EBID is crucial to the continued habitat improvement of this river reach for the benefit of the flycatcher. The water transaction program by EBID will allow for a greater number of acres to become flycatcher habitat.

The IBWC management plan will also manage flycatcher breeding habitat and implement measures to protect nesting sites from human disturbance during the breeding season, and protect against detrimental edge effects by not mowing willows in their right-of-ways. With riparian habitat restoration and the ability to provide water and protection to these sites, the recovery goals for the Lower Rio Grande Management Unit can be met.

The number of flycatcher territories detected annually in this reach from 1993 to 2010 ranged from 0 to 9 (Durst *et al.* 2008; Service 2012, pp. 33–34). The number of territories detected has been relatively stable; however fire and other vegetation changes likely reduced the quality habitat at Selden Canyon, as no detections were reported in 2010 (Service 2012a, p. 33–34).

IBWC has sponsored recent flycatcher surveys along the lower Rio Grande (Blackburn 2010, p. 1–3; 2011, p. 1–4) resulting in an increase in the overall survey efforts, known breeding sites, and estimated total number of territories. Blackburn (2010, p. 1–3; 2011, p. 1–4) identified additional territories on or near Bailey's Point Bar and near Crow Canyon. In 2012, a total of 25 territories were detected, enough to meet the numerical territory recovery goal in the Lower Rio Grande Management Unit (Hill, D. 2012, pers. comm.). This increase may reflect survey effort, as well as an increase in riparian habitat quality following the



reduction of grazing and habitat mowing (SWCA Environmental Consultants 2011, p. 16). Also, dispersal of flycatchers pioneering new breeding areas originating from the nearby large population from the Middle Rio Grande Management Unit may have also contributed.

#### Benefits of Inclusion—Canalization and Conservation Project

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

The Rio Grande within the Lower Rio Grande Management Unit area is known to be occupied by flycatchers and has undergone section 7 consultation under the jeopardy standard related to the lower Rio Grande Elephant Butte Irrigation District Canalization and Conservation Project. There may be some minor benefits from the designation of critical habitat along the lower Rio Grande, primarily because it would require Federal agencies to perform additional review of their project implementation. While this area was not previously designated as flycatcher critical habitat, the IBWC (the primary federal agency affecting flycatcher critical habitat along the lower Rio Grande) has already undergone section 7 consultation under the jeopardy standard due to the occurrence of flycatchers along the lower Rio Grande. If this segment were designated as flycatcher critical habitat, IBWC would likely reinstate consultation on their ongoing management responsibilities. Because one of the primary threats to the flycatcher is habitat loss and degradation, section 7 consultation process under the Act would evaluate effects of the action on flycatcher habitat. With the implementation of the flycatcher conservation actions included in the Canalization and Conservation Project, which are expected to result in more breeding habitat, territories, breeding pairs, and nesting success, we concluded the project would not jeopardize the flycatcher or adversely modify proposed critical habitat (Service 2012a, pp. 61–62). We also concluded that these flycatcher conservation actions would support the habitat and territory goals established in

the Recovery Plan. Any future federal projects implemented by other agencies with less prominent responsibilities along the lower Rio Grande, such as Federal Highway Administration, or from the BLM on surrounding lands, would require evaluation using the jeopardy standard under section 7 of the Act. However, because flycatchers occur along the lower Rio Grande and due to the long-term and extensive flycatcher habitat conservation benefits resulting from the EBID's Canalization and Conservation Project, the incremental benefits of designating critical habitat from Caballo Dam to Leasburg Dam are limited.

Another important benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners, agencies, tribes, and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the flycatcher that reaches a wide audience, including parties engaged in conservation activities, is valuable. The designation of critical habitat may also strengthen or reinforce some Federal laws such as the Clean Water Act. These laws analyze the potential for projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental laws.

We believe that there would be little educational and informational benefit gained from including the Lower Rio Grande within the designation because this area is well known as an important area for flycatcher management and recovery. For example, the collection of federal agencies and stakeholders integral to water and land management along the lower Rio Grande are involved in conducting flycatcher surveys, have previously initiated section 7 consultation, and have planned and are implementing flycatcher conservation actions. Consequently, we believe that the informational benefits and support for implementing other environment regulations have already occurred through past actions even though this area is not designated as critical habitat.

#### Benefits of Exclusion—Canalization and Conservation Project

The benefits of excluding the lower Rio Grande between Caballo Dam to Leasburg from designated critical habitat include: (1) Continued and strengthened effective working relationships with IBWC, EBID, Audubon, and other stakeholders and partners; (2) meaningful collaboration

toward flycatcher recovery; and (3) the development of a water transaction program that provides irrigation water to flycatcher restoration sites that might not otherwise occur. The restoration activities and conservation objectives created by IBWC and other non-federal partners is currently meeting the flycatcher territory recovery goal component described in the Recovery Plan, and is expected, with improved water availability to vegetation, to meet the habitat-related recovery goal for this Management Unit.

EBID's constituents view critical habitat designation as an intrusion on their abilities to manage their water rights. Through fostering a cooperative working relationship with EBID, IBWC and others conducting surveys and habitat monitoring, and undertaking habitat restoration and enhancement projects, are realizing flycatcher conservation benefits. Without EBID's support in carrying out these restoration efforts and implementing the water transaction program, significant conservation benefits to the flycatcher could be lost. For these reasons, we believe that fostering our working relationship with EBID and their constituents is important to maintain flycatcher conservation benefits.

As a result of the amount of important flycatcher recovery areas located on private lands or with non-federal resources, proactive voluntary conservation efforts have and will continue to be important to achieve flycatcher recovery. As the water manager for the lower Rio Grande, EBID's willingness to participate and coordinate the water transaction program is crucial to creating successful flycatcher restoration sites. Their agreement to work with IBWC, NFWF, and others demonstrates that meaningful, collaborative, and cooperative work for the flycatcher and its habitat will continue within their jurisdiction. The development of the water transaction program may not occur if critical habitat were designated. Therefore, we believe that the results of these voluntary restoration activities will promote long-term protection and conserve the flycatcher and its habitat within the lower Rio Grande Management Unit. The benefits of excluding this area from critical habitat will encourage the continued cooperation and development of the water transaction program, which will allow IBWC to provide water to the flycatcher restoration sites. If this area is designated as critical habitat, we believe it is unlikely that EBID's constituents will support the water transaction program.

Excluding the lower Rio Grande area that is within the jurisdiction of IBWC from the critical habitat designation will provide significant benefits to the flycatcher through sustaining and enhancing the working relationship between the Service, IBWC, EBID, and other stakeholders. The willingness of IBWC and EBID to work with the Service on innovative ways to manage the flycatcher and develop flycatcher habitat will reinforce our partnership, which is important in order to achieve flycatcher recovery. We can often achieve greater conservation through voluntary actions than through implementing a critical habitat regulation on a project-by-project basis.

By excluding the Rio Grande south of Caballo Dam in New Mexico from critical habitat designation, we are also encouraging new partnerships with other landowners and jurisdictions to protect the flycatcher and other listed or sensitive species. We consider this voluntary partnership in conservation vital to our understanding of the status of species on non-Federal lands and necessary for us to implement recovery actions such as habitat protection and restoration, and beneficial management actions for species.

#### Benefits of Exclusion Outweigh the Benefits of Inclusion—Canalization and Conservation Project

We have reviewed and evaluated the lower Rio Grande from Caballo Dam to Leasburg Dam in New Mexico, and have concluded that the benefits of exclusion under section 4(b)(2) of the Act outweigh the benefits of including these areas as flycatcher critical habitat. The incremental regulatory benefits of including these lands within the critical habitat designation are minimized because the regulatory, educational, and ancillary benefits that would result from critical habitat designation are similar to the benefits already afforded through the IBWC management plan and protections associated with the listing of the flycatcher. The implementation of the IBWC collaborative conservation project provides for significant conservation, management, improvement, and protection of the physical or biological features essential to flycatcher conservation in order to achieve flycatcher recovery goals.

The Service has created close partnerships through the development of IBWC's restoration plan, which incorporates protections and management objectives for the flycatcher and the habitat upon which it depends for breeding, sheltering, and foraging activities. The conservation strategy identified in IBWC's

management plan, along with our close coordination with IBWC, EBID and other partners, addresses the identified threats to flycatchers and the geographical areas that contain the physical or biological features essential to its conservation.

Exclusion of these lands from critical habitat will help preserve the partnerships we have developed with local jurisdictions and project proponents through the development and ongoing implementation of their conservation plan. These partnerships are focused on flycatcher conservation and securing conservation benefits that will lead to recovery. Furthermore, these partnerships aid in fostering future partnerships for the benefit of listed species that do not occur on Federal lands and thus are less likely to result in a section 7 consultation. Because we now have a sustainable flycatcher population along the lower Rio Grande, we are relying on the conservation efforts of the many stakeholders to create, manage, and maintain flycatcher habitat to contribute to reaching recovery goals. We expect that the results of implementing these flycatcher conservation actions will generate benefits beyond those that could be achieved from project-by-project evaluation through a critical habitat designation.

The conservation gains to the flycatcher identified south of Caballo Dam are more beneficial than designation of critical habitat because of the development of the water transaction program. This explicit benefit will not be realized without EBID's voluntary participation. The water users (farmers), who are currently supportive of the restoration efforts in the southern reach of the Rio Grande, will be reluctant to continue participation in the conservation efforts if critical habitat is designated. It will be necessary for EBID's constituents to support the water transaction program, in order for it to be successful. If critical habitat is designated, the constituents are unlikely to support the efforts of the water transaction program. Our partnership, along with the biological opinion for IBWC's canalization project and restoration sites (which includes the flycatcher management plan and the water transaction program), ensures implementation of the protections and management actions identified within their plan. Therefore, the relative benefits of excluding critical habitat on these lands are substantial and outweigh the benefits of including the area as critical habitat.

We have determined that the additional regulatory benefits of

designating these occupied areas as flycatcher critical habitat are minimal. Furthermore, the conservation objectives identified by the IBWC Plan, in conjunction with our partnership with the EBID and others, will provide a greater benefit to the species than critical habitat designation. We also conclude that the educational and ancillary benefits of designating critical habitat for the flycatcher between Caballo and Leasburg Dams would be minor because of the partnership established between the Service and IBWC, and the management objectives identified in the biological assessment and biological opinion. Therefore, in consideration of the relevant impact to current and future partnerships, as summarized in the *Benefits of Exclusion* section above, we determined the significant benefits of exclusion outweigh the benefits of critical habitat designation.

#### Exclusion Will Not Result in Extinction of the Species—Canalization and Conservation Project

We determine that the exclusion of the lower Rio Grande between Caballo Dam and Leasburg Dam from the designation of critical habitat for the flycatcher will not result in extinction of the species because current conservation efforts under IBWC's restoration plan adequately protects the geographical areas containing the physical or biological features essential to flycatcher conservation. In our biological opinion, the Service determined that implementation of the IBWC Canalization and Conservation Project and associated flycatcher restoration plans was not likely to result in jeopardy to flycatcher or adversely modify proposed critical habitat (Service 2012a, pp. 61–62), and is likely to benefit the species. It is anticipated that the implementation of these projects will support reaching the flycatcher territory and habitat goals established in the Recovery Plan. Therefore, based on the benefits described above, we have determined that this exclusion will not result in the extinction of the flycatcher, and the Secretary is exercising his discretion under section 4(b)(2) of the Act to exclude the entire proposed segment of the lower Rio Grande from Caballo Dam to Leasburg Dam from this final critical habitat designation.

#### Tribal Management Plans

In this section, we first provide an overview of the conservation actions described in the flycatcher management plans being implemented by the La Jolla and Rincon Band of Luiseño Mission

Indians in California; Navajo Nation in New Mexico and Utah; San Carlos Apache and Yavapai-Apache Tribes in Arizona; Southern Ute Tribe in Colorado; and Zuni and San Ildefonso Pueblos in New Mexico. These plans were either admitted to the supporting record during the open comment period for the proposed rule or were already part of our files and submitted during the development of the 2005 flycatcher critical habitat designation. Based upon our occupancy criteria for this rule, all of the streams identified on these tribal lands either are known to have flycatcher territories or are expected to be used by migrant flycatchers. After an introduction of the conservation efforts of each of these tribal lands, discussed in order of the Recovery and Management Units, we then collectively analyze the benefits of including the tribal lands within the critical habitat designation and the benefits of excluding these areas. We conclude with analysis comparing the benefits of inclusion with the benefits of exclusion of these tribal lands.

The tribes (Hualapai, Chemehuevi, Fort Mojave, CRIT, and Quechan—Fort Yuma) included in the planning area for the LCR MSCP are discussed above within the evaluation of the LCR MSCP for exclusion under section 4(b)(2) of the Act.

#### Coastal California Recovery Unit, San Diego Management Unit

##### La Jolla Band of Luiseño Mission Indians

The La Jolla Band of Luiseño Indians Reservation is located in northern San Diego County, California, in the San Diego Management Unit, and contains an approximately 11.6-km (7.2-mi) stream segment along the San Luis Rey River that was proposed as flycatcher critical habitat. The La Jolla Band of Luiseño Indians completed a Flycatcher Management Plan (La Jolla Band of Luiseño Indians 2005, entire) and confirmed through their letter submitted during the proposal's comment period that the plan has ongoing implementation.

The La Jolla Band of Luiseño Indians' Flycatcher Management Plan provides guidelines for the protection and management of flycatcher habitat. The Tribe's Flycatcher Management Plan describes a collection of measures, protections, and efforts they are and will be undertaking to protect flycatcher riparian habitat which includes: (1) Maintaining permanent staff to address environmental issues, of which a Master's level biologist is employed; (2) maintaining open space along the San

Luis Rey River and to establish this open space as a reserve for environmental and cultural purposes; (3) management of native vegetation that could improve the quality and abundance of riparian habitat, and decrease the risk of wildfire; (4) reducing the impact of recreation in riparian areas by continuing to educate tribal members and campground visitors through outreach programs, brochures, and newsletters; and (5) working to discourage the use of off-road vehicles in riparian areas through education, movement or closure of roads, and development of tribal ordinances.

##### Rincon Band of Luiseño Mission Indians

The Rincon Band of Luiseño Mission Indians Reservation is located in northern San Diego County, California, in the San Diego Management Unit, and contains an approximately 4.3-km (2.7-mi) stream segment along the San Luis Rey River proposed as willow flycatcher critical habitat. The Rincon Band of Luiseño Indians completed a Flycatcher Tribal Resource Conservation and Management Plan (Rincon Band of Luiseño Mission Indians 2005, entire) and confirmed through their letter submitted during the proposed rule's comment period, the plan's ongoing implementation toward flycatcher conservation.

The Rincon Band of Luiseño Mission Indian's Management Plan addresses potential threats to flycatcher habitat through implementation of a variety of protective measures including: (1) Management of native vegetation that could improve the quality and abundance of riparian habitat, and decrease the risk of wildfire; (2) removal of all trash and debris from the San Luis Rey River; (3) excluding activities in the floodplain, such as mining and livestock grazing, which could remove or reduce the quality of riparian habitat; (4) exclusion of unauthorized recreational uses and off-road vehicle use from the riparian area; and (5) education of the public through development of signs, boundaries, and other measures to prevent unauthorized recreational use.

Additionally, the Tribe is currently coordinating with the Service to develop a Reservation-wide HCP to provide conservation benefits to federally listed, unlisted, and rare species, including the federally endangered flycatcher.

#### Lower Colorado Recovery Unit, Little Colorado Management Unit

##### Zuni Pueblo

The Zuni Department of Natural Resources (2012, entire), on behalf of The Zuni Pueblo (Zuni), developed and submitted a Flycatcher Management Plan to the Service in October 2012. Zuni and the Service have a common interest in promoting healthy ecosystems and protecting the flycatcher and its habitat. Zuni described that their cultural and spiritual beliefs are tied to wetlands and riparian areas, and, therefore, have committed to continue to manage riparian corridors benefiting all riparian obligate species, including the flycatcher.

The Zuni's Flycatcher Management Plan describes their approach to managing the flycatcher and its habitat on tribal land, which includes a 55.4-km (34.4-mi) segment of the Zuni River and a 35.8-km (22.2-mi) segment of the Rio Nutria proposed as critical habitat in McKinley and Cibola Counties, New Mexico. This Management Plan was developed in accordance with the Recovery Plan (Service 2002, entire), which is the primary resource for conservation practices.

The Zuni Department of Natural Resources has actively managed known flycatcher habitat in order to conserve and protect the continued presence of flycatchers on Zuni Pueblo. Zuni has supported research studies to improve their understanding of flycatcher territory abundance, site fidelity, year-to-year movements, and survival. Zuni has protected these riparian areas with known territories by preventing major land altering and development activities; implementing seasonal buffers when needed; providing education to tribal members; and managing cattle through annual review of grazing, rotational grazing practices, and livestock exclusions. Zuni has also used introduction of beavers to elevate ground water tables, thereby increasing the amount of water available for riparian plants that flycatcher rely upon.

Zuni will continue to survey for flycatchers in known areas and also other habitats that exhibit suitable habitat characteristics. Their objectives by continuing these surveys is to be able to conserve and protect the flycatcher and its habitat from possible land altering actions such as over utilization, habitat manipulation, fire, or mechanical or chemical treatments.

Zuni has also begun to develop 12 different riparian habitat areas that may be used by nesting flycatchers. A 49-ha (120-ac) wetland-riparian habitat area is being established with cottonwood and

willow trees by using treated affluent from the wastewater treatment plant. This habitat is being developed partially to replace areas where vegetation needed to be reduced in order to reduce hazardous fuel loads. Zuni has created 5 of the 12 habitat sections and continue to see improvement in the growth of cottonwood and willow. It is their objective that with the continued development of these habitats, breeding flycatchers will use the area.

Upper Colorado Recovery Unit, San Juan Management Unit

#### Navajo Nation

The Navajo Nation submitted a management plan that recognizes the flycatcher as a species in need of protection on the Navajo Nation (Navajo Nation 2012, entire). Their plan uses conservation techniques recommended in the Recovery Plan and applies to all appropriate streams administered by the Navajo Nation, including a 3.5-km (2.2-mi) segment proposed as critical habitat along the San Juan River within San Juan County, New Mexico, and a 51.6-km (32.1-mi) segment along the San Juan River in San Juan County, Utah (43.5 km, 27.0 mi of the south bank on the eastern portion of the segment and 8.1 km, 5.1 mi of both banks of the remaining western portion of the segment). The Navajo Nation Department of Fish and Wildlife (NNDFW) described that they will review their flycatcher management plan every 5 years for effectiveness, and, in consideration of the current status of the flycatcher under Navajo and Federal law, they will revise and extend the plan accordingly.

The NNDFW has authority with regard to endangered and threatened species protection and all temporary and permanent developments must receive clearance from NNDFW. The Navajo Nation evaluates a project's potential impact on protected wildlife or their habitat by using their Natural Heritage Database and various tribal and Federal wildlife protection regulations. The Navajo Nation's regulatory process divides their land into six separate land status categories based on their biological sensitivity and uses these categories to manage actions in a way that minimizes impacts to sensitive species and habitats.

Proposed flycatcher critical habitat segments along the San Juan River falls into areas the Navajo Nation has delineated as either as a biological preserve or a highly sensitive area (Navajo Nation 2012, p. 28). These areas are provided the greatest degree of protection from permanent development

and temporary disturbances. Biological preserves are landscapes of high wildlife value and little or no current development or disturbance, or are particularly important for one or more protected species. Permanent or temporary development within biological preserves is prohibited unless it is compatible with the management of those areas as wildlife habitat. Highly sensitive habitats are areas that contain a high degree of habitat or resources importance for one or more protected species and have been relatively undisturbed by development. Permanent development is not prohibited, but those developments must demonstrate that impacts to protected species will be minimal, and the NNDFW strongly urges relocating projects to less sensitive habitats if possible.

Although NNDFW makes a strong effort to avoid impacts to riparian habitats through project evaluation, some necessary developments may occur and efforts will be made to reduce, minimize, or mitigate potential project impacts. When a project could disturb nesting flycatchers or their habitat, NNDFW requires the project sponsor to adhere to protocol surveys and avoidance restrictions. Projects with the potential to disturb flycatchers or affect its habitat require two years of surveys. NNDFW prohibits activities within 0.4 km (0.25 mi) of a known nest or 0.4 km (0.25 mi) of potential nesting habitat (if a nest is not known) during the breeding season. Alteration of riparian habitat within 0.4 km (0.25 mi) of a known breeding area is prohibited year-round. When riparian habitats will be affected NNDFW seeks mitigation to enhance or improve similar habitats elsewhere. Of particular importance to NNDFW is enhancement of riparian habitats for the benefit of tribally or federally protected species, and any such projects get high priority.

Existing recreational use on the Navajo Nation by boaters, campers, or hikers is not a primary stressor to flycatcher habitat. Recreation primarily occurs along stream segments in canyon, where habitat for flycatcher territories is not expected.

The introduction of nonnative species, including those for weed or invasive species management, is currently prohibited by NNDFW policies and will be both a criminal and civil offense in the Navajo Nation Fish and Wildlife Code proposed amendments (pending approval by the Navajo Nation Council) (Navajo Nation 2012, p. 25). The NNDFW recognizes the potential impacts to riparian habitat from the tamarisk leaf beetle, and

mitigating the adverse effects through the implementation of projects such as the planting of willows in affected riparian habitats, will be a priority.

The NNDFW does not anticipate any prescribed burns in potential flycatcher habitat, and would not approve a prescribed burn in known flycatcher habitat without consultation with the Service.

The Navajo Nation described that while livestock grazing is a traditional way of life for the Navajo People, the Navajo Nation recognizes that management is needed to address impacts that grazing has on vegetation flycatchers rely upon. The Nation can withdraw riparian habitat from grazing use and has previously worked with other Navajo agencies to reduce and eliminate grazing in important habitats along the San Juan River. Efforts are underway by Navajo policy makers and agencies to address past grazing impacts on the Navajo Nation and to improve protection and enforcement of Navajo resources and ecosystems. For example, this year the Navajo Departments of Resource Enforcement and Agriculture, in the Division of Natural Resources, partnering with local chapters (municipal subdivisions of the Navajo government), have been conducting roundups to reduce overgrazing by stray, feral, and unpermitted livestock. Additionally, the Navajo Nation and the BIA have been conducting public outreach regarding grazing impacts and the necessity of immediate and proactive steps to be taken to reduce grazing pressure and restore productivity of Navajo Nation rangelands.

#### Southern Ute Tribe

The Southern Ute Tribal Flycatcher Management Plan (Management Plan), developed by the Southern Ute Division of Wildlife Resource Management (2012, entire), was adopted by their Tribal Council in July 2012. The Tribe manages its lands within the Reservation in a manner that protects and conserves natural resources, including habitats for endangered and threatened species.

The Southern Ute's Management Plan describes their comprehensive and integrated approach in managing the flycatcher and its habitat on tribal land. This includes the 25.9-km (16.1-mi) segment of the Los Pinos River proposed as flycatcher critical habitat in La Plata County, Colorado. This Management Plan can be amended when determined necessary by the Department and Council to reflect new information such as the flycatcher's biology, distribution, or abundance.

The Southern Ute Division of Wildlife Resource Management is involved in internal tribal project review. Prior to review, all land use, management, and development activities on tribal lands require review and comment by tribal resource experts and formal approval by Tribal Council. As described in their Management Plan, all projects that could adversely affect sensitive resources, such as flycatcher habitat, are mitigated to the maximum extent practicable.

A primary goal of the Southern Ute Tribe, as reflected in their Management Plan, is to protect flycatcher habitat and territories, focusing on maintaining the complex vegetation structure and hydrologic conditions, which represent and support flycatcher habitat. Loss of habitat will be minimized by locating land-use and development outside of flycatcher habitat areas. Management and protection of habitat include such strategies as establishing seasonal buffers around territories; designating Tribal Conservation Areas; minimizing recreation impacts; suppressing and reducing occurrence of wildfire; and managing cattle grazing through exclusion, fencing, or conservative use.

The Management Plan indicates that flycatcher habitat improvements will also be a goal along the Los Pinos River. Habitat creation and enhancement efforts will focus on restoring native plant communities through planting and improving the hydrologic conditions that favor the establishment of native plants. The Tribe will pursue grants for habitat improvements, seek improvement of in-stream flow, and explore introduction of beavers in order to raise groundwater elevation.

The Southern Ute's Management Plan also describes that they will continue to conduct surveys for flycatcher and conduct research in support of flycatcher conservation. The Tribe will ensure that all surveyors have the appropriate training to conduct flycatcher surveys and will conduct period surveys throughout the Reservation for flycatcher territories. They will maintain their data in electronic databases and coordinate and share non-sensitive information with the Service and others. They will continue to support research to better understand flycatcher distribution and other actions that can improve tribal conservation and management of the flycatcher.

Gila Recovery Unit, Verde Management Unit

#### Yavapai-Apache Nation

The Yavapai-Apache Nation completed a Flycatcher Management Plan in 2005, and updated their plan in 2012 (Yavapai Apache Nation 2012, entire). The Yavapai-Apache Nation Tribal Council approved the implementation of their updated Management Plan in September 2012. The Yavapai and Apache people describe that they have valued and protected the Verde River, and the 2.8-km (1.7-mi) portions of the stream on Yavapai-Apache tribal lands proposed as flycatcher critical habitat within Yavapai County, Arizona, since time immemorial.

The Nation continues to preserve those portions of the Verde River under its jurisdiction along with the plants and animals associated with the River. The Nation has a common interest with the Service in promoting healthy ecosystems for endangered and threatened species, including the flycatcher.

The Management Plan specifically addresses and presents assurances for implementation of flycatcher habitat conservation. The Nation will take steps to protect flycatcher habitat along the Verde River through zoning, implementing tribal ordinances and code requirements, and carrying out measures identified in the Recovery Plan.

The purpose of the Nation's Flycatcher Management Plan is to promote the physical and biological features that will maintain flycatcher habitat. Their strategy is not to allow any net loss or permanent impacts to flycatcher habitat by implementing measures from the Recovery Plan. Recreation and access to riparian areas will be managed to ensure no net loss of habitat. Fire within riparian areas will be suppressed and also managed by reducing fire risks. The Tribe will cooperate with the Service to monitor and survey habitat for breeding and migrating flycatchers, conduct research, and perform habitat management, cowbird trapping, or other beneficial flycatcher management activities.

Since 2005, the Yavapai-Apache Nation has concluded that through implementation of their Flycatcher Management Plan, there has been no net loss of flycatcher habitat. Since 2005, no cattle grazing has occurred within the Verde River corridor. If any future grazing is permitted, it will be conducted appropriately with fences, and in a manner to protect flycatcher habitat quality. Also, no new access

roads or recreation sites have been created. Similarly, any new housing areas have been directed to avoid construction within the river corridor.

The Yavapai-Apache Nation has conducted continued education, information gathering, and partnering. The Nation has emphasized the importance of protecting the Verde River within tribal youth education programs. The Nation has also installed measurement devices to evaluate the depth of the Verde River groundwater in order to address river flows necessary to maintain or improve the riparian habitat quality. The Yavapai-Apache Nation has also continued to strengthen its partnership with the Service by hosting a meeting on the Service's Verde River conservation strategies. The Nation has committed to cooperatively discussing and examining future projects with the Service that could impact the flycatcher or its habitat.

Gila Recovery Unit, Upper Gila Management Unit

#### San Carlos Apache Tribe

The San Carlos Apache Tribe Flycatcher Management Plan, developed by the SCATRD (2012, entire), was adopted by their Tribal Council in 2005, and was updated and adopted by the Council in September 2012. The Tribe describes that it highly values its wildlife and natural resources, which it is charged to preserve and protect under their Tribal Constitution. Consequently, the Tribe has managed wildlife habitat on its tribal lands, including endangered and threatened species habitat. San Carlos Apache tribal land includes the 31.3-km (19.5-mi) segment of the Gila River upstream of the conservation space of San Carlos Lake proposed as flycatcher critical habitat in Graham County, and a small disconnected portion (1 km, 0.6 mi) of the San Pedro River north of Aravaipa Creek in Pinal County Arizona.

Please note that as a result of new information we received from comments, we have now updated our land ownership information, and have correctly identified that the BIA owns the conservation space or lakebed of San Carlos Lake. Please see *San Carlos Reservoir* within this Exclusion section for our separate 4(b)(2) exclusion analysis of the conservation space of San Carlos Lake, which is owned by the BIA.

The purpose of their Management Plan is to provide a comprehensive and integrated approach in managing the flycatcher and its habitat, with the overall goal of protecting and securing areas of suitable and potentially suitable

flycatcher habitat on San Carlos Apache tribal land. In addition, it serves as a guide to evaluate projects that may impact the flycatcher and its habitat. Strategies for managing flycatcher habitat are based on guidelines outlined in the Recovery Plan. This Management Plan can be amended when determined necessary by the Department and Council to reflect new information on the flycatcher's biology, survey methodologies, or tribal goals and objectives for flycatcher management.

Through the implementation of their Management Plan, tribal ordinances and codes, the Tribe will protect and manage known flycatcher habitat, including areas proposed as critical habitat along the Gila River. The San Carlos Recreation and Wildlife Department will monitor riparian habitat, survey for flycatchers (in accordance with current protocols), and manage suitable and potentially suitable flycatcher habitat. The Tribe assures no net flycatcher habitat loss, permanent modification, or adverse impacts will occur as described in the Recovery Plan. The Recovery Plan will also be a reference guide for any habitat management activities or projects. The Tribe, through the San Carlos Recreation and Wildlife Department, will confer with tribal and Federal agencies, when appropriate, before performing management activities to control or replace salt cedar with native willow, cottonwood, or mesquite depending on the capability of the site, in order to avoid or minimize detrimental impacts.

Since the Plan's development in 2005, the San Carlos Apache Tribe has consistently conducted annual flycatcher surveys and is committed to continue future surveys. A database has been developed to maintain survey data allowing the Tribe to evaluate flycatcher populations and trends over multiple years. Flycatcher locations are electronically mapped to assess density and habitat use.

The results of the Tribe's flycatcher surveys have assisted in identifying potential project impacts in order to avoid and minimize effects to flycatchers and their habitat. The Recreation and Wildlife Department, a clearinghouse for all project reviews, has evaluated multiple projects since 2005, some of which were associated with Federal funding and resulted in informal and formal section 7 consultations with the Service. In 2009, the Federal Highway Administration consulted with the Service on two bridge improvement projects. Using survey data, tribal, FHWA, and Service biologists were able to determine the location and proximity of flycatcher

territories to the construction site in order to assess the potential impacts, and measures were included in the section 7 biological opinions to reduce and minimize effects to flycatcher habitat.

The San Carlos Apache's Soil and Moisture Conservation Program (SMCP) has been pursuing two of the Tribe's many objectives for natural resource health: noxious weed removal and restoring native vegetation. In 2005, the SMCP initiated an effort to eradicate or reduce salt cedar in riparian areas where it was not yet a dominant portion of the habitat. The goals were to improve native vegetation, wildlife diversity, riparian health, and culturally important plants without using harsh, intrusive methods of weed removal. The Tribe consulted the Recovery Plan during project planning to guide habitat improvement in flycatcher breeding habitat.

#### Rio Grande Recovery Unit, Upper Rio Grande Management Unit

##### San Ildefonso Pueblo

The San Ildefonso Pueblo, located in Rio Arriba County, New Mexico, completed and adopted a 2011 addendum to their 2005 Integrated Resource Management Plan, focusing specifically on flycatcher habitat management (San Ildefonso Pueblo 2012, entire). The San Ildefonso Pueblo described that their motivation to repair and protect their land is strong, with their culture and tradition obligating them to be stewards of the land, water, and wildlife, including the 7.7 km (4.8 mi) of the Rio Grande proposed as flycatcher critical habitat.

The San Ildefonso Pueblo's addendum provides the management goals for long-term management of the Tribe's natural resources, including the flycatcher's habitat, based on the Recovery Plan. Their flycatcher management goals are to: (1) Restore water-related elements to improve quality, distribution, and abundance of riparian habitat; (2) retain riparian habitat and minimize vegetation removal; (3) manage livestock grazing through better fencing to improve the quality and quantity of riparian habitat; (4) protect riparian habitat from recreation impacts; (5) improve abundance of native plant species; (6) suppress fires that may occur in riparian areas; (7) coordinate with others to improve flycatcher populations; and (8) minimize threats to migratory flycatchers.

The San Ildefonso Pueblo is collaborating with nearby pueblos and agencies on improving stream function

and riparian habitat. They entered into an agreement in 2005 with the nearby pueblos and the Corps to protect riparian habitat, in part, by conducting a watershed feasibility study on tribal lands. The Pueblo has also collaborated with other agencies, such as the BIA and Service, on conducting flycatcher surveys and evaluation of riparian rehabilitation management project proposals and environmental assessments (70 FR 60886; October 19, 2005, p. 60958).

#### Benefits of Inclusion—Tribal Lands Implementing Flycatcher Management Plans

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

The streams that are being evaluated that occur within these tribal lands are known to be occupied by flycatchers and therefore, if a Federal action or permitting occurs, there is a catalyst for evaluation under section 7 of the Act. Our section 7 consultation history across the flycatcher's range shows that since listing in 1995, four formal consultations have occurred for actions conducted on tribal lands that resulted in adverse effects to flycatchers. No formal flycatcher consultations have been conducted with the BIA, a likely source of federal funding for Native American tribes. The two most recent formal section 7 consultations were with the Federal Highway Administration implementing bridge improvements on tribal lands in Arizona. We have conducted informal consultations with agencies implementing actions on tribal lands, provided tribes technical assistance on project implementation, and the Corps has coordinated with pueblos on projects; however, overall, since listing in 1995, formal section 7 consultations have been rare on tribal lands. Because of how tribes and pueblos have chosen to manage and conserve their lands and the lack of past section 7 consultation history, we do not anticipate that tribal actions would considerably change in the future, generating a noticeable increase in section 7 consultations that would cause impacts to flycatchers and flycatcher habitat. Therefore, with

migratory and territorial flycatchers using these tribal lands and few formal section 7 consultations completed, the effect of a critical habitat designation on these lands is minimized.

Were we to designate critical habitat on these tribal lands, our section 7 consultation history indicates that there may be some, but few, regulatory benefits to the flycatcher. As described above, even with flycatchers occurring on these tribal lands, the frequency of formal flycatcher-related section 7 consultations has been rare. Projects initiated by Federal agencies in the past that were associated with maintenance of rights-of-way or water management such as those initiated by Federal Highway Administration or the USBR may occur on tribal lands in the future. When we review projects addressing the flycatcher pursuant to section 7 of the Act, we commonly examine conservation measures associated with the project for consistency with strategies described within the Recovery Plan. Where there is consistency with managing habitat and implementing conservation measures recommended in the Recovery Plan (as is the case for these tribes), it would be unlikely that a consultation would result in a determination of adverse modification of critical habitat. Therefore, when the threshold for adverse modification is not reached, only additional conservation recommendations could result out of a section 7 consultation, but such measures would be discretionary on the part of the Federal agency.

Another important benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners and the public regarding the potential conservation value of an area, and it may help focus management efforts on areas of high value for certain species. Any information about the flycatcher that reaches a wide audience, including parties engaged in conservation activities, is valuable. These tribes and pueblos are currently working with the Service to address flycatcher habitat and conservation, participate in working groups, and exchange management information. Because these tribes and pueblos have developed flycatcher specific Management Plans, have been involved with the critical habitat designation process, and are aware of the value of their lands for flycatcher conservation, the educational benefits of a flycatcher critical habitat designation are minimized.

Another possible benefit of the designation of critical habitat is that it may strengthen or reinforce some

Federal laws such as the Clean Water Act. These laws require analysis of the potential for proposed projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental laws.

Finally, there is the possible benefit that additional funding could be generated for habitat improvement by an area being designated as critical habitat. Some funding sources may rank a project higher if the area is designated as critical habitat. Tribes or pueblos often seek additional sources of funding in order to conduct wildlife-related conservation activities. Therefore, having an area designated as critical habitat could improve the chances of receiving funding for flycatcher habitat-related projects. However, areas where nesting, migrating, dispersing, or foraging flycatchers occur, as is the case here, may also provide benefits when projects are evaluated for receipt of funding.

Therefore, because of the implementation of tribal management plan conservation, rare initiation of formal section 7 consultations, the occurrence of territorial and migrant flycatchers on tribal lands, and overall coordination with tribes on flycatcher-related issues, it is anticipated that there may be some, but limited, benefits from including these tribal lands in a flycatcher critical habitat designation. The principal benefit of any designated critical habitat is that activities in and affecting such habitat require consultation under section 7 of the Act. Such consultation would ensure that adequate protection is provided to avoid destruction or adverse modification of critical habitat. However, with tribes and pueblos implementing measures that conserve flycatcher habitat combined with the rarity of Federal actions resulting in formal section 7 consultations, the benefits of a critical habitat designation are minimized.

#### Benefits of Exclusion—Tribal Lands Implementing Flycatcher Management Plans

The benefits of excluding these tribal lands from designated critical habitat include: (1) The advancement of our Federal Indian Trust obligations and our deference to tribes to develop and implement tribal conservation and natural resource management plans for their lands and resources, which includes the flycatcher; (2) the conservation benefits to the flycatcher and its habitat that might not otherwise occur; and (3) the maintenance of effective collaboration and cooperation

to promote the conservation of the flycatcher and its habitat, and other species.

During the development of the flycatcher critical habitat proposal (and coordination for other critical habitat proposals) and other efforts such as development of the Recovery Plan, we have met and communicated with various tribes and pueblos to discuss how they might be affected by the regulations associated with flycatcher management, flycatcher recovery, and the designation of critical habitat. As such, we established relationships specific to flycatcher conservation. As part of our relationship, we have provided technical assistance to these tribes and pueblos to develop measures to conserve the flycatcher and its habitat on their lands. These measures are contained within the management plans that we have in our supporting record for this decision. These proactive actions were conducted in accordance with Secretarial Order 3206, "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act" (June 5, 1997); the relevant provision of the Departmental Manual of the Department of the Interior (512 DM 2); and Secretarial Order 3317, "Department of Interior Policy on Consultation with Indian Tribes" (December 1, 2011). We believe that these tribes and pueblos should be the governmental entities to manage and promote flycatcher conservation on their lands. During our communication with these tribes and pueblos, we recognized and endorsed their fundamental right to provide for tribal resource management activities, including those relating to riparian habitat.

We received tribal management plans specific to the flycatcher and its habitat from eight tribes and pueblos (we address an additional five tribes that developed management plans within the LCR MSCP exclusion analysis). All of the proposed critical habitat segments we identified on lands managed by tribes and pueblos that provided management plans are where migratory flycatchers have been recorded (or are anticipated to occur) or where territories have also been detected. Tribes have expressed that their lands, and specifically riparian habitat, are connected to their cultural and religious beliefs, and as a result they have a strong commitment and reverence toward its stewardship and conservation. Many tribes recognize that their management of riparian habitat and conservation of the flycatcher are common goals they share with the Service, and their Management Plans



are based on strategies found in the Recovery Plan. Some of the common Management Plans strategies are maintaining riparian conservation areas, preserving habitat, improving habitat, or having no net loss of riparian habitat. Tribes also have project-by-project review processes in place that allow evaluation and implementation of conservation measures to minimize, or eliminate adverse impacts. Some tribes have natural resource departments, which have experienced biologists, conduct flycatcher surveys, and maintain databases on the quality of habitat throughout tribal lands and the status and occurrence of migratory and territorial flycatchers. Having this information available to tribes creates effective conservation through any project review process. The implementation of their Management Plans has been coordinated and approved through appropriate tribal processes, such as tribal councils. Overall, these commitments toward management of flycatcher habitat likely accomplish greater conservation than would be available through the implementation of a designation of critical habitat on a project-by-project basis.

The designation of critical habitat on these tribal or pueblo lands would be expected to adversely impact our working relationship with these tribes. During our discussions with these tribes and from comments we received on the proposed designation of critical habitat, many informed us that critical habitat would be viewed as an intrusion on their sovereign abilities to manage natural resources in accordance with their own policies, customs, and laws. For example, the Rincon Tribe states that “A critical habitat designation on the Reservation would have an unfortunate and substantial negative impact on the working relationship the Service and the Rincon band have established” (Mazzetti 2011, p. 3). The perceived restrictions of a critical habitat designation could have a damaging effect on coordination efforts, possibly preventing actions that might maintain, improve, or restore habitat for the flycatcher and other species. To this end, we found that tribes would prefer to work with us on a government-to-government basis. The La Jolla Band of Luiseño Indians wrote that “\* \* \* we believe that proper consultation and partnering, rather than regulation, will best achieve the desired result of conservation,” and “La Jolla and the Service, in partnership with the BIA, have worked hard to erase the perception of past negative issues, and

establish this cooperative relationship” (Peck 2011, p. 2). For these reasons, we believe that our working relationships with these tribes would be better maintained if we excluded their lands from the designation of flycatcher critical habitat. We view this as a substantial benefit since we have developed a cooperative working relationship with the tribes and pueblos for the mutual benefit of flycatcher conservation and other endangered and threatened species.

We indicated in the proposed rule that our final decision regarding the exclusions of tribal lands under 4(b)(2) of the Act would consider tribal management and the recognition of their capability to appropriately manage their own resources, and the government-to-government relationship of the United States with tribal entities (76 FR 50542; August 15, 2011, p. 50584). We also acknowledged our responsibilities to work directly with tribes in developing programs for healthy ecosystems, that tribal lands are not subject to the same controls as Federal public lands, our need to remain sensitive to Indian culture, and to make information available to tribes (76 FR 50542; August 15, 2011, p. 50596). We identified all tribal land included within the proposal as areas we were considering for exclusion and our continued coordination with tribes and pueblos (76 FR 50542; August 15, 2011, pp. 50582–50583).

We coordinated and communicated with tribes and pueblos throughout the revision of flycatcher critical habitat by providing them information on: Implementation of section 4(b)(2) of the Act; the Recovery Plan; Management Plan templates, guidance, and review; critical habitat schedules, related documents, and public hearings; and our interest in consulting with them on a government-to-government basis at their request. We also followed up our correspondence with telephone calls and electronic mail to assist with any questions. During the comment period, we received input from many tribes and BIA offices expressing the view that designating flycatcher critical habitat on tribal land would adversely affect the Service’s working relationship with all tribes. Many noted that beneficial cooperative working relationships between the Service and tribes have assisted in the conservation of listed species and other natural resources. They indicated that critical habitat designation on these tribes or pueblos would amount to additional Federal regulation of sovereign Nations’ lands, and would be viewed as an unwarranted and unwanted intrusion into tribal

natural resource programs. We conclude that our working relationships with these tribes on a government-to-government basis have been extremely beneficial in implementing natural resource programs of mutual interest, and that these productive relationships would be compromised by critical habitat designation of these tribal lands.

In addition to flycatcher management plans, we anticipate future management plans to include conservation efforts for other listed species and their habitats. We believe that many tribes and pueblos are willing to work cooperatively with us and others to benefit other listed species, but only if they view the relationship as mutually beneficial. Consequently, the development of future voluntarily management actions for other listed species may be compromised if these tribal lands are designated as critical habitat for the flycatcher. Thus, a benefit of excluding these lands would be future conservation efforts that would benefit other listed species.

#### Benefits of Exclusion Outweigh the Benefits of Inclusion—Tribal Lands Implementing Flycatcher Management Plans

The benefits of including these tribes and pueblos in the critical habitat designation are limited to the incremental benefits gained through the regulatory requirement to consult under section 7 and consideration of the need to avoid adverse modification of critical habitat, agency and educational awareness, potential additional grant funding, and the implementation of other law and regulations. However, as discussed in detail above, we believe these benefits are minimized because they are provided for through other mechanisms, such as (1) the advancement of our Federal Indian Trust obligations; (2) the conservation benefits to the flycatcher and its habitat from implementation of flycatcher management plans; and (3) the maintenance of effective collaboration and cooperation to promote the conservation of the flycatcher and its habitat.

The benefits of excluding these areas from being designated as flycatcher critical habitat are more significant and include encouraging the continued implementation of tribal management and conservation measures such as monitoring, survey, habitat management and protection, and fire-risk reduction activities that are planned for the future or are currently being implemented. These programs will allow the tribes to manage their natural resources to benefit riparian habitat for the

flycatcher, without the perception of Federal Government intrusion. This philosophy is also consistent with our published policies on Native American natural resource management. The exclusion of these areas will likely also provide additional benefits to the flycatcher and other listed species that would not otherwise be available without the Service's maintaining a cooperative working relationship with other tribes and pueblos. In conclusion, we find that the benefits of excluding these tribal lands (La Jolla and Rincon Band of Luiseño Mission Indians in California; Navajo Nation in New Mexico and Utah; San Carlos Apache and Yavapai-Apache Tribes in Arizona; Southern Ute Tribe in Colorado; and Zuni and San Ildefonso Pueblos in New Mexico) from critical habitat designation outweigh the benefits of including these areas.

#### Exclusion Will Not Result in Extinction—Tribal Lands Implementing Flycatcher Management Plans

As noted above, the Secretary, under section 4(b)(2) of the Act, may exclude areas from the critical habitat designation unless it is determined, "based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned." We have determined that exclusion of these tribes and pueblos from the critical habitat designation will not result in the extinction of the flycatcher. First, Federal activities on these areas that may affect the flycatcher will still require consultation under section 7 of the Act. Section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species. Therefore, even without critical habitat designation on these lands, activities that occur on these lands cannot jeopardize the continued existence of the flycatcher. Even so, our record demonstrates that formal section 7 consultations rarely occur on tribal lands, which is likely as a result of existing conservation planning. Second, each of these tribes and pueblos have committed to protecting and managing flycatcher habitat according to their management plans and natural resource management objectives. We believe this commitment accomplishes greater conservation than would be available through the implementation of a designation of critical habitat on a project-by-project basis. With the implementation of these conservation measures, based upon strategies

developed in the Recovery Plan, we have concluded that this exclusion from critical habitat will not result in the extinction of the flycatcher.

Accordingly, we have determined that these tribes and pueblos should be excluded under subsection 4(b)(2) of the Act because the benefits of excluding these lands from critical habitat for the flycatcher outweigh the benefits of their inclusion, and the exclusion of these lands from the designation will not result in the extinction of the species.

#### Tribal Conservation Partnerships, Southern California

We determined approximately 11.2 km (7.0 mi) of stream segments owned, administered by, or set aside for the sole and exclusive use of certain Southern California tribes (Ramona Band of Cahuilla (0.4 km, 0.3 mi); the Pala Band of Luiseño Mission Indians of the Pala Reservation (8.3 km, 5.3 mi); the Barona Group of Capitan Grande Band of Mission Indians and the Viejas (Baron Long) Group of Capitan Grande Band of Mission Indians, which jointly manage the Capitan Grande Band of Diegueno Mission Indians Reservation (0.9 km, 0.3 mi); and the Lipay Nation of Santa Ysabel (1.6 km, 1.0 mi)) contain the physical or biological features essential to the flycatcher conservation, and therefore meet the definition of critical habitat under the Act. While none of these southern California tribes submitted a formal management plan identifying specific flycatcher conservation measures, our relationship and partnership with these tribes is important in order to cooperate towards flycatcher recovery, provide technical assistance on implementing flycatcher conservation actions, and share information on flycatcher distribution and abundance (Service 2002, Appendix N). During the comment periods, some of these tribes did provide some information about conservation and educational efforts, which we identify in each tribe's introduction (see below).

When conducting our analysis under section 4(b)(2) of the Act, with regard to these tribal lands, we considered several factors, including Executive Order 13175, Presidential Memorandum (74 FR 57879; November 9, 2009), Secretarial Order 3206, our existing and future partnerships with tribes, and existing conservation strategies or actions that tribes are currently implementing. We also took into consideration any conservation actions that are planned as a result of ongoing government-to-government consultations with tribes. Under section 4(b)(2) of the Act, the Secretary is exercising his discretion to exclude

approximately 11.2 km (7.0 mi) of stream segments comprised of tribal lands. As described in our analysis below, this conclusion was reached after considering the relevant impacts of specifying these areas as critical habitat.

The longstanding and distinctive relationship between the Federal and tribal governments is defined by treaties, statutes, executive orders, judicial decisions, and agreements, which differentiate tribal governments from the other entities that deal with, or are affected by, the U.S. Government. This relationship has given rise to a special Federal trust responsibility involving the legal responsibilities and obligations of the United States toward Indian tribes with respect to Indian lands, tribal trust resources, and the exercise of tribal rights. Pursuant to these authorities, lands have been retained by Indian tribes or have been set aside for tribal use. These lands are managed by Indian tribes in accordance with tribal goals and objectives within the framework of applicable treaties and laws. Secretarial Order 3317, "Department of Interior Policy on Consultation with Indian Tribes" (December 1, 2011), outlines the policies and the responsibilities of the Department of Interior in matters affecting tribal interests. In accordance with Secretarial Order 3317; Secretarial Order 3206, "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act" (June 5, 1997); and the relevant provision of the Departmental Manual of the Department of the Interior (512 DM 2), we believe that fish, wildlife, and other natural resources on tribal lands are better managed under tribal authorities, policies, and programs, than through Federal regulation wherever possible and practicable. We also recognize our unique responsibility to promote tribal sovereignty and self-governance. Based on this philosophy, we believe that, in most cases, designation of tribal lands as critical habitat would provide very little additional benefit to the flycatcher. Furthermore, we believe designating these tribal lands would have an impact on Federal policies promoting tribal sovereignty and self-governance because designation is often viewed by tribes as an unwarranted and unwanted intrusion into tribal self-governance, thus compromising the government-to-government relationship important to achieving our mutual goals of managing for healthy ecosystems upon which the viability of endangered and threatened species populations depend.

Section 4(b)(2) of the Act allows the Secretary to exclude areas from critical

habitat based on economic impacts, impacts to National security, or other relevant impacts if the Secretary determines that the benefits of such exclusion outweigh the benefits of designating the area as critical habitat, unless such exclusion will result in the extinction of the species. In the decision *Center for Biological Diversity, v. Norton*, 240 F. Supp. 2d 1090 (D. Ariz. 2003), the court held that a positive working relationship with Indian tribes is a relevant impact that can be considered when weighing the relative benefits of a critical habitat designation (also see *Center for Biological Diversity v. U. S. Fish and Wildlife Service*, No. 09–CV–2216 W (S.D. Cal. Sept. 26, 2011)). In the case of the flycatcher, critical habitat designation would have an adverse impact on our relationship with the affected tribes. Most tribes we consulted expressed concern about the intrusion into tribal sovereignty that critical habitat designation represents. Comments received from tribes reaffirmed this concern and stated they would view critical habitat designation on their lands as an unwanted intrusion, which would have a negative impact on tribal sovereignty and self-governance and on the relationship between the tribe and the Service. This response was consistent with responses the Service received from Indian tribes in past designations (for example, revised critical habitat designation for the arroyo toad (76 FR 7246, February 9, 2011)). In addition, exclusion of tribal lands would also have the benefit of promoting a positive relationship between the Service and the tribes (in accordance with Secretarial Order 3206), with a very small reduction in the benefits of designation (primarily the loss of section 7 consultation to consider adverse modification of critical habitat).

Coastal California Recovery Unit; Santa Ana Management Unit

The Ramona Band of Cahuilla

The Ramona Band of Cahuilla, California, is located in northern Riverside County, in the Santa Ana Management Unit, and contains an approximately 0.4-km (0.3–mi) stream segment along Bautista Creek that meets the definition of flycatcher critical habitat. Tribal lands of the Ramona Band of Cahuilla, California, along Bautista Creek were not within the geographical area known to be occupied by the flycatcher at the time of listing, but have since had documented occupancy and are currently considered occupied and will be subject to the

consultation requirements of the Act in the future.

Although currently there is no flycatcher management plan for these tribal lands, the Service, BIA, and tribe are currently coordinating to discuss flycatcher management on the reservation and will work together to promote conservation of the species and its habitat. The Ramona Band of Cahuilla, California, has developed draft conservation measures that benefit the flycatcher and its habitat and has stated, “the Ramona Band of Cahuilla invites the Department to work with the tribe to devise and adopt its plan” (Gomez 2012, p. 2).

Coastal California Recovery Unit; San Diego Management Unit

Pala Band of Luiseño Mission Indians of the Pala Reservation

The Pala Band of Luiseño Mission Indians of the Pala Reservation, California, is located in northern San Diego County, California, in the San Diego Management Unit. Approximately 8.3 km (5.2 mi) of the San Luis Rey River that meets the definition of flycatcher critical habitat is on tribal land, which includes tribal reservation lands and pending fee-to-trust lands, of the Pala Band of Luiseño Mission Indians of the Pala Reservation, California. Tribal lands of the Pala Band of Mission Indians along the San Luis Rey River were within the geographical area known to be occupied by the flycatcher at the time of listing, are currently considered occupied, and will be subject to the consultation requirements of the Act in the future.

The tribe developed a management plan in 2005, which is currently being implemented to guide management and land use on the reservation. Although the Tribe has not developed a management plan specifically addressing the flycatcher, they have developed a management plan for the federally endangered arroyo toad (*Anaxyrus californicus*), which provides ancillary benefits to the flycatcher such as: (1) Maintenance of designated open space and waterways along the San Luis Rey River; (2) discouraging development within the San Luis Rey River; and (3) removal of nonnative species.

Additionally, in 2010, the Tribe was awarded a Tribal Wildlife Grant to develop a tribal Habitat Conservation Plan (THCP), in cooperation with the Service. The purpose of the THCP is to protect the Tribe’s natural resources, through the permitting of any incidental take occurring during land development, in return for providing coverage to listed species, including the

flycatcher, and other covered species by minimizing or mitigating for impacts to these species of their habitat. The Tribe is currently coordinating with the Service in the initial stages of the THCP development.

Also, The Pala Environmental Protection Agency has developed an education program for tribal members to ensure awareness of habitat and resource constraints on the Reservation (Smith 2011, p. 4).

Barona Group of Capitan Grande Band of Mission Indians of the Barona Reservation, California and the Viejas (Baron Long) Group of Capitan Grande Mission Indians of the Viejas Reservation, California (Capitan Grande Reservation)

The Barona Group of Capitan Grande Band of Mission Indians and the Viejas (Baron Long) Group of Capitan Grande Band of Mission Indians jointly manage the Capitan Grande Reservation. The Capitan Grande Reservation is located in San Diego County, California, in the San Diego Management Unit, and contains an approximately 0.9 km (0.6 mi) stream segment along the San Diego River that meets the definition of flycatcher critical habitat. Tribal lands jointly managed by the Barona Group of Capitan Grande Band of Mission Indians of the Barona Reservation, California and the Viejas (Baron Long) Group of Capitan Grande Mission Indians of the Viejas Reservation, California, along the San Diego River were not within the geographical area known to be occupied by the flycatcher at the time of listing, but have since had documented occupancy and are currently considered occupied and will be subject to the consultation requirements of the Act.

Although currently there is no flycatcher management plan for the Capitan Grande Reservation, the Service, BIA, and both Tribes are currently coordinating to discuss flycatcher management on the reservation and will work together to promote conservation of the species and its habitat. The Tribes have also been working closely with the BIA on a fuel reduction project for fire safety purposes, which provide an ancillary benefit to the flycatcher by reducing the likelihood of fire that might affect flycatcher habitat.

Additionally, as discussed in comments we received from the Barona Group of Capitan Grande Band of Mission Indians and the Viejas (Baron Long) Group of Capitan Grande Mission Indians, the Tribes have not developed this stream segment, nor do they have any intention to. They described that this portion of the San Diego River is

not inhabited and is very remote, and use by outside parties is not permitted and is only accessed for hunting and cultural activities by tribal members.

Coastal California Recovery Unit; Salton Management Unit

The Iipay Nation of Santa Ysabel

The Iipay Nation of Santa Ysabel, California Reservation is located in eastern San Diego County, California, in the Salton Management Unit, and contains an approximately 1.6-km (1.0-mi) stream segment along San Felipe Creek that meets the definition of flycatcher critical habitat. Tribal lands of the Iipay Nation of Santa Ysabel, California, along San Felipe Creek were not within the geographical area known to be occupied by the flycatcher at the time of listing, but have since had documented occupancy and are currently considered occupied and will be subject to the consultation requirements of the Act in the future.

Although currently there is no flycatcher management plan for the Iipay Nation of Santa Ysabel, the Service, BIA, and Tribe are currently coordinating to discuss flycatcher management on the reservation and will work together to promote conservation of the species and its habitat. The Iipay Nation of Santa Ysabel, California, has coordinated and collaborated with the Service by attending tribal coordination quarterly meetings. The meetings facilitate routine communication among the Service, BIA, and tribal governments on upcoming rulemakings, species reviews, consultation with other Federal agencies, or any other endangered species issues that may be of interest or concern tribes. These meetings also provide a forum to discuss any fish or wildlife resource management issues or concerns tribal governments may have and would like to discuss with or seek the technical assistance of the Service.

Benefits of Inclusion—Southern California Tribal Partnerships

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

However, for some species, and in some locations, the outcome of these

analyses will be similar, because effects to habitat will often also result in effects to the species. While some of these stream segments on southern California tribal lands were known to be occupied by flycatchers at the time of listing and others were not, all of them have since had documented occupancy and are currently considered occupied by our criteria established within this rule with either the known occurrence of territories or the likelihood of being used by migrating flycatchers, and therefore will be subject to the consultation requirements of the Act in the future. Though a jeopardy and adverse modification analysis must satisfy two different standards, any modifications to proposed actions resulting from a section 7 consultation to minimize or avoid impacts to the flycatcher would be habitat based, as the flycatcher is primarily dependent on a properly functioning hydrological regime. For example, because the stream segments we identified as essential in southern California are considered occupied, any impact to riparian habitat would directly affect the species because it is wholly dependent on riparian habitat for breeding, sheltering, feeding and rearing.

Another possible benefit of including these southern California tribal lands as critical habitat is the public education regarding the potential conservation value of an area that may help focus conservation efforts on areas of high conservation value for certain species. Any information about the flycatcher and its habitat that reaches a wide audience, including parties engaged in conservation activities, is valuable. The inclusion of tribal lands in the flycatcher proposed critical habitat rule can be beneficial to the species because the proposed rule identifies those lands that are essential to the conservation of the flycatcher and which may require special management considerations or protection. The process of proposing and finalizing revised critical habitat provides the opportunity for peer review and public comment on habitat we determined meets the definition of critical habitat. This process is valuable to land owners and managers in prioritizing conservation and management of identified areas.

However, in the case of the flycatcher, the educational benefits have largely been realized by the previous efforts including the previous critical habitat designation published in the **Federal Register** on October 19, 2005 (70 FR 60886); our October 12, 2004, proposed critical habitat rule (69 FR 60706); the Recovery Plan (Service 2002, entire); our first flycatcher critical habitat

designation, published July 22, 1997 (62 FR 39129), and August 20, 1997 (62 FR 44228); the final flycatcher listing rule (60 FR 10694, February 27, 1995). In addition, because of our efforts coordinating with these southern California tribes on the proposed rule, we believe educational benefits have largely been realized on lands controlled by or set aside for the sole and exclusive use of tribes. In an effort to demonstrate our commitment to work closely with the tribes as a partner in protecting species while also respecting tribal status, the Service is conducting ongoing coordination with all the affected southern California tribes. We believe our ongoing coordination with the tribes should provide sufficient future education about the flycatcher and its habitat, facilitate development of management plans (for reservations that do not currently have management plans), and promote flycatcher conservation on tribal lands.

An additional benefit to designating critical habitat is to ensure that listed species, such as the flycatcher, have essential habitat available that provides for breeding, sheltering, feeding and rearing to achieve recovery goals. In keeping with our tribal trust responsibility, Secretarial Order 3206 states that when designating critical habitat, we shall evaluate and document the extent to which the conservation needs of listed species can be achieved by limiting the designation to other lands. For the flycatcher, the Recovery Plan identifies a minimum number of territories per Management Unit that must be met for the reclassification and recovery of the species (Service 2002, p. 84). A minimum number of 50 territories must be met for the Santa Ana Management Unit, 125 territories for the San Diego Management Unit, and 25 for the Salton Management Unit (Service 2002, p. 84).

Within the Santa Ana Management Unit, approximately 3,815 ha (9,451 ac) of lands were identified as essential to the flycatcher. The Ramona Band of Cahuilla, located within this management unit, only consists of 1.8 ha (4.4 ac) of land identified as essential to the flycatcher. Within the San Diego Management Unit, approximately 3,827 ha (9,459 ac) of lands were identified as essential to the flycatcher. The Barona Group of Capitan Grande Band of Mission Indians of the Barona Reservation, the Viejas (Baron Long) Group of Capitan Grande Mission Indians of the Viejas Reservation, and the Pala Band of Luiseño Mission Indians of the Pala Reservation, located within this management unit, only consists of 283 ha (700 ac) of land

identified as essential to the flycatcher. Within the Salton Management Unit, approximately 312 ha (772 ac) of lands were identified as essential to the flycatcher. The Lipay Nation of Santa Ysabel, located within this management unit, only consists of 9.0 ha (22.1 ac) of land identified as essential to the flycatcher. Therefore, the proposed tribal lands represent a very small amount of the essential flycatcher habitat available in these Management Units.

The designation of flycatcher critical habitat may also trigger some of the provisions in other secondary laws such as State environmental laws if they analyze the potential for projects to significantly affect the environment. The additional protections associated with critical habitat may be beneficial in areas not currently conserved or addressed by management plans. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental laws. However, we believe that fish, wildlife, and other natural resources on tribal lands are better managed under tribal authorities, policies, and programs than through Federal regulation wherever possible and practicable.

The stream segments we identified as essential on these southern California tribal lands are considered occupied. As a result, we find that the incremental regulatory benefits of critical habitat designation on these tribal lands may be minimal. Additionally, we believe the educational benefits of critical habitat designation on these southern California tribal lands may have been realized through publication of the listing rule for the flycatcher, previous critical habitat designations, the proposed rule to revise critical habitat, and Recovery Plan. Therefore, we find the limited incremental regulatory and educational benefits of critical habitat designation to be largely redundant with that provided by listing, previous critical habitat designations, and past recovery planning efforts.

#### Benefits of Exclusion—Southern California Tribal Partnerships

Under Secretarial Order 3206, American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Act, we recognize that we must carry out our responsibilities under the Act in a manner that harmonizes the Federal trust responsibility to tribes and tribal sovereignty while striving to ensure that tribes do not bear a disproportionate burden for the conservation of listed species, so as to avoid or minimize the potential for conflict and confrontation.

In accordance with the Presidential memorandums of April 29, 1994, and November 9, 2009, we believe that, to the maximum extent possible, tribes are the appropriate governmental entities to manage their lands and tribal trust resources, and that we are responsible for strengthening government-to-government relationships with tribes. Because of the unique government-to-government relationship between Indian tribes and the United States, it is important for us to establish and maintain an effective working relationship and mutual partnership with these southern California tribes to promote the conservation of the flycatcher and other sensitive species. Maintaining positive working relationships with tribes is key to implementing natural resource programs of mutual interest, including habitat conservation planning efforts.

During the public comment period, we received comments from tribes expressing their view that critical habitat designation is an unwarranted and unwanted intrusion into tribal self-governance. This sentiment has been expressed by other tribes in previous rulemakings (such as the 2007 proposed critical habitat designation for peninsular bighorn sheep (72 FR 57739; October 10, 2007), 2009 proposed critical habitat designation for Casey's June beetle (74 FR 32857; July 09, 2009), and 2009 proposed revised critical habitat designation for arroyo toad (74 FR 52612; October 13, 2009). Critical habitat designation on these southern California tribes would potentially damage our working relationship with the tribes. We believe excluding these southern California tribes from critical habitat will help preserve the relationships we have worked to develop and are currently building with the tribes, and foster future partnerships.

Therefore, we believe significant benefits would be realized by forgoing designation of critical habitat on tribal lands managed by these southern California tribes. These benefits include: (1) Continuation and strengthening of our effective working relationships with the tribes to promote conservation of the flycatcher and its habitat; (2) allowing for continued meaningful collaboration and cooperation in working toward recovering this species, including conservation benefits that might not otherwise occur; and (3) encouragement of other tribes to complete management plans in the future on other reservations for this, and other federally listed and sensitive species, and engage in meaningful collaboration and cooperation.

#### Benefits of Exclusion Outweigh the Benefits of Inclusion—Southern California Tribal Partnerships

We reviewed and evaluated the benefits of inclusion and the benefits of exclusion of these southern California tribal lands as flycatcher critical habitat. Including these tribal lands in the final revised critical habitat designation for the flycatcher would likely provide minimal additional protection under section 7(a)(2) of the Act when there is a Federal nexus, and the designation will also not likely add benefits as an educational tool for tribal members regarding the flycatcher and the physical and biological features essential to its conservation. We believe past and future coordination with these southern California tribes will provide sufficient education regarding flycatcher habitat conservation needs. We also anticipate limited ancillary benefit from other environmental laws if these areas are designated as critical habitat because of the listing of the flycatcher as an endangered species and the educational awareness of these tribes. Absent critical habitat on tribal lands, future projects requiring Federal funding, authorization, or permits would still be subject to consultation under section 7(a)(2) of the Act to ensure such projects will not jeopardize the continued existence of the flycatcher; therefore, we believe the additional limited regulatory incremental benefit of designating critical habitat on these southern California tribal lands is minimized. In addition, the proposed tribal lands as essential to the flycatcher represents a very small portion of essential habitats in each effected management unit. Therefore, in keeping with our tribal trust responsibilities as stated in Secretarial Order 3206, we believe that the conservation needs of the flycatcher can be achieved by limiting the designation to other non-tribal lands.

Conversely, the benefits of excluding these southern California tribal lands as flycatcher critical habitat are significant. Exclusion of these lands from critical habitat will help preserve the partnership we have developed with the tribes and strengthen those we are building with other tribes, and foster future partnerships and development of management plans. These tribes and the BIA emphasized through comment letters their belief that designation of critical habitat on tribal land undermines tribal sovereign governmental authority and interferes with the cooperative government-to-government trust relationship between the tribes and the United States. We are committed to working with our tribal

partners to further the conservation of the flycatcher and other endangered and threatened species. The partnerships we have and are developing with these southern California tribes will help facilitate cooperation towards flycatcher recovery, implementation of flycatcher conservation actions, and the sharing information on flycatcher distribution and abundance. Therefore, in consideration of the relevant impact to our government-to-government relationship with these southern California tribes and our current and future conservation partnerships, we determined the significant benefits of exclusion outweigh the benefits of critical habitat designation.

In summary, we find that the exclusion of these southern California tribal lands from this final revised critical habitat will preserve our partnership with the tribe and foster future collaborative efforts to conserve and recover the flycatcher. These partnership benefits are significant and outweigh the limited potential regulatory and educational benefits of including 11.2 km (7.0 mi) of stream within these southern California tribal lands as flycatcher critical habitat.

#### Exclusion Will Not Result in Extinction of the Species—Southern California Tribal Partnerships

We determined that the exclusion of 11.2 km (7.0 mi) of stream along these southern California tribal lands from this revised final designation of flycatcher critical habitat will not result in extinction of the species. The jeopardy standard of section 7(a)(2) of the Act and routine implementation of conservation measures through the section 7 consultation process due to flycatcher and other federally listed species occupancy provide assurances that this species will not go extinct as a result of exclusion from critical habitat designation. Additionally, the combined amount of these tribal lands and individually within their Management Units represents a small portion of the overall amount of stream segments designated within the Santa Ana, San Diego, and Salton Management Units. Therefore, based on the above discussion the Secretary is exercising his discretion to exclude approximately 11.2 km (7.0 mi) along stream segments within these southern California tribal lands from this final revised critical habitat designation.

Tribal Conservation Partnerships, New Mexico

#### Rio Grande Recovery Unit, Upper Rio Grande Management Unit

Both the Ohkay Owingeh (formerly referred to as the San Juan Pueblo) and the Santa Clara Pueblo occur adjacent to each other along the upper Rio Grande in New Mexico. Because they share similar locations, habitat conditions, issues, and concerns, and they can cooperate and implement similar projects from similar sources, our exclusion analysis for these two pueblos is combined below. Neither of these pueblos submitted a flycatcher specific management plan, because they manage their lands in a holistic manner. However, they both have established conservation partnerships with the Service and have implemented conservation and recovery actions for the improvement of riparian habitat and the flycatcher. As a result, in order to reduce replication of similar text, we have combined our exclusion analysis for these pueblos below.

#### Ohkay Owingeh Pueblo (San Juan)

Ohkay Owingeh Pueblo is located along the Rio Grande just north of Espanola in Rio Arriba County, New Mexico, and adjoins the lands of Santa Clara Pueblo. The Ohkay Owingeh Pueblo includes the southern or downstream end of the Velarde reach of the Rio Grande, and comprises the largest contiguous area of generally intact riparian woodland, as well as the largest riparian area under the control of a single landowner, within the Velarde reach. A total of about 16.6 km (10.3 mi) of the Rio Grande are located within the Pueblo and over 450 ha (1100 acres) of riparian habitat are still extant within the Pueblo boundaries. We proposed a 9.3-km (5.8-mi) segment of the Rio Grande on Ohkay Owingeh Pueblo as flycatcher critical habitat.

While the Ohkay Owingeh Pueblo does not have a flycatcher specific Management Plan, they have implemented flycatcher habitat management and protection measures. We have consolidated information on the past, present, and future voluntary measures, habitat improvement projects, and management to conserve the flycatcher and its habitat on lands of Ohkay Owingeh Pueblo.

Based on their traditional beliefs and ties to the bosque (or riparian area), the Ohkay Owingeh Pueblo continues to protect, conserve, and improve the riparian habitat the flycatcher relies upon. The Pueblo has invested a significant amount of ongoing time and effort to address the needs and recovery

of the flycatcher. In addition, based on the long-term goals of restoring additional wetland and native habitat, the Pueblo has shown that it is managing its resources to meet its traditional and cultural needs, while addressing the conservation needs of the flycatcher. Currently, both the Ohkay Owingeh and Santa Clara Environmental Affairs Department employs tribal members who work on holistic habitat improvement and management, which includes endangered and threatened species and their habitat.

The long-term goal of riparian management on Ohkay Owingeh Pueblo is to make significant additions of wetland areas for breeding flycatchers, as well as implement innovative management techniques, decrease fire hazards by restoring native vegetation, share information with other habitat managers, utilize habitat management projects in the education of the tribal community and surrounding community, and provide a working and training environment for the people of the Pueblo.

In June of 1993, the flycatcher was documented on the west side of the Rio Grande at Ohkay Owingeh Pueblo as a biological assessment was being prepared for the proposed NM 74 Bridge project. The project proposed to replace an existing bridge and two-lane road section with a newly located bridge and two-lane road with shoulders. Subsequent evaluations indicated that a viable population of flycatchers was utilizing the area.

The presence of the flycatcher prompted the Pueblo to manage and improve riparian habitat and associated wetlands for the flycatcher. Habitat within the Pueblo is much degraded relative to historic conditions for two main reasons: (1) River channelization that has caused drying of the floodplain desiccation, cessation of overbank flooding, and disruption of river function processes; and (2) intensive invasion by nonnative trees, primarily Russian olives. The increasing frequency and severity of fires in the Rio Grande riparian area, accompanied by changes in vegetation and the water regime, underscored the urgency the need to reduce habitat stressors and improve stream function and riparian habitat.

The Ohkay Owingeh Pueblo immediately began management and conservation projects to benefit the flycatcher following the bridge project. One ha (2 ac) of native riparian vegetation were planted on the reclaimed old roadway; 0.1 ha (0.22 ac) of riparian vegetation were planted

adjacent to the new bridge; 0.4 ha (1 ac) of riparian woodland was restored adjacent to the project; and wetland restoration, which included open water and saturated soils, was developed at three sites encompassing another 0.4 ha (1 ac).

Since 1999, the Pueblo has initiated or completed a variety of habitat improvement and conservation projects, including further wetland creation and expansion, flycatcher habitat enhancement with vegetation and open water, and management to improve the occurrence of native riparian habitat. These projects were funded through various programs of the Environmental Protection Agency, Wildland Urban Interface Collaborative Forest Restoration Program, Endangered Species Act Collaborative Program, Service Partners for Fish and Wildlife Program, and the State of New Mexico. In total, these projects addressed 301 ha (744 ac) of habitat on the Pueblo with direct and indirect benefits to the flycatcher. The project implementations include conservation, monitoring, and management for the flycatcher into the future. These efforts contribute to the long-term goals of recovery for the flycatcher. In addition to the habitat work, the Pueblo supports flycatcher surveys and nest monitoring on the Pueblo lands.

In 2004, the Pueblo sponsored a multi-organization riparian restoration conference on their lands and are collaborating with nearby pueblos and agencies on improving stream function and riparian habitat. Their management efforts and flycatcher conservation were highlighted at the conference. As such, the Service and its partners gained valuable information about restoring flycatcher habitat and management techniques that can be applied to other riparian areas. In 2005, they formalized this effort by entering into an agreement with the nearby pueblos and the Corps to protect and improve riparian habitat, in part, by conducting a watershed feasibility study on tribal lands.

#### Santa Clara Pueblo

Santa Clara Pueblo, is located in Rio Arriba County, New Mexico, and adjoins the lands of Ohkay Owingeh Pueblo. The Santa Clara, Ohkay Owingeh, and San Ildefonso Pueblos form nearly a contiguous segment of the Rio Grande. The Santa Clara Pueblo encompasses more than 21,449 ha (53,000 ac) of diverse vegetative communities, including approximately 714 ha (1,764 ac) of riparian habitat along the Rio Grande. We proposed a 10.2-km (6.4-mi) segment of the Rio

Grande on Santa Clara Pueblo as flycatcher critical habitat.

While the Santa Clara Pueblo does not have a flycatcher specific Management Plan, they have implemented flycatcher habitat management and protection measures. We have consolidated information on the past, present, and future voluntary measures, restoration projects, and management to conserve the flycatcher and its habitat.

The Rio Grande is an integral part of the Santa Clara Pueblo's history, culture, and continued preservation as a homeland. They view all of their natural resources, including the Rio Grande riparian area, as important to the survival of the Santa Clara people. Many of the various vegetative communities within the Pueblo and the innumerable wildlife species they support have significant traditional and spiritual value to the tribal people.

In June of 1993, the flycatcher was documented on the west side of the Rio Grande north of the NM 74 Bridge as a biological assessment was being prepared for the proposed bridge project. The project proposed to replace an existing bridge and two-lane road section with a newly located bridge and two-lane road with shoulders. Subsequent evaluations indicated that a viable population of flycatchers was utilizing the area and was nesting on the site at Ohkay Owingeh Pueblo, but adjacent to Santa Clara Pueblo. We have determined in the criteria described in this rule, that the upper Rio Grande through the Santa Clara Pueblo is occupied by flycatchers because of the detections of flycatcher territories throughout the length of the Rio Grande, and its migratory, dispersal, and foraging behavior.

Over the last 11 years, the Santa Clara Pueblo has restored riparian habitat for the good of the entire landscape and associated wetlands for the flycatcher. The Santa Clara Pueblo has partnered with the Service, BIA, USFS, New Mexico Natural Resource Department, and New Mexico Association of Conservation Districts. Habitat within the Pueblo is degraded relative to historic conditions for two main reasons: (1) River channelization that has caused drying of the floodplain, cessation of overbank flooding, and disruption of river function processes; and (2) intensive invasion by nonnative trees, primarily Russian olives. The increasing frequency and severity of fires in the Rio Grande riparian habitat, accompanied by changes in vegetation and the water regime, underscores the urgency of to reduce habitat stressors and improve the quality of riparian habitat.

In 2006 and 2008, the Santa Clara Pueblo received a Tribal Wildlife Grant from the Service to help develop multi-storied riparian vegetation. These projects occurred at two separate locations (Big Rock Pond and Barrancos Arroyo), but both focused on reducing hazardous fuels, removal of trash, and wetland and riparian habitat expansion and enhancement. The Barrancos Arroyo Project resulted in planting over 30,000 native shrubs, trees, and herbaceous wetland plants. In 2008, the Santa Clara Pueblo received a "Habitat Enhancement Award" from the New Mexico Riparian Council due to the Pueblo's outstanding riparian habitat improvement work.

As mentioned above, in 2005 the Santa Clara Pueblo, along with the adjacent pueblos of Ohkay Owingeh and San Ildefonso partnered with the Corps by entering into an agreement to protect and improve riparian habitat, in part, by conducting a watershed feasibility study. This feasibility study, explores ways to holistically developed projects to improve the function of the river and reduce impacts of flooding that is anticipated to improve overall riparian habitat conditions, including those for the flycatcher.

#### Benefits of Inclusion—Ohkay Owingeh and Santa Clara Pueblo

As discussed above under *Application of Section 4(b)(2) of the Act*, Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat.

The Rio Grande within the upper Rio Grande Management Units is known to be occupied by flycatchers and therefore, if a Federal action or permitting occurs, there is a catalyst for evaluation under section 7 of the Act. Our section 7 consultation history at the pueblos of Ohkay Owingeh and Santa Clara shows that since listing, no formal section 7 consultations addressing the flycatcher have occurred implementing federal actions. We have conducted informal consultations with agencies implementing actions or providing funding on the pueblos, provided the technical assistance on project implementation, and the Corps has coordinated with the pueblos along the upper Rio Grande on projects. However, overall, since listing in 1995, no formal



section 7 consultations have occurred at the pueblos of Ohkay Owingeh and Santa Clara. Effects to the flycatcher from federal projects have all resulted in insignificant and discountable conclusions because conservation measures have focused on habitat improvement and management for the flycatcher and its habitat. Because of how the Pueblo has chosen to manage and conserve their lands and the lack of past section 7 consultation history, we do not anticipate that actions by the pueblos would considerably change in the future, generating a noticeable increase in section 7 consultations that would cause impacts to flycatchers and flycatcher habitat. Therefore, with migratory and territorial flycatchers using the pueblos and no formal section 7 consultations completed, the effect of a critical habitat designation on these lands is minimized.

Should we designate critical habitat on the pueblos, our previous section 7 consultation history indicates that there could be some, but likely few, regulatory benefits to the flycatcher. As described above, even with flycatchers occurring on the pueblos, no formal flycatcher-related section 7 consultations have occurred. Projects initiated by Federal agencies in the future could be associated with actions associated with maintenance of rights-of-way, water management, or implementation of grants or funding of habitat improvement projects. When we review projects addressing the flycatcher pursuant to section 7 of the Act, we commonly examine conservation measures associated with the project for consistency with strategies described within the Recovery Plan. Where there is consistency with managing habitat and implementing appropriate conservation measures, it would be unlikely that a consultation would result in a determination of adverse modification of critical habitat. Therefore, when the threshold for adverse modification is not reached, only additional conservation recommendations could result from a section 7 consultation, but such measures would be discretionary on the part of the Federal agency. Because of how the pueblos have chosen to manage and conserve their lands and the lack of a past formal section 7 consultation history, we do not anticipate that the pueblos' actions would considerably change in the future, generating a noticeable increase in section 7 consultations that would cause impacts to flycatchers and flycatcher habitat. Therefore, with migratory and territorial flycatchers using these tribal lands and

no previous formal section 7 consultations completed, the effect of a critical habitat designation on these lands is minimized.

Another important benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners, agencies, tribes, and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the flycatcher that reaches a wide audience, including parties engaged in conservation activities, is valuable. The designation of critical habitat may also strengthen or reinforce some Federal laws such as the Clean Water Act. These laws analyze the potential for projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental laws.

The pueblos are very familiar with the flycatcher and their habitat needs, and are working with the Service to address flycatcher management and recovery. Further, Pueblo lands were included in the proposed designation in 2004 and during this current designation process. Representatives from the pueblos have attended meetings with the Service discussing the flycatcher, its habitat and recovery, and critical habitat. Thus, the educational benefits that might follow critical habitat designation, such as providing information to the pueblos on areas that are important for the long-term survival and conservation of the species, may have already been provided. For these reasons, we believe there is little educational benefit or support for other laws and regulations attributable to critical habitat beyond those benefits already achieved from listing the flycatcher under the Act.

#### Benefits of Exclusion—Ohkay Owingeh and Santa Clara Pueblo

The benefits of excluding the pueblos of Ohkay Owingeh and Santa Clara from designated critical habitat include: (1) The advancement of our Federal Indian Trust obligations and our deference to tribes to develop and implement tribal conservation and natural resource management plans for their lands and resources, which includes the flycatcher; (2) the conservation benefits to the flycatcher and its habitat that might not otherwise occur; and (3) the maintenance of effective collaboration and cooperation to promote the conservation of the flycatcher and its habitat, and other species.

During the development of the flycatcher critical habitat proposal (and

coordination for other critical habitat proposals) and other efforts such as development of the Recovery Plan, we have met and communicated with the pueblos to discuss how they might be affected by the regulations associated with flycatcher management, flycatcher recovery, and the designation of critical habitat. As such, we established relationships specific to flycatcher conservation. As part of our relationship, we have provided technical assistance to develop measures to conserve the flycatcher and its habitat on their lands. These proactive actions were conducted in accordance with Secretarial Order 3206, "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act" (June 5, 1997); the relevant provision of the Departmental Manual of the Department of the Interior (512 DM 2); and Secretarial Order 3317, "Department of Interior Policy on Consultation with Indian Tribes" (December 1, 2011). We believe that the pueblos of Ohkay Owingeh and Santa Clara should be the governmental entities to manage and promote flycatcher conservation on their lands. During our communication with the pueblos of Ohkay Owingeh and Santa Clara, we recognized and endorsed their fundamental right to provide for tribal resource management activities, including those relating to riparian habitat.

We have coordinated and collaborated with the pueblos of Ohkay Owingeh and Santa Clara on the management and recovery of the flycatcher and their habitat and have established a conservation partnership. The pueblos have expressed that their lands, and specifically riparian habitat, are connected to their cultural and religious beliefs, and as a result they have a strong commitment and reverence toward its stewardship and conservation. Many tribes and pueblos recognize that their management of riparian habitat and conservation of the flycatcher are common goals they share with the Service. The pueblos' management actions are evidence of their commitment toward measures to improve habitat consistent with strategies found in the Recovery Plan. Some of the common management plans strategies are maintaining riparian conservation areas, preserving habitat, improving habitat, reducing occurrence of fire, and conducting flycatcher surveys. The Ohkay Owingeh and Santa Clara Environmental Affairs Departments implement conservation measures to improve riparian habitat conditions. Having information on the

distribution and abundance of flycatchers available to pueblos creates effective conservation through any project review process.

The designation of critical habitat on the pueblos of Ohkay Owingeh and Santa Clara would be expected to adversely impact our working relationship. During our discussions with the pueblos and from comments we received on the proposed designation of critical habitat, they informed us that critical habitat would be viewed as an intrusion on their sovereign abilities to manage natural resources in accordance with their own policies, customs, and laws. The perceived restrictions of a critical habitat designation could have a more damaging effect to coordination efforts, possibly preventing actions that might maintain, improve, or restore habitat for the flycatcher and other species. To this end, we found the pueblos of Ohkay Owingeh and Santa Clara would prefer to work with us on a government-to-government basis. For these reasons, we believe that our working relationships with would be better maintained if they were excluded from the designation of flycatcher critical habitat. We view this as a substantial benefit since we have developed a cooperative working relationship for the mutual benefit of flycatcher conservation and other endangered and threatened species.

We indicated in the proposed rule that our final decision regarding the exclusions of tribal lands under 4(b)(2) of the Act would consider tribal management and the recognition of their capability to appropriately manage their own resources, and the government-to-government relationship of the United States with tribal entities (76 FR 50542, August 15, 2011, p. 50584). We also acknowledged our responsibilities to work directly with tribes in developing programs for healthy ecosystems, that tribal lands are not subject to the same controls as Federal public lands, our need to remain sensitive to Indian culture, and to make information available to tribes (76 FR 50542, August 15, 2011, p. 50596). We identified all tribal land included within the proposal as areas we were considering for exclusion and our continued coordination with tribes and pueblos (76 FR 50542, August 15, 2011, pp. 50582–50583).

We coordinated and communicated with the pueblos of Ohkay Owingeh and Santa Clara throughout the revision of flycatcher critical habitat by providing them information on: Implementation of section 4(b)(2) of the Act; the Recovery Plan; Management Plan templates, guidance, and review; critical habitat

schedules, related documents, and public hearings; and our interest in consulting with them on a government-to-government basis at their request. We also followed up our correspondence with telephone calls and electronic mail to assist with any questions. During the comment period, we received input from many tribes and pueblos and BIA offices expressing the view that designating flycatcher critical habitat on tribal land would adversely affect the Service's working relationship with all tribes. Many noted that beneficial cooperative working relationships between the Service and tribes have assisted in the conservation of listed species and other natural resources. They indicated that critical habitat designation on these tribes or pueblos would amount to additional Federal regulation of sovereign Nations' lands, and would be viewed as an unwarranted and unwanted intrusion into tribal natural resource programs. We conclude that our working relationships with the pueblos of Ohkay Owingeh and Santa Clara on a government-to-government basis has been extremely beneficial in implementing natural resource programs of mutual interest, and that these productive relationships would be compromised by a critical habitat designation of these lands.

We have an effective working relationship with the pueblos of Ohkay Owingeh and Santa Clara, which was established and has evolved through informal consultations. We believe that the pueblos of Ohkay Owingeh and Santa Clara are willing to work cooperatively with us and others to benefit other listed species, but only if they view the relationship as mutually beneficial. Consequently, the development of future voluntary management actions for other listed species may be compromised if these lands are designated as critical habitat for the flycatcher. Thus, a benefit of excluding these lands is future conservation efforts that would benefit other listed species.

#### Benefits of Exclusion Outweigh the Benefits of Inclusion—Ohkay Owingeh and Santa Clara Pueblo

The benefits of including the pueblos of Ohkay Owingeh and Santa Clara in the critical habitat designation are limited to the incremental benefits gained through the regulatory requirement to consult under section 7 and consideration of the need to avoid adverse modification of critical habitat, agency and educational awareness, and the implementation of other law and regulations. However, as discussed in detail above, we believe these benefits

are minimized because they are provided for through other mechanisms, such as (1) the advancement of our Federal Indian Trust obligations; (2) the conservation benefits to the flycatcher and its habitat from implementation of flycatcher conservation actions; and (3) the maintenance of effective collaboration and cooperation to promote the conservation of the flycatcher and its habitat.

The benefits of excluding the pueblos of Ohkay Owingeh and Santa Clara from being designated as flycatcher critical habitat are more significant and include encouraging the continued implementation of tribal management and conservation measures such as monitoring, survey, habitat management and protection, and fire-risk reduction activities that are planned for the future or are currently being implemented. Overall, these conservation actions and management of flycatcher habitat likely accomplishes greater conservation than would be available through the implementation of a designation of critical habitat on a project-by-project basis (especially when these formal section 7 consultations rarely occur). These programs will allow the pueblos to manage their natural resources to benefit riparian habitat for the flycatcher, without the perception of Federal Government intrusion. This philosophy is also consistent with our published policies on Native American natural resource management. The exclusion of these areas will likely also provide additional benefits to the flycatcher and other listed species that would not otherwise be available without the Service's maintaining a cooperative working relationship. In conclusion, we find that the benefits of excluding the pueblos of Ohkay Owingeh and Santa Clara from critical habitat designation outweigh the benefits of including these areas.

#### Exclusion Will Not Result in Extinction of the Species—Ohkay Owingeh and Santa Clara Pueblo

We have determined that exclusion of the pueblos of Ohkay Owingeh and Santa Clara will not result in extinction of the species. First, Federal activities on this area that may affect the flycatcher will require evaluation under section 7 of the Act, because the flycatcher occurs on these lands. Section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species. Therefore, even without critical habitat designation on this land, federal activities that occur on these lands cannot jeopardize the

continued existence of the flycatcher. Second, the pueblos are committed to protecting and managing Pueblo lands and species found on those lands according to their tribal, cultural, and natural resource management objectives, which provide conservation benefits for the species and its habitat. In short, the pueblos are committed to greater conservation measures on their land than would be available through the designation of critical habitat. Accordingly, we have determined that the pueblos of Ohkay Owingeh and Santa Clara should be excluded under section 4(b)(2) of the Act because the benefits of exclusion outweigh the benefits of inclusion and will not cause the extinction of the species.

### Summary of Comments and Recommendations

We requested written comments from the public on the proposed designation of critical habitat for the flycatcher during two comment periods. The first comment period associated with the publication of the proposed rule (76 FR 50542) opened on August 15, 2011, and closed on October 14, 2011. We also requested comments on the proposed critical habitat designation and associated draft economic analysis and draft environmental assessment during a comment period that opened on July 12, 2012, and closed on September 10, 2012 (77 FR 41147). We did receive one request for a public hearing from Globe County. We held a public hearing on August 16, 2012, in San Carlos, Arizona. We also contacted appropriate Federal, State, and local agencies; scientific organizations; and other interested parties and invited them to comment on the proposed rule, draft economic analysis, and draft environmental assessment during these comment periods.

During the two comment periods, we received over 240 comment letters on the proposed critical habitat designation, draft economic analysis, or draft environmental assessment. During the August 16, 2012, public hearing, no individuals or organizations made comments on the designation of revised critical habitat for the flycatcher. All substantive information provided during comment periods has either been incorporated directly into this final determination or addressed below. Comments we received were grouped into several general issues specifically relating to the proposed critical habitat designation for the flycatcher and are addressed in the following summary and incorporated into the final rule as appropriate.

### Peer Review Comments

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270), we solicited independent opinions from five knowledgeable individuals who have expertise with the species, with the geographic region where the subspecies occurs, or familiarity with the principles of conservation biology. Of the five individuals contacted, four responded. The peer reviewers that submitted comments supported the science used to develop the proposal and provided us with comments, which are included in the summary below and incorporated into the final rule, as appropriate. We received comments from the peer reviewers during the comment period on our proposed rule. Peer reviewer comments are addressed in the following summary and incorporated into the final rule as appropriate.

*Comment (1):* Peer reviewers commented that we made good use of the current data, published and gray literature, expert opinion, and the Recovery Plan (Service 2002, entire). Peer reviewers agreed with our justification to designate critical habitat as river segments, our definition of a large population, and that small populations in close proximity equaled a large population. With one clarification (see below), peer reviewers agreed with our rationale to use a 35-km (22-mi) radius to determine the degree of connectivity to assign smaller separate flycatcher breeding sites and the distance from large populations to evaluate for designation of areas as critical habitat. All reviewers who provided input agreed with our approach to use the Recovery Plan and expert opinion to select critical habitat segments where few or no territories were known. Additionally, all peer reviewers agreed with our identification of the importance of migration habitat and how we included it within the designation. Peer reviewers agreed with how we identified and categorized special management considerations or protections (see below for a clarifying comment) as well as our description of the lateral extend of critical habitat.

*Our Response:* We believe we have considered and applied to this designation the best available scientific and commercial information regarding the flycatcher.

*Comment (2):* One peer reviewer discussed the 35-km (22-mi) radius to determine connectivity, provided information on results of flycatcher movements in New Mexico, and commented on our use of the term “regularly.” The reviewer discussed that

along the Middle Rio Grande in New Mexico, researchers have not witnessed the type of breeding flycatcher movements within years or between years reported in Paxton *et al.* (2007, p. 76). Shifts in territories may occur; however the statement in the proposal that flycatchers “regularly” will disperse or move to new breeding sites 30 to 40 km (18 to 25 mi) away within a particular basin within the same year may be an overstatement. The reviewer wrote that based on the detection and establishment of flycatcher territories along the Middle Rio Grande, flycatchers do not appear to regularly disperse more than a few kilometers or miles, and in general are not likely to disperse more than 16 to 24 km (10 to 15 mi). Therefore, a reduction in the geographic extent of population connectivity should be considered.

*Our Response:* In order to determine the connectivity of small separate flycatcher breeding sites and the distance from large populations to evaluate for critical habitat, we used the known between-year movements of banded adult and juvenile flycatchers reported from USGS (Paxton *et al.* 2007, p. 76). This study is the most comprehensive banding and movement study conducted on the flycatcher, occurring over a decade and involving the banding and tracking of over 1,500 flycatchers (Paxton *et al.* 2007, p. 1). From one season to the next, flycatchers have returned very near to the area previously used (50 m (150 feet)) and have moved as far away as 444 km (275 mi). However, more common were movements toward the lower end of these two extremes. As opposed to using the word “regularly” as the peer reviewer noticed, we could have more accurately described that “locations with breeding habitat that are within 30 to 40 km (18 to 25 mi) of each other will have higher meta-population connectivity, and there is a higher probability of colonization of new habitats that are within this distance (Paxton *et al.* 2007, p. 76).” As a result of this change in wording, we believe the flycatcher movements detected in New Mexico are more accurately captured and the intent of our statement is clearer.

Further, the shorter between-year distances detected on the Rio Grande in New Mexico may be a result of the recent success of nesting flycatchers at those sites. As USGS reported, “the higher a flycatcher’s productivity in one year, the more likely it was to return to the same territory the following year. Those individuals that had higher than normal reproductive success and showed territory fidelity continued to

reproduce above average, while those that did poorly and moved tended to do better than in the previous year (Paxton *et al.* 2007, p. 76)."

*Comment (3):* One peer reviewer discussed that it may be appropriate to describe the relative importance of the list of special management considerations and protections. The reviewer was concerned that because we referred to the elimination or reduction of exotic plants, this could be construed as having additional importance for flycatcher conservation. The reviewer described that the research does not support any difference in flycatcher health, reproductive success, or survivorship when comparing nesting flycatcher use of native vegetation to habitat dominated with exotic tamarisk.

*Our Response:* We agree with the reviewer that the science demonstrates that flycatchers can be equally successful in both suitable exotic tamarisk and native vegetation (Sogge *et al.* 2005, p. 1). Many of the previous beliefs associated with adverse impacts of tamarisk on reducing water supply and impacting wildlife populations were largely overstated or inaccurate (Shafroth *et al.* 2010, pp. viii-xi).

As a result, it is not our intention to suggest that removal or elimination of tamarisk is a preferred flycatcher management need. On the contrary, we believe that because of the sustained interest in the removal of tamarisk, our inclusion of this item is to provide measures that reduces the implementation of poorly designed projects, reduces temporal impacts to flycatcher habitat, and identifies strategies and considerations that would result in successful projects with improved overall habitat quality.

For a number of reasons, we believe that flycatcher habitat that is comprised of tamarisk requires special management considerations and protections. Tamarisk can be more flammable than native vegetation, and there may be widespread future impacts to flycatcher habitat associated with the tamarisk leaf beetle. In order to address these issues, where flycatcher habitat is comprised of tamarisk, it is important to understand that reducing the proportion of tamarisk may be largely dependent on reducing land or water management stressors that may be preventing native vegetation from flourishing. As a result, our special management considerations and protections emphasize retaining native and exotic vegetation, while improving the distribution, abundance, and quality of flycatcher habitat by improving hydrologic conditions and reducing land management stressors. We encourage implementing strategies

found in the Recovery Plan (Service 2002, Appendices H and K).

#### *Comments From States*

Section 4(i) of the Act states, "the Secretary shall submit to the State agency a written justification for his failure to adopt regulations consistent with the agency's comments or petition." Accordingly, we provided notice about our proposed rule to all six States where critical habitat was proposed (California, Nevada, Arizona, Utah, New Mexico, and Colorado). Comments we received from States regarding the proposal to designate revised critical habitat for the flycatcher are addressed below. We received comments from State agencies of Arizona, Nevada, New Mexico, and Colorado. We also received a comment from Utah Governor's office. Two State agencies (AGFD and New Mexico Department of Game and Fish) expressed specific support for the Service's approach to designating critical habitat for the flycatcher.

*Comment (4):* The Service has failed to cooperate or consult with State and local agencies prior to designating critical habitat for the flycatcher as required under sections 2(c)(2) and 7(a)(2) of the Act. "Consultation with affected States," where required by statute but not defined by Congress, means something more than the invitation of comments from the public; the commenter cited *California Wilderness Coalition v. United States Dept. of Energy*, 631 F.3d 1072, 1087 (9th Cir. 2011) in support of this argument.

*Our Response:* During this designation process, we requested information from, and coordinated development of, the proposed critical habitat designation with appropriate State resource agencies in Arizona, Utah, Nevada, California, New Mexico, and Colorado. The Service received substantial information from a variety of partners, including the States, to help us refine the final critical habitat designation. The final rule has been adjusted, accordingly, including modifying boundaries of critical habitat units, based on information provided from peer review and public comments on site specific biological expertise on the flycatcher. A summary of comments from States is provided below.

*Comment (5):* We received several comments from State resource agencies presenting site-specific information on areas that should or should not be considered as critical habitat and areas that we should consider for exclusion.

*Our Response:* The information received from our State resource agency

partners was very helpful, and enabled us to refine our understanding of habitat essential to the conservation of the species, and in the case of occupied habitat, habitat that contains physical or biological features that may require special management considerations or protections. We based the proposed rule on the best available information at that time; we requested technical input from a variety of partners, including the States, to help us refine the final critical habitat designation. The final rule has been adjusted accordingly, including modifying boundaries of critical habitat units, based on our partners' site-specific biological expertise with the species (see Summary of Changes from Proposed Rule section).

*Comment (6):* Although reevaluation of recovery goals is not included in the proposed rule, the New Mexico Department of Game and Fish suggests establishing recovery goals in the future for the Pecos River and designating Rattlesnake Springs, Eddy County, New Mexico, as critical habitat.

*Our Response:* The Recovery Plan does not currently have recovery goals or a management unit established for the Pecos River, therefore, we did not propose any areas in the Pecos River drainage as critical habitat. The small population of flycatcher territories at Rattlesnake Springs continues to be monitored by the New Mexico Department of Game and Fish and Carlsbad Caverns National Park. Although this location is not included within units where goals have been established, these areas and territories are still subject to consultation under the jeopardy provisions of section 7 of the Act and may play a role in recovery with regards to source population and population stability.

*Comment (7):* The Colorado Department of Natural Resources urges an assessment of the genetic status and distribution of the flycatcher. Further, other commenters noted that there are questions associated with the northern portion of the flycatcher's range and the boundaries of the range of the southwestern subspecies.

*Our Response:* We are familiar with this issue, and the collection and analysis of genetic information from breeding flycatchers and history of adjustment of the northern boundary in Utah and Colorado is discussed within the proposed rule. Following the analysis of flycatcher genetic material across the northern part of the bird's range (Paxton 2000, pp. 3, 18–20), the northern boundary of this southwestern subspecies in Utah and Colorado was reduced (Service 2002, Figure 3). As a result, the southwestern subspecies'

range only occurs in the southernmost portions of Utah and Colorado. This is consistent with morphological characteristics of museum specimens, where Behle (1985, pp. 54–57) argued that flycatchers in northernmost Utah were *E. t. adastus*, those in the extreme southern part of the State were *E. t. extimus*.

The U.S. Geological Survey has continued to collect genetic information to help refine the northern boundary of the subspecies' range in Utah, Colorado, and New Mexico (Paxton *et al.* 2007a, entire). They reconfirmed the genetic markers that identify differences among flycatcher subspecies, with breeding sites clustering into two groups separated approximately along the currently recognized boundary. A complication in refining the subspecies' northern boundary is that this region is sparsely populated with breeding flycatchers, and therefore only minimal information is available (Paxton *et al.* 2007a, p. 16). We encourage the survey and detection of flycatcher territories and collection of genetic samples to further our understanding of this area, but we currently recognize the northern geographic boundary of the flycatcher as described in the Recovery Plan (Service 2002, Figures 3, 4).

*Comment (8):* The Utah Governor's office recommended that the Service analyze the habitat value of Kanab Creek from the Highway 89 Bridge to the Stateline, as Utah Division of Wildlife Resources' surveys detect flycatchers using this segment and some flycatchers have remained through the breeding season.

*Our Response:* Kanab Creek occurs within the Middle Colorado Management Unit. From 2000 to 2007, a single site was surveyed seven times (Sogge and Durst 2008). No flycatcher territories were detected in 6 years, and two territories were detected in 2002 (Sogge and Durst 2008). Our methodology focused on identifying areas of habitat that are important for reaching the numerical territory and habitat-related goals described in the Recovery Plan. We proposed just over 74 km (46 mi) along the Colorado River as flycatcher critical habitat within the Middle Colorado River Management Unit. We believe these areas are capable of reaching the 25 territory goal established in the Recovery Plan.

We expect that in some Management Units, critical habitat will not be designated in all locations where flycatcher habitat occurs or may occur, or where territories have been detected. While this portion of Kanab Creek has had nesting flycatcher habitat, the reliability and abundance of flycatcher

habitat and territories appears to be limited. Although we did not designate it as critical habitat, it can still contribute to flycatcher recovery and is subject to evaluation of Federal actions under the jeopardy standards of section 7 of the Act.

*Comment (9):* The NDOW recommended that the Service consider excluding the proposed critical habitat areas within the Pahrnagat NWR from the final critical habitat designation.

*Our Response:* We have reevaluated the habitat at the Pahrnagat NWR and our final designation is reduced from the amount that was proposed (see Summary of Changes from Proposed Rule section). The remaining area is owned and managed by the Service. In general, we found there are benefits to including federally owned area in the designation of critical habitat because of the Federal agencies' obligation to consult under section 7 of the Act on activities that may adversely modify critical habitat. The consultation requirement provides some benefit to flycatcher conservation. We expect that ongoing conservation efforts in this area will continue with or without critical habitat designation, limiting the benefits of excluding the area. Consequently, we have not determined that the benefits of excluding these areas outweigh the benefits of including these areas.

*Comment (10):* AGFD supports exclusion of Upper Alamo Lake Area from designation of critical habitat, including sections of the Bill Williams, Santa Maria, and Big Sandy Rivers that are included under the existing Alamo Lake State Wildlife Area Management Plan.

*Our Response:* We identified this area as an area for possible exclusion in our proposed rule based on the existence of a management plan. We continue to acknowledge that excluding this area would provide benefits to our partnership with AGFD. The Alamo State Wildlife Area has a successful management plan that provides for maintenance of flycatcher habitat and other species. Although recreation and wildlife at Alamo Lake is managed by the AGFD under agreement with the Corps, the conservation space of Alamo Lake and Alamo Dam is owned and the dam operated by the Corps. Alamo Dam is operated primarily for flood control (as compared to water storage and delivery for other reservoirs) and typically remains at low levels, permitting occupancy of flycatcher habitat. The Corps has consulted with the Service in the past on dam operations and the potential effects to the flycatcher. To date, those operations have supported the maintenance of

flycatcher territories at Alamo Lake and downstream along the Bill Williams River. The Corps maintains an obligation to consult under section 7 of the Act on their current operations, and those uncertain future operations or activities that may adversely modify critical habitat. As a result, the consultation requirement provides some benefit to flycatcher conservation. In addition, we expect that ongoing conservation efforts in this area will continue with or without critical habitat designation, limiting the benefits of excluding the area. Consequently, after reviewing the best available information, we have determined that the benefits of including these Federal lands as critical habitat outweigh the benefits of excluding this area.

*Comment (11):* Multiple commenters questioned the proposed designations on the Paria and San Juan Rivers. Specifically, one commenter asserted that the habitat along the Paria and San Juan Rivers is not suitable for breeding populations of flycatchers and should not be incorporated into a critical habitat designation. Survey notes indicated that these segments are ephemeral and dominated by exotic vegetation. Survey hours resulted in only rare observations of migrant flycatchers, and the Utah Governor's office contends there is no evidence of willow flycatcher occupancy ever on the Utah portion of the San Juan River and specifically questioned the rationale for designating the San Juan River as critical habitat when no nesting areas occur on the river.

*Our Response:* The Paria and San Juan Rivers are a part of the Upper Colorado Recovery Unit, primarily occurring throughout the Four Corners area of Utah, Colorado, Arizona, and New Mexico. We recognize that limited information exists for this area, and, through our proposed rule, we sought additional information. We have results from site-specific, project-related surveys, but we are not familiar with any comprehensive or long-term surveys along these streams. The flycatcher has been detected in this area in the past (likely as a migrant), no nesting flycatchers have been detected here.

The Flycatcher Recovery Team discussed that the low number of breeding sites and territories within the Upper Colorado Recovery Unit is probably a function of relatively low survey effort rather than an accurate reflection of the bird's actual numbers and distribution (Service 2002, p. 64) and that much willow riparian habitat occurs along drainages within this Recovery Unit and remains to be surveyed (Service 2002, p. 64).

Because the flycatcher is an endangered species, recognized by both the Service and the State of Utah, it is expected that their distribution and abundance is diminished. The absence of detecting recent flycatcher territories along the San Juan River in Utah is believed to be partly due to its rarity as an endangered species and also to the relatively low survey effort (Service 2002, p. 64). Unitt's (1987, p. 150) document, titled "*Empidonax traillii extimus*: An Endangered Subspecies," summarized some of the recent Utah historical distribution, describing flycatcher summer nesting season occurrence along the Virgin, San Juan, and Colorado Rivers.

In contrast to our 2005 designation of flycatcher critical habitat, where we did not propose or designate critical habitat in the Upper Colorado Recovery Unit, the objective of this revision was to propose critical habitat in a distribution and abundance to meet Recovery Plan goals. The Recovery Team established goals of 25 flycatcher territories in both the San Juan and Powell Management Units, the only Management Units within the Upper Colorado Recovery Unit.

Although these segments of the Paria River and the San Juan River were not within the geographical area known to be occupied by flycatchers at the time of listing, these areas may be able to sustain flycatcher habitat and territories and therefore are essential to flycatcher conservation in order to help meet recovery goals in these Management Units. These areas were identified as having substantial recovery value in the Recovery Plan and are anticipated to provide flycatcher habitat for metapopulation stability, gene connectivity through these portions of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated flycatcher habitats are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

We agree that tamarisk occurs within these streams, but as described in the proposed and this final rule, tamarisk (and Russian olive) provides suitable habitat for flycatchers in either monotypic stands or mixed with native vegetation. While flycatcher habitat is most commonly associated with perennial streams, flycatcher territories do occur along intermittent streams that can go dry during the breeding season.

*Comment (12):* We also received a comment that the Paria River is

unsuitable due to the presence of two roads, an operating farm, and an active gravel pit. The heavily traveled Cottonwood Road directly abuts the Paria River segment for 6 km (4 mi). Flycatcher territories were lost when bridges were built across riparian areas (Service 2002, p. 37), and the lateral presence of these roads is far more intrusive than a bridge. Given that the Service has not studied the effects of a road on potential habitat, the commenter believed it would be arbitrary for the Service to designate the Paria River segment. The comment stated that the farm and gravel pit on 2.4 km (1.5 mi) greatly reduce the size of the entire segment, and the continuing human activity in the narrow corridor renders the Paria River segment unsuitable. Therefore, the Paria River lacks the listed primary constituent elements and is unsuitable due to the narrow canyon and human disturbance.

*Our Response:* While human activities can negatively impact willow flycatcher habitat, some willow flycatcher territories persist within urban areas and adjacent to human disturbance. Therefore, the presence of the road, gravel pit, and farm do not preclude the Paria River from consideration as critical habitat.

*Comment (13):* The Utah Governor's office also expressed concern about the potential economic impacts of designating critical habitat along the San Juan River in San Juan County, Utah (San Juan Management Unit). Specifically, the entities state that existing land use activities include river rafting and camping, livestock grazing, oil and gas exploration and production, sand and gravel extraction, irrigated farming, habitat management of wildland fire fuels, and mining. In addition, private property values could be affected.

*Our Response:* Potential economic impacts associated with these activities are discussed in the draft economic analysis. Specifically, recreation-related enterprises and agricultural activity undertaken by the Navajo Nation are discussed in paragraphs 353 through 355 of the draft economic analysis. Potential impacts to development activities on the Navajo Reservation (utilities, transportation, sewer management, and residential development) are discussed in paragraph 432. Additional potential transportation impacts are discussed in paragraph 501. Finally, oil and gas development in this management unit are discussed extensively in Chapter 8. Our evaluation found that all of these activities will only result in baseline costs (associated with the listing of the

flycatcher, and incremental impacts in this area are limited to administrative costs.

*Comment (14):* State agencies from Colorado and New Mexico, the USBR, and other commenters asked the Service to exclude the area on the Rio Grande within Elephant Butte Reservoir in Sierra and Socorro Counties, New Mexico, under section 4(b)(2) of the Act. The reasons for exclusion as outlined by USBR fall under four categories: (1) Treaty obligations and national security considerations; (2) benefits of a management plan; (3) water storage and persistence of primary constituent elements; and (4) economic value of water deliveries. Further, the Colorado Department of Natural Resources commented that the designation of critical habitat on the Rio Grande could affect the Rio Grande Compact between New Mexico, Texas, and Colorado.

*Our Response:* As part of the revised critical habitat, the Service proposed a 211-km (131-mi) segment of the Rio Grande, within the Middle Rio Grande Management Unit, that includes a 45.7-km (28.4-mi) portion within Elephant Butte Reservoir. Over time, as the lake at Elephant Butte has declined, there has been an increase of willows and other trees in the delta of Elephant Butte Reservoir, and also an increase in flycatcher territories within the reservoir pool and north of the reservoir pool where the habitat is supported by the low-flow conveyance channel. The area within and north of Elephant Butte Reservoir supports the largest known population of flycatchers in the range of the subspecies. In our proposed rule, we also identified this location as an area we were considering for exclusion under section 4(b)(2) of the Act due to potential impact on water operations. After reviewing the best available scientific information, we have determined that the benefits of including the Elephant Butte Reservoir as critical habitat outweigh the benefits of excluding this area in the final designation, as discussed in the following paragraphs.

With regard to treaty obligations and national security considerations, USBR provided information describing their commitments for water delivery, including deliveries to Mexico. They assert that designation of critical habitat would impact their ability to meet these commitments and lead to national security issues. We have no information which suggests that designation of critical habitat in this area would preclude USBR from meeting their commitments under these treaties, nor do we have any indication from the Department of Defense that designation

in this area may present a national security concern.

USBR provided a conservation plan for the flycatcher during the comment period for the proposed critical habitat designation. The plan includes provisions to monitor flycatcher populations and their habitat, to maintain at least 100 territories, and to proceed with future habitat creation and restoration plans over the next 10 years. However, we are not aware that the provisions or measures in the plan have been implemented and shown to be effective. We expect to consult under section 7 with USBR on the ongoing operations of the reservoir and their management plan within two years to address any discretionary actions by USBR that may affect the flycatcher. The results of this consultation and ongoing management efforts could affect what is considered critical habitat in this area in any future critical habitat analysis. As a consequence, we may revise critical habitat in the future as our resources allow.

With regard to water storage and elements of essential physical and biological features, USBR provided information documenting that habitats and their primary constituent elements are temporary and dependent on the level of the reservoir and, as such, these areas should not be considered essential to the conservation of the species. The proposed critical habitat rule explains that the dynamic nature of riparian vegetation, dependent as it is on hydrological conditions, is an important characteristic of flycatcher habitat. This is also true of dynamic habitats along reservoirs that vary in water elevation stage. As a result, the shoreline areas of reservoirs can provide the essential physical and biological features that define flycatcher critical habitat. Therefore, it would not be appropriate to exclude the area from consideration as critical habitat based solely on the premise that some elements of the habitat may be temporary in nature.

Finally, USBR provided extensive information documenting the economic value of the water deliveries they facilitate including both the value of the water itself and the value of the water in income to users. There is no disputing the economic value of the water deliveries; however, there is no information to suggest that designation of critical habitat will disrupt those water deliveries. Specifically on point, the economic analysis investigated this issue and determined that any impacts to water resources from Elephant Butte Reservoir would be associated with baseline costs (costs attributable to listing the flycatcher as an endangered

species), not the incremental impact of critical habitat designation. The rationale for this conclusion is that, because the area is currently occupied, consultation under the jeopardy standard is required with or without critical habitat, and that project modifications that may be required to avoid adverse modification are not likely to differ practically from project modifications that may be required to avoid jeopardy. In total, the economic analysis found that \$25,000 in incremental impacts may occur at Elephant Butte Reservoir associated with the administrative costs of completing consultations under the adverse modification standard. Consequently, we determined that the benefits of including this area from designation of critical habitat outweigh the benefits of excluding the area, and thus, this area is included in the final designation of critical habitat.

Although the Secretary chose not to exercise his discretion to exclude the Rio Grande within Elephant Butte Reservoir in its entirety under section 4(b)(2) of the Act, we did reevaluate the Rio Grande within the Middle Rio Grande Management Unit and found that the most downstream portions of the river segment within Elephant Butte Reservoir in the Middle Rio Grande Management Unit did not meet our criteria for, and therefore, our definition of, flycatcher critical habitat. We found that the 31.4-km (19.5-mi) downstream portion of the proposed segment within the active storage pool of Elephant Butte Reservoir contains some of the elements of physical or biological features of flycatcher habitat along the reservoir edge. However, in the Middle Rio Grande Management Unit, the habitat features in this most downstream portion are not essential to flycatcher conservation because the number of flycatcher territories and amount of habitat in the farther upstream portion (about 180 km, 112 mi) of this segment have already far exceeded the recovery goals for this management unit. As a result, the most downstream portion of the Rio Grande in Elephant Butte Reservoir is not necessary for the conservation of flycatcher, as the Unit without this portion meets the quantity of habitat and territories identified as essential for this Management Unit (refer to our *Criteria Used To Identify Critical Habitat* section). Therefore, we are not including this portion in the designation for this Management Unit (see Summary of Changes from Proposed Rule).

*Comment (15):* The New Mexico Interstate Stream Commission states that a key assumption of the economic

analysis is that critical habitat will not require changes in water level operations or loss of storage capacity. The commenter states that this assumption is illogical, incorrect, and inconsistent with Office of Management and Budget (OMB) guidelines for Federal agencies conducting an economic analysis of proposed regulations, which are required to apply the “best assessment of the way the world would look absent the proposed action.” The commenter states that no evidence or logic is evident in the report that supports the assumptions that the operating pool will not require changes in water level operations or loss of storage capacity.

*Our Response:* The commenter is correct that the assumption in the economic analysis that water operations will not change as a result of critical habitat designation for flycatcher is key to the analysis. However, the reasons for this assumption are articulated in Chapter 3 of the economic analysis. The reasons are repeated here. First, in areas where flycatcher presence is known, an extensive consultation history exists with regard to impacts of flycatcher on water management, with at least 35 formal consultations on water actions being conducted on flycatcher since 1996. Several habitat conservation plans (HCPs) already exist for flycatcher related to water management issues, some covering large river stretches, including the Lower Colorado Multi-Species Conservation Program. On the Middle Rio Grande, a long-term biological opinion has been issued addressing flycatcher and the Rio Grande silvery minnow, and a large Middle Rio Grande Endangered Species Collaborative Program exists. On the Kern, Salt, and Verde Rivers, HCPs have been developed related to operations of water management facilities. All of the existing plans have included conservation actions for the flycatcher, and many have included habitat mitigation, but none to date has required changes to water operations for flycatcher such that downstream flow to water users have been affected. Due to the extensive history of management of flycatcher through incidental take permit development, the economic analysis assumes that, in areas where flycatcher territories have been detected, water managers will pursue an incidental take permit or statement for current operations as part of an HCP or section 7 biological opinion.

The 2005 economic analysis considered the potential for flycatcher conservation to result in changes to dam operations in order to avoid adverse effects on flycatcher habitat. However,



management agencies have asserted in some cases that they lack legal discretion to release water for flycatcher management purposes. For example, in *Defenders of Wildlife v. Norton*, 257 F. Supp. 2d 53 (D.D.C. 2003), the Federal district court held that USBR lacked discretion to provide water for species in the Colorado Delta because USBR was precluded from changing Colorado River operations by the Colorado River compact. Other court cases addressing section 7 consultation between USBR and the Service have upheld the use of off-site mitigation, as is often contemplated in incidental take permits for the flycatcher, and allowed USBR to raise the level of the lake above existing flycatcher habitat (see *Southwest Center v. U.S. Bureau of Reclamation*, 143 F.3d 515, (9th Cir. 1998) and *Southwest Center for Biological Diversity v. U.S. Bureau of Reclamation*, 6 F. Supp. 2d 1119 (D.Az. 1997)). Based on these findings, it appears unlikely that flycatcher conservation efforts, regardless of critical habitat designation, will result in changes in dam operations beyond those conservation activities outlined in an incidental take permit. Therefore, the analysis does not estimate the potential magnitude of impacts associated with changes in dam operations, such as maintaining water levels at an elevation at or below flycatcher habitat areas, or the cost of replacing water supplies, either under the baseline or incrementally due to critical habitat designation.

As noted in Chapter 2 of the draft economic analysis, the Service states that in a scenario where a section 7 consultation resulted in both a jeopardy and adverse modification finding under each different standard, it is likely that conservation measures by the Federal agency that might be required to avoid jeopardy would be similar to those required to avoid adverse modification. As noted in Chapters 2 and 3 of the draft economic analysis, the Service found no instances where actual project modifications were previously required to avoid destruction or adverse modification of critical habitat in a review of the past consultation record for flycatcher both with and without critical habitat. As such, in areas where flycatcher territories have been detected or flycatcher presence is known, this analysis assumes that a future HCP or section 7 consultation will be developed or undertaken, but that resulting conservation efforts will not differ than those that would have occurred absent critical habitat. That is, quantified incremental impacts of future consultations in the areas either

occupied by the species, or where the species is otherwise currently managed for, are assumed to be limited to the additional, minor administrative costs of considering the potential for the project to adversely modify critical habitat.

*Comment (16):* The New Mexico Interstate Stream Commission states that the costs incurred by water officials, including developing new State or local law, ordinances, or policy to protect sensitive habitat within the storage pool at Elephant Butte Reservoir are not addressed in the economic analysis.

*Our Response:* The economic analysis includes estimated costs of efforts to manage flycatchers at Elephant Butte Reservoir of \$10.1 to \$84.7 million. To calculate this, we use the reservoir's large storage capacity and the cost per acre-foot of management efforts, developed as part of biological opinions and HCPs developed elsewhere, as a proxy. While the analysis does not attempt to parse out the costs by specific use, the per-acre-foot cost was developed from estimates that incorporated program management costs. In Chapter 3, the final economic analysis now acknowledges that some costs may be associated with the development of law, ordinances, or policies by managing agencies related to flycatcher management. Because the population of flycatchers is very large at Elephant Butte, and agencies are already aware and conducting consultations on the flycatcher both at the Reservoir and in areas downstream, and because the Service does not anticipate that requirements to protect critical habitat will differ from requirements to protect the species in areas that are already being managed for the species, costs are attributed to the baseline, as they would be anticipated to occur even absent critical habitat for flycatcher.

*Comment (17):* The New Mexico Interstate Stream Commission states that Elephant Butte Reservoir is a known and highly valued recreational area that attracts regional visitors seeking boating, camping, fishing, and other recreational activities that are supported by well-established marinas and commercial businesses at the reservoir and nearby towns. Designation of the proposed critical habitat will reduce the surface water area available for boaters and water content for fish species within the reservoir, imposing a direct and negative economic impact on visitation and revenues. The value of this lost recreation was provided in earlier public comment by USBR and should be included in the economic analysis. Furthermore, lost recreational revenue associated with the designation of

riparian habitat along the Middle Rio Grande riparian corridor and the Upper Rio Grande Basin should be included in the economic analysis.

*Our Response:* USBR estimates that recreation users spend, in aggregate, between 1 and 2 million user-days at Elephant Butte each year and spend approximately \$26.28 per day in the region. The Agency states that if the surface water elevation is lowered, fewer recreation user days will occur. We have not included this estimate in our economic analysis, because the Service does not anticipate that the surface water elevation of the reservoir will decrease as a result of the presence of the flycatcher or designated critical habitat (see paragraphs 99 and 176 through 178 of the draft economic analysis).

*Comment (18):* The New Mexico Interstate Stream Commission inquired about the Rio Fernando within the Upper Rio Grande Management Unit and sought clarification on stream conditions and the importance of this area for flycatcher recovery.

*Our Response:* Flycatcher territories were detected along the Rio Fernando in 2008, and are still known to occur. Although this stream segment is relatively short, there is sufficient habitat to support several nesting pairs. Within the Upper Rio Grande Management Unit, the recovery goal is 75 territories and the known single year high is 39 territories, detected in 2000. The Rio Grande, Rio Grande del Rancho, and Coyote Creek were identified within this Management Unit as having substantial recovery value in the Recovery Plan (Service 2002, p. 92). These three segments, along with the essential Rio Fernando segment, are anticipated to provide flycatcher habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

*Comment (19):* The New Mexico Department of Agriculture suggested that the Service provide an analysis that recognizes the agricultural industry in the environmental assessment.

*Our Response:* The impacts envisioned in the comment letter related to the availability of irrigation water. While the economic analysis does not include a chapter specifically titled "agriculture," Chapter 3 discusses

potential impacts on water management, including irrigation diversions, in great detail. We do not anticipate changes in the amount of water available as a result of the listing or designation. Rather, the water projects have historically obtained incidental take permits by completing HCPs that generally involve acquiring mitigation lands and various management activities. Because changes in flow are not anticipated, impacts to downstream agricultural users are not anticipated.

*Comment (20):* The New Mexico Department of Agriculture disagrees with the statement in the draft environmental assessment that “potential impacts to the quality of the environment are not likely to be highly controversial” and, instead, suggests the “potential impacts \* \* \* may result in varying degrees of controversy.”

*Our Response:* The environmental assessment acknowledges prior controversy. The Service believes that, with the combination of exclusions and voluntary conservation measures in place, the likely impacts of the proposed designation would not be highly controversial. The Service understands that, given the prior history of designation, some level of controversy may result.

#### *Comments From Federal Agencies*

*Comment (21):* One commenter stated that they oppose the designation of critical habitat on military lands.

*Our Response:* Within this revision, we identified important streams for flycatcher habitat and recovery to propose as critical habitat at Vandenberg Air Force Base within the Santa Ynez Management Unit and Marine Corps Base Camp Pendleton and Naval Weapons Station Seal Beach Detachment Fallbrook (Fallbrook Naval Weapons Station) within the San Diego Management Unit. After the identification of these lands, we evaluated the conservation and management of these lands by these military installations as provided in their INRMPs. We described and evaluated the conservation measures for each of these installations in our proposal and this final rule and concluded that each provides a benefit to the flycatcher and its habitat. As a result, we conclude that the areas we identified as important for the flycatcher habitat are exempt from critical habitat designation under section 4(a)(3) of the Act (see *Application of Section 4(a)(3) of the Act* section above).

*Comment (22):* A Federal agency suggested that the Cienega Creek segment in southern Arizona within the Santa Cruz Management Unit should be

expanded to include the entirety of the creek from the headwaters downstream because this is high-quality habitat where flycatchers have been documented.

*Our Response:* The BLM provided us new information during the comment period about a breeding flycatcher detected on Empire Gulch (a tributary to the headwaters of Cienega Creek) and habitat quality for breeding and migrating flycatchers along Cienega Creek. We discussed these comments with the BLM, incorporated their recommendations into our proposal within our July 12, 2012, amendments to the proposed rule (76 FR 41147, p. 41151), and subsequently have included two short segments of Empire Gulch and a longer segment of Cienega Creek in our final designation (see *Critical Habitat Unit Descriptions*, Gila Recovery Unit section above).

*Comment (23):* A commenter stated that under the recent consultation for Nationwide Aerial Application of Fire Retardant on USFS lands, retardant use within flycatcher critical habitat on national forests would be avoided. The commenter stated that, although the proposed critical habitat was not considered in that analysis, it too will likely be avoided by the same size buffer zones. However, the commenter believes that newly designated critical habitat identified in the final rule will need to be reviewed by the individual national forests at that time to determine if there would need to be any exceptions or modifications to the standard buffer zones. The commenter states that the national forests will consult as appropriate at that time, and the new areas will then be included in fire retardant avoidance maps prior to the upcoming fire season.

*Our Response:* We appreciate the commenter's information and willingness to incorporate this final critical habitat designation into consideration of fire retardant use on USFS lands. We look forward to working with the USFS for future discussion of fire retardant use and avoidance of its use on National Forest System lands that might affect this revised critical habitat designation for the flycatcher.

*Comment (24):* One commenter noted that the NPS is currently conducting a special resource study of the San Gabriel River watershed and the San Gabriel Mountains regarding the formation of the San Gabriel Region National Recreation Area in California. The purpose of such action would be to increase recreational opportunities in the area, including riding, cycling, hiking and picnicking. The Service

should consider the impacts of critical habitat designation on the proposed National Recreation Area.

*Our Response:* The NPS's study, including its recommendations, is scheduled to be transmitted to Congress this year. At this time, given the uncertainty associated with the various alternatives proposed in the study and likely action taken by Congress, we are unable to estimate the potential effects of the designated critical habitat on recreational opportunities arising from a National Recreation Area. However, a discussion of the study and possible action by Congress has been added to Chapter 10 of the final economic analysis.

*Comment (25):* The Corps requested we exclude the South Fork Kern River (including upper Lake Isabella) and Canebrake Creek, California, located within the South Fork Kern River Wildlife Area, as well as Hafenfeld and Sprague Ranches, from the revised critical habitat designation, because current management of Lake Isabella Reservoir benefits flycatcher habitat and a designation could impact the management purpose of the reservoir for flood control and water supply. The commenter indicated that the Sprague and Hafenfeld properties are managed under a conservation easement or management plan to benefit flycatchers. The commenter also noted that Lake Isabella Reservoir is managed in compliance with all terms and conditions of the Service's 2000 biological opinion on long-term operations of Lake Isabella Reservoir that addressed effects to the flycatcher and its critical habitat designated at that time.

*Our Response:* On the basis of the conservation easement and management plan in place with private partnerships, the Sprague Ranch and Hafenfeld Ranch have been excluded from this final designation (see Exclusions section above).

However, the South Fork Kern Wildlife Area is owned by the Corps and managed by the USFS. In contrast to the non-federally owned Sprague Ranch and Hafenfeld Ranch, there is additional benefit to including the federally owned portions of the South Fork Kern River in the designation of critical habitat because of the Federal agencies obligation to consult under section 7 of the Act on activities that may adversely modify critical habitat. The Corps has consulted with the Service in the past on dam operations, the potential effects to the flycatcher, and implemented reasonable and prudent measures described in those associated biological opinions.

Conservation measures included off-site land conservation efforts rather than modifying reservoir operations. The Corps maintains an obligation to consult under section 7 of the Act on their current operations, and those uncertain future operations or activities that may adversely modify critical habitat. As a result, the consultation requirement provides some benefit to flycatcher conservation. We expect that ongoing conservation efforts in this area will continue with or without critical habitat designation, limiting the benefits of excluding the area. Consequently, after reviewing the best available information, we have determined that the benefits of including this area as critical habitat outweigh the benefits of excluding this area.

Furthermore, Canebrake Creek lies within a California Department of Fish and Game Ecological Reserve and is well upstream and not within the jurisdiction of the Corps' management of Lake Isabella Reservoir. There is no management plan specifically addressing flycatcher habitat in this area, thus we have determined that the benefits of including Canebrake Creek outweigh the benefits of excluding this area.

*Comment (26):* The USFS identified a camping area at Luna Lake in the San Francisco Management Unit and requested that it be excluded from the designation due to the lack of primary constituent elements.

*Our Response:* This recreation site had not previously been considered in the draft economic analysis. We have added a discussion of the site and its use to section 10.4 of the draft economic analysis. In addition, this area was found not to be essential for conservation of the flycatcher and has been removed from the final designation (see Summary of Changes from the Proposed Rule section above).

*Comment (27):* Several individuals state that current management strategies for grazing operations within the Tonto National Forest provide sufficient rest to allow for conservation of riparian habitat. One comment also states that some areas within the middle Salt River region are not suitable for grazing.

*Our Response:* The Service believes that carefully managed and closely monitored, light-to-conservative levels of grazing within critical habitat during the non-growing season may be compatible with flycatcher recovery (Service 2002, Appendix G). Thus, complete loss of grazing opportunities is not anticipated. Section 4.3 of the draft economic analysis describes the estimation of economic impacts associated with grazing. Communication

with Federal land managers identified allotments that are unlikely to face future grazing restrictions or riparian exclusions, due to either manmade (e.g., fencing, roads, or seasonal use) or natural (e.g., steep canyons or unsuitable habitat) features. No impacts are anticipated in these areas.

*Comment (28):* The USFS provided detailed information on grazing allotment management and conservation strategies as relevant to the flycatcher economic analysis.

*Our Response:* The draft economic analysis identified allotments that were unlikely to face future grazing restrictions or riparian exclusions, due to either manmade (e.g., fencing, roads, or seasonal use) or natural (e.g., steep canyons or unsuitable habitat) features, through communication with land managers at the USFS and the BLM. The information provided in public comment by this entity is consistent with the information and assumptions used in the draft economic analysis.

*Comment (29):* As holders of the grazing permit for the Dagger Allotment in the Tonto National Forest, Cherry Creek Cattle Company commented that there is no evidence to indicate that grazing poses a threat to the species. They stated they have yet to be shown a case in which cattle have negatively affected the bird's welfare. Instead, there are case studies that demonstrate that the flycatcher actually benefits from the presence of water improvements and insect populations that are a result of grazing activity. An example is a study of the U-Bar Ranch in the Gila River Valley, where the highest density of the species occurred in an area with grazing present.

*Our Response:* The Recovery Plan (2002, pp. 35–36, 114–116) discusses the issues, impacts, and evidence regarding the compatibility of grazing with flycatcher life history. The Service believes that carefully managed and closely monitored, light-to-conservative levels of grazing within critical habitat during the non-growing season may be compatible with flycatcher recovery (Service 2002, Appendix G).

*Comment (30):* Multiple individuals commented on the economic impact of historical closures of recreational areas along the Salt River and Tonto Creek by the USFS for the protection of the flycatcher. These areas were popular locations that generated local spending and jobs related to the provision of fuel, lodging, food, and equipment. They estimate annual lost expenditures by recreational users of \$47,123,599. No information is provided regarding the derivation of this estimate.

*Our Response:* Section 10.3.11 of the draft economic analysis provides a detailed discussion of the costs associated with reduced recreational opportunities in the Tonto National Forest. We estimate lost direct expenditures of approximately \$400,000 annually (2010 dollars) based on data provided by the USFS on the number of fishing and hunting trips taken prior to the closures, the availability of substitute locations, and published estimates of average trip expenditures in each county in Arizona. These costs are attributed to the listing of the species (baseline), not the designation of critical habitat (incremental), because USFS began implementing these seasonal restrictions prior to the original designation of critical habitat in these areas.

*Comment (31):* The USFS states that camping along the shoreline of Lake Roosevelt, and fishing along the Salt River and the Tonto Creek confluence and Roosevelt Lake, could be affected by the designation.

*Our Response:* As discussed above, section 10.3.11 of the draft economic analysis provides a detailed discussion of the costs associated with reduced recreational opportunities on the Salt River, Tonto Creek, or Lake Roosevelt. The USFS has been implementing seasonal restrictions at Roosevelt Lake since 1998. Thus, the designation of critical habitat is not expected to result in additional, incremental impacts to recreational users. We have excluded Roosevelt Lake from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act as a result of the implementation of SRP's Roosevelt Dam HCP and the supporting management conducted by the USFS (see Exclusions section below).

*Comment (32):* The USFS identified an area of the Los Padres National Forest located within the proposed Santa Ynez Management Unit as heavily used for recreation. Specifically, it writes that the area between Live Oak picnic area and the Gibraltar Dam experiences heavy recreational use for picnics and swimming, especially in the summer when several thousand visitors may enter this area in one day. In addition, the three developed recreation sites require annual maintenance such as fire hazard reduction and clearing of the hardened crossings after high winter flows. The USFS is concerned that the designation of critical habitat could curtail use or maintenance of these popular sites. Finally, the agency notes that there are no records of flycatchers in the area.

*Our Response:* Future formal section 7 consultation on the recreational

activities taking place in this area is unlikely. If the USFS requests technical assistance or informal consultation, we are unlikely to recommend modifications to these activities, because the stream segment in question is used for migratory purposes, rather than nesting. Furthermore, there may be a benefit to continued recreation at the site in terms of educating visitors about the flycatcher and its habitat needs. If technical assistance or informal consultation occurs, the majority of the costs would be attributed to the baseline scenario because the area is considered to be occupied by the species. In addition, Federal agencies are aware of the potential presence of the species because the Santa Ynez River segment was previously designated as critical habitat. We have added a discussion of this site to chapter 10 of the final economic analysis.

*Comment (33):* USBR commented that the "Fisheries" section of the environmental assessment should not focus on just the Colorado River fisheries, as several other river systems such as the Rio Grande have conflicting uses between the fisheries and flycatcher. The discussion does not represent the full issues associated with conflicts between existing fish such as the Rio Grande silvery minnow (*Hybognathus amarus*) and the flycatcher.

*Our Response:* Along the middle Rio Grande, revised flycatcher critical habitat overlaps with critical habitat for the Rio Grande silvery minnow, which is only found in the section of the Rio Grande between Cochiti Dam and Elephant Butte Reservoir (68 FR 8088, February 19, 2003). Both the flycatcher and silvery minnow have experienced loss of habitat from stream modifications along the river system that include agriculture development, water diversion, impoundments, and livestock grazing (68 FR 8088, February 19, 2003, pp. 8088–8089, 8127). Because of potential conflicting interests between current and future water users and protected species, a collaborative group called the Middle Rio Grande Endangered Species Collaborative Program was developed. This group consists of local, regional, tribal, and Federal organizations whose goals are to alleviate jeopardy for the protected species while still providing for current and future water users (Middle Rio Grande Endangered Species Collaborative Program 2010).

USBR has overseen several restoration projects, funded by the Middle Rio Grande Endangered Species Collaborative Program, to enhance habitat for both the silvery minnow and

the flycatcher. Several groups, including the Santa Domingo Pueblo (Service 2008) and the Pueblo of San Felipe (Service 2007b), have been funded to remove nonnative plants and refurbish habitats along the Rio Grande. These projects provide proper water flow and bank stabilization for the silvery minnow while also creating native habitat structure for the flycatcher.

*Comment (34):* We received a suggestion to add the U.S. Department of Agriculture and NPS to the list of agencies likely to enter into section 7 consultations with the Service under the No Action Alternative in the draft environmental assessment.

*Our Response:* The USFS is the Federal bureau within the U.S. Department of Agriculture that would be likely to consult with the Service, and this agency is already listed. We have added the NPS to this list and noted other places in the environmental assessment where actions by the NPS could be considered in section 7 consultations for flycatcher critical habitat.

#### *Comments Related to Tribal Lands*

*Comment (35):* A variety of comments from tribes and others stated that they oppose the designation of critical habitat on tribal lands. We also received some comments that we did not adequately coordinate with tribes based on our government-to-government relationship.

*Our Response:* It is important for the Service to work and communicate with tribes and pueblos potentially impacted by the designation of critical habitat. We support and recognize tribal sovereign authority and each tribe's inherent power to manage and control their natural resources. In accordance with Secretarial Order 3206 and the Service's Native American Policy, we consult with tribes when actions taken under the Act may affect tribal lands, tribal trust resources, or the exercise of American Indian tribal rights as defined in the Secretarial Order.

Prior to our publication of the proposed revision of flycatcher critical habitat, the Service's Regional Directors sent letters to the leader of each tribe and pueblo that could be affected by the rule, provided information about our intention to propose revised flycatcher critical habitat, and offered the opportunity to initiate government-to-government consultations regarding the process. We also explained our exclusion policies under section 4(b)(2) of the Act and provided other relevant information to assist tribes and pueblos in cooperating in this process. We also communicated informally with tribal

representatives, including making presentations at tribal wildlife conferences in Arizona and New Mexico about the upcoming critical habitat revision and our related policies. In California, the Service attended meetings with all seven tribes that could be affected by critical habitat.

Following publication of our August 15, 2011, proposal (76 FR 50542), and throughout the process to revise critical habitat, we continued communicating with tribes and pueblos verbally and in writing. We contacted each tribe and pueblo formally in writing, and informally via telephone and electronic mail; offered government-to-government consultation at their request; and provided a copy of the proposal. In September 2011, we sent a letter to the leader of each tribe and pueblo with an updated draft flycatcher management plan template, flycatcher literature, and further guidance on how to develop and implement a flycatcher management plan for our consideration for exclusion under section 4(b)(2) of the Act. We followed up this letter with electronic messages and phone calls to tribes and pueblos providing additional management plan guidance. We later provided tribes and pueblos an update on our schedule for completion of the designation, opportunities for submitting management plans, an offer of technical assistance on management plans, and information about seeking exclusion from the critical habitat designation.

Following our July 12, 2012, notice of availability for the draft economic analysis and draft environmental assessment (77 FR 41147), we again sent a letter to the leader of each tribe and pueblo, dated July 30, 2012, to notify them of the opportunity to comment on the process, offer government-to-government consultation, and inform them of the dates and locations of the public hearing and open house meeting. Representatives from local Service field offices in Arizona, California, Colorado, and New Mexico contacted tribes and pueblos in person, during meetings, and through electronic mail and telephone calls to inform them about the proposed rule and offered help with development of flycatcher management plans. Representatives from the BIA also coordinated with the Service to provide their guidance and assistance. In many cases, the Service assisted tribes in the development of flycatcher management plans.

In November 2011, we met with a representative from the San Ildefonso Pueblo in New Mexico at their request. We also met with and had teleconferences with representatives

from the GRIC of Arizona in October 2012. We had additional meetings with all of the tribes in California. While preparing to publish the proposed rule, we made presentations to tribal wildlife conferences, attended by tribal staff in New Mexico and Arizona about the development of the upcoming critical habitat proposal and our exclusion process.

Overall, we provided detailed correspondence and coordination, and communicated with the 19 tribes and pueblos where we proposed critical habitat. We also provided more general correspondence to other nearby tribes not included in the proposed designation and coordinated with them at their request. We subsequently excluded, under section (4)(b)(2) of the Act, all of the 19 tribes and pueblos that were included within the proposed designation (see Exclusions section). We intend to keep working to improve our relationships with tribes and the BIA following the tenets of Secretarial Order 3206 and Executive Order 13175.

*Comment (36):* The Southern Ute Indian Tribe, Fort Mojave Indian Tribe, Pueblo de San Ildefonso, Yavapai-Apache Nation, Hualapai Department of Natural Resources, Navajo Nation, Pueblo of Zuni, and the San Carlos Apache Tribe each submitted to the Service a copy of their respective management plans for the flycatcher. Many included amendments or revisions to ensure adequate conservation for the flycatcher and its habitat.

*Our Response:* We appreciate these efforts, and appropriate sections of this rule and economic analysis have been revised to reflect conservation efforts reflected in the respective plans.

*Comment (37):* The Barona Group of Capitan Grande Band of Mission Indians of the Barona Reservation, California, stated that our description of the portion of the “San Diego River (upper)” area being considered for exclusion from this critical habitat designation was confusing. The Tribe noted that the area being considered for exclusion is described as 4.7 km (2.9 mi) and 82.4 ha (203.7 ac) in the supplementary table (on page 2 of 5), under the heading “Areas Considered for Exclusion,” but the area, as shown on the proposed map, is nearly identical to that of 37 ha (92 ac) excluded from critical habitat for the arroyo toad (*Anaxyrus californicus*).

*Our Response:* The Service inadvertently included in these calculations lands not within the boundary of the Capitan Grande Band of Diegueno Mission Indians Reservation (Capitan Grande Reservation), which is jointly managed by the Barona Group of

Capitan Grande Band of Mission Indians of the Barona Reservation, California, and the Viejas (Baron Long) Group of Capitan Grande Band of Mission Indians of the Viejas Reservation, California, in the proposed rule for the flycatcher. We have revised the boundaries of this segment to appropriately reflect the area of tribal lands considered for critical habitat to an approximately 0.9 km (0.6 mi) stream segment of the San Diego River (upper) and consisting of approximately 9.0 ha (22 ac) of the Capitan Grande Reservation. See Summary of Changes from the Proposed Rule above for further discussion.

*Comment (38):* The Viejas (Baron Long) Group of Capitan Grande Band of Mission Indians of the Viejas Reservation, California, expressed concern that the Service and the BIA did not make a greater effort to comply with directives obligating Federal agencies to consult with tribes when taking actions that impact tribes, particularly those involving tribal lands and the management of biological resources. The Tribe cited Secretarial Order 3206 and Executive Order 13175, Consultation and Coordination with Indian Tribal Governments (Nov. 9, 2000), as outlining the Service’s responsibility to communicate with Tribes regarding actions that may affect tribal lands as far in advance as practicable. According to the Tribe, the Service’s track record on the proposed designation fails to meet these obligations, and, had such notification and consultation occurred, the Service would have obtained sufficient information to exclude the tribe from the proposed designation. The Tribe requested full consultation going forward, expressed appreciation of the Service’s recent efforts in this regard, and anticipates that intergovernmental discussions will continue.

*Our Response:* The Service makes every effort to coordinate with tribes well in advance of taking any action which may affect tribes or tribal lands. The Service met with both tribes on June 16, 2011, prior to publication of the proposed rule; have kept in contact with the tribes via email concerning the possible development of management plans for the flycatcher; and have met with the tribes at quarterly meetings. We appreciate the feedback provided by the Viejas (Baron Long) Group of Capitan Grande Band of Mission Indians of the Viejas Reservation, California, and will continue to foster effective communications with tribes.

*Comment (39):* The Pala Band of Luiseño Mission Indians of the Pala Reservation, California, expressed concern regarding the proposed Gregory

Canyon Landfill, just west of the Pala Reservation, because the construction and operation of a landfill at this location would segregate the San Luis Rey population of flycatcher into east and west subpopulations and that the effect on gene flow caused by such segregation should be included in the analysis of the designation in this area. The Tribe believes it is highly likely that the mountain stream in Gregory Canyon provides habitat that the flycatcher would use as an adjunct to the primary riparian corridor, extending its use by the species up the canyon, and that this location should be designated critical habitat for the flycatcher.

*Our Response:* We agree that Gregory Canyon provides riparian habitat that the flycatcher may use. However, Gregory Canyon was not identified as necessary for recovery in the Recovery Plan, and we do not believe the area is essential to the conservation of the species; therefore, we did not propose the area as critical habitat. In developing the critical habitat determination, the Service used the Recovery Plan, as well as information from peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, and other unpublished materials and expert opinion or personal knowledge.

*Comment (40):* The Ramona Band of Cahuilla, California, indicated that they have developed a draft conservation measure regarding the species that will serve as the appropriate resource management plan for the Ramona Indian Reservation and other tribal lands. The Ramona Band of Cahuilla stated that it invites the Service to work with the Tribe to devise and adopt its plan.

*Our Response:* We appreciate the Tribe’s invitation and look forward to working cooperatively with the Ramona Band of Cahuilla, California, in the development and adoption of their management plan for the flycatcher.

*Comment (45):* The Barona Band of Mission Indians comments that the draft economic analysis does not explain why uniquely tribal values described in the report are not monetized, and, therefore, the report provides an incomplete assessment of costs and renders the economic analysis legally inadequate.

*Our Response:* The draft economic analysis is unable to monetize impacts for which economic data are not readily available in published academic literature or from other sources. Furthermore, new primary research, such as complex surveys eliciting values for the unique amenities provided to tribes by reservation lands, is beyond

the scope of this analysis. The uniquely tribal values described in the draft economic analysis are difficult to define in scope and scale, and necessary economic data are not readily available. To address the Barona Band of Mission Indians' concern that such values will not be considered in the rulemaking process, however, we include a note regarding these "uniquely tribal values" into exhibit 6-1 of the draft economic analysis, so that unquantified values can be considered in combination with quantified administrative costs.

*Comment (46):* Maps show that flycatchers are present on GRIC lands in Arizona; however, there are no critical habitat designations on lands managed by the GRIC. The GRIC Tribal Historic Preservation Office supports designation of lands as critical habitat for the flycatcher.

*Our Response:* While we believe it is reasonable to anticipate that migrating or dispersing flycatchers occur along the section of the lower Gila River where the GRIC occurs, we are not currently aware of flycatcher territories on these lands. We have not proposed critical habitat on GRIC lands. At the Tribe's request, we are available to provide our technical assistance about flycatchers, flycatcher habitat, management, and surveys.

*Comment (47):* The GRIC indicates that the economic analysis fails to properly assess direct and ancillary benefits of the rulemaking. Specifically, the Community raises the following concerns: (1) Regarding direct benefits, the draft economic analysis fails to conduct an adequate assessment of these benefits. Even in the case where benefits are not quantifiable, options such as conducting a threshold analysis or doing additional research, outlined in Circular A-4, were not properly considered. As a result, the draft economic analysis does not indicate that any direct or indirect benefit results from the proposed designation. (2) Regarding ancillary benefits, the draft economic analysis provides no monetary, or non-monetary quantification for the listed ancillary benefits, and no discussion of their relative importance. In addition, many of the ancillary benefits are not a result of the designation, are overstated or duplicative.

The Santa Clara Pueblo also disagree with the inclusion of certain categories of benefits as ancillary to the proposed critical habitat because these benefits are already realized absent the designation.

*Our Response:* The OMB Circular A-4 (p. 10) states, "For all \* \* \* major rulemakings, you should carry out a

BCA [benefit-cost analysis]. If some of the primary benefit categories cannot be expressed in monetary units, you should also conduct a Cost-Effectiveness Analysis (CEA). In unusual cases where no quantified information on benefits, costs and effectiveness can be produced, the regulatory analysis should present a qualitative discussion of the issues and evidence." Both benefit-cost analysis and cost-effectiveness analysis require measurement of the effectiveness of the regulation in quantitative terms. Benefit-cost analysis simply takes the next step of monetizing the value to the public of the improvements.

The primary purpose of this critical habitat designation is to support the long-term conservation of the flycatcher. As described in section 11.1 of the draft economic analysis, quantification and monetization of this conservation benefit require information on the incremental change in the probability of conservation resulting from the designation. Such information is not available, and as a result, quantification of the primary benefit of critical habitat designation is not possible. The Service does not believe that conducting additional research on the benefits of flycatcher conservation is within the scope of this economic analysis.

Section 11.1.3 of the draft economic analysis discusses potential ancillary benefits. Although economic literature does exist that monetizes similar benefits, these studies are necessarily site-specific. For example, using benefits transfer techniques to estimate changes in residential property value based on the existing economic literature would require knowledge of the characteristics of the specific lands preserved as a result of the designation of critical habitat, including proximity to residential properties and the amount of existing open space in the area. Without knowing where lands will be preserved (e.g., through mitigation fees) as a result of this designation, it is impossible to estimate such benefits. Similarly, quantifying benefits associated with improved water quality would require information regarding baseline water quality, hydrologic and chemical modeling to estimate changes in water quality, and risk analysis to determine avoided human health risk based on changes to water quality. These types of analyses are beyond the scope of the draft economic analysis. As a result, ancillary benefits associated with the designation of critical habitat are discussed qualitatively. Specifically, section 11.3 and exhibit 11-1 in the draft economic analysis provide a list and discussion of the potential ancillary benefits associated with the proposed

critical habitat. This exhibit indicates which benefits may occur in each management unit, in order for the Service to compare to costs when determining exclusions. It also indicates whether such benefits are likely to occur in the baseline, or result incrementally from the designation of critical habitat.

*Comment (48):* The GRIC and another commenter state that the economic analysis fails to assess potential impacts to the GRIC from potential changes to downstream water availability from the San Carlos Reservoir.

*Our Response:* As stated in Chapter 3 of the economic analysis, water users that receive deliveries from the San Carlos Reservoir could be affected by critical habitat designation if reservoir operations are modified such that less water is available for irrigation or other community uses. Reductions in available water to the GRIC could result in reductions in irrigated crop acres for end users, if farmers are unable to switch to less water-intensive crops or find substitute water sources. If less water is available for community use, restrictions on municipal or domestic use could result. However, as stated in Chapter 3, due to the extensive consultation history on the flycatcher allowing for habitat mitigation in lieu of changing water operations, and a previous Service suggestion than an HCP or section 7 consultation be developed related to San Carlos Reservoir operations, the analysis finds that future modifications to the operations of the San Carlos Reservoir to avoid adverse modification of critical habitat for flycatcher are unlikely. Instead, the analysis assumes than an HCP or section 7 consultation and incidental take permit will be developed that allow for habitat mitigation. To approximate the cost of developing an HCP, the analysis applies that range of incidental take permit costs, which also incorporate the acquisition of mitigation lands. Applying this estimate, total costs for Coolidge Dam are approximately \$4.25 to \$35.7 million. Because changes in dam operations are not anticipated, impacts of critical habitat designation to water deliveries to the GRIC or SCIDD related to the San Carlos Reservoir are not expected.

*Comment (49):* The San Carlos Apache Tribe expresses concern that the draft economic analysis did not evaluate its assumptions using sensitivity analysis. Furthermore, this comment states that aggregating impacts occurring on both tribal and non-tribal lands results in the marginalization of disproportionate impacts to tribes.

*Our Response:* As shown in exhibit ES-4 and exhibit ES-5 of the draft

economic analysis, the analysis presents a range of possible impacts, resulting from variation in key assumptions, in high and low impact scenarios.

Although the draft economic analysis does aggregate estimates of impacts occurring on both tribal and non-tribal lands, paragraph 322 and section 6.1 of the draft economic analysis explain that, due to the unique characteristics of tribal economies, economic impacts to tribes are evaluated differently from impacts on non-tribal lands.

Furthermore, quantified baseline and incremental costs that could be incurred by the tribes in the future are separately presented in exhibit 6–1 of the draft economic analysis.

*Comment (50):* The GRIC states that the proposed rule indicates on its maps, as does the economic analysis, that critical habitat is being proposed on Community lands, but this area is neither addressed in the proposed rule, nor is it assessed in the economic analysis. The Community provides information regarding the related economic impacts they will realize if this portion of the Salt River is designated, including potential impacts to its ability to grow riparian mesquite, a culturally and economically significant crop.

*Our Response:* The Service is not designating critical habitat for the flycatcher on any portion of the Community's land. Any apparent inclusion of Community land on maps in the proposed rule or draft economic analysis was unintentional.

*Comment (51):* The GRIC indicates that the time period of the analysis is both inconsistent and too short. The period of analysis is inconsistent in that the baseline uses an analytical period of 50 years, whereas the incremental analysis uses varying periods. Further, this time period is too short in that the period of analysis for the San Carlos Reservoir should be indefinite since the GRIC intends to use the reservoir, and the San Carlos Irrigation District has contracts, in perpetuity. However, if it is impractical to use an indefinite period, the analysis should note that in reality the Community could realize impacts resulting from a change to reservoir management in perpetuity.

*Our Response:* In response to the Community's concern that the period of analysis is too short and too variable, we refer the commenter to section 2.3.5 (paragraph 87) of the economic analysis. In general, the analysis makes the best use of available data and information, which in some cases dictates the time period of the analysis (for example, in the analysis of water impacts). The draft economic analysis, however, complies

with Circular A–4 standards for the appropriate definition of the “foreseeable future” for this analysis.

For water projects where an incidental take permit has been issued, we forecast costs over the remaining period of the permit, because future management of the resource is relatively certain. For all other water projects, we forecast costs over a 30-year period. Given the nature of these projects, where multiple stakeholders and government entities often negotiate over decisions regarding how to manage and allocate resources, changes in the foreseeable use of the water tend to occur less frequently than changes in other types of economic activity. In contrast, other activities, such as future transportation projects, may be more difficult to forecast beyond 20 years.

In the case of the San Carlos Irrigation Project, which delivers water to the GRIC, it is unlikely that flows to the Community will be affected by the presence of the flycatcher. The Service has previously suggested that if water transfers result in a loss of downstream flycatcher habitat, additional habitat could be acquired on the San Pedro River as part of an HCP (see paragraphs 170 through 173 of the draft economic analysis). We include the potential costs of such efforts in paragraph 173 of the draft economic analysis.

*Comment (52):* The GRIC stated that, in the environmental assessment, the Service failed to provide any meaningful analysis of how the proposed rule will impact water delivery obligations under the San Carlos Project Act, which requires that the Reservoir “provid[e] water for the irrigation of lands allotted to the Pima Indians on the Gila River Reservation.”

*Our Response:* With the measures described in the “Water Resources” and “Tribal Resource” sections of the environmental assessment, it is unlikely that the Service would conclude an adverse modification determination to flycatcher critical habitat from San Carlos Irrigation District operations. Therefore, it is not anticipated that the Service would require the BIA, through section 7 consultation, to change current San Carlos Irrigation District operations.

*Comment (53):* Some commenters are concerned about the clarity of the description of the northern boundary of the Middle Rio Grande river segment in New Mexico near the Bernalillo County line and the Isleta Pueblo. Additionally, commenters sought clarity on the distribution of flycatcher territories in this area and how critical habitat may apply to lands between the Isleta Pueblo-Bernalillo County lines.

*Our Response:* Although Isleta Pueblo lands have contained several nesting pairs of flycatchers and each territory is important, we believe there is sufficient habitat and territories within the Middle Rio Grande Management Unit to meet and exceed recovery goals farther downstream. We have not included any lands within the Isleta Pueblo in the proposal and clarified the language in the final rule regarding the northern boundary of this critical habitat segment.

It is important to note, however, that absent any critical habitat, the flycatcher will still receive protection in the future due to its status as a listed species under the Act. Thus, any costs that will occur due to the listing of the species, regardless of whether critical habitat is designated, are attributed to the baseline. Appendix C and paragraphs 66 through 73 of the draft economic analysis provide the process used by the Service and applied in the economic analysis to distinguish actions that will occur as a result of the species' listing.

*Comment (54):* The Santa Clara Pueblo states that the list of economic activities that the draft economic analysis includes as potentially occurring on the reservation is incomplete. The Pueblo believes that a higher level of economic activity is likely to occur in the area. The Pueblo foresees the possibility of activities such as, but not limited to, groundwater pumping, livestock grazing, agriculture, flood control, recreation development, and future additions or renovations to their existing hotel and casino. The Pueblo is particularly concerned that the Service properly considers potential impacts to groundwater pumping, even if monetization of impacts is not possible at this time. As a result, the estimate of four formal consultations per year is an underestimate of the likely level of consultation activity that the Pueblo will undergo.

*Our Response:* Section 6.4.16 of the draft economic analysis has been updated to reflect a higher level of consultation activity on affected portions of the Santa Clara Pueblo, and to highlight the Pueblo's concerns regarding potential impacts to groundwater. The number of consultations has been increased to 10, or approximately one every other year for the 20-year period of the analysis, to account for additional expected activities on proposed reservation land.

*Comment (55):* Two tribes express concern regarding the definition of baseline conditions and costs in the draft economic analysis. One entity states the baseline should include existing flycatcher critical habitat in



order to properly reflect the current conditions. Another suggests that it is incorrect to assume that the presence of the species was the impetus for conservation actions already undertaken, and that conservation efforts should therefore not be considered baseline costs.

*Our Response:* According to OMB's Circular A-4, the baseline should be the best assessment of the way the world will look (in the future) absent the proposed rule. The revised designation will replace the existing critical habitat regulation. Thus, the Secretary has the discretion to exclude from the final rule areas that were designated in 2005. In other words, absent an explicit decision from the Secretary to designate an area as part of the final rule, in the future, critical habitat protections will no longer apply. Thus, comparison of a world with the designation as proposed in 2011 to a world without critical habitat (the baseline scenario) is appropriate for the purposes of the economic analysis.

*Comment (56):* Activities occurring on tribal lands, unlike activities occurring in other geographic areas where critical habitat may be designated, almost always have a Federal nexus for section 7 consultation. As a result, the San Carlos Apache Tribe is likely to experience significant economic impacts.

*Our Response:* Paragraph 325 in section 6 of the draft economic analysis explains that because all tribal lands overlapping proposed critical habitat are located within areas occupied by the flycatcher, which would include flycatcher territories, and migrating and dispersing flycatchers. As a result, where the species occupancy is well known, the Service considers all costs associated with conservation measures to be baseline (see chapter 2 of the economic analysis). This would pertain to activities on tribal lands with a Federal nexus. As a result, we assume that future incremental impacts on tribal lands will be limited to the additional administrative effort of addressing critical habitat in section 7 consultation.

Specifically, the draft economic analysis (paragraphs 444 and following in section 6.4.15) discusses this concern using text from a comment submitted previously by the San Carlos Apache Tribe. The full extent of flycatcher occupancy on San Carlos Indian Reservation is unknown due to the proprietary nature of tribal survey information. However, the information contained in the management plan, as well as the section 7 consultation history, does not indicate that significant management requirements or

economic impacts have occurred as a result of the presence of the flycatcher. Past economic impacts related to flycatcher conservation have included costs of administrative efforts, surveying and monitoring, and cowbird trapping. These costs are expected to continue in the future with or without critical habitat. Some additional consultation could occur if critical habitat were designated. However, given our ongoing relationship with the San Carlos Apache Tribe and the information provided in their Management Plan, we have determined that the benefits of excluding lands on the San Carlos Apache Reservation outweigh the benefits of inclusion.

*Comment (57):* The Santa Clara Pueblo indicates that the draft economic analysis improperly states that the Service contacted each tribe to solicit information on the likely impacts of the designation. Santa Clara Pueblo maintains that informal contact from contractor staff to the tribes does not respect the government-to-government relationship the Service should maintain with tribal entities.

*Our Response:* The Service has maintained contact with the Santa Clara Pueblo and other tribal governments through letters, phone calls, and emails, and has provided the Tribe with notice of publication dates of various documents. We provided numerous opportunities to engage in government-to-government discussions regarding our proposal, and we continue our openness to do so. We appreciate the comment and are fully responsible for strengthening government-to-government relationships with tribes.

#### *Other Comments Related to the Act and Implementing Regulations and Policy*

*Comment (58):* Since the definition of "destruction or adverse modification of critical habitat" has been invalidated, the Service must revise the definition to focus on whether, with the implementation of an agency's proposed action (taking into consideration habitat management, conservation or other offsetting measures), the critical habitat remaining would continue to serve its intended conservation role for the species.

*Our Response:* The Service is working to update the regulatory definition of adverse modification since it was invalidated by several Courts of Appeal, including the Ninth Circuit and the Fifth Circuit. At this time (without updated regulatory language), we are analyzing whether destruction or adverse modification would occur based on the statutory language of the Act itself, which requires us to consider

whether an agency's action is likely to result in the destruction or adverse modification of habitat which is determined by the Service to be critical to the conservation of the species (16 U.S.C. 1536(a)(2)). We agree with the commenter that to perform this analysis, we consider how the proposed action is likely to affect the function of the critical habitat in serving the intended conservation role.

*Comment (59):* Some commented that the Service did not adequately notify landowners where proposed critical habitat was located.

*Our Response:* Due to the large scope of the proposed designation, it was not possible to contact each individual landowner within the proposed designation. We believe we contacted the appropriate Federal, State, and local agencies; tribes; scientific organizations; elected officials; and other interested parties including other landowners, as best we could, and invited them to comment on the proposed rule. We sent out over 1,100 pieces of mail for each published notice in the **Federal Register**. We contacted these groups by letter and electronic mail at the time of publication of the proposed rule (76 FR 50542, August 15, 2011); and again when we reopened the comment period to announce the availability of the draft economic analysis and draft environmental assessment, and to notify the public of the location of a public hearing (77 FR 41147, July 12, 2012). We held a public hearing at the request of Gila County, in San Carlos, Arizona, on August 16, 2012. In order to inform the general public, notices were published in the **Federal Register** and local newspapers, and we widely distributed news releases and posted them on the Internet. A web page of flycatcher critical habitat materials was maintained at Arizona Ecological Services Web site <http://www.fws.gov/southwest/es/arizona>. Additional flycatcher critical habitat materials, including public comments, are available at <http://www.regulations.gov>.

*Comment (60):* Several commenters expressed the willingness of a variety of water agencies (Bear Valley Mutual Water Company, City of Redlands, City of Riverside, City of San Bernardino Municipal Water Department, East Valley Water District, San Bernardino Valley Municipal Water District, San Bernardino Valley Water Conservation District, Western Municipal Water District, West Valley Water District, and Yucaipa Valley Water District) to work with the Service to provide for flycatcher conservation.

*Our Response:* The Service appreciates the agencies' willingness to

work with the Service to conserve the flycatcher and its habitat. We believe partnerships with other agencies are vital to providing conservation of our shared natural resources, and look forward to working with the agencies in pursuit of this goal.

*Comment (61):* There is no reference in the proposed rule to the requirement set forth in the Federal Land and Policy Management Act for values management. The Service must adhere to the requirements as set forth in that legislation including mitigation efforts for all the promised values.

*Our Response:* The Federal Land and Policy Management Act of 1976, as amended (43 U.S.C. 1701), established the BLM's multiple-use mandate to serve present and future generations. Section 102(a)(8) states that public lands must "be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values." In section 103(e), "public lands" is defined generally as land administered by the BLM. There are no provisions in the Federal Land and Policy Management Act that are applicable to the Service in general or the designation of critical habitat specifically.

*Comment (62):* The implementing agreements for both the Orange County Southern Subregion HCP and the Western Riverside County MSHCP state that, to the extent consistent with other agency priorities, staffing, and funding constraints, the Service intends to reassess and revise the boundaries of existing designated critical habitat and any proposed critical habitat of covered species designated within the HCP boundaries.

*Our Response:* The implementing agreements indicate that the Service intends to reassess and revise the boundaries of existing designated critical habitat and any proposed critical habitat of covered species within HCP boundaries. However, due to current funding and priority limitations, the Service cannot reassess or revise all critical habitat designations for multiple species concurrently. In revising this current designation of critical habitat for the flycatcher, the Service is responding to litigation and the subsequent settlement agreement in which we agreed that the Service would revise critical habitat for the flycatcher.

*Comment (63):* The Service has found that the redesignation does not create a Federal mandate as defined under the Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.). However, the Service needs to complete a financial plan in an honest manner and with a

thorough consideration of the facts. Recognize and disclose that the redesignation of critical habitat will cause the otherwise unnecessary expenditure of funds by local governments and private citizens.

*Our Response:* The designation or revision of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. The Service completed an economic analysis and made its findings available for public comment. Consequently, we do not believe that this rule will significantly or uniquely affect small governments for reasons explained in the sections of this rule entitled *Regulatory Flexibility Act* (5 U.S.C. 601 et seq.) and *Unfunded Mandates Reform Act* (2 U.S.C. 1501 et seq.).

#### *Other Comments Related to Biology, Methodology, and Critical Habitat Designation*

*Comment (64):* Several commented that the critical habitat in the proposed rule is excessive, capable of supporting some 100,000 flycatcher territories, in contrast to the current number of territories (approximately 1,300) and the Recovery Plan goal of 1,950 territories. Similar comments were received that generally pointed out that the amount and location of areas identified in the critical habitat proposal were significantly larger than our 2005 designation, and there was no discussion or analysis of the difference.

*Our Response:* Our specific methodology used to identify areas proposed as flycatcher critical habitat was described in the proposed rule (76 FR 50542, August 15, 2011, pp. 50552–50558). This approach duplicated much of what was identified and designated in 2005, with additional proposed areas primarily targeting locations needed in order to reach specific territory and habitat-related recovery goals for each management unit.

The science provided in the Recovery Plan (Service 2002, entire) and our knowledge of the distribution and abundance of territories, use of river corridors for migration, year-to-year movements, habitat use within territories, and Recovery Plan goals helped guide our approach and provided support for the segments proposed and designated as critical habitat. In some locations, especially Management Units where there is limited information on flycatcher distribution and abundance, we sought additional information through the designation process and used our best professional judgment to identify and designate river segments.

The naturally irregular, patchy, and dynamic distribution of flycatcher habitat within riparian corridors, combined with the habitat-related and territory recovery goals and important migration habitat likely accounts for a larger area than what is perceived to be needed in order to accomplish the territory component of the Recovery Plan's targets. In other words, because of the dynamic aspects of flycatcher habitat due to flooding, changing river locations, and land uses, we are unable to specifically target patches of habitat within riparian corridors. Instead, we identified the boundaries (riparian area) where this habitat is expected to occur over time.

Additionally, a comparison of the 2011 proposal to the 2005 final designation is inappropriate because our 2011 proposal does not incorporate any section 4(b)(2) exclusions from the final designation. In the 2011 proposed rule and 2012 notice of availability, we identified 1,451.5 km (901.9 mi) stream miles that we considered for exclusion from the final designation (76 FR 50542, August 15, 2011; 77 FR 41147, July 12, 2012). The exclusions we are making in this final rule are discussed in the Exclusions section.

*Comment (65):* Some commenters questioned the scientific evidence used by the Service.

*Our Response:* In designating flycatcher critical habitat, we believe we have used the best available scientific and commercial information, including results of numerous surveys, peer-reviewed literature, unpublished reports by scientists and biological consultants, habitat suitability models, a stakeholder-driven Recovery Plan, and expert opinion from biologists with extensive experience studying the flycatcher and its habitat. We believe the peer reviewer support for our use of the best available science to develop this critical habitat designation confirms our approach.

*Comment (66):* One commenter expressed concern that the quality of the maps was poor and, therefore, made it difficult for the public to adequately comment on the proposed revisions. Map quality makes it difficult to proceed with land and water management projects such as fuel reduction or fire management. Similarly, some commenters recommended more detailed maps to determine where the primary constituent elements of critical habitat may be absent at locations such as road, campgrounds, bridges, or where the bird's status is uncertain.

*Our Response:* In the proposed rule (76 FR 50542; August 15, 2011), we

described where people can view enhanced color maps and retrieve site-specific boundaries of the critical habitat proposal in GIS format. These color maps and electronic GIS information files could be viewed or retrieved by visiting <http://www.regulations.gov> or <http://www.fws.gov/southwest/es/arizona>. The maps within the proposed rule identified every river segment and provided the UTM location and landmarks for each endpoint; County, State, and Management Unit boundaries; and other important common landmarks (e.g., towns, highways, lakes). Color maps posted online at the Arizona Ecological Services Office Web site included all the same information as those found in the proposed rule, with additional color-coded information on land ownership and areas considered for exclusion under section 4(b)(2) of the Act. The boundary for our lateral extent of critical habitat was also provided within the electronic GIS information.

**Comment (67):** A few comments pointed out technical errors such as places where the proposed rule includes a written description of the lands proposed for inclusion and exclusion in the designation, but the associated maps do not always match the written description.

**Our Response:** We appreciate commenters bringing those issues to our attention and have made corrections as needed. Please refer to the Summary of Changes from Proposed Rule section where we have corrected a number of mapping errors from the proposed rule.

**Comment (68):** There is an error in Table 1 of the proposed rule regarding breeding flycatchers from Parker Dam to the Southerly International Boundary. This area has not been known to be occupied by breeding flycatchers since the 1930s, and no nests have been detected from 1991 to 2010. This area should be listed as "No" in the first column (Known to be occupied at the time of listing (1991–1994)) and "No" in the second column (Territories detected (1991–2010)).

**Our Response:** We identified areas occupied at the time of listing at those streams (not portions of streams) where flycatcher territories were detected in any one season in surveys conducted from 1991 to 1994 (Sogge and Durst 2008). We considered a broader area to be occupied than just the specific site where a territory was located because flycatchers, as a neotropical migrant, travel between Central America and the United States. Because flycatchers occupy riparian areas along rivers while traveling between wintering and breeding grounds, we expect that many

small areas along long stretches of stream can be occasionally used by migrant flycatchers from year to year. North and south-bound migrating flycatchers are frequently found occupying stopover areas along streams upstream of, downstream of, and between known breeding sites.

Therefore, for this wide-ranging bird, it is difficult to precisely determine known occupied areas due to the following considerations: (1) The flycatcher's neotropical migratory habits of occupying stopover areas along streams upstream of, downstream of, and between breeding sites; and (2) the season-to-season variation in habitat quality and subsequent lack of specific nest-site fidelity. As a result, for the purpose of this critical habitat designation, we believe it is most conservative and reasonable to conclude that any segment along a stream where flycatcher territories were detected from 1991 to 1994 also be considered occupied at the time of listing.

At the time of listing, only specific sites on the Colorado River within the Middle Colorado Management Unit were known to have territories. However, based upon our criteria and the wide-ranging nature of this bird as a neotropical migrant (and it occupying migration stop-over habitat), we also consider the Colorado River within the Hoover to Parker Dam and Parker Dam to Southerly International Border Management Units as occupied at the time of listing.

Following listing and prior to the implementation of the LCR MSCP, flycatcher territories were detected along the LCR mainstem below Hoover Dam, primarily at Havasu NWR, but also as mostly single territories sporadically distributed from Lake Mohave to Yuma (Service 2002, Figure 8).

Since implementation of the LCR MSCP in 2005, flycatchers have occurred in abundance as migrants throughout the length of the LCR; however, flycatcher territories within the Lake Mead to Mexico planning area have only been detected at the Havasu and Bill Williams River NWRs and within the Lake Mead National Recreation Area (MacLeod *et al.* 2008, pp. 89–92). As a result of implementing updated survey protocols and with additional information, these lone territories (primarily south of the Bill Williams River along the LCR) have not been detected since 2005 (MacLeod *et al.* 2008, pp. 89–92; MacLeod and Koronkiewicz 2009, pp. 54–56; 2010, pp. 46–47; MacLeod and Pelligrini 2011, pp. 51–52; 2012, pp. 43–44).

**Comment (69):** In Table 2 of the proposed rule to revise critical habitat

for the flycatcher, the Service failed to recognize private land ownership in California, specifically as it relates to areas downstream of Morris Dam on the San Gabriel River and adjacent to the Big Tujunga Wash Mitigation Area, in Los Angeles County.

**Our Response:** The Service inadvertently excluded data for private landownership in California in the proposed rule. We have made the appropriate changes in this final rule (see TABLE 2).

**Comment (70):** One commenter wrote that the southwestern willow flycatcher is not recognized as a valid subspecies by the American Ornithologists' Union (AOU), and differences in morphological measures between flycatcher species and subspecies are flawed.

**Our Response:** We are not familiar with any issue within the AOU, or the scientific community in general, over the recognition of the southwestern subspecies of the willow flycatcher. The 1957, fifth edition of the AOU Checklist is the most recent version of the checklist that addressed subspecies. In 1973, the AOU separated the Traill's flycatcher (*Empidonax traillii*) into the willow (*Empidonax traillii*) and alder (*Empidonax alnorum*) flycatcher. The AOU has yet to provide any subspecies updates since its 1957 version. However, other entities have subsequently provided up-to-date and AOU-endorsed descriptions. Today, the Clements Checklist presents more than 9,930 species of birds recognized by the scientific and birding communities, including the AOU. The southwestern subspecies of the willow flycatcher is recognized within the Clements Checklist (<http://www.birds.cornell.edu/clementschecklist/>). Similarly, an additional authority on subspecies is the list of The Birds of North America (<http://www.bna.birds.cornell.edu/bna/>). The Birds of North America description of species and subspecies also provides taxonomic information and is supported by the AOU, Cornell Laboratory of Ornithology, and Academy of Natural Sciences. The flycatcher is also recognized in the Birds of North America resource as a subspecies of the willow flycatcher.

We are unfamiliar with any issue about flycatcher morphological measurements. We recommend reviewing the willow flycatcher summary, including the discussion about measurements (and subspecies) found in The Birds of North America's willow flycatcher life history description (Sedgwick 2000, entire). This account can be acquired from The

Birds of North America Online at <http://www.bna.birds.cornell.edu/bna/>.

*Comment (71):* The Service fails to acknowledge work by F. Merriam Bailey (1928), McLeod *et al.* (2009), Ellis *et al.* (2008), and others documenting an expansion of the species.

*Our Response:* We agree that the number of known flycatcher territories and breeding sites has increased since its listing in 1995. The recent work conducted by McLeod and Koronkiewicz (2009) and Ellis *et al.* (2008) have both been reviewed and are cited within the proposed and final rules. We are uncertain exactly which F. Merriam Bailey document is referenced within this comment, but it could be *The Birds of New Mexico*. Within our flycatcher life history summary described above, we cited sources such as Hubbard (1987, pp. 6–10), Unitt (1987, pp. 144–152), and Browning (1993, pp. 248, 250), that provided flycatcher specific information. The historical breeding range of the flycatcher includes southern California, southern Nevada, southern Utah, Arizona, New Mexico, western Texas, southwestern Colorado, and extreme northwestern Mexico. The flycatcher's current range is similar to the historical range. In 1995, only 359 flycatcher territories were known from California, Arizona, and New Mexico. Unitt (1987, p. 156) estimated the entire southwestern subspecies was "well under 1,000 pairs, more likely 500." In the July 23, 1993, flycatcher listing proposal (58 FR 39495, p. 39498), 230 to 500 territories were estimated to exist. Following the 2007 breeding season, USGS (Durst *et al.* 2008, p. 4) estimated that 1,299 flycatcher territories were known to exist rangewide. The reason for the increase in the number of known territories is a combination of improved survey effort and technique combined with improved management and population growth.

*Comment (72):* Final reports are available for the Lower Colorado River, Gila River, and Rio Grande for the years 2007 to 2010. Data from surveys conducted after 2007 would be useful to incorporate into the proposal due to changes in bird numbers and bird use in these areas.

*Our Response:* A variety of sources were used to determine breeding site location and information from 1991 to 2010. The Recovery Plan (Service 2002), the USGS flycatcher rangewide database (Sogge and Durst 2008), the 2007 flycatcher rangewide report (Durst *et al.* 2008), and recent survey information for the 2008, 2009, and 2010 breeding seasons (including those from the Lower Colorado River, Gila River, and Rio

Grande) were all used as authoritative sources of information on breeding flycatcher distribution and abundance. The flycatcher rangewide database developed and maintained by USGS (Sogge and Durst 2008) compiles the results of surveys conducted throughout the bird's range from 1991 through 2007. We also examined 2008 to 2010 data that the Service in Arizona, Nevada, Utah, New Mexico, and Colorado, compiled and entered into separate databases and spreadsheets. However, these post-2007 flycatcher data were difficult to comprehensively incorporate into this rule because they have not yet been analyzed and synthesized into the overall rangewide database. Therefore, much of our compiled rangewide information ends following the 2007 breeding season.

*Comment (73):* The IPCC models of climate change are neither accurate nor reliable.

*Our Response:* We addressed these models within our proposed rule (76 FR 50542, August 15, 2011, pp. 50547–50548), stating, "as is the case with all models, there is uncertainty associated with projections due to assumptions used and other features of the models. However, despite differences in assumptions and other parameters used in climate change models, the overall surface air temperature trajectory is one of increased warming in comparison to current conditions (Meehl *et al.* 2007, p. 762; Prinn *et al.* 2011, p. 527)." The Service will continue to follow and assess the science behind climate change and update our summaries as new information is published.

*Comment (74):* The Service's suggestion of the need to suppress fire is entirely archaic and dangerous.

*Our Response:* The Recovery Plan (Service 2002, Appendix L) provides a description of land use and management actions that have led to the increased occurrence of fires in riparian areas. The Service's expectation of fire management is consistent with the needs of the flycatcher, our policies under the Act, and implementation of emergency actions, such as those associated with fire management to preclude dangerous situations that would place human life or property in jeopardy. Our fire management recommendations focus on improving habitat conditions that would reduce fire in riparian areas and return them to a less frequent and more natural fire regime.

*Comment (75):* The Service should not designate critical habitat in areas that have ephemeral habitat such as Horseshoe Reservoir, the confluence of the Virgin River and Lake Mead, upper

Lake Mead near Pearce Ferry, or the Muddy River. Commenters expressed concern that these areas do not possess the primary constituent elements of essential features and contain habitat that is temporary and not essential for the conservation of the species. Further, Federal agencies may not have discretion to manage some of these areas.

*Our Response:* Flycatcher habitat is naturally ephemeral and its mosaic-like distribution is dynamic because riparian vegetation is typically prone to periodic disturbance (i.e., flooding) (Service 2002, p. 17). Flooding is a necessary function in order to recycle habitat and create vegetation in a structure and density needed for nest placement, to replenish aquifers, and to distribute appropriate soils that create seed beds for the germination and growth of flycatcher habitat. The range and variety of stream flow conditions (frequency, magnitude, duration, and timing) (Poff *et al.* 1997, pp. 770–772) that establish and maintain flycatcher habitat can arise in both regulated and unregulated flow regimes throughout its range (Service 2002, p. D–12). Because of their dynamic water storage operations, the dams that operate the reservoirs identified in this comment, and others within the flycatcher's range, can help establish extensive riparian habitat within the conservation space of the lake when the water recedes. These processes have developed the riparian habitat and prey components described in the primary constituent elements of essential physical or biological features that support flycatcher territories. Flycatcher habitat can be supported by managed water that mimics key components of the natural hydrologic cycle creating varying amounts of flycatcher habitat important for its recovery.

We acknowledge that in some instances the discretion of a Federal agency with regards to water management may be limited. When action agencies evaluate their responsibilities under the Act, distinguishing to what extent their agency has discretion is an important consideration to determine their overall proposed action and effects analysis when consulting with the Service under section 7 of the Act.

*Comment (76):* One commenter asserted that critical habitat designation has little impact or effect to species in remote areas or where public access is limited.

*Our Response:* The commenter did not specify which areas were the subject of this comment. However, we proposed areas as critical habitat that we

determined meet the definition of critical habitat under the Act (see Critical Habitat, *Background*). It may be true that limited benefits of critical habitat may be seen in some areas, and this is information that can be considered in an exclusion analysis of any given area (see Exclusions).

*Comment (77):* The proposed rule states that critical habitat does not include manmade structures such as aqueducts, roads, and other paved areas; however, some proposed stream reaches, such as the San Gabriel River, do include manmade flood control channels, levees, and concrete drop structures that require maintenance by the Corps including the occasional removal of deposited sediments. These areas should be removed from the final critical habitat designation.

*Our Response:* In the development of this final rule, we have reviewed lands included in our proposal and, to the extent practicable, have revised and removed developed areas from critical habitat that we determined do not contain physical or biological features essential for the conservation of the species (see Summary of Changes From the Proposed Rule section, above). We made every effort to remove all developed areas, such as housing developments, roads, and other lands not reasonably believed to contain, or be capable of supporting, the physical or biological features essential for flycatcher conservation. However, due to the limitations in technology, it is not possible to remove every one of these developed areas. Nor does the Service have the ability to ground truth and confirm each recommended developed area for removal. As a result, even at the refined mapping scale, the maps of the final designation may still include developed areas that do not contain these features (see *Criteria Used to Identify Critical Habitat* section). Developed areas that do not contain the physical or biological features essential for the conservation of the species within the boundaries of critical habitat are not considered to be critical habitat, and, thus, actions in those areas would not trigger consultation unless they affected adjacent critical habitat.

However, as described within this rule, some developed areas, such as irrigation ditches, levees, or reservoir bottoms, and the influence of manipulated water, such as agricultural return flow or treated waste water create conditions that support riparian habitat used by the flycatcher. In some instances, these areas can provide unanticipated, but important opportunities for flycatcher conservation and recovery. It is possible

that areas surrounding flood control structures can similarly trap sediment and water that facilitates the development of riparian habitat. We encourage coordination with the Service to help provide technical assistance to evaluate these areas.

*Comment (78):* One commenter states that habitat areas within existing power line corridors and rights-of-way that are required to be maintained under existing Federal energy laws and regulations are not essential to the conservation of the species because they currently do not, and in the future cannot, contain the primary constituent elements of essential features; these corridors should be identified and removed from the final critical habitat designation. Similarly, several comments suggested exclusion of right-of-way corridors adjacent to bridges.

*Our Response:* When determining proposed critical habitat boundaries, we made efforts to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack the primary elements of physical or biological features and primary constituent elements for flycatcher habitat. These types of developments are not typically found adjacent to rivers within floodplains and, when they do occur, may be missing from or inaccurately represented in existing map sources. As a result, because of the large scope of this designation and the limitations of maps, any such developed lands, such as cement pads which support transmission or power poles or roads left inside critical habitat boundaries, are not considered designated as critical habitat because they lack the necessary physical or biological features. Therefore, a Federal action involving these developed lands would not trigger section 7 consultation with respect to critical habitat or the prohibition of adverse modification, unless the specific action would affect the physical or biological features in the adjacent critical habitat. However, if lands surrounding these developed areas that fall within rights-of-way have the physical and biological features to develop the primary constituent elements of flycatcher critical habitat, then they would be subject to consultation.

*Comment (79):* One commenter supported the addition of a 0.40-km (0.25-mi) segment of the Rio Fernando de Taos in the upper Rio Grande Management Unit in New Mexico as critical habitat, but also recommended expanding this critical habitat area to include a marsh across from and west of Baca Park.

*Our Response:* We have examined this area and are uncertain about the amount of marsh vegetation (e.g., cattails, etc.) and limited woody vegetation from which flycatchers can nest, perch, and forage and to what extent this additional area provides essential habitat for nesting flycatchers.

Our methodology focused on identifying areas of habitat that are important for reaching the numerical territory and habitat-related goals described in the Recovery Plan. We proposed just over 98 km (61 mi) of stream segments collectively along the Rio Grande, Coyote Creek, Rio Grande Del Ranch, and Rio Fernando as flycatcher critical habitat within the Upper Rio Grande Management Unit. We believe these areas are capable of reaching the 75 territory goal established in the Recovery Plan.

In some Management Units, especially those with more abundant habitat like the Upper Rio Grande Management Unit, not all locations where flycatcher habitat occurs or may occur, or areas where territories have been detected, were designated as critical habitat. Regardless of whether an area is designated as critical habitat, those areas can still be important flycatcher habitats that contribute to recovery and are subject to section 7 of the Act.

*Comment (80):* One commenter was concerned that the protection of invertebrate prey as an essential physical or biological feature is precluded by current Service policy and projects relative to the use of aquatic pesticides within the areas proposed for critical habitat designation in both Arizona and New Mexico. The uses of rotenone and antimycin A have been sanctioned by the Service for the treatment of aquatic communities for native fish restoration, although both substances have been proven to decimate aquatic invertebrate assemblages.

*Our Response:* The flycatcher is an insect-eating generalist (Service 2002, p. 26), eating a wide range of invertebrate prey including flying, and ground- and vegetation-dwelling insect species of terrestrial and aquatic origins (Drost *et al.* 2003, pp. 96–102). Wasps and bees are common food items, as are flies, beetles, butterflies, moths and caterpillars, and spittlebugs (Beal 1912, pp. 60–63; McCabe 1991, pp. 119–120). Diet studies of adult flycatchers found a wide range of prey taken from small flying ants to large dragonflies, with true bugs comprising half of the prey items (Drost *et al.* 1998, p. 1; DeLay *et al.* 1999, p. 216). Willow flycatchers also took the larvae of non-flying species.

From an analysis of the flycatcher diet along the South Fork of the Kern River, California (Drost *et al.* 2003, p. 98), flycatchers consumed prey from 12 different insect groups. Therefore, while the flycatcher is known to consume aquatic insects, it is an insect generalist and is reliant on a variety of insects, many of which are not aquatic in their origin.

The use of piscicides (chemicals that kill fish) in fisheries management have long prompted concerns over the potential human health and ecological impacts. In June 2011, the AGFD Director authorized the Rotenone Review Advisory Committee to advise and make recommendations regarding the use of rotenone and other piscicides for Arizona fisheries and aquatic wildlife management. Antimycin A is no longer commercially available, limiting current use to small supplies held in inventory by some State and Federal fish and wildlife service agencies. Only rotenone formulations are currently available for purchase. Four subcommittees were formed to provide technical expertise, opinion, and analyses on the use of piscicides. In December 2011, a final report was issued which confirmed the continued use of piscicides. The report also recommended that applications of rotenone be consistent with U.S. Environmental Protection Agency labeling requirements, appropriate State and Federal laws and regulations, and the Rotenone Standard Operating Procedures manual. As both rotenone and antimycin A have impacts to non-target aquatic organisms (including food resources for the flycatcher), an evaluation of potential impacts to all species in the area, including the flycatcher would be required for any proposed Federal action involving use of these piscicides.

*Comment (81):* The Service relied on incorrect information to classify the occupancy status of the San Gabriel River as no territories have been detected on the river since 1991.

*Our Response:* In the proposed rule, the Service stated that “\* \* \* we refer to breeding sites as areas where flycatcher territories were detected. A territory is defined as a discrete area defended by a resident single flycatcher or pair of flycatchers within a single breeding season.” In determining whether this area had been occupied since 1991, we used data from the USGS. This information was analyzed by Durst *et al.* (2008, p. 11), and it was determined that the San Gabriel River has had an established territory. Therefore, the Service concludes that

territories have been documented on the San Gabriel River since 1991.

*Comment (82):* One commenter stated that, because the proposed reaches of Big Tujunga Wash and Little Tujunga Wash in the Santa Clara Management Unit, California, have never been occupied by flycatchers, it appears they are being considered for critical habitat designation because they are within 35 km (22 mi) of the Santa Clara River and the San Gabriel River. The commenter stated that the areas between the Santa Clara River and San Gabriel River are urbanized and that there are features that could serve as significant obstacles to flycatcher migration between the Santa Clara River, Big and Little Tujunga Washes, and the San Gabriel River. Additionally, the commenter states that because the flycatchers are not occupying Big Tujunga Wash, and it is unlikely they will, it is likely the flycatchers are also not occupying or going to occupy Little Tujunga Wash. The commenter indicated that the proposed rule clearly stated it is not designating areas as critical habitat solely because they are serving as migration habitat. Therefore, the commenter believes that the cited reaches in Big and Little Tujunga Washes do not meet the criteria for critical habitat that is essential for the survival of the flycatcher.

*Our Response:* While the Big Tujunga Wash is not considered to be occupied, it is included in the final critical habitat designation because it is considered to be essential to the conservation of the species. The Santa Clara, Ventura, and San Gabriel Rivers, Piru Creek and Big Tujunga Canyon, were identified in the Recovery Plan as having substantial recovery value in the Santa Clara Management Unit (Service 2002, p. 86). These areas are essential to flycatcher conservation because they are anticipated to provide habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and population growth and colonization potential. As a result, these river segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

Based on these comments, we reviewed maps and reports and reevaluated Little Tujunga Creek. We discovered that the 2.2-km (1.4-mi) segment of the Little Tujunga Creek is not essential for the flycatcher because it provides minimal habitat, metapopulation stability, or prevention

against catastrophic loss. As a result, we determined that it was not essential for flycatcher conservation and removed it from our critical habitat designation.

*Comment (83):* One commenter stated that the north end of Recapture Reservoir and Recapture Canyon (a tributary of the San Juan River) near Blanding, Utah, appears to be potential flycatcher habitat, but the commenter was unaware if the area is occupied by willow flycatchers.

*Our Response:* We have no documented or anecdotal reports of willow flycatchers at Recapture Reservoir or Canyon, in southwest Utah, within the San Juan Management Unit, nor was this area identified within the Recovery Plan. Typically, narrow canyons can have abundant riparian habitat, but not the expansive amounts of floodplain and habitat needed for flycatchers to establish territories. We did however, identify and propose as critical habitat areas along the San Juan River in Utah and New Mexico, as well as the Los Pinos River in Colorado, where flycatcher territories and migrant flycatchers have been detected within this Management Unit. We encourage continued evaluation, survey, and management of new areas for flycatcher recovery and conservation. However, at this time, without better information about the quantity and quality of the habitat for the willow flycatcher at Recapture Reservoir and Canyon, we will not propose it for critical habitat.

*Comment (84):* One commenter noted that the Los Angeles County Flood Control District is required by environmental regulatory agencies to remove nonnative vegetation on lands proposed for critical habitat designation at the Big Tujunga Wash Mitigation Area. Additionally, the commenter stated that a permit is required to conduct nonnative vegetation removal at the proposed area of Morris Reservoir and stated the San Gabriel River also contains nonnative vegetation, such as tamarisk and *Arundo donax* (giant reed), and, in the past, portions of this area, which are proposed for critical habitat designation, have been mitigation locations for several District projects. The commenter goes on to state that the Service's proposed restrictions on nonnative vegetation removal could potentially interfere with the District's permit requirements and threaten to undo years of effort and significant expense by the District to restore riparian habitat. The commenter believes that the critical habitat designation will conflict with maintenance of flood protection facilities of the Corps at Big Tujunga Wash, Hansen Flood Control Basin, San

Gabriel River, and the Santa Fe Flood Control Basin.

*Our Response:* The Service acknowledges the concerns expressed by the commenter. The proposed designation of critical habitat for the flycatcher does not require that restrictions be placed on nonnative vegetation removal. Rather, the proposed rule does discuss some special management considerations or actions that may be needed for essential features of flycatcher habitat, such as minimizing the clearing of vegetation (including nonnatives) in some areas, as a recommendation. Additionally, we identify support for conservation measures that reduce habitat stressors that can allow native plants to flourish. The Service will work closely with Los Angeles County Flood Control District and any other partners to ensure that flycatcher conservation efforts are compatible with the needs of maintenance of flood control facilities.

*Comment (85):* Areas in Los Angeles County are included in the proposed critical habitat because other lands throughout the flycatcher's range are so deficient that the Service cannot meet Recovery Plan objectives otherwise. Los Angeles County should not be burdened with critical habitat designation for the flycatcher and its restrictions for this reason, especially considering the significant adverse impacts to Los Angeles County's flood protection and water supply.

*Our Response:* In developing the critical habitat determination, the Service did not solely rely on the Recovery Plan, but also used information from peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, and other unpublished materials and expert opinion or personal knowledge. The Service used the Recovery Plan for the flycatcher to help identify those areas that contain the physical or biological features essential for the conservation of the species to guide our decision. There are numerous drainages in the flycatcher's range that have the physical or biological features essential for the flycatcher; however, the analysis for the Recovery Plan identified those drainages that are most vital to recovery of the species, including segments within the boundaries of Los Angeles County. The areas proposed for designation as critical habitat were designed to provide sufficient riparian habitat for breeding, non-breeding, territorial, dispersing, and migrating flycatchers in order to reach the geographic distribution, abundance, and

habitat-related recovery goals described in the Recovery Plan. For a full discussion of the analysis of the impacts of the designation on water supply operations, see Comment 15.

*Comment (86):* Several commenters stated that designating critical habitat immediately above Seven Oaks Dam threatens the ability of the water agencies to put their recently obtained State-issued appropriative water rights to use by developing and maintaining a conservation pool behind the Dam.

*Our Response:* Thank you for your recommendations. The end point for this critical habitat segment along the Santa Ana River is the same that was finalized in our 2005 flycatcher critical habitat designation. We are not including an area immediately behind Seven Oaks Dam in final critical habitat designation, but leave approximately 50 m (164 ft) distance between Seven Oaks Dam and the critical habitat end point.

*Comment (87):* The Service's determination that the proposed habitat in the Santa Ana Management Unit is essential for the conservation of the species is not supported by the best available scientific data for any of the proposed stream segments in the Santa Ana Management Unit. The best available evidence from a recent survey demonstrates that most of the proposed critical habitat in the Santa Ana Management Unit is either completely barren or fails to meet the minimum requirements for suitable riparian habitat. If a geographical area is uninhabitable, it follows that it is not currently occupied by the flycatcher, and it cannot therefore be designated absent a finding that the occupied portions of the habitat are inadequate (50 CFR 424.12(e)). The Service has made no such finding, and the best available evidence would not support such a finding.

*Our Response:* Section 3(5)(A)(i) of the Act provides for the designation of critical habitat in specific areas within the geographical area occupied by the species, at the time it is listed which contain the physical or biological features essential to the conservation of a species, and which may require special management considerations or protection. Under section 3(5)(A)(ii) of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. For example, an area currently occupied by the species but that was not occupied at the time of listing may be essential for the conservation of the species and may be included in the

critical habitat designation. We designate critical habitat in areas outside the geographical area occupied by a species only when a designation limited to its range would be inadequate to ensure the conservation of the species, as defined by the Flycatcher Recovery Plan in the case with the flycatcher.

If a finding is made that an area is essential to the conservation of a species, we may include such areas as critical habitat even if they were not known to be occupied at the time of listing, are not occupied currently, or do not currently contain the essential habitat features. The Santa Ana Management Unit consists of a diverse and widely distributed group of seven streams that were identified in the Recovery Plan as areas of substantial recovery value (although Oak Glen Creek was not specifically named as a tributary to the Santa Ana River) (Service 2002, p. 86).

The Santa Ana Management Unit, which is primarily comprised of the Santa Ana River drainage, specifically has a recovery goal of 50 flycatcher territories. We proposed as critical habitat segments along the lower portion of the Santa Ana River within Riverside County, which we were mostly excluded under section 4(b)(2) of the Act based on the Western Riverside County MSHCP (see Exclusions section), and also proposed areas within the San Bernardino National Forest. Areas within the middle portion of the Santa Ana River were not proposed as critical habitat.

Since the flycatcher was listed, the stream segments proposed as flycatcher critical habitat have since be found to possess flycatcher territories from the lower portions of the Santa Ana River drainage near Prado Dam to the upper portion and tributaries within the San Bernardino National Forest. A total of 30 flycatcher breeding sites were known within this Management Unit, with a high of 49 territories detected in 2001. Together, these stream segments are essential for flycatcher conservation because they are anticipated to provide habitat for metapopulation stability, gene connectivity through this portion of the flycatcher's range, protection against catastrophic population loss, and provide for population growth and colonization potential. As a result, these river segments and associated flycatcher habitat are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

*Comment (88):* The proposed rule fails to distinguish between currently



occupied and unoccupied areas within the Santa Ana Management Unit. If the Service meant to suggest that all proposed critical habitat in the Santa Ana Management Unit is currently occupied, then this conclusion is contradicted by the best available scientific data, which reveal that about two-thirds of the proposed habitat is either completely barren or lacking in riparian habitat capable of supporting flycatchers. To support the designation of the Santa Ana Management Unit as currently occupied, the Service must at least demonstrate, with the best available scientific data, that each segment proposed for designation is currently used by the flycatcher. Unoccupied areas in the Santa Ana Management Unit should be removed from the final designation, or properly supported as presently unoccupied habitat.

*Our Response:* While the proposed critical habitat segments within the Santa Ana Management Unit were not within the geographical area known to be occupied at the time of listing, all of the segments have been known to be occupied at some time since listing (see the “Santa Ana Management Unit, California” discussion above). Additionally, under the definition of critical habitat provided in the Act, an area need not be currently occupied in order to be included in a critical habitat designation. If an area meets the definition of critical habitat as interpreted for any given species (see *Criteria Used to Identify Critical Habitat* section above), the area should be proposed as critical habitat regardless of its current occupancy status.

*Comment (89):* Several commenters were concerned with the Service’s reliance on the Recovery Plan to justify proposing portions of the Santa Ana Management Unit as critical habitat. The commenters asserted that there are no data, habitat assessments, or survey results in either the Recovery Plan or in the proposed rule to support a conclusion that substantial recovery value exists in the listed stream segments in the Santa Ana Management Unit, and, that by relying so heavily on Recovery Plan, the Service has failed to consider the physical or biological features essential for the conservation of the species, special management considerations, and the current best available scientific data regarding the actual features of the specific stream segments themselves.

*Our Response:* The Service has used the best available scientific data in our determination of stream segments that meet the definition of critical habitat for the flycatcher. The Recovery Plan

(Service 2002) was developed using information from 58 individuals from numerous scientific agencies and stakeholders, including data on habitat assessments and surveys. The Recovery Plan identifies specific river reaches, within Management Units, where recovery efforts should be focused and where substantial recovery value exists of currently or potentially suitable habitat (Service 2002, p. 86). Even so, in developing the critical habitat determination, the Service did not solely rely on the Recovery Plan, but also used information from peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, and other unpublished materials and expert opinion or personal knowledge. As discussed above, we have determined that, while the Santa Ana Management Unit was not within the geographical area known to be occupied at the time of listing, the area is essential to the conservation of the species, flycatcher territories have been detected throughout the lower and upper portions of the river drainage (Service 2002, figure 5; p. 8, 67, 84, and 86), and is appropriately identified as critical habitat.

In the definition of critical habitat under the Act, areas that were occupied at the time of listing and not occupied at the time of listing are treated separately. Areas that are included in critical habitat because they were not known to be occupied at the time of listing, yet are determined to be essential to the conservation of the species, need not have the features essential to the conservation of the species. As such, a finding that an area contains the essential habitat features that may require special management is not required for areas that were not known to be occupied at the time of listing.

In our discussion of the physical or biological features essential for the conservation of the species in the proposed rule, we stated that flycatcher habitat that is not currently suitable for nesting at a specific time, but is useful for foraging and migration, can still be important for flycatcher conservation. Feeding sites and migration stopover areas are important components for the flycatcher’s survival, productivity, and health, and they can also be areas where new breeding habitat develops as nesting sites are lost or degraded (Service 2002, p. 42). These successional cycles of habitat change are important for long-term conservation of flycatcher habitat.

*Comment (90):* The Service’s finding that the proposed stream segments in the Santa Ana Management Unit are essential for flycatcher conservation is contradicted by the discussion of potential effects of climate change on flycatcher habitat included in the proposed rule. If climate change will cause increased warming, increasingly frequent warm spells and heat waves, greater frequency of heavy-precipitation events, decreased stream flows, and greater frequency of fires, as asserted in the proposed rule, then the riparian habitat scattered throughout the stream segments in question is likely to decrease, reducing habitat available for flycatcher breeding, foraging, migration, and shelter.

*Our Response:* The Service does not believe that the discussion of the potential effects of climate change to the flycatcher contradicts the essential nature of the stream segments identified in the Santa Ana Management Unit. The discussion in the proposed rule concerning the various effects of climate change states that these actions may present a challenge evaluating habitat conditions for the flycatcher. The Service also states in the proposed rule that exactly how climate change will affect precipitation in the specific areas with flycatcher habitat is uncertain. All potential threats to the flycatcher and its habitat are taken into consideration when identifying areas for critical habitat designation, and we state in the proposed rule that these areas may require special management considerations.

*Comment (91):* Several commenters asserted that California’s State Water Resources Board Decision 1649 supports a conclusion that the Santa Ana Management Unit is not essential habitat for the flycatcher and that Seven Oaks Dam and Prado Dam do not require special management considerations or protections. The commenters stated that the Service must consider State Water Resources Board Decision 1649 because it is required to do so by section 2(c)(2) of the Act, which obligates the Service to cooperate with State and local agencies to resolve water resource issues in concert with conservation of endangered species. Additionally, the best available scientific evidence demonstrates special management of the flood control and water conservation operations at Seven Oaks Dam or Prado Dam would have negligible benefit to the species while severely damaging existing water rights and local water supplies.

*Our Response:* The commenters asserted that the State Water Resources Board Decision 1649 determined the

area is not essential. However, the State Water Resources Board Decision 1649 language was not used in the context of critical habitat as defined under section 3 of the Act. A designation of critical habitat is made by the Service in accordance with the provisions of the Act and its implementing regulations. Critical habitat designation is not required under and is not governed by State law. When we conduct a critical habitat analysis, we use the best available scientific data to determine the specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features essential for the conservation of the species which may require special management considerations or protection; and specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species (see Critical Habitat section above).

The State Water Board is not charged with the legal responsibility to designate critical habitat, and Decision 1649 does not incorporate critical habitat as defined by the Act (as we did in the proposed revised critical habitat rule and in this final rule). Thus, any decision made by the State under State law regarding "essential" flycatcher habitat cannot supersede this final critical habitat analysis and designation.

We further note that State Water Resources Board Decision 1649 (2009, p. 23) specifically states that any analysis of impacts of potential water conservation operations (i.e., water diversion or holding water for sale) on endangered species must ensure all appropriate agencies have been consulted. As a result of the California Regional Water Quality Control Board's decision, specific analysis of water diversions or holding water for conservation by Federal Agencies must be evaluated under section 7 of the Act for effects on the flycatcher and its habitat. It is through section 7 consultation that we will evaluate the impacts of the proposed water diversion or conservation operations on the flycatcher and its designated critical habitat.

*Comment (92):* Several commenters asserted that the current operations of both Seven Oaks Dam and Prado Dam benefit the species by increasing the availability of suitable riparian habitat, which would be compromised by the proposed designation of the Santa Ana Management Unit. Similarly, one commenter noted that the existing and ongoing water management practices

within and adjacent to the San Gabriel River Unit encourage riparian conditions and the physical and biotic conditions favorable and beneficial to the flycatcher.

*Our Response:* The Service agrees that dam operations can cause water to spread out over a wider area more consistently than there would be without the dam, potentially causing the development of riparian habitat over a large area. However, depending on how each dam is operated, flycatcher habitat may or may not be able to develop due to the amount and length of time water is stored or covers the floodplain or lake bottom. Additionally, some dams divert water from a river such that stream flows downstream of the dam are not consistent or substantial enough, and sometimes water rarely returns to the river channel, thereby removing the opportunities for habitat to persist. Therefore, we do not agree with the commenters' assertions that operations of the Seven Oaks Dam and Prado Dam or water management practices within and adjacent to the San Gabriel River Unit will necessarily benefit the flycatcher by increasing the amount of suitable riparian habitat or that designation of critical habitat will compromise current operations.

*Comment (93):* Several commenters stated that the environmental impacts and mitigation associated with the construction and operation of Seven Oaks Dam were addressed in the 1988 "Phase II General Design Memorandum on the Santa Ana River Mainstem Including Santiago Creek, California, Main Report and Supplemental Environmental Impact Statement" (EIS). The commenters asserted that the mitigation required by the supplemental EIS continues to sufficiently address the biological impacts from operations of the Seven Oaks Dam.

The commenters also stated that the 2000 final biological assessment completed by the Corps to evaluate the biological impacts of post-dam operations at Seven Oaks Dam determined that in Subarea 1 (which includes the dam and reservoir pool/inundation area, and encompasses the 100-year floodplain up to an elevation of about 790 m (2,580 ft)), operations of Seven Oaks Dam for flood control, would have no effect on the flycatcher. The commenter added that the Corps-determined Subarea 1 lacked suitable habitat for the flycatcher, and that although emergent riparian vegetation occurred in one portion of Subarea 1 (Santa Ana Canyon), the Corps determined that no adverse impact to the flycatcher was anticipated because the patches were not of sufficient

breadth or width to support any but transient or migratory individuals.

The commenters additionally pointed out that the Service's 2002 biological opinion on operations for Seven Oaks Dam and the possible effects on the flycatcher concluded that operation of the dam for flood control purposes was not likely to adversely affect the flycatcher. The commenter believes the inclusion of Seven Oaks Dam and Reservoir in the proposed rule is therefore inconsistent with the Service's own assessment of impacts of dam operations on the flycatcher.

*Our Response:* The Service included the areas in question in the vicinity of Seven Oaks Dam in the proposed revised critical habitat designation for flycatcher because we determined these areas are essential for the conservation of the species based on habitat conditions and information provided in the flycatcher recovery plan, not because we believe dam operations are adversely impacting the species, as the commenter suggested (see *Criteria Used To Identify Critical Habitat* section above). Additionally, as discussed in the response above concerning the designation of the physical dam and reservoir, the Service is not designating critical habitat on manmade features that do not contain the physical or biological features essential for the conservation of the species for the flycatcher, or the reservoir behind Seven Oaks Dam (see Summary of Changes From the Proposed Rule above for further discussion).

*Comment (94):* Several commenters asserted that the critical habitat designation in the Santa Ana River, including its associated tributaries, above and below Seven Oaks Dam, may prevent public agencies from providing and maintaining safe passage of large flood flows and will impact the ongoing construction, operation, and maintenance of several elements of the Santa Ana River Mainstem Flood Control Project. The commenters expressed concern that the designation of critical habitat would place significant restrictions on operations and management and potentially affect the lives and property of millions of citizens. The commenters also assert that any restriction of the operation of Seven Oaks Dam risks flooding on the Santa Ana River, including the potential damage to infrastructure operated by the water management agencies downstream of Seven Oaks Dam, and ignores the congressional purpose of authorizing and funding the construction of the Santa Ana Mainstem Project for the express purpose of

preventing flood damage to life and property.

*Our Response:* Under section 7 of the Act, a Federal agency consults with the Service to ensure activities it undertakes do not adversely modify designated critical habitat. However, section 7(p) of the Act, concerning Presidentially declared disaster areas, allows for emergency actions to be taken without section 7 consultation in the event of an “emergency situation which does not allow the ordinary procedures of this section to be followed.” Thus, the Service does not anticipate that any consultation in this area would require that species conservation take precedence over protection of human life or property. Our consultation record since 1995 has demonstrated that the listing of the flycatcher or designation of critical habitat has not resulted in the inability to protect existing flood control structures or operations. The Service believes that flycatcher conservation, the requirements of Federal agencies to evaluate and consult on potential adverse effects to the flycatcher and its critical habitat can be compatible with the maintenance of flood control structures and operations (see Comment 15 for more explanation regarding impacts to water operations).

*Comment (95):* One commenter requested that the Service buffer its critical habitat designation by removing from critical habitat the area 60 m (200 ft) from the center line of a highway to minimize any disturbance to the critical habitat that might occur as a result of any routine maintenance and repair work.

*Our Response:* We identified the lateral extent of all proposed lands for critical habitat designation as those areas within the boundaries of the 100-year floodplain that currently support, or have the possibility to support, the physical or biological features essential for the flycatcher. We identified that existing paved roadways that may occur within the critical habitat boundaries where habitat could not be established, would not be considered critical habitat, even though we were unable to identify and extract those locations from our designation. However, routine maintenance activities on roadways or adjacent to roadways could affect critical habitat or the flycatcher depending on the type of activity, extent of maintenance, season of work, development of temporal access roads, or any number of various actions. The impacts to the flycatcher or to its designated critical habitat must be considered by any Federal agency planning to conduct or permit such activities.

*Comment (96):* A commenter expressed concern that critical habitat designation would restrict or eliminate the continuation of riparian management efforts such as wildland fuels reduction projects, and biological and mechanical control of tamarisk and Russian olive.

*Our Response:* Designation of critical habitat has no impact on decisions that private landowners make on their land that do not require Federal funding or permits. Federal agencies that undertake, fund, or permit activities that may affect critical habitat are required to consult with the Service to ensure such actions do not adversely modify or destroy designated critical habitat. Critical habitat does not close any public or private lands to most activities; critical habitat designation only serves to identify areas essential to flycatcher conservation. Should projects be proposed for these areas that require Federal funding or permitting, the Federal agency would be required to disclose the potential negative impacts to flycatchers or their primary constituent elements.

Our environmental assessment for the proposed rule (section 3.5.2.1) concludes that there would be minimal impacts on fire risk reduction projects and wildland fire suppression projects. Conservation activities and measures, such as appropriate seasonal timing and avoiding occupied locations, are limitations that will continue to allow fire management goals to be achieved. Furthermore, this rule and the Recovery Plan supports proposed management actions that reduce the land management actions that result in the increase in exotic plant species and supports actions that improve landscape conditions allowing native plants to flourish.

#### *Other Comments Related to Exclusion Areas*

*Comment (97):* One commenter does not support the exclusion of properties under section 4(b)(2) of the Act.

*Our Response:* Exclusion of areas from final designation of critical habitat is provided for under section 4(b)(2) of the Act, when a determination is made that the benefits of excluding any area from critical habitat outweigh the benefits of including that area in critical habitat, provided that exclusion of that area from critical habitat will not result in extinction of the species. Please see the *Application of Section 4(b)(2) of the Act* section for a full discussion of the areas we have determined are appropriate to exclude from the final designation of critical habitat.

*Comment (98):* Many commenters identified particular areas that they believed should not be designated because critical habitat will unnecessarily burden the regulated public and will overload Service staff with implementation of the designation. Specifically, many private landowners with water diversions, cattle ranches, and agricultural property, plus residents in areas dependent on recreation to support local economies throughout the flycatcher's range, commented that this designation would cause them harm economically, could limit the ability of farmers and ranchers to till productive farmland, could limit use of fertile grazing land, could restrict the utilization of critical water rights, and could delay projects through the regulatory process.

*Our Response:* Pursuant to the Act, we are statutorily required to designate critical habitat for a federally listed species if it is determined to be both prudent and determinable. We made a determination that critical habitat was both prudent and determinable in our previous designation for the flycatcher (62 FR 39129, July 22, 1997). We further note that we were previously under court order to revise flycatcher critical habitat (69 FR 60706, October 12, 2004; 76 FR 60886, October 19, 2005) and reached a settlement agreement with plaintiffs and the Court for this current revision (our proposal was published at 76 FR 50542, August 15, 2011). Please see the Previous Federal Actions section for a discussion of the litigation history concerning this designation.

Critical habitat designations do not constitute or create a regulatory burden, by themselves, in terms of Federal laws and regulations on private landowners carrying out private activities, but in certain areas they may trigger additional State regulatory reviews and other requirements. For example, actions occurring in critical habitat in California may be subject to additional regulatory reviews under the California Environmental Quality Act (California Public Resources Code, sections 21000–21178, and Title 14 CCR, section 753, and Chapter 3, sections 15000–15387) and other State laws and regulations. When a private action requires Federal approval, permit, or is federally funded, the critical habitat designation may impose a Federal regulatory burden for private landowners; absent Federal approval, permits, or funding, the designation should not affect farming and ranching activities on private lands. Similarly, a Federal nexus could result in the designation affecting future land use plans, and the designation may trigger State requirements which could

impact such plans. However, we note that lands included in the proposal are waterways with limited development (housing or commercial structures) potential. As explained in this rule, we are required to and have developed an economic analysis of the effects of this designation pursuant to section 4(b)(2) of the Act. Our economic analysis considers the issues raised by the commenters.

*Comment (99):* We received a request to exclude Newhall Land and Farming Company along the Santa Clara River and Castaic Creek in Los Angeles and Ventura Counties, California, under section 4(b)(2) of the Act, as a result of the establishment and implementation of a collection of conservation easements. We also identified this location in our July 12, 2012, amended proposal (77 FR 41147) as an area we were considering for exclusion under section 4(b)(2) of the Act. The commenter stated that land owned by Newhall Land and Farming Company within the Santa Clara River Management Unit is already protected through existing, pending, and future conservation easements and other management measures.

*Our Response:* In developing this revised final designation, we have considered Newhall Land and Farming Company's comments regarding exclusion from critical habitat. We determined that approximately 807 ha (1,993 ac) of land within the Santa Clara River Management Unit owned by Newhall Land and Farming Company meet the definition of critical habitat under the Act. In our exclusion analysis under section 4(b)(2) of the Act, we evaluated Newhall's lands that have been placed in conservation easements and are currently under a long-term management plan (see Exclusions section above). Of the 807 ha (1,993 ac) of land along the Santa Clara River owned by Newhall Land and Farming Company within the Santa Clara River Management Unit, 118 ha (291 ac) are in conservation easements at the present time and are being managed under the long-term Natural River Management Plan. We determined that the benefits of exclusion from critical habitat outweigh the benefits of inclusion for a 4.4 km (2.7 mi) portion of the Santa Clara River east of Interstate 5 (see Exclusions section).

An additional 16 ha (39 ac) are located within the Turkey Ranch conservation easement of the Resource Management Development Plan; however, according to the deed restriction, under certain circumstances, the owner will have the right to relocate all or a part of the deed restriction to

other land. This allowance for relocation of the deed restriction to other lands does not provide long-term conservation and management of the area. As a result, we have determined that the benefits of including these 16 ha (39 ac) outweigh the benefits of excluding this area. Thus, this area is included in this final designation of critical habitat.

We also evaluated the approximately 136 ha (336 ac) of Ventura County Floodplain lands restrictive covenant. One aspect of this restrictive covenant that may benefit the flycatcher in the future is farmland that may be scoured by the river will not be converted back to farmland after the scouring event has occurred. However, due to the uncertainty on when this may occur in the future and the fact that the 136 ha (336 ac) is not currently receiving long-term conservation and management to benefit the flycatcher, we determined that the benefits of including these areas from designation of critical habitat outweigh the benefits of excluding these areas. Thus, these areas are included in the final designation of critical habitat.

None of the remaining 537 ha (1,327 ac) of Newhall Land and Farming Company lands are in conservation easements or restrictive covenants at the present time to benefit the flycatcher; therefore, these areas were not excluded from the final critical habitat designation under section 4(b)(2) of the Act.

*Comment (100):* One commenter asserted the Santa Ana River levees should be excluded from critical habitat designation because levee operations and maintenance activities are required by the Corps and certain maintenance activities require authorization from both the Corps and the Environmental Protection Agency. Any designation of critical habitat would require avoidance, minimization, and conservation for impacts to areas designated as critical habitat, and would initiate the section 7 consultation process. This would likely prevent or delay the maintenance of these critical flood control facilities, required by the Corps, and thereby pose a potential threat to public health and safety.

*Our Response:* The determination of whether levee operations or maintenance may adversely affect the areas designated as critical habitat for the flycatcher is evaluated on a project-specific basis by the Federal action agency and the Service. Consultation on existing or future Federal projects, such as operations and maintenance of levees for flood control conducted by the Corps, if determined to be necessary, would either be reinitiated or initiated

by the Federal action agency under section 7 of the Act. Our consultation record since 1995 has demonstrated that the listing of the flycatcher or designation of critical habitat has not resulted in the inability to protect existing flood control structures or operations. The Service believes that flycatcher conservation resulting from the requirement of Federal agencies to evaluate and consult on potential adverse effects to the flycatcher and its critical habitat can be compatible with the maintenance of flood control structures and operations.

The Service is very sensitive to the need to allow response efforts necessary to avoid imminent loss of human life or property. Section 7 of the Act also allows for emergency consultations in response to an act of God, disasters, casualties, national defense, or security emergencies (such as to expedite measures required to ensure human health and safety) (50 CFR 402.05). Emergency consultation procedures allow action agencies to incorporate endangered species concerns into their actions during the response to an emergency. If a Federal agency must take emergency action that may affect a listed species or critical habitat, the agency would contact the Service to identify actions that could be implemented to minimize take of listed species while responding to the emergency. The Federal action agency would initiate formal consultation after the fact and provide necessary documentation to the Service for an after-the-fact biological opinion that documents the effects of the emergency response on listed species or critical habitat. Therefore, we do not believe delays due to section 7 consultation on levee operations and maintenance activities should pose a significant risk to human health and safety, and we did not exclude any areas from this final critical habitat designation on the basis of section 7 consultation on these activities.

*Comment (101):* The San Diego County Water Authority is requesting exclusion because areas along the San Luis Rey River and along Agua Hedionda Creek where existing right-of-way pipelines cross the streams would require maintenance operations; the areas are not known to contain flycatchers; and any adverse effects to physical or biological features essential for the conservation of the species in these areas would be minor and temporary.

*Our Response:* The existing right-of-way pipelines are within the geographical range of the flycatcher identified at listing, have had

documented occupancy since listing, and intersect some stream reaches such as the San Luis Rey River and Agua Hedionda Creek. Some of the areas in question are covered by the San Diego County Water Authority HCP, but also fall within the boundaries of the San Diego County Subarea Plan under the Multiple Species Conservation Plan and the Carlsbad HMP. After carefully balancing the considerations involved in determining whether lands should be included or excluded from the designation of critical habitat, we have concluded that the benefits of excluding areas within the boundaries of the San Diego County Subarea Plan under the Multiple Species Conservation Plan and Carlsbad HMP outweigh the benefits of inclusion (see Exclusions for further discussion). Regarding the areas outside the boundaries of the San Diego County Subarea Plan under the Multiple Species Conservation Plan and Carlsbad HMP, we do not believe the maintenance operations would negate the value of these areas in the conservation of the species. As a result, we have determined that the benefits of inclusion outweigh the benefits of exclusion of these areas. Thus, these portions of the San Luis Rey River and Agua Hedionda Creek outside the San Diego County Subarea Plan under the Multiple Species Conservation Plan and Carlsbad HMP are included in this final designation of critical habitat.

*Comment (102):* One commenter requests exclusion from critical habitat designation on the proposed segment between Morris Reservoir and Santa Fe Dam on the San Gabriel River in California because the area is unoccupied and of poor quality, and the recent completion of a Flycatcher Management Plan for the proposed segment on the San Gabriel River addresses flycatcher conservation in this segment.

*Our Response:* We consider this area to be occupied (see Response to Comment 81 for more information). Additionally, although the area in question was not occupied at the time of listing, the area is within the geographical range of the species, has been occupied since listing, contains the physical or biological features essential to flycatcher conservation, and was identified in the Recovery Plan as being essential for flycatcher recovery (see *Criteria Used To Identify Critical Habitat* section above). We have reviewed the submitted management plan and have determined that although it was effective immediately (September 5, 2012), and there are ongoing management actions that benefit multiple species' habitat, including the

flycatcher, there are no species-specific management actions, other than monitoring, that currently benefit the flycatcher. Furthermore, a regulatory benefit of inclusion exists because we anticipate a Federal nexus (with the Corps under the Clean Water Act) for section 7 consultation for activities in this area. Designation of this area as critical habitat would provide a benefit by providing an additional level of review of proposed activities that might adversely modify habitat that contains the physical or biological features essential for the conservation of the species. Therefore, we have determined that the benefits of including the San Gabriel River between Morris Reservoir and Santa Fe Dam from final revised critical habitat outweigh the benefits of excluding this area. Thus, this area is included in this final designation of critical habitat.

*Comment (103):* One commenter requested an exclusion of lands located at the Big Tujunga Wash Mitigation Area in California from critical habitat designation because the area has been working under a master plan since 2000, with the cooperation and knowledge of the Service, to preserve and enhance riparian habitat.

*Our Response:* We appreciate the conservation that the Big Tujunga Wash Mitigation Area has benefitted multiple species and their habitats, including the flycatcher, and look forward to their continued cooperation with the Service. We anticipate a Federal nexus for section 7 consultation (with the Corps under the Clean Water Act) for activities at this mitigation site. Designation of this area as critical habitat would provide a benefit by providing an additional level of review of proposed activities that might adversely modify habitat that contains the physical or biological features essential for the conservation of the species. Also, conservation actions are likely to continue in this area with or without critical habitat designation, limiting the benefits of exclusion. Therefore, we determined that the benefits of including this area from designation of critical habitat outweigh the benefits of excluding the area. Thus, this area is included in the final designation of critical habitat.

*Comment (104):* We received comments recommending we exclude the Virgin River in Clark County, Nevada, as a result of the Clark County MSHCP. We identified this location in our proposal as an area we were considering for exclusion under section 4(b)(2) of the Act.

*Our Response:* The entire proposed Virgin River segment in Clark County,

Nevada, is within the planning area for the 30-year incidental take permit for the Clark County MSHCP issued in 2001, to Clark County, the cities of Clark County, and Nevada Department of Transportation. The Clark County MSHCP permit authorized incidental take of 2 listed species and 76 unlisted species in the event they become listed during the permit term.

Incidental take of six riparian bird species, including the flycatcher, was conditioned in the issuance of the Clark County MSHCP permit because a large proportion of the species' total habitat in Clark County is located on lands that have little or no protective status. The Clark County MSHCP estimated 50 percent of the total riparian habitat in the County was located on private or local government-controlled land classified as unmanaged or managed for multiple uses, where conservation actions specific to these areas to ensure adequate protection for the riparian birds were not in place. Consequently, the Service's permit conditioned incidental take of these birds on the completion of a conservation management plan that would: (1) Identify the management and monitoring actions needed for riparian habitats and associated covered species along the Virgin River; and (2) identify the acquisition of private lands in desert riparian habitats. The total number and location of acres to be acquired was to be identified in the conservation management plan through the MSHCP's Adaptive Management Process and agreed to by the permittees, the land management agencies involved in the implementation of the MSHCP, and the Service.

In 2004, the City of Mesquite initiated development of a separate aquatic and riparian HCP (Virgin River HCP) in response to the disposal of approximately 4,047 ha (10,000 ac) of nearby BLM land. This HCP was initiated because of potential effects from development of this land on listed species associated with the Virgin River that are not included in the Clark County MSHCP. It was anticipated by the Clark County MSHCP permittees and the Service that completion of the Virgin River HCP would fulfill the original intent in the Clark County MSHCP permit for the permittees to develop a Virgin River conservation management plan. Therefore, in order to avoid redundant planning efforts, Clark County completed a Conservation Management Assessment in November 2008, with Service concurrence, fulfilling their permit term and condition for completing a conservation management plan for the Virgin River.

This assessment focused on species in the upland areas along the Virgin River rather than the riparian and aquatic species occurring in the 100-year floodplain of the river, as that would be the focus of the Virgin River HCP.

The Virgin River HCP is currently under development but is not yet completed. Therefore, conservation actions that would minimize and mitigate impacts specific to Virgin River riparian and aquatic species occurring in the river and its 100-year floodplain, including the flycatcher, are not yet in place.

Additionally, while the MSHCP planning area encompasses the entire segment of the Virgin River in Nevada, much of the riparian habitat along this segment occurs on lands managed by entities other than the MSHCP permittees, including the BLM, NPS, and State of Nevada. Although these agencies are signatories to the MSHCP's Implementing Agreement, they retain management authority and are ultimately responsible for activities occurring on their lands and impacts associated with those activities, such as livestock grazing and recreational activities. In addition, other activities that negatively affect the habitat, such as water resource development, are not covered activities under the MSHCP and not under the jurisdiction or authority of the permittees, and threats, such as the occurrence and spread of biocontrol agents, are not under the control of any of the land managers or owners. Therefore, threats to the flycatcher and its habitat not under the control, responsibility, or authority of the MSHCP permittees remain a concern and have yet to be addressed.

Based on the above factors, we determined that the benefits of including this area from designation of critical habitat outweigh the benefits of excluding the area. Thus, this area is included in the final designation of critical habitat.

*Comment (105):* We received requests to exclude segments of the Virgin River within the Overton Wildlife Management Area (WMA) in Clark County, Nevada, and we identified this location in our proposal as an area we were considering for exclusion under section 4(b)(2) of the Act.

*Our Response:* Overton WMA is located in Clark County, Nevada, and is managed by the NDOW. Stretches of both the Muddy River and Virgin River run through Overton WMA. Overton WMA encompasses a wide diversity of habitats within its 7,146 ha (17,657 ac). Approximately 20 percent of lands comprising Overton WMA are owned by the State of Nevada, and 80 percent are

lands leased from USBR and the NPS. Funding for the operation and maintenance of Overton WMA results primarily from Federal Aid in Wildlife Restoration Act funds (74 percent) with an additional 25 percent funded by the State, and 1 percent funded by Federal Aid in Sport Fish Restoration Act funds. Pursuant to Federal Aid regulations, the property must continue to serve the purpose for which it is funded, in this case for waterfowl and other wetland species (16 U.S.C. 669–669i; 50 Stat. 917).

Overton WMA lands along the Virgin River occur in an important flycatcher breeding area known as Mormon Mesa. Other lands in this area are managed by BLM, USBR, Clark County, and multiple private entities. This area is undeveloped and subject to flooding events and river flows that provide a relatively natural mosaic of habitats including cattail marshes and riparian forest consisting of tamarisk, Gooddings willow, and coyote willow. Due to flood events, suitable habitat and occupied sites have shifted over the years, but all breeding sites have been located within a 1-km (0.62-mi) wide floodplain and 6.6-km (4.1-mi) long stretch of the river.

A management plan for Overton WMA, which included strategies for managing flycatcher habitat, was completed in December 2000, to provide a framework for implementing management actions for the next 10 years. This plan is targeted for revision in the future. The main strategy identified in the plan to benefit flycatcher (and other neotropical migratory birds) along the Virgin River of Overton WMA is to maintain and enhance dense patches of coyote willow for occupied and breeding habitat for flycatcher. Currently, no enhancement projects have been implemented by the NDOW at Mormon Mesa although the NDOW is in the initial stages of developing plans with the USBR to remove tamarisk and plant native riparian species in their place along the Virgin River of Overton WMA.

Up until recently, natural conditions have maintained suitable flycatcher habitat at Mormon Mesa; therefore, the NDOW has not yet implemented projects here. Recently, impacts from the tamarisk leaf beetle in the area has significantly reduced suitable flycatcher breeding habitat. This area continues to be threatened by the overutilization and trampling of riparian vegetation by livestock, surface and noise disturbance from recreational activities, and water resource development. These issues are not addressed by current conservation efforts, minimizing the benefits of excluding the area from critical habitat.

In addition, there may be Federal involvement in the funding of the management of the area that could provide benefits of including the area in critical habitat.

Based on the above factors, we determined that the benefits of including Overton WMA land (6.5 km (4.0 mi)) occurring along the Virgin River from designation of critical habitat outweigh the benefits of excluding the area. Thus, this area is included in the final designation of critical habitat.

#### *Other Comments Related to Economic Impacts and Analysis*

*Comment (106):* One entity representing mining interests states that any restriction or interruption imposed on water transportation and diversions to maintain critical habitat would have a dramatic impact on mining operations. Further, any such restrictions are attributable solely to the designation of critical habitat.

*Our Response:* Nearly all of the mining sites located in or near proposed critical habitat are in areas occupied by the flycatcher where Federal agencies are already aware of the presence of the species. Thus, any future section 7 consultations related to the mining operations would occur regardless of whether critical habitat is designated. Furthermore, as described in the Service's memorandum provided in Appendix C of the draft economic analysis, project modifications likely to be requested to avoid adverse modification are likely to be similar to modifications requested to avoid jeopardy. Thus, the incremental effects of the designation in these cases are likely to be limited to minor administrative costs.

One exception is the Morenci Mine in the San Francisco Management Unit. The flycatcher occupies this unit; however, the area was not previously proposed for critical habitat designation, and there is no history of formal section 7 consultation in the area. Thus, we assume the designation would increase the awareness of Federal agencies of the need to consider impacts to flycatcher, and future section 7 consultations would be attributable to the designation.

This site is located 11 km (7 mi) southwest of proposed critical habitat; thus, consultation would be required if a Federal action occurs and a hydrologic link is established showing an effect on the flycatcher or its critical habitat. As described in paragraphs 570 through 571 of the draft economic analysis, we lack the specific data and models to determine how streamflow in proposed critical habitat may be affected. This site is discussed in greater detail in

paragraphs 587 through 589 of the draft economic analysis.

In addition, two of the potential mine sites identified in exhibit 9–1 of the draft economic analysis area are located in unoccupied areas where impacts would be considered incremental to the designation. The first, located in the Powell Management Unit in Utah, is listed as an “occurrence,” suggesting it is not an active mine. The second, located in the Santa Clara Management Unit, was identified as an active sand and gravel mine in 2005 by USGS, but was not found in the State of California’s online database of mines. Thus, this site may also be inactive. As discussed in paragraph 571 of the draft economic analysis, sand and gravel operations do not utilize large volumes of surface water and, although they may disturb habitat over relatively small areas, are unlikely to pose a major threat to the species.

*Comment (107):* One entity representing mining interests states that the rationale presented in the draft economic analysis for why it is difficult to predict potential constraints on water use to accommodate flycatcher concerns is flawed, and the mere identification of at-risk commodities is an irrelevant exercise absent quantification of those impacts.

*Our Response:* The Service respectfully disagrees that potential effects on water use related to mining operations is predictable and easily modeled. As stated in paragraph 571 of the draft economic analysis, hydrological models explaining the relationship between groundwater pumping and surface water diversions and flycatcher habitat health are not readily available. In the absence of such models, information about the resources potentially affected is useful to the decisionmaker. Furthermore, as summarized at the end of Chapter 9 of the draft economic analysis, of the identified mines that have previously raised concerns about proposed critical habitat for the flycatcher, all but one are located in areas where section 7 consultations would be undertaken due to the presence of the listed species absent designated critical habitat.

*Comment (108):* One entity representing mining interests states that the court decision in *Gifford Pinchot Task Force v. United States Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004), amended by 387 F.3d 968 (9th Cir. 2004), “raises the bar” in terms of the potential impacts of critical habitat because an activity that does not jeopardize the species’ continued survival nevertheless may be prohibited because it will adversely modify critical

habitat. In the draft economic analysis, the Service, therefore, should not rely on consultations on mining activities that were undertaken prior to the *Gifford Pinchot* ruling as evidence of potential future impacts.

*Our Response:* Prior consultations provide evidence of the types of project modifications that may be requested to avoid jeopardizing the species. As the *Gifford Pinchot* court decision did not affect the definition of “jeopardy,” the historical record remains informative. The Service’s memorandum in Appendix C of the draft economic analysis provides its rationale for determining that, in the case of the flycatcher, additional project modifications are unlikely in most circumstances to be requested to avoid adverse modification.

*Comment (109):* One entity representing mining interests states that the draft economic analysis assesses the likelihood of future impacts to mining resulting from the designation by limiting the analysis to mines located directly within critical habitat. Limiting the analysis this way allows the Service to bolster its determination that the likelihood of future impact to the mining industry is low.

*Our Response:* Paragraphs 574 through 594 of the draft economic analysis describe mining operations located outside of proposed critical habitat that may affect the habitat (see summary in exhibit 9–2).

*Comment (110):* A commenter states that the economic analysis of impacts to the mining industry is inadequate and fails to include the Rosemont Mine. The commenter provides information on the economic importance of the Rosemont Mine to the State of Arizona.

*Our Response:* The draft economic analysis is unable to quantify economic impacts to the mining industry in Chapter 9 because of the uncertainty over how future water withdrawals may affect the flycatcher and its habitat. However, the draft economic analysis provides qualitative information regarding potential impacts to the mining industry. Because the Rosemont Mine is currently in the permitting process and is not yet active, it is difficult to forecast the potential impacts of critical habitat designation. The proposed mine site lies approximately 48 km (30 mi) southeast of Tucson along the Santa Rita Mountains, and is approximately 16 km (10 mi) west of proposed critical habitat in Cienega Creek. Chapter 9 of the draft economic analysis has been revised to include information on the Rosemont Mine.

*Comment (111):* A commenter provides a copy of FMC’s Lower Pinal Creek Riparian Management and Monitoring Plan. This management plan addresses conservation of flycatcher habitat at FMC’s Miami Mine and adjacent land in Gila County, Arizona.

*Response:* Chapter 9 of the draft economic analysis has been revised to reference FMC’s Lower Pinal Creek Riparian Management and Monitoring Plan.

*Comment (112):* Catron County, New Mexico, is concerned that the critical habitat revision will place unnecessary burden and constraints on proposed Arizona Water Settlement Act projects. Specifically, they are concerned about the implementation of projects to improve irrigation ditches and stabilize stream channels along the San Francisco River near the Towns of Alma and Luna, New Mexico. Catron County is also concerned that historic use of irrigation water from San Francisco River will be prohibited by court order or by cost, and that this is a potential indirect unrecognized takings issue.

*Our Response:* Projects under the Arizona Water Settlement Act and other federally funded projects occurring along the San Francisco River will require evaluation of not only the flycatcher, but other federally listed species such as loach minnow (*Tiaroga cobitis*) and spikedace (*Meda fulgida*) under the Act. We have worked successfully on other stream projects in this area to minimize impacts to federally listed species and also meet project needs. We anticipate that with the mutual cooperation and collaboration of stakeholders, action agencies, and the Service, the revision of critical habitat will not add additional burdens.

*Comment (113):* The Elephant Butte Irrigation District primarily seeks protection of the water supply it administers and the water rights of its members against the effects that could be imposed under the Act; the District also seeks protection against any disruption of their system and seeks assurance that the Act will not be used to gain a higher allocation for environmental water in times of drought.

*Our Response:* The Elephant Butte Irrigation District would be covered under the International Boundary Water Commission’s section 7 biological opinion for the water transaction network that is being developed to provide water to flycatcher restoration sites. The Service expects only that the obligations within the biological opinion for their Canalization Project be met, and nothing further is expected to



be required. Our section 7 consultation included a conference on critical habitat. In addition, the proposed area in the Lower Rio Grande is excluded from the final designation (see Exclusions).

*Comment (114):* A group of entities state that the economic analysis incorrectly indicates that Seven Oaks Dam is covered under the Western Riverside County MSHCP. The entities argue that, because the dam does not fall under this MSHCP, the \$43 million in estimated impacts to its operations should be attributed to the incremental rather than baseline scenario.

*Our Response:* The final economic analysis has been revised to clarify that operation of Seven Oaks Dam is not covered by the MSHCP. Nonetheless, impacts to operations at this dam are considered baseline. As the comment correctly points out, baseline impacts occur in those areas where flycatcher territories have been detected and where flycatcher presence is well known. Flycatcher presence is assumed to be well known within the vicinity of Seven Oaks Dam for the following reasons: (1) Flycatcher territories have been detected along the Santa Ana River segment; (2) critical habitat for flycatcher was designated in areas immediately upstream of the dam in 2005; (3) San Bernardino Valley Municipal Water District and Western Municipal Water District's May 2007 presentation to the California State Water Resources Control Board discusses critical habitat for flycatcher upstream of the dam; (4) the decision awarding the San Bernardino Valley Municipal Water District and Western Municipal Water District the water rights to implement the Supplemental Water Project specifically includes mitigation measures for flycatcher, as well as an explicit statement that "habitat on the perimeter of the desiccation area will continue to provide habitat for the endangered southwestern willow flycatcher"; and (5) the agencies are required to develop a MSHCP for the supplemental water project under the terms of the decision awarding them the water rights. Based on this information, the proposal does not appear to provide new information about the presence of flycatcher in these areas. Therefore, the analysis continues to attribute these impacts to the baseline scenario.

*Comment (115):* A group of commenters state that the analysis did not fully analyze potential costs associated with the loss of local water supplies, restricted development, and potential flood damage on the Santa Ana River. In particular, these commenters are concerned about

potential changes in operation and maintenance of Seven Oaks Dam and maintenance of the Santa Ana River levees. One entity also expressed concern that the costs of consultations associated with the maintenance of the levees were not included in the draft economic analysis.

*Our Response:* With regard to flood control, the Act does not expect species conservation to take precedence over protection of human life or property. For example, section 7(p) of the Act, concerning Presidentially declared disaster areas, allows for emergency actions to be taken without section 7 consultation in the event of an "emergency situation which does not allow the ordinary procedures of this section to be followed." Likewise, routine maintenance required to ensure the proper functioning of levees would not be prohibited. Therefore, economic impacts that potentially could result from a catastrophic flood event, such as loss of life or property value, are not quantified because management actions to prevent catastrophic flooding are not expected to be precluded due to designation of critical habitat for the flycatcher. We have included additional text in the final economic analysis discussing the potential for economic impacts associated with flood control activities.

With regard to a potential loss in water supplies, the final economic analysis has been revised to acknowledge the concerns about the potential impact of flycatcher critical habitat on the Supplemental Water Project at Seven Oaks Dam, recognizing that impacts could be significant in the event that critical habitat precludes the development of this project. That said, there have been multiple court decisions where Federal agencies have successfully argued that they lack the discretion to release water to address concerns under the Act. In other cases, courts have upheld the use of off-site mitigation while allowing USBR to raise the level of the lake above existing flycatcher habitat. Based on these court decisions, the analysis considers it highly unlikely that the designation of critical habitat for the flycatcher will result in the release of water or the loss of water supplies at Seven Oaks Dam.

Given that the presence of the flycatcher or its critical habitat is not expected to affect the availability of water stored at Seven Oaks Dam, future lost development due to a lack of available water is unlikely. With respect to development, the draft economic analysis estimates four types of costs to potential projects occurring in critical habitat: Consultation costs; lost land

value associated with land set-asides that may be required for projects in critical habitat; costs of implementing additional project modifications, such as cowbird trapping; and potential time delay impacts related to the need to comply with CEQA requirements. Due to a high level of baseline restrictions to development in the floodplain, this analysis limits development impacts to areas where population density is high, and the availability of substitute land is low. Most of these are urbanized areas in California units. In sum, the estimated impacts to development are approximately \$51 million over a 20-year period of time, with the most substantial category of costs being lost land values, totaling over \$35 million. Estimated impacts in the Santa Ana Management Unit are \$18 million, of which \$13 million are associated with land set-asides. The majority of all costs, however, are attributed to the baseline, as flycatcher presence in areas subject to development in the floodplain is well known and critical habitat impacts are not expected to differ greatly from those expected under the listing alone.

*Comment (116):* One commenter submitted an analysis that identifies and estimates the economic impacts that would be incurred in Kern County, California, if Isabella Reservoir Operations were changed to avoid adversely modifying proposed critical habitat for flycatcher.

*Our Response:* The final economic analysis now includes, in Chapter 3, a summary of the analysis provided by the commenter, which acknowledges the potential economic impacts of changing water operations at Lake Isabella Reservoir. However, as stated in Chapter 3, due to the known presence of the flycatcher, extensive consultation history on the species, and existence of a completed section 7 consultation for the operations at Lake Isabella Reservoir in which the Corps purchased nearby property for flycatcher conservation to reduce and minimize impacts in lieu of modifying its operations, the analysis finds that the likelihood of future modifications to Lake Isabella Reservoir Operations to accommodate flycatcher and its habitat is very low.

*Comment (117):* Several commenters expressed concern that the economic analysis did not adequately address potential impacts of critical habitat designation for flycatcher on operations at Elephant Butte Reservoir and planned activities on the Lower Rio Grande. Commenters requested that potential impacts on the Elephant Butte Pilot Project, environmental water transactions program, and Rio Grande Canalization project should be

considered. One commenter states that the incremental analysis is incomplete and inaccurate through omission of the direct, indirect, and induced costs associated with the many effects a critical habitat designation in Elephant Butte Reservoir may have on water operations in New Mexico.

*Our Response:* The draft economic analysis in Chapter 3 has been revised to more fully incorporate a discussion about planned and ongoing actions, conservation efforts, and potential impacts at Elephant Butte Reservoir and in the Lower Rio Grande Management Unit.

*Comment (118):* One commenter states that the draft economic analysis does not address costs associated with releases from Morris Reservoir, which are also necessary for the aquifer recharge operations at the San Gabriel Canyon Spreading Grounds and the San Gabriel River unit. The commenter states that the Watermaster and County documented reasonably foreseeable costs associated with the designation of critical habitat for flycatcher in the San Gabriel River unit, which have been improperly excluded from the draft economic analysis. The draft economic analysis may not have considered costs related to lower volumes of water associated with restriction on dam releases and decreases in instream percolation. The draft economic analysis did not include post-fire and subsequent periodic sediment removal projects at Big Tujunga and Morris Reservoirs.

*Our Response:* While the draft economic analysis was correct in stating that the Santa Fe Dam is the only water management facility within the proposed critical habitat area along the San Gabriel River, the final economic analysis in Chapter 3 has been revised to more fully incorporate a discussion about potential impacts to the San Gabriel River system, including operations at Cogswell, San Gabriel, and Morris Dam/reservoirs. The previous estimates of costs provided for San Gabriel River unit from this commenter were developed for the Santa Ana sucker and predicated on the assumption that sediment removal projects at upstream dams would be precluded. However we have no evidence to suggest that such measures would be relevant to the downstream proposed critical habitat for the flycatcher. Nonetheless, we have included a description of past and potential future costs associated with Santa Ana sucker management activities, as estimated by the Service's economic analysis, in this unit. Because flycatcher presence is well-known, and

the species is currently managed for in this unit, management actions for the flycatcher associated with this unit are considered to be baseline.

*Comment (119):* Several comments state that the economic analysis does not adequately address the impact of flycatcher critical habitat on agricultural activities. One comment states that the economic consequences of reduced water availability for agriculture caused by critical habitat designation would cause detrimental impacts to local communities in New Mexico. One commenter states that the economic analysis does not adequately address the impacts of critical habitat designation on farming operations related to impacts to delay or denial of a Federal loan or other Federal assistance. Two commenters state that the economic analysis fails to address potential impacts to the San Carlos Irrigation and Drainage District.

*Our Response:* Chapter 4 of the economic analysis describes and quantifies potential impacts on ranching activities. A section has been included in Chapter 3 of the final economic analysis to specifically address potential impacts to crop agriculture. As stated in the analysis, irrigators that utilize surface water could be affected by critical habitat designation if reservoir operations that provide water for irrigation are modified such that less water is available for irrigation. Reductions in available water to water districts could result in corresponding reductions in irrigated crop acres for end users, if farmers are unable to switch to less water-intensive crops or find substitute water sources. However, as stated in Chapter 3, due to the extensive consultation history on the flycatcher allowing for habitat mitigation in lieu of changing water operations, the analysis finds that future modifications to the operations of reservoirs to avoid adverse modification of critical habitat for flycatcher are unlikely. Therefore, the impacts of critical habitat designation on irrigators are also unlikely as a result of critical habitat designation. Instead, the analysis finds that a more likely scenario is that habitat mitigation and other conservation efforts will be undertaken. The expected conservation efforts are not expected to affect water deliveries.

The quantified impacts also do not include potential losses in Federal Natural Resource Conservation Service and Farm Service Agency funding. Agricultural activities on private lands may be supported by voluntary participation in a number of programs sponsored by Federal agencies, including the Natural Resource

Conservation Service and the Farm Service Agency. These agencies provide funding and technical assistance for agriculture-related activities. It is possible that, fearing that receiving Federal funding would potentially require them to bear the burden of maintaining fish habitat, irrigators could decline participation in Federal programs. Natural Resource Conservation Service staff state that if that were to occur, funds not allocated within proposed critical habitat would likely be reallocated within the State, and the Natural Resource Conservation Service questions the assumption that farmers would refuse funding to avoid a Federal nexus, particularly as its awards typically go to farmers who wish to promote conservation. As a result, these potential impacts are not included in estimated costs.

*Comment (120):* One commenter states that the economic analysis is void of any impacts assessment related to current and projected agricultural, municipal, and industrial water uses within the watersheds of each critical habitat unit. Specifically, the analysis of impacts in the Verde Management Unit fails to mention any potential impacts from municipal water use projects, agriculture, and other anticipated residential development in that watershed.

*Our Response:* Chapter 3 of the final economic analysis has been revised to more directly discuss potential impacts to crop agriculture and urban water uses. Municipal water projects in the Verde Management Unit are specifically addressed.

With respect to residential and related development, section 5.2.3 of the draft economic analysis contains a discussion of projected residential development in the Verde Management Unit. Specifically, one consultation is forecast related to the construction of a wastewater treatment plant for the City of Cottonwood. This section also describes the history of the Verde Valley Ranch Development at Peck's Lake, in an area owned by FMC. The draft economic analysis concludes that development on this land is not viable, due to a remanded National Pollutant Discharge Elimination System permit, and land use objectives of the local planning department.

*Comment (121):* One commenter states that the analysis of economic impacts must include all current and potential water withdrawals and land uses that may affect critical habitat, regardless of whether they are within critical habitat. The commenter states that the scope of the economic analysis is limited to the activities occurring

within the proposed critical habitat, though critical habitat can be deemed to affect water uses that take many miles from critical habitat. Limiting the scope of analysis to certain types of water management activities occurring within or immediately adjacent to critical habitat dramatically understates the impact of critical habitat, rendering the economic analysis useless in informing decision making.

**Our Response:** The economic analysis must use the best available information to assess potential impacts to critical habitat designation, whether or not those impacts are generated from within the designation. The draft economic analysis does address potential water management issues related to water management structures and actions located upstream of proposed critical habitat units (e.g., the San Gabriel River Unit and Lower Rio Grande Units). However, because the analysis does not anticipate that changes to water operations are likely to occur as a result of critical habitat designation for the flycatcher, few impacts to downstream users are anticipated. The final economic analysis now includes a discussion of potential impacts to groundwater users in several major irrigation districts with connections to proposed critical habitat areas. The final economic analysis also now includes a discussion of potential impacts to crop irrigation, flood control, and hydropower facilities that have the potential to be affected by critical habitat for flycatcher.

**Comment (122):** One comment states that the proposed critical habitat will inhibit public agencies from providing and maintaining safe passage of perennial and large flood flows through communities with large urban populations. The economic analysis should consider that critical habitat for flycatcher could result in decreased flood protection from dam operation and channel maintenance restrictions, increased channel costs associated with mitigation requirements, and constrained construction windows from nesting season restrictions and lost access to water in Los Angeles County. The commenter states that many reaches in Los Angeles County are within active, engineered, flood protection facilities or downstream of flood protection dams and reservoirs.

**Our Response:** Chapter 3 of the economic analysis has been revised to specifically discuss potential impacts of critical habitat designation on flood control projects. In the past, flood control projects in flycatcher habitat areas have generally resulted in habitat mitigation off-site, rather than in

changing operations and maintenance of facilities (e.g., vegetative clearing schedules). One exception is the San Luis Rey Flood Control Project, where changes in vegetative clearing activities were altered to accommodate flycatcher concerns during section 7 consultation involving critical habitat, which has resulted in a reduction in flood control capacity of the project from 270 years to approximately 100 years. However, no flood damages have resulted from this change to date, and the Service is currently in ongoing discussions with the Corps in an attempt to reach an agreement that allows the project to reach the 270-year flood control projection as originally proposed. Further, the Act does not expect species conservation to take precedence over protection of human life or property (see section 7(p) of the Act).

**Comment (123):** Designation of proposed critical habitat for flycatcher may inhibit Metropolitan Water District's ability to provide water to its 26 member agencies by restricting access to its right-of-ways, including access roads that it uses for routine operations, maintenance, and repairs. Ongoing projects include replacement and rebuilding of siphon transition structures and blow-off valves.

**Our Response:** The draft economic analysis in Chapter 3 has been revised to acknowledge overlap with Metropolitan Water District properties in the proposed Santa Clara River, Big Tujunga Creek, San Gabriel River, Waterman Creek, Santa Ana River, and San Timoteo Creek units. Flycatcher presence is well-known or the species is otherwise currently managed for in all of these units, except for Big Tujunga Canyon, which is unoccupied. A previous economic analysis for the Santa Ana sucker anticipated that the Metropolitan Water District may prepare an HCP for that species related to its ongoing operations. While it is unclear whether a permit or Federal nexus would exist for many Metropolitan efforts, it is possible that a nexus could occur for some actions. To the extent that Metropolitan expects only to conduct work on existing facilities, those facilities would not be considered critical habitat and would not require conservation efforts. Metropolitan's ability to provide water to its member agencies is not anticipated to be affected by critical habitat designation. Impacts related to administrative or other conservation efforts in the Big Tujunga Canyon segment would be attributed to the designation of critical habitat. Lands owned by Metropolitan in the Big Tujunga segment were included in the analysis as part of lands conducting

"residential and related development activities" in Chapter 5 of the economic analysis. Costs estimates for these lands include administrative costs related to potential future consultations, as well as project modifications that were estimated on a per consultation basis.

**Comment (124):** The Service failed to consider in its identification of the economic benefits of excluding areas the economic benefit of maintaining the local water supply and the present levels of flood protection for heavily populated areas such as Los Angeles County. The Service has not consulted the District or stakeholders in Los Angeles County in its preparation of the draft economic analysis of the proposed designation.

**Response:** Due to the broad area included in this critical habitat designation, some parties were not contacted directly. However, through mailing lists, press releases, and other sources, we believe that our outreach efforts were sufficient. The Service received two comment letters from the Los Angeles Department of Public Works and a letter from Metropolitan Water District of Southern California. Substantial edits were made to the economic analysis as a result of these and other public comments; we have no data indicating that designating critical habitat would have significant impacts on human health and safety.

**Comment (125):** The proposed designation is multi-generational in nature, which, according to Circular A-4, lends itself to a lower discount rate of 1 to 2 percent.

**Our Response:** The commenting entity is correct that lower discount rates may be appropriate where inter-generational impacts are likely to occur. However, we generally do not forecast impacts beyond a 20- to 30-year time period (with the exception of four dam projects where baseline costs extend 50 years into the future). Thus, we apply the OMB's recommended discount rate of 7 percent and test the sensitivity of this rate using a rate of 3 percent.

**Comment (126):** One entity states that the proposed designation of critical habitat threatens the financial viability of the Cherry Creek Cattle Company operation, which holds a grazing permit on the Dagger Allotment in the Tonto National Forest. The designation of critical habitat is expected to place a significant economic burden on this operation.

**Our Response:** The Dagger Allotment is located on the Salt River within the Roosevelt Management Unit and is considered occupied by the flycatcher. Exhibit 2-3 of the draft economic analysis identifies this stream segment

as unlikely to have incremental economic impacts, except for the portion of administrative costs to address adverse modification in section 7 consultation, as a result of the species occupancy and public awareness. As a result, all costs associated with conservation efforts for grazing activities are considered baseline impacts that result from the listing of the species and not the designation of critical habitat. On page A-9 of the draft economic analysis, the Small Business Impacts Analysis estimates annualized incremental administrative impacts of approximately \$480 per grazing entity. This translates to 1.21 percent of average annual revenues per grazing entity.

*Comment (127):* One entity provides information on the management of ranching and agricultural lands on the privately owned Rancho Temescal. In particular, this comment states that Rancho Temescal is in the process of developing a safe harbor agreement with the Service. This comment also expresses concern over the regulatory burden to Rancho Temescal that would result from the designation of critical habitat.

*Our Response:* The draft economic analysis generally estimates costs associated with grazing on Federal lands only, due to the lack of a Federal nexus for section 7 consultation on private ranching lands. However, text has been added describing this pursuit of a safe harbor agreement and potential associated costs.

*Comment (128):* One organization states that grazing operations should be considered small entities, and the draft economic analysis should estimate the overall effect on the community of grazing restrictions. This comment estimates annual economic losses of \$2.8 million to Gila County associated with preclusion of grazing on six allotments.

*Our Response:* Section 4.6 of the draft economic analysis estimates regional economic impacts associated with grazing restrictions. For the Roosevelt Management Unit, where the allotments mentioned by the organization are located, all regional impacts associated with grazing restrictions are considered baseline impacts; that is, these impacts may occur even absent the designation of critical habitat. These baseline regional economic impacts are estimated to be \$56,000 annually, as shown in exhibit 4-13 of the draft economic analysis. In contrast to the analysis provided in the comment, the draft economic analysis does not assume that all grazing will be precluded. Instead, the draft economic

analysis assumes grazing restrictions will be proportional to the acres of each allotment located within proposed critical habitat. Additionally, the draft economic analysis considers costs to grazing entities in the Small Business Impacts Analysis presented in Appendix A. Pages A-10 through A-13 of the draft economic analysis describe the analysis of impacts to small grazing entities.

*Comment (129):* Two entities state generally that significant economic impacts to grazing and agricultural operations are likely. This comment also expresses concern that economic impacts cannot be adequately evaluated due to uncertainty over the conservation efforts likely to be requested following the designation of critical habitat.

*Our Response:* Sections 2.3 and 4.2 of the draft economic analysis describe the types of incremental impacts expected to occur following the designation of critical habitat. Specifically, the draft economic analysis considers project modification costs associated with grazing reductions, fencing construction and maintenance, and cowbird trapping, and the administrative impacts of section 7 consultation. Pages A-10 through A-13 of the draft economic analysis describe the analysis of impacts to small grazing entities. Exhibit A-3 of the draft economic analysis presents the results of the Small Business Impacts Analysis, which estimates annualized incremental administrative impacts of approximately \$480 per grazing entity. This translates to 1.21 percent of average annual revenues per grazing entity.

Impacts to agricultural operations would occur if changes in the management of water operations affect the availability of water for farming activities. For additional discussion of such impacts, see our responses to specific comments on water management activities, such as reservoirs, irrigation districts, groundwater pumping, and flood control activities.

*Comment (130):* Newhall Land and Farming provided updated information regarding existing easements and preservation agreements, including identification of a new area of private floodplain ownership in proposed critical habitat which will be placed in a restrictive covenant for floodplain conservation.

*Our Response:* Section 5.2.3 of the draft economic analysis has been updated to reflect the addition of Newhall's land holdings to areas considered for exclusion in the revised proposed rule (77 FR 41147, July 12, 2012). The final economic analysis also

reflects new acreage estimates of Newhall land ownership and management in the Santa Clara Management Unit with respect to the potential for development in that area. Please see response to Comment 100 above for discussion of Newhall Land and Farming areas that were excluded from the final designation of critical habitat.

*Comment (131):* The Foothills-Eastern and San Joaquin Hills Transportation Corridor Agencies believe that the draft economic analysis improperly excludes the State Road 241 Completion Project from consideration of economic impacts resulting from the proposed rule. The Service's claim that the project is not viable is outdated and is based on inaccurate information. As such, the draft economic analysis should evaluate the costs associated with the project modifications and alternatives in the recent planning documents.

*Our Response:* We have updated the discussion of the State Road 241 Completion Project found at paragraphs 496 through 498 of the draft economic analysis to include additional information provided by these agencies regarding their progress towards identifying a viable alternative. In addition, we have included in that discussion information provided by these agencies regarding the potential cost of future section 7 consultations considering the flycatcher and its habitat.

*Comment (132):* An estimate of impacts associated with the State Road 241 Completion Project provided previously by the Foothills-Eastern and San Joaquin Hills Transportation Corridor Agencies was inappropriately excluded from the draft economic analysis based on the assumption that the subunit would be excluded from the final rule.

*Our Response:* The Transportation Corridor Agencies are correct that the Service should estimate the impacts of areas proposed for exclusion from critical habitat designation under section 4(b)(2) of the Act in order to provide information regarding the potential avoided costs, or benefits of exclusion. However, in this case, the Transportation Corridor Agencies' information regarding potential costs were not excluded from the draft economic analysis because the subunit was considered for exclusion. Rather, as stated in the draft economic analysis (section 7.5, paragraphs 496 through 498), costs were not assessed for the Transportation Corridor Agencies' project due to the fact that the project was not considered likely to occur within the period of the analysis. This

section has been updated to include additional information regarding continued efforts to identify and receive approval for an alternative route. Potential costs identified by the Transportation Corridor Agencies are discussed, but are not added to the total impacts in that subunit, due to the remaining significant uncertainty regarding the likelihood of the project.

*Comment (133):* The draft economic analysis fails to use the Tenth Circuit co-extensive impacts methodology to evaluate the proposed rule's economic impacts and instead adopts the incremental approach for the draft economic analysis.

*Our Response:* As described in Chapter 2 of the draft economic analysis, we separately estimate both the baseline and incremental costs of the proposed rule. The co-extensive costs of the proposed rulemaking are simply the sum of both estimates. The draft economic analysis is therefore in compliance with the Tenth Circuit Court of Appeals decision per *New Mexico Cattlegrowers Assn. v. U.S. Fish and Wildlife Service*, 248 F.3d 1277 (10th Cir. 2001).

*Comment (134):* The draft economic analysis does not include an evaluation of the cumulative impact of multiple critical habitat designations, as required by well-established principals of Federal environmental laws such as NEPA. Critical habitat for arroyo toad and thread-leaved brodiaea (*Brodiaea filifolia*) occur in the same area. In addition, one commenter stated that although some land owned or maintained by the San Bernardino County Flood Control District may be occupied by other Federally listed species, the extra "layer" of regulation associated with the designation of critical habitat for the flycatcher will create an additional economic burden for the District to assess and perform routine maintenance because of mitigation requirements.

*Our Response:* The OMB guidelines for best practices concerning the conduct of economic analysis of Federal regulations (*Circular A-4*) direct agencies to measure the costs of a regulatory action against a baseline, which it defines as the "best assessment of the way the world would look absent the proposed action." The baseline utilized in the draft economic analysis is the existing state of regulation, prior to the designation of critical habitat, which provides protection to the species under the Act, as well as under other Federal, State, and local laws and guidelines. To characterize the "world without critical habitat," the draft economic analysis also endeavors to

forecast these conditions into the future over the time frame of the analysis, recognizing that such projections are subject to uncertainty. This baseline projection recognizes that flycatcher habitat is already subject to a variety of Federal, State, and local protections regardless of the designation of critical habitat.

Throughout the draft economic analysis, we provide information about the cost of actions that provide baseline protection to the habitat. This information provides context to the decision-maker regarding the regulatory environment, and, in many cases, quantification of the baseline includes joint costs benefiting multiple species. For example, baseline efforts include the implementation of multiple-species HCPs benefiting dozens of listed species, or the completion of section 7 consultations addressing multiple species. While we focus on costs associated specifically with flycatcher, many of these joint costs (e.g., the administrative effort associated with a section 7 consultation) are not easily separable by species. Thus, in order to avoid undercounting costs attributable to flycatcher and its habitat, our cost estimates likely include some impacts that also benefit other species.

*Comment (135):* Several private landowners state that the designation of critical habitat would adversely affect local communities and successful ongoing land and wildlife management. The designation of critical habitat has the potential to interfere with vested water rights in the Salt River watershed, undermine existing collaborative management efforts, further limit the land base in Gila County, and impose additional economic costs associated with section 7 consultation, particularly in the context of livestock grazing operations.

*Our Response:* The draft economic analysis addresses impacts to livestock grazing in Chapter 4 and impacts on water rights in Chapter 3. This analysis estimates costs associated with grazing on Federal lands only, due to the lack of a Federal nexus for section 7 consultation on private lands. Incremental impacts associated with section 7 consultation, additional conservation efforts, and regional economic effects are estimated in this chapter. Potential impacts associated with the Salt River Project are also discussed in detail in Chapter 3 of the draft economic analysis.

*Comment (136):* In its analysis under Executive Order 13211, the Service stated that the proposed critical habitat designation will not significantly affect energy supplies, distribution or use

because there are no pipelines, distribution facilities, power grid stations, and other such energy infrastructure within the boundaries of the proposed critical habitat areas. This assertion is not correct because the areas proposed for critical habitat designation include proposed power lines and three hydroelectric power generation stations. The commenter goes on to assert that the Service's proposal to restrict dam operations will impact water delivery to these hydroelectric facilities; therefore, the role of hydroelectric facilities and thus impacts to them become more significant.

*Response:* As discussed above in previous responses, we do not anticipate that flycatcher conservation efforts will result in changes in dam operations beyond those conservation activities outlined in an incidental take permit. In the past, such activities have focused on habitat mitigation in lieu of changes to operations. Section A.2 of the draft economic analysis specifically addresses Executive Order 13211 and explains that we do not anticipate any changes in the timing or amount of water spilled at dams with the capacity to produce hydropower. Thus, the designation of critical habitat is unlikely to affect energy supply. The discussion of Executive Order 13211 has also been updated appropriately (see *Energy Supply, Distribution, or Use—Executive Order 13211*).

*Comment (137):* The Service's proposal to have dam operations return to "more natural hydrologic regimes" will, if imposed on storm operations, result in a return to the significant flooding conditions (which did result in fatalities) that necessitated the construction of the dams in the first place. This in turn will have a significant adverse impact to the residents' quality of life and the region's ability to keep jobs at a time when unemployment in Los Angeles County is at 12.5 percent. Further, the Service's proposed restrictions on water supply in the proposed Big Tujunga unit may not be possible as the City of Los Angeles' water rights in the Big Tujunga area are "pueblo rights," that were granted under international treaty, and the Act cannot trump international treaties.

*Our Response:* As discussed above, we do not anticipate that flycatcher conservation efforts will result in changes in dam operations beyond those conservation activities outlined in an incidental take permit. In the past, such activities have focused on habitat mitigation in lieu of changes to operations. Furthermore, with regard to flood control, the Act does not expect species conservation to take precedence

over protection of human life or property. For example, section 7(p) of the Act, concerning Presidentially declared disaster areas, allows for emergency actions to be taken without section 7 consultation in the event of an “emergency situation which does not allow the ordinary procedures of this section to be followed.” Likewise, routine maintenance will not be prohibited. Therefore, economic impacts that potentially could result from a catastrophic flood event, such as loss of life or property value, are not quantified because management actions to prevent catastrophic flooding are not expected to be precluded due to designation of critical habitat for the flycatcher. We have included additional text in the final economic analysis discussing the potential for economic impacts associated with flood control activities.

Furthermore, the Service does not propose to restrict water supply in the Big Tujunga subunit. As discussed in detail in previous responses, historically, flycatcher concerns have been addressed through mitigation, rather than changes to water operations.

*Comment (138):* The proposed designation warrants review and a determination of significance by the OMB because: (1) Potential flood damage to properties in any given year due to the Service’s proposed restrictions on dam operations and facility maintenance, combined with the potential loss of groundwater available for pumping due to the Service’s proposed pumping restrictions will result in significant economic impacts to Los Angeles County; and (2) proposed restrictions on nonnative vegetation removal and maintenance of flood protection facilities do conflict with other Federal agencies’ actions by conflicting with mitigation requirements imposed by Federal permits issued to the District and the maintenance activities of the Corps in Big Tujunga Wash, Hansen Flood Control basin, San Gabriel River, and Santa Fe Flood Control Basin.

*Response:* The economic impacts of the proposed critical habitat designation are estimated and reported in the final economic analysis. The estimate of annualized costs range from less than \$1 million to \$1.7 million. The designation will not result in an annual effect of \$100 million or more on the economy, therefore, this rule is not considered an economically significant rule. We do not anticipate that the flood protection capabilities of water structures located in designated critical habitat will be affected by the regulation for the reasons discussed in previous responses. Thus,

the rule is unlikely to conflict with mitigation requirements imposed on flood control projects by the other Federal agencies (see discussion in section 3.2.4 of the final economic analysis).

*Comment (139):* The Service states that no regulatory flexibility analysis under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) is required if the proposed critical habitat designation will not impact a substantial number of small entities (i.e., small businesses, small organizations, and small government jurisdictions). The Service’s proposed restrictions on dam operations and flood protection facility maintenance have consequences to communities near and far downstream of the proposed critical habitat areas in Los Angeles County. A substantial number of small entities depend on the flood protection facilities that are potentially impacted by the proposed critical habitat designation because they get their water supply from the groundwater basins in which the proposed critical habitat areas for Los Angeles County are located. The Service’s proposal will increase these small entities’ exposure to flood hazards and their access to their water supply. The Service needs to comply with the Regulatory Flexibility Act and conduct a regulatory flexibility analysis of the proposed critical habitat designation. The analysis should include the cumulative impact of other Act listings and critical habitat designations in Los Angeles County and in the areas in which the region gets its imported water. The Service also needs to consult local flood protection, water supply and business entities, not solely litigious environmental groups, while conducting this analysis.

*Response:* As discussed in response to prior comments, we do not anticipate that the proposed rule will affect water operations or flood control capacity. Thus, the types of downstream economic impacts contemplated in the comment are unlikely.

Furthermore, we note that Appendix A of the final economic analysis includes an analysis of the potential for critical habitat designation to have a significant economic impact on a substantial number of small entities as required by the Regulatory Flexibility Act. The appendix discusses the case law concerning whether indirectly affected entities (i.e., entities that are not directly subject to the regulation, such as the downstream communities referenced in this comment) must be included in the Regulatory Flexibility Act analysis. The case law concludes that the analysis need only include

directly regulated entities, which the Service interprets to be Federal agencies, which are not small entities (see *Regulatory Flexibility Act* (5 U.S.C. 601 *et seq.*) section below.). Our analysis goes further, and considers impacts to small entities that may be indirectly affected (e.g., third parties to section 7 consultations), but only to those entities for which the regulatory link would be measurably diluted.

Indeed, in response to a similar argument to include indirectly regulated entities in the analysis of a rule promulgated by Environmental Protection Agency, the DC District Court wrote, “The rule will doubtless have economic impacts in many sectors of the economy. But to require an agency to assess the impact on all of the nation’s small businesses possibly affected by the rule would be to convert every rulemaking process into a massive exercise in economic modeling, an approach we have already rejected. See *Mid-Tex Elec. Coop.*, 773 F.2d at 343” (*Cement Kiln Recycling Coalition v. Environmental Protection Agency*, 225 F.3d 855, 869 (DC Cir. 2001, at V:50–52.)). The court limited the analysis to only those small entities to which the rule will apply. Thus, the analysis presented in Appendix A of the final economic analysis complies with the Regulatory Flexibility Act.

#### *Other Comments Related to the Environmental Assessment*

*Comment (140):* The draft environmental assessment views environmental justice impacts only through a “macro lens.” Environmental justice impacts must be assessed by looking at those impacts on us as a separate, unique people, and not solely within the context of the entire designation.

*Our Response:* The environmental assessment acknowledges the potential for localized environmental justice impacts. The potential for economic impacts that disproportionately affect low income or minority communities exists for some activities, to the extent that there are employment and payroll impacts of reductions on economic activity, and those impacts are concentrated in the minority or low income communities. As no specific projects are mandated or authorized by this designation of critical habitat, and the designation does not directly restrict land use or land management activities, it is not possible to predict whether such impacts will in fact occur. However, it is likely that any such impacts would be at most minor, in the context of the entire designation, because: (1) The economic impacts

associated with individual relevant projects or actions would be relatively small; and (2) there would be only a small number of projects throughout the designation which would create such impacts.

**Comment (141):** Impacts based on biological effects, such as benefits to the flycatcher anticipated under the different actions, are not well developed in the environmental assessment. For example, the document describes areas proposed for exclusion under Alternative B that have some type of conservation or management plan to protect habitat, but there is no discussion as to why designating critical habitat in these habitat areas would provide any additional benefit to the species or its habitat.

**Our Response:** The analysis associated with evaluating exclusions under section 4(b)(2) of the Act, is appropriately included within this final rule, rather than a NEPA document. Areas that were considered for exclusion were locations where the benefits of exclusion may outweigh the benefits of inclusion as critical habitat (see Exclusion section above). In each exclusion analysis included within this final rule, we considered a range of possible benefits of inclusion and exclusion, and weighed the benefits of each in order to determine whether or not any particular area will be excluded. Benefits of including an area as critical habitat are largely derived from the regulatory benefits associated with the requirements of Federal agencies to consult with the Service for any actions that may affect the designated critical habitat.

**Comment (142):** The designation of critical habitat within existing flood control facilities would result in potential risks to public health and safety. The proposed critical habitat would likely delay, if not compromise, the Riverside County Flood Control and Water Conservation District's ability to maintain existing flood control facilities. Federal funding related to flood control facility repairs could be significantly delayed as well. If flood control facilities are not properly maintained or repaired when damaged, public health and safety could be put at risk. These potential impacts have not been addressed in the environmental assessment.

**Our Response:** The channel maintenance activities described in the District's letter are covered activities within a long-term maintenance agreement that is currently being finalized between the CDFG and the District, as part of the implementation of the Western Riverside County MSHCP.

On June 22, 2004, the Service issued a single incidental take permit under section 10(a)(1)(B) of the Act to 22 permittees under the Western Riverside County MSHCP to be in effect for a period of 75 years (Service 2004, entire). The Service anticipates the proposed actions will affect the flycatcher, including the loss of up to 23 percent of the modeled habitat for this species in the plan area (Service 2004, p. 227). Within the plan, and through implementation of the Riparian-Riverine Areas and Vernal Pools policy, we anticipate no loss of occupied flycatcher habitat or areas otherwise determined to have long-term conservation value for the species (Service 2004, p. 227). We concluded in our biological opinion (Service 2004, p. 227) that implementation of the plan, as proposed, was not likely to jeopardize the continued existence of the flycatcher. Our determination was based on our conclusion that based on the low level of impact anticipated to individuals of this species and because the impacts associated with loss of the flycatcher's modeled habitat, when viewed in conjunction with the protection and management of the MSHCP Conservation Area, are not anticipated to result in an appreciable reduction in the numbers, reproduction, or distribution of this subspecies throughout its range (Service 2004, p. 227).

Species-specific flycatcher conservation objectives are included in the Western Riverside County MSHCP. The MSHCP Conservation Area will include at least 4,282 ha (10,580 ac) of flycatcher habitat (breeding and migration habitat) including six core areas of high-quality habitat and interconnecting linkages, including essential segments of the Santa Ana River, San Timoteo Creek, and Temecula Creek (including Vail Lake). The plan aims to conserve 100 percent of breeding habitat for the flycatcher, including buffer areas 100 m (328 ft) adjacent to breeding areas. In addition, the Western Riverside County MSHCP requires compliance with a Riparian and Riverine Areas and Vernal Pool policy that contains provisions requiring 100 percent avoidance and long-term management and protection of breeding habitat not included in the conservation areas, unless a Biologically Equivalent or Superior Preservation Determination can demonstrate that a proposed alternative will provide equal or greater conservation benefits than avoidance.

The Service completed an internal consultation on the effects of the plan on the flycatcher and its habitat that is

found within the plan boundaries, and determined that implementation of the plan provides for the conservation of the species because it provides for the conservation of breeding and migration flycatcher habitat, the conservation of dispersal habitat and adjacent upland areas, surveys for undiscovered populations, and the maintenance and potential restoration of suitable habitat areas within the conservation area. For these reasons, critical habitat designation would not lead to incremental effects on habitat management in these areas of concern by the District. However, because of the WRC MSHCP, these areas have been excluded from the final critical habitat designation (see Exclusions).

**Comment (143):** Table 3.4 of the environmental assessment does not include the federally listed Santa Ana River woolly-star (*Eriastrum densifolium* ssp. *sanctorum*). The proposed critical habitat within the Santa Ana River floodplain could result in habitat management decisions in favor of riparian flycatcher habitat, but to the detriment of alluvial fan sage scrub species and the Santa Ana River woolly-star (*Eriastrum densifolium* ssp. *sanctorum*) conservation objectives of the Western Riverside County MSHCP.

**Our Response:** The river processes that encourage native plant growth and succession for flycatchers would be expected to benefit other native plants and wildlife as well. As a result, there should not be a conflict between conservation needs of the different species. For example, riparian areas are dynamic systems, and there are open spaces along rivers with soil types which are not conducive to dense woody plant growth for flycatchers that are more appropriate for other types of plants, such as sage scrub species or the woolly-star. Side tributaries with open washes (wide stream channels without regular flow) that may be more conducive to other species are not within our designation of flycatcher critical habitat, with the exception of areas immediately at the confluence.

**Comment (144):** The analysis of Alternative A is based only on additional stream segments, as compared to 2005 designation. This approach may underestimate adverse impacts of Alternative A.

**Our Response:** The No Action Alternative consists of areas designated in 2005. This comports with the requirements under NEPA to analyze the impacts as if none of the proposed actions were taken. Alternative A is defined as the addition of newly proposed critical habitat segments, and the analysis consists of the incremental



impact of designating those segments. The sections on cumulative impacts consider the impacts of these segments when added to those of past, present, and reasonably foreseeable future actions.

*Comment (145):* The environmental assessment appears to be based on the incorrect assumption that suitable or occupied flycatcher habitat occurs across the entirety of mapped floodplains and recovery Management Units, and that section 7 consultations would currently be required within the entire mapped floodplains and Management Units. Most floodplains and Management Units (e.g., Santa Ana River) include various habitat types such as unvegetated, open channel areas and areas that are not known to be occupied. If included in the critical habitat, these areas would be subject to section 7 consultations, further unnecessarily delaying critical flood control maintenance activities.

*Our Response:* The environmental assessment analyzes impacts based on the methodology, assumptions, and definitions of critical habitat found in the August 15, 2011, proposed rule (76 FR 50542, pp. 50553–50558). This section includes discussion of migratory habitat, lateral extent, and mapping, as they relate to coverage of areas within each management unit.

*Comment (146):* Section 3.6.2.3 of the environmental assessment incorrectly concludes that Alternative B impacts would be similar to Alternative A. Alternative B would result in the exclusion of the existing Santa Ana River Levee system from critical habitat and avoid the adverse impacts that a critical habitat designation would likely have upon the levees. The environmental assessment should accurately describe the full extent of the reduced potential adverse impacts provided by Alternative B.

Also, section 3.12.2.2 of the environmental assessment does not address all the potential adverse socioeconomic consequences of Alternative A, which would not exclude any of the proposed critical habitat units. Alternative A would include the existing Santa Ana River Levee system in the critical habitat area. This would result in possible delays in permits for levee maintenance activities as well as section 7 conservation measures to provide riparian vegetation conflicting with Federal levee certification and maintenance requirements. As a result, the levees may be decertified and approximately 1,300 ha (3,300 ac) of land (approximately 10,000 residents) would be remapped and placed in a Federal Emergency Management Agency

(FEMA) flood hazard area and required to purchase flood insurance policies for federally secured mortgages. The potential flood insurance cost should be estimated and included in the analysis of Alternative A. The flood insurance cost burden within low-income areas protected by the levees could be especially severe.

*Our Response:* The Service believes that the flood control rating for the levees would not be affected by the designation based on past conservation efforts and consultation outcomes (see our response to Comment 101 for more explanation). In addition, Service policy and precedent demonstrate that maintenance activities necessary to protect against the loss of life or property are not precluded by the Act. The Act does not expect species conservation to take precedence over protection of human life or property. For example, section 7(p) of the Act, concerning Presidentially declared disaster areas, allows for emergency actions to be taken without section 7 consultation in the event of an “emergency situation which does not allow the ordinary procedures of this section to be followed.”

Examining the section 7 consultation history for the Santa Ana sucker, for example, related to flood control operations at Cogswell Dam shows that flood protection projects (e.g., sediment control) have been allowed to continue even when critical habitat was designated for the sucker at that location. Thus, economic impacts that potentially could result from a catastrophic flood event, such as loss of life or property value, are not quantified, because management actions to prevent catastrophic flooding are not expected to be precluded due to designation of critical habitat for the flycatcher. As such, while some costs may be incurred to complete section 7 consultations, the functioning of the levee system is unlikely to be affected by the presence of the flycatcher or designated critical habitat, and, therefore, flood insurance premiums should not change.

*Comment (147):* Section 3.13.2 of the environmental assessment does not address the potential adverse environmental justice impacts of Alternative A. The potential remapping of existing developed areas behind the Santa Ana River Levees as flood hazard areas could adversely impact low income or minority communities. In addition to public health and safety concerns, a remapped floodplain would increase flood insurance costs and the residential and commercial construction costs to flood-proof structures and

comply with floodplain management requirements.

*Our Response:* For reasons describe above in response to Comment 147, the Service does not expect such remapping to occur as a result of critical habitat designation.

*Comment (148):* The Service must evaluate the air quality and greenhouse gas emissions and climate change impacts that may be caused by a critical habitat designation.

*Response:* The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation areas. The Service must use the best scientific and commercial information available; we do not believe that critical habitat will cause impacts to air quality or changes to greenhouse gas emissions.

### Required Determinations

#### *Regulatory Planning and Review* (Executive Orders 12866 and 13563)

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) will review all significant rules. The Office of Information and Regulatory Affairs has determined that this rule is significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation’s regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

#### *Regulatory Flexibility Act* (5 U.S.C. 601 *et seq.*)

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 (5 U.S.C. 801 *et seq.*), whenever an agency must publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (small businesses, small organizations,

and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of an agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities. In this final rule, we are certifying that the critical habitat designation for the flycatcher will not have a significant economic impact on a substantial number of small entities. The following discussion explains our rationale.

According to the Small Business Administration, small entities include small organizations, such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; as well as small businesses. Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and agricultural businesses with annual sales less than \$750,000. To determine if potential economic impacts on these small entities are significant, we consider the types of activities that might trigger regulatory impacts under this rule, as well as the types of project modifications that may result. In general, the term “significant economic impact” is meant to apply to a typical small business firm’s business operations.

To determine if the rule could significantly affect a substantial number of small entities, we consider the number of small entities affected within particular types of economic activities (e.g., water management, livestock grazing, residential and related development, oil and gas development, and transportation). We apply the “substantial number” test individually to each industry to determine if certification is appropriate. However, the SBREFA does not explicitly define “substantial number” or “significant economic impact.” Consequently, to assess whether a “substantial number” of small entities is affected by this designation, this analysis considers the relative number of small entities likely to be impacted in an area. In some

circumstances, especially with critical habitat designations of limited extent, we may aggregate across all industries and consider whether the total number of small entities affected is substantial. In estimating the number of small entities potentially affected, we also consider whether their activities have any Federal involvement.

Designation of critical habitat only affects activities authorized, funded, or carried out by Federal agencies. Some kinds of activities are unlikely to have any Federal involvement and so will not be affected by critical habitat designation. In areas where the species is present, Federal agencies already are required to consult with us under section 7 of the Act on activities they authorize, fund, or carry out that may affect the flycatcher. Federal agencies also must consult with us if their activities may affect critical habitat. Designation of critical habitat, therefore, could result in an additional economic impact on small entities due to the requirement to reinstate consultation for ongoing Federal activities (see *Application of the “Adverse Modification” Standard* section).

In our final economic analysis of the critical habitat designation, we evaluated the potential economic effects on small business entities resulting from conservation actions related to the listing of the flycatcher and the designation of critical habitat. The analysis is based on the estimated impacts associated with the rulemaking as described in Chapters 3 through 10 and Appendix A of the analysis and evaluates the potential for economic impacts related to: (1) Water management; (2) livestock grazing; (3) residential and related development; (4) tribes; (5) transportation; (6) mining, oil, and gas development; and (7) recreation.

#### Water Management

Within areas proposed as critical habitat, approximately 1,599 businesses are engaged in the water supply and irrigation industry. Of these, 1,350 or 84 percent have annual revenues at or below the small business threshold of \$7.0 million, and thus are considered small entities. Only one of the dams expected to incur incremental impacts is not operated by the Federal Government. The Luna Dam in the San Francisco Management Unit is owned by the Luna Irrigation Company. Because revenue information is not publicly available for this company, we conservatively assume that it is small. This small entity represents approximately 0.08 percent of the total number of small entities. Luna Irrigation Company could be expected to incur

annualized incremental impacts ranging from \$930 to \$5,800; however, due to the lack of flycatcher habitat or ability to establish flycatcher habitat, we have removed the Luna Lake portion of the San Francisco River from critical habitat designation (see Summary of Changes from Proposed Rule above). Therefore, we anticipate no impacts to this entity from the critical habitat designation.

#### Livestock Grazing

Across the areas proposed as critical habitat, 554 businesses are engaged in the beef cattle ranching and farming industry. Of these, 517 or 93 percent, have annual revenues at or below the small business threshold of \$750,000, and thus are considered small.

The analysis forecasts a total of three incremental formal section 7 consultations; therefore, we assume three small entities may incur project modification costs as a result of critical habitat designation. These three small entities represent approximately 0.49 percent of small grazers across the study area. A further 29 entities may incur some minor administrative costs associated with informal consultations and technical assistance efforts. These 29 entities represent approximately 5.6 percent of small grazing entities across the study area.

We estimate total annualized impacts to the three entities that may incur project modification costs of \$3,000 to \$5,300, or \$1,000 to \$1,800 per entity. Assuming each has annual revenues of \$39,800, these annualized impacts per small entity are expected to range from 2.51 percent to 4.52 percent of annual revenues. The remaining 29 entities are expected to incur approximately \$14,000 in annualized administrative costs, or \$480 per entity. Assuming each company has annual revenues of \$39,800, annualized impacts per small entity are estimated at 1.21 percent of annual revenues. Therefore, we find that the designation of critical habitat will not impact a significant number of entities in this sector or have a substantial impact on those potentially affected.

#### Residential and Related Development

Across the areas proposed as critical habitat, 77,348 businesses are engaged in residential and related development. Of these, 76,516 or nearly 99 percent have annual revenues at or below the relevant small business thresholds for their respective North American Industry Classification System (NAICS) codes, and thus are considered small.

We assume that one small developer will incur costs associated with land set asides, time delays, other project

modification, and administrative activities as a result of critical habitat designation. This small developer represents less than 0.01 percent of small developers across the study area. The analysis forecasts an additional six informal consultations and technical assistance efforts that are not expected to incur land value losses. The six small entities assumed to participate in these consultations represent less than 0.01 percent of small developers across the study area.

We estimate total economic impacts of \$200,000 to the one small entity that may incur costs associated with changes to its projects. Assuming the average small entity has annual revenues of approximately \$3.5 million, these annualized impacts per small entity represent approximately 5.7 percent of annual revenues. The remaining six entities are expected to incur approximately \$11,000 in annualized administrative costs, or \$1,800 per entity. Assuming each company has annual revenues of \$3.5 million, annualized impacts per small entity represent approximately 0.05 percent of annual revenues. Therefore, we find that the designation of critical habitat will not impact a significant number of entities in this sector or have a substantial impact on those potentially affected.

#### Transportation

Impacts to transportation activities are expected to be incurred largely by Federal and State agencies. These entities are not considered small. However, the analysis forecasts some administrative costs associated with roads that may be managed by county or city governments. The analysis forecasts informal and technical assistance efforts in four counties out of the 49 counties in the study area. Of these counties, 3 counties or 75 percent have populations falling below 50,000, and, therefore, are considered small. Third-party administrative costs for these three counties total \$8,300 on an annualized basis. These impacts represent between 0 and 0.06 percent of the respective county's annual revenues, and, therefore, not considered a significant impact.

#### Mining, Oil, and Gas Development

We do not forecast incremental impacts to mining activities. Moreover, the known mining companies pursuing activities in the vicinity of critical habitat are not small entities. To be considered a small entity in this industry, companies must employ fewer than 500 people. FMC employs more than 29,700 people. Grupo Mexico, the

parent company of Asarco, Inc., employed 23,931 people in 2010. Rosemont Copper anticipates employing up to 444 people directly at the Rosemont Mine. As of 2011, the parent company of Rosemont Copper, Augusta Resource Corporation, employed a total of 56 people throughout Canada and the United States. Therefore, it is unlikely that Augusta Resource Corporation will employ fewer than 500 people following construction of the Rosemont Mine.

Across the areas proposed as critical habitat, 393 businesses are engaged in the oil and gas industry. A total of 15 oil and gas companies are located within La Plata County, Colorado, and San Juan County, Utah, and may be affected by critical habitat. Of these 15 companies, 11 entities, or approximately 73 percent, employ fewer than 500 employees, and thus, are considered small.

The analysis forecasts a total of seven formal and informal section 7 consultations. Therefore, we assume that seven small oil and gas companies incur costs incremental administrative costs associated with section 7 consultation. These seven small entities may incur total administrative costs of \$200, or \$28 per entity. Assuming the average small entity has annual revenues of approximately \$2.2 million, these annualized impacts per small entity represent less than 0.01 percent of annual revenues, and, therefore, not considered a significant impact.

#### Recreation

We examined potential impacts to recreational activities, such as hiking, camping, picnicking, fishing, hunting, boating, river rafting, and ORV use, and did not forecast any incremental impacts; therefore, no incremental impacts to small entities are anticipated.

The Service's current understanding of recent case law is that Federal agencies are only required to evaluate the potential impacts of rulemaking on those entities directly regulated by the rulemaking; therefore, they are not required to evaluate the potential impacts to those entities not directly regulated. The designation of critical habitat for an endangered or threatened species only has a regulatory effect where a Federal action agency is involved in a particular action that may affect the designated critical habitat. Under these circumstances, only the Federal action agency is directly regulated by the designation, and, therefore, consistent with the Service's current interpretation of RFA and recent case law, the Service may limit its evaluation of the potential impacts to those identified for Federal action

agencies. Under this interpretation, there is no requirement under the RFA to evaluate the potential impacts to entities not directly regulated, such as small businesses. However, Executive Orders 12866 and 13563 direct Federal agencies to assess costs and benefits of available regulatory alternatives in quantitative (to the extent feasible) and qualitative terms. Consequently, it is the current practice of the Service to assess to the extent practicable these potential impacts if sufficient data are available, whether or not this analysis is believed by the Service to be strictly required by the RFA. In other words, while the effects analysis required under the RFA is limited to entities directly regulated by the rulemaking, the effects analysis under the Act, consistent with the EO regulatory analysis requirements, can take into consideration impacts to both directly and indirectly impacted entities, where practicable and reasonable.

In doing so, we focus on the specific areas being designated as critical habitat and compare the number of small business entities potentially affected in that area with other small business entities in the region, instead of comparing the entities in the area of designation with entities nationally, which is more commonly done. This analysis results in an estimation of a higher number of small businesses potentially affected. If we were to calculate that value based on the proportion nationally, then our estimate would be significantly lower. Following our evaluation of potential effects to small business entities from this rulemaking, we conclude that the number of potentially affected small businesses is not substantial.

In summary, we have considered whether this revised designation will result in a significant economic effect on a substantial number of small entities. Given that this final rule excludes 1270.4 km (789.6 mi) of stream segments from final designation, the costs of the critical habitat designation will likely be even lower. Based on the above reasoning and currently available information, we concluded that this rule will not result in a significant economic impact on a substantial number of small entities. Therefore, we are affirming our certification that the designation of critical habitat for the flycatcher will not have a significant economic impact on a substantial number of small entities, and a regulatory flexibility analysis is not required.

*Energy Supply, Distribution, or Use—Executive Order 13211*

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. The Office of Management and Budget (OMB) has provided guidance for implementing this Executive Order that outlines nine outcomes that may constitute “a significant adverse effect” when compared to not taking the regulatory action under consideration.

Some dams within the flycatcher proposed critical habitat area have installed hydroelectric capacity; however, the conclusion found in our economic analysis does not forecast any changes to the timing or amount of water spilled at these dams.

With respect to potential impacts to the oil and gas development industry, representatives express concern that development activity in La Plata County, Colorado, and San Juan County, Utah, will be subject to section 7 consultation as a result of the designation. They estimate additional per project costs of \$20,000, and potential time delays, associated with the consultation activity. Total energy production from natural gas wells in these counties totaled 433 million Mcf (1 Mcf = one thousand cubic feet) in 2010, or approximately 1.6 percent of the 26.86 billion Mcf produced in the United States in the same year.

Based on the protections already afforded riparian habitat, we project only seven formal and information consultations over the timeframe for the analysis. Because total present value incremental administrative costs are \$11,000 over 20 years, costs associated with section 7 consultation are unlikely to increase the cost of energy production in the United States in excess of 1 percent.

The economic analysis finds that energy-related impacts associated with flycatcher conservation activities within critical habitat are not expected (Industrial Economics, Inc. 2012, pp. A-17–A18). As such, the designation of critical habitat is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

*Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)*

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.), we make the following findings:

(1) This rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or tribal governments, or the private sector, and includes both “Federal intergovernmental mandates” and “Federal private sector mandates.” These terms are defined in 2 U.S.C. 658(5)–(7). “Federal intergovernmental mandate” includes a regulation that “would impose an enforceable duty upon State, local, or tribal governments” with two exceptions. It excludes “a condition of Federal assistance.” It also excludes “a duty arising from participation in a voluntary Federal program,” unless the regulation “relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority,” if the provision would “increase the stringency of conditions of assistance” or “place caps upon, or otherwise decrease, the Federal Government’s responsibility to provide funding,” and the State, local, or tribal governments “lack authority” to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. “Federal private sector mandate” includes a regulation that “would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program.”

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate

in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this rule will significantly or uniquely affect small governments because it would not produce a Federal mandate of \$100 million or greater in any year; that is, it is not a “significant regulatory action” under the Unfunded Mandates Reform Act. The FEA concludes incremental impacts may occur due to administrative costs of section 7 consultations for water management, livestock grazing, residential and related development, tribal, transportation, mining, oil, and gas development, and recreation projects; however, these are not expected to significantly affect small governments. Incremental impacts stemming from various species conservation and development control activities are expected to be borne by the Federal Government, State agencies, with some effects to water and livestock grazing operators, and land, oil, and gas developers, which are not considered small governments. The designation of critical habitat imposes no obligations on State or local governments. By definition, Federal agencies are not considered small entities, although the activities they fund or permit may be proposed or carried out by small entities. Consequently, we do not believe that the critical habitat designation will significantly or uniquely affect small government entities. As such, a Small Government Agency Plan is not required.

*Takings—Executive Order 12630*

In accordance with Executive Order 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for the flycatcher in a takings implications assessment. As discussed above, the designation of critical habitat affects only Federal actions. Although private parties that receive Federal funding, assistance, or require approval or authorization from a Federal agency for an action may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. The takings implications assessment concludes that this designation of critical habitat for the flycatcher does not pose significant takings implications for lands within or affected by the designation.

*Federalism—Executive Order 13132*

In accordance with Executive Order 13132 (Federalism), this rule does not have significant Federalism effects. A federalism impact summary statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, this critical habitat designation with appropriate State resource agencies in California, Arizona, Nevada, Utah, Colorado, and New Mexico. We received comments from state wildlife agencies of Arizona, Nevada, Arizona, and Colorado. We also received comments from The State of Utah's Governor's office. We have addressed them in the Summary of Comments and Recommendations section of the rule. The designation of critical habitat in areas currently occupied by the flycatcher may impose nominal additional regulatory restrictions to those currently in place and, therefore, may have little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments in that the areas that contain the physical or biological features essential to the conservation of the species are more clearly defined, and the elements of the features of the habitat necessary to the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist local governments in long-range planning (rather than having them wait for case-by-case section 7 consultations to occur).

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) will be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

*Civil Justice Reform—Executive Order 12988*

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the applicable standards set forth in sections 3(a) and

3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the Act. This final rule uses standard property descriptions and identifies the elements of physical or biological features essential to the conservation of the flycatcher within the designated areas to assist the public in understanding the habitat needs of the species.

*Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)*

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

*National Environmental Policy Act (42 U.S.C. 4321 et seq.)*

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 et seq.) in connection with designating critical habitat under the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)). However, when the range of the species includes States within the Tenth Circuit, such as that of flycatcher, under the Tenth Circuit ruling in *Catron County Board of Commissioners v. U.S. Fish and Wildlife Service*, 75 F.3d 1429 (10th Cir. 1996), we prepare an environmental assessment.

We prepared a draft environmental assessment for flycatcher critical habitat designation and notified the public of its availability in the **Federal Register** on July 12, 2012 (77 FR 41147). We also accepted public comments on the draft environmental assessment and made revisions in response to many of those comments (see Summary of Comment and Recommendations above). In preparing the environmental assessment, we also considered the previous critical habitat designation in 2005, internal scoping within the Service, a review of the previous consultation history of the species, and

a review of public comments we received on the August 15, 2011, proposed rule (76 FR 50542).

We analyzed the potential impacts of critical habitat designation on the following resources and resource management types: Land use and management; fish, wildlife, and plants (including endangered and threatened species); fire management; water resources (including water management projects and groundwater pumping); livestock grazing; construction and development; tribal trust resources; soils and mineral resources; recreation; socioeconomic; and environmental justice. We found that the designation of critical habitat for the flycatcher would not have direct impacts on the environment as designation is not expected to impose land use restrictions or prohibit land use activities. However, the designation of critical habitat could: (1) Increase the number of additional section 7 consultations for proposed projects within designated critical habitat; (2) increase the number of reinitiated section 7 consultations for ongoing projects within designated critical habitat; (3) maintain the flycatcher's primary constituent elements; (4) increase the likelihood of greater expenditures of time and Federal funds to develop measures to prevent both adverse effects to the species and adverse modification to critical habitat; and (5) indirectly increase the likelihood of greater expenditure of non-Federal funds by project proponents to complete section 7 consultations and to develop reasonable and prudent alternatives (to avoid adverse modification of critical habitat by Federal agencies) that maintain critical habitat. Such an increase might occur where there is a Federal nexus to actions within areas with no known flycatcher territories, or from the addition of adverse modification analyses to jeopardy consultations in known flycatcher habitat.

The primary purpose of preparing an environmental assessment under NEPA is to determine whether a proposed action would have significant impacts on the human environment. If significant impacts may result from a proposed action, then an environmental impact statement is required (40 CFR 1502.3). Whether a proposed action exceeds a threshold of significance is determined by analyzing the context and the intensity of the proposed action (40 CFR 1508.27). Our environmental assessment found that the impacts of the proposed critical habitat designation would be minor and not rise to a significant level, so preparation of an environmental impact statement is not

required. Copies of our final environmental assessment and Finding of No Significant Impact can be found at <http://www.fws.gov/southwest/es/arizona>, <http://www.regulations.gov> at Docket No. FWS-R2-ES-2011-0053, and at the Arizona Ecological Services Office (see **FOR FURTHER INFORMATION CONTACT**).

#### *Government-to-Government Relationship with Tribes*

In accordance with the President's memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to tribes.

There were tribal lands in California, Utah, Arizona, Colorado, and New

Mexico included in the proposed designation of flycatcher critical habitat. At the end of the 2007 flycatcher breeding season, 5 percent of all known breeding sites were administered by Native American Tribes (Durst *et al.* 2007, p. 17). Using the criteria found in the *Criteria Used To Identify Critical Habitat* section, we determined that all of the areas proposed for designation on tribal lands were essential to flycatcher conservation. We sought government-to-government consultation with these tribes throughout the proposal and development of this final designation of flycatcher critical habitat, and we spoke to tribal representatives at conferences, meetings, and public hearings about the designation. We communicated with tribes through letters, electronic messages, and telephone calls about our exclusion process under section 4(b)(2) of the Act, and we provided templates and information to develop management plans, technical assistance and review of management plans, and critical habitat designation information and schedule updates. We considered these tribal areas for exclusion from final critical habitat designation to the extent consistent with the requirements of 4(b)(2) of the Act, and subsequently, excluded all tribal lands from this final designation.

#### **References Cited**

A complete list of all references cited is available on the Internet at <http://www.regulations.gov> and upon request

from the Arizona Ecological Services Office (see **FOR FURTHER INFORMATION CONTACT**).

#### **Authors**

The primary authors of this rulemaking are the staff members of the Arizona Ecological Services Office.

#### **List of Subjects in 50 CFR Part 17**

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

#### **Regulation Promulgation**

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

#### **PART 17—[AMENDED]**

■ 1. The authority citation for part 17 continues to read as follows:

**Authority:** 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

■ 2. Amend § 17.11(h) by revising the entry for “Flycatcher, southwestern willow” under “BIRDS” in the List of Endangered and Threatened Wildlife to read as follows:

#### **§ 17.11 Endangered and threatened wildlife.**

\* \* \* \* \*

(h) \* \* \*

Species		Historic range	Vertebrate pop- ulation where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
BIRDS							
Flycatcher, south- western willow.	<i>Empidonax traillii extimus</i> .	U.S.A. (AZ, CA, CO, NM, NV, TX, UT), Mexico.	Entire	E .....	577	17.95(b)	NA

■ 3. In § 17.95, amend paragraph (b) by revising the entry for “Southwestern Willow Flycatcher (*Empidonax traillii extimus*)” to read as follows:

**§ 17.95 Critical habitat—fish and wildlife.**

\* \* \* \* \*

(b) *Birds.*

\* \* \* \* \*

**Southwestern Willow Flycatcher**  
(*Empidonax traillii extimus*)

(1) Critical habitat units are depicted for Inyo, Kern, Los Angeles, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura Counties in California; Clark, Lincoln, and Nye Counties in southern Nevada; Kane, San Juan, and Washington Counties in southern Utah; Alamosa, Conejos, Costilla, and La Plata Counties in southern Colorado; Apache, Cochise, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Pima, Pinal, Santa Cruz, and Yavapai Counties in Arizona; and Catron, Grant, Hidalgo, Mora, Rio Arriba, Socorro, Taos, and Valencia Counties in New Mexico on the maps and as described below.

(2) Within these areas, the primary constituent elements of the physical and biological features essential to the conservation of the southwestern willow flycatcher consist of two components:

(i) *Riparian vegetation.* Riparian habitat along a dynamic river or lakeside, in a natural or manmade successional environment (for nesting, foraging, migration, dispersal, and shelter) that is comprised of trees and shrubs (that can include Gooddings willow, coyote willow, Geyer’s willow,

arroyo willow, red willow, yewleaf willow, pacific willow, boxelder, tamarisk, Russian olive, buttonbush, cottonwood, stinging nettle, alder, velvet ash, poison hemlock, blackberry, seep willow, oak, rose, sycamore, false indigo, Pacific poison ivy, grape, Virginia creeper, Siberian elm, and walnut) and some combination of:

(A) Dense riparian vegetation with thickets of trees and shrubs that can range in height from about 2 meters (m) to 30 m (about 6 feet (ft) to 98 ft). Lower-stature thickets (2 to 4 m or 6 to 13 ft tall) are found at higher elevation riparian forests, and tall-stature thickets are found at middle- and lower-elevation riparian forests;

(B) Areas of dense riparian foliage at least from the ground level up to approximately 4 m (13 ft) above ground or dense foliage only at the shrub or tree level as a low, dense canopy;

(C) Sites for nesting that contain a dense (about 50 percent to 100 percent) tree or shrub (or both) canopy (the amount of cover provided by tree and shrub branches measured from the ground);

(D) Dense patches of riparian forests that are interspersed with small openings of open water or marsh or areas with shorter and sparser vegetation that creates a variety of habitat that is not uniformly dense. Patch size may be as small as 0.1 hectare (ha) (0.25 acre (ac)) or as large as 70 ha (175 ac).

(ii) *Insect prey populations.* A variety of insect prey populations found within or adjacent to riparian floodplains or moist environments, which can include: flying ants, wasps, and bees

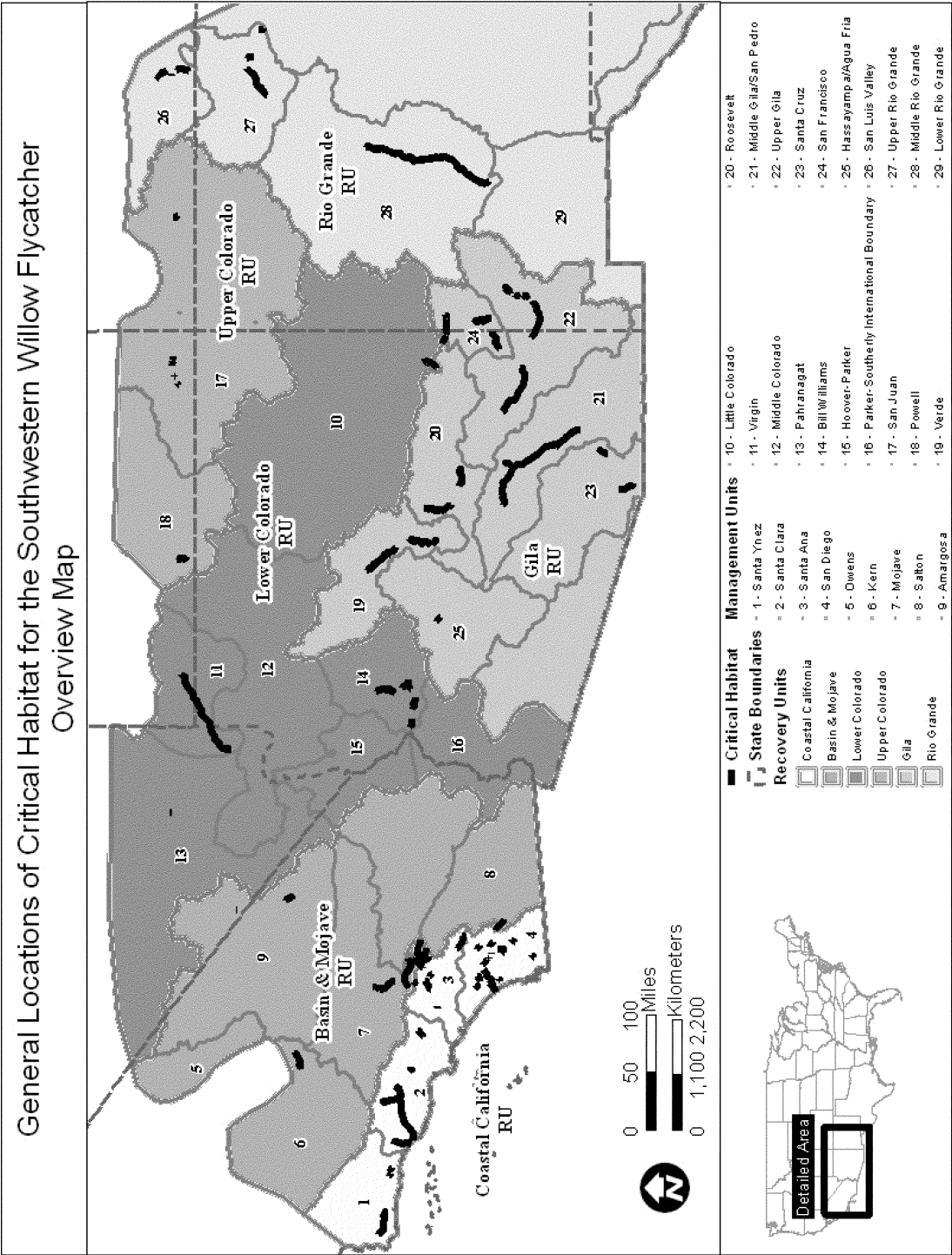
(Hymenoptera); dragonflies (Odonata); flies (Diptera); true bugs (Hemiptera); beetles (Coleoptera); butterflies, moths, and caterpillars (Lepidoptera); and spittlebugs (Homoptera).

(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on February 4, 2013.

(4) *Critical habitat map units.* Data layers defining map units were created in two steps. First, the linear segments were mapped from the National Hydrologic Dataset using USA Contiguous Equidistant Conic (North American Datum 1983) coordinates. Next, the lateral extents were digitized over the most recent available aerial photography using Albers Equal Area Conic (North American Datum 1983) coordinates. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at the field office internet site (<http://www.fws.gov/southwest/es/arizona/>), <http://www.regulations.gov> at Docket No. FWS–R2–ES–2011–0053, and at the Arizona Ecological Services Office. The textual description for each critical habitat unit below includes the Universal Transverse Mercator (UTM) zone and UTM easting (E) and northing (N) coordinate pairs for the starting and ending points.

(5) Index map of southwestern willow flycatcher critical habitat units follows:

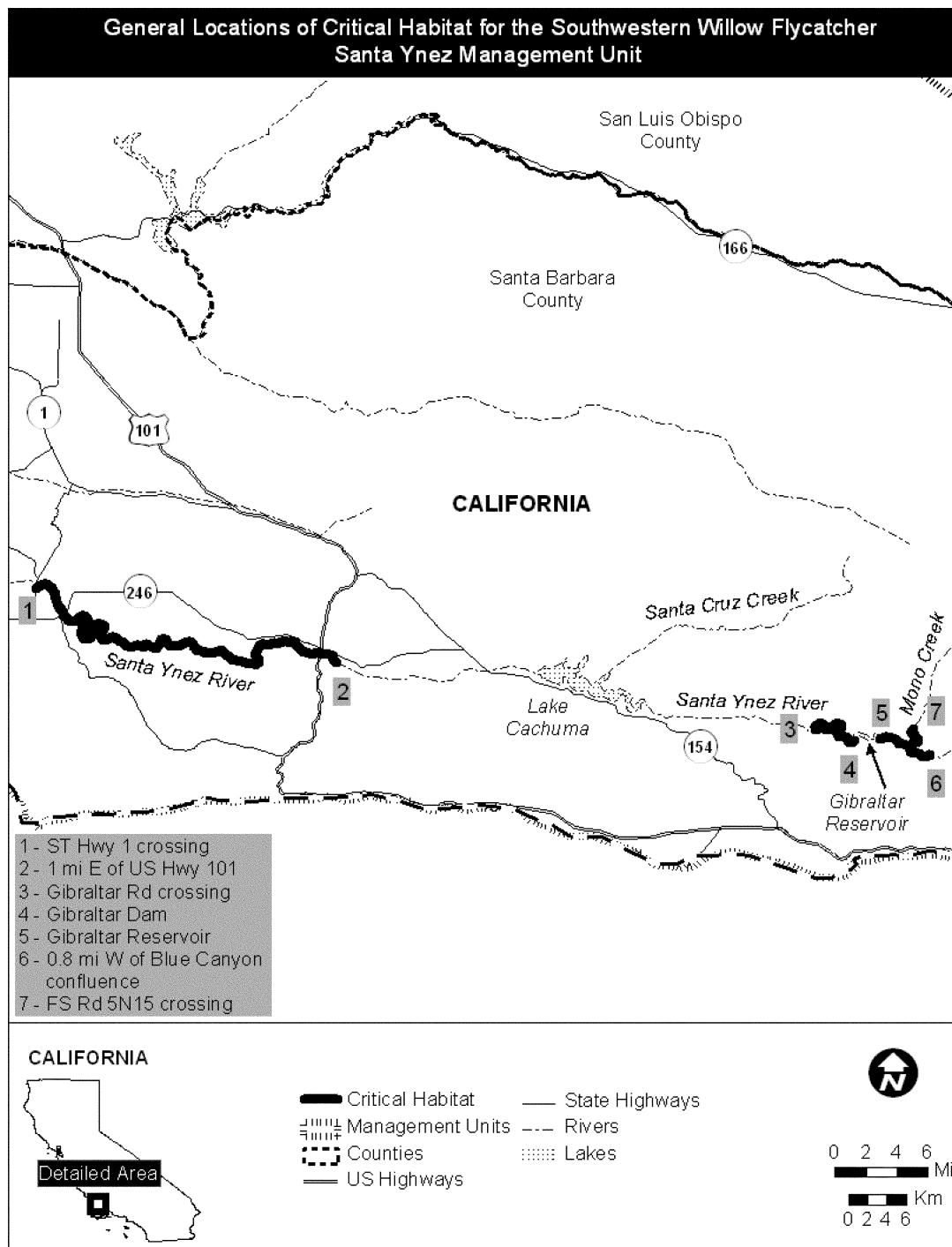




(6) Santa Ynez Management Unit. (i)

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Santa Ynez River (east) .....	11, 259890, 3821926 .....	11, 255550, 3823716.
Santa Ynez River (middle) .....	11, 253343, 3823606 .....	11, 249967, 3824847.
Santa Ynez River (west) .....	10, 759116, 3832075 .....	10, 732972, 3839168.
Mono Creek .....	11, 258529, 3824766 .....	11, 258310, 3822974.

(ii) Map of Santa Ynez Management Unit follows:

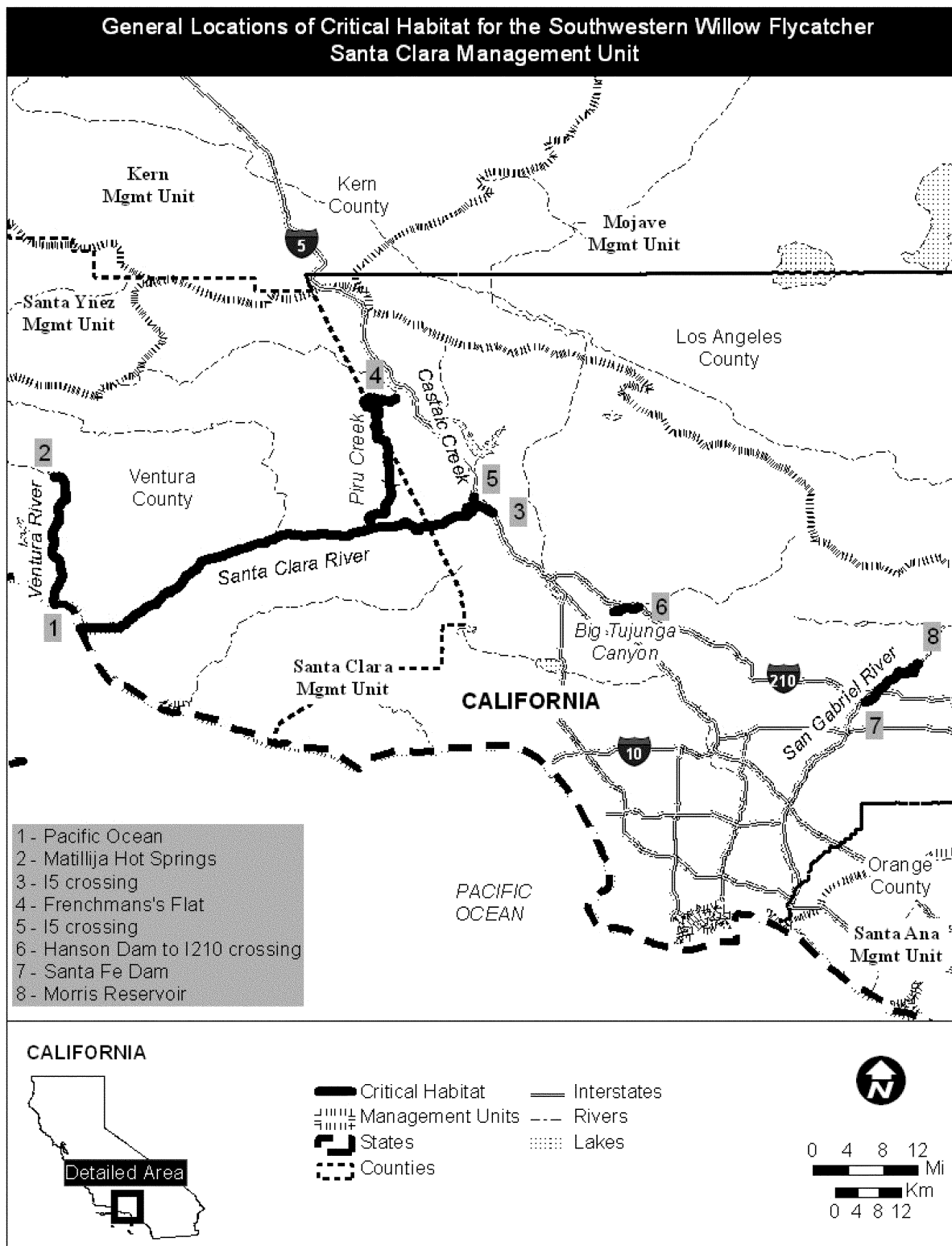


(7) Santa Clara Management Unit.

(i)

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Ventura River .....	11, 287996, 3818329 .....	11, 287559, 3794961.
Santa Clara River .....	11, 354467, 3810419 .....	11, 291354, 3790556.
Piru Creek .....	11, 339998, 3831805 .....	11, 335776, 3807951.
Castaic Creek .....	11, 351629, 3813373 .....	11, 350055, 3809756.
Big Tujunga Canyon Creek .....	11, 376326, 3792941 .....	11, 372432, 3792049.
San Gabriel River .....	11, 418737, 3781999 .....	11, 410558, 3775011.

(ii) Map of Santa Clara Management Unit follows:



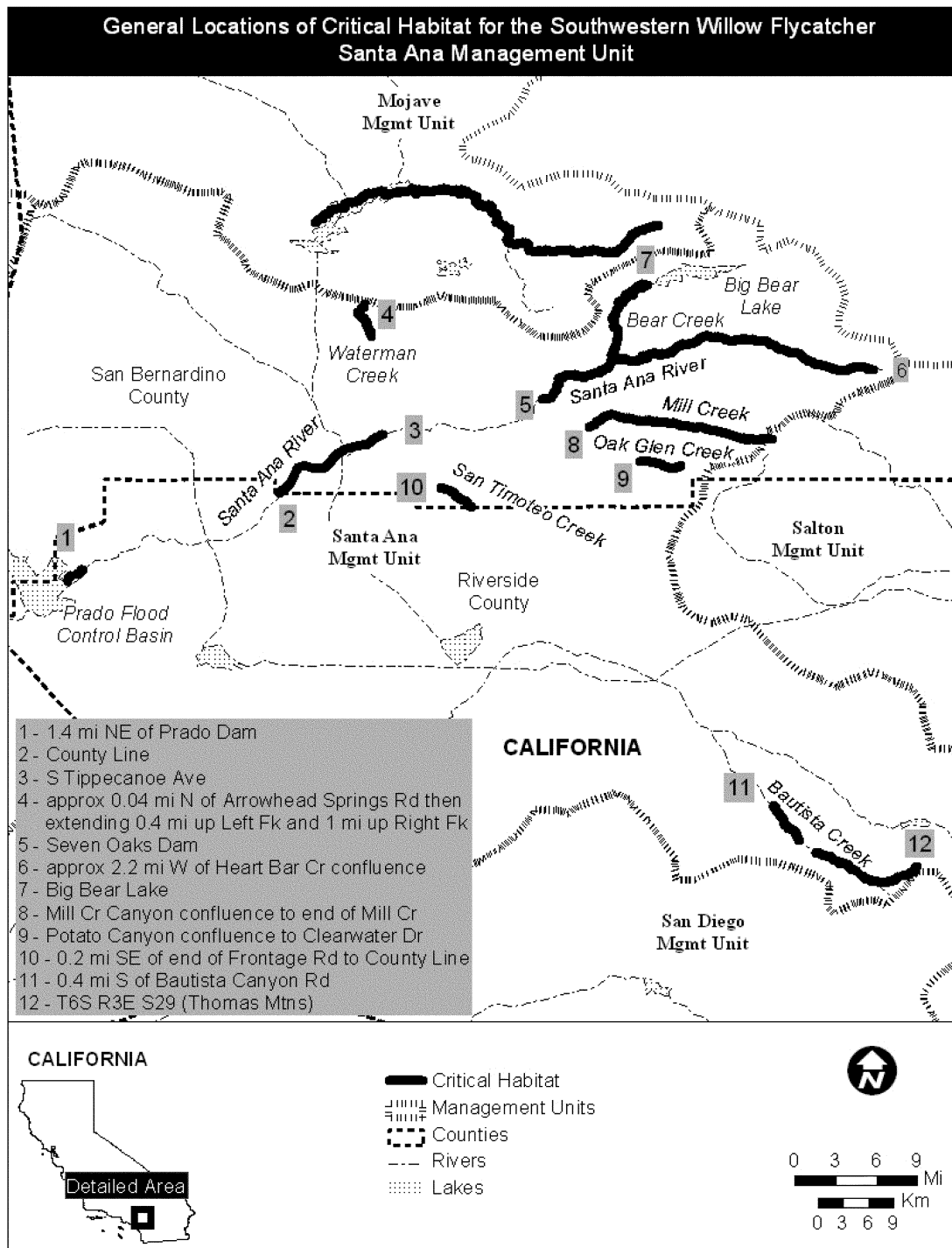
(8) Santa Ana Management Unit.

(i)

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Santa Ana River (east) .....	11, 524293, 3778965 .....	11, 491603, 3775416.
Santa Ana River (middle) .....	11, 476054, 3771257 .....	11, 465807, 3764349.
Santa Ana River (west) .....	11, 446395, 3755315 .....	11, 445684, 3754790.
Santa Ana River (west) .....	11, 445183, 3754633 .....	11, 444806, 3753995.
Waterman Creek (left fork) .....	11, 473453, 3785826 .....	11, 473755, 3785448.

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Waterman Creek (right fork) .....	11, 474240, 3786803 .....	11, 473755, 3785448.
Waterman Creek .....	11, 474905, 3782822 .....	11, 473755, 3785448.
Bear Creek .....	11, 502121, 3788996 .....	11, 498606, 3779948.
Mill Creek .....	11, 513502, 3770687 .....	11, 496356, 3772092.
Oak Glen Creek .....	11, 505534, 3767595 .....	11, 501351, 3768018.
San Timoteo Creek .....	11, 484708, 3762642 .....	11, 481625, 3764986.
Bautista Creek (east) .....	11, 528791, 3720143 .....	11, 527304, 3719071.
Bautista Creek (middle) .....	11, 526904, 3718922 .....	11, 518771, 3721743.
Bautista Creek (west) .....	11, 517140, 3723124 .....	11, 514531, 3727407.

(ii) Map of Santa Ana Management  
Unit follows:



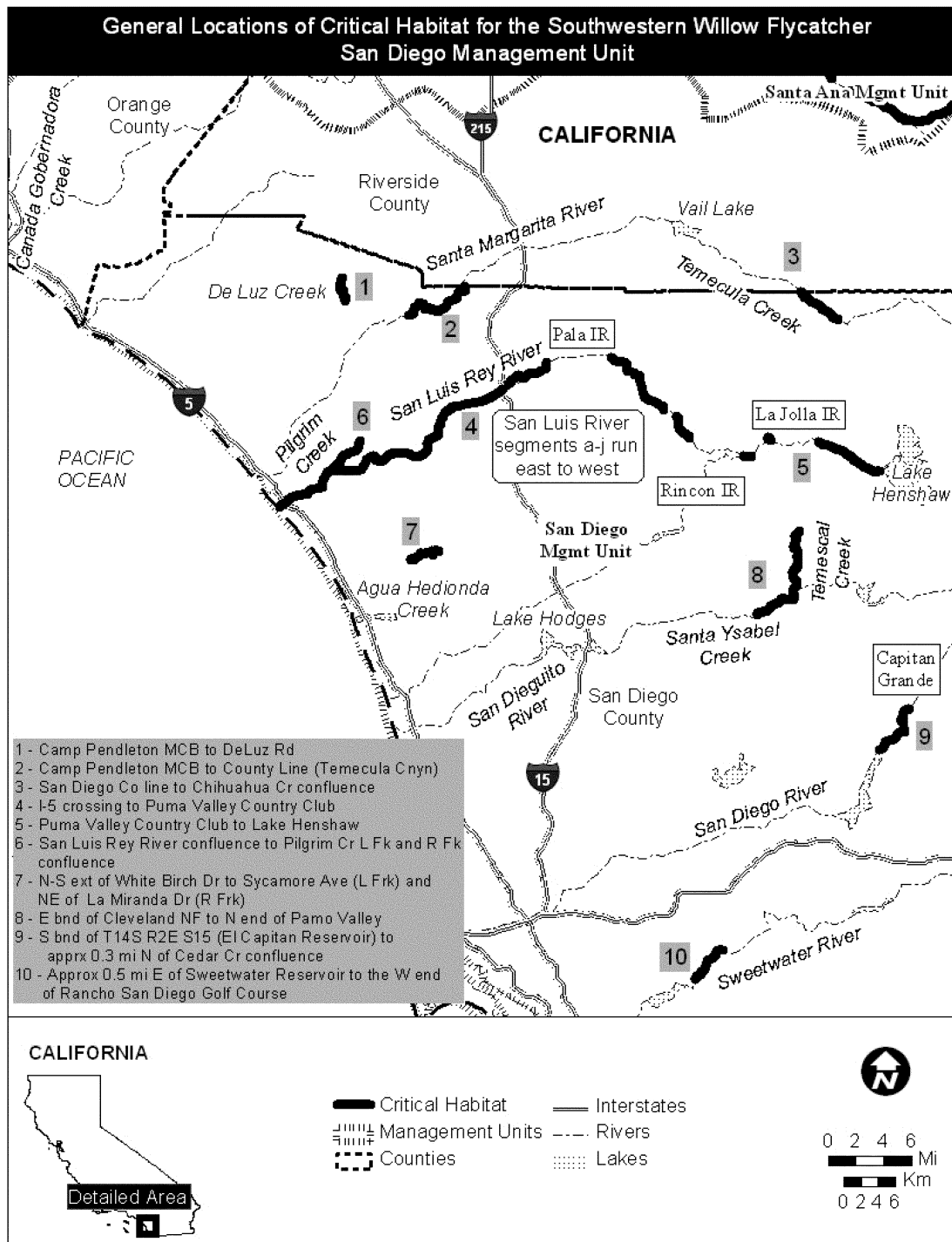
(9) San Diego Management Unit.

(i)

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
DeLuz Creek .....	11, 469888, 3700258 .....	11, 470085, 3697512.
Santa Margarita River .....	11, 481662, 3699235 .....	11, 476206, 3695949.
Temecula Creek .....	11, 517749, 3695379 .....	11, 514170, 3698604.
Pilgrim Creek .....	11, 471495, 3681452 .....	11, 468703, 3677979.
San Luis Rey (a) .....	11, 521911, 3678001 .....	11, 515935, 3681292.
San Luis Rey (b) .....	11, 511327, 3681486 .....	11, 510983, 3681512.
San Luis Rey (c) .....	11, 509443, 3679678 .....	11, 508633, 3679673.
San Luis Rey (d) .....	11, 503450, 3681703 .....	11, 502102, 3684334.
San Luis Rey (e) .....	11, 500948, 3684975 .....	11, 497954, 3689280.
San Luis Rey (f) .....	11, 497754, 3689394 .....	11, 497376, 3690144.

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
San Luis Rey (g) .....	11, 497295, 3690329 .....	11, 496153, 3690759.
San Luis Rey (h) .....	11, 496081, 3690813 .....	11, 495783, 3690993.
San Luis Rey (i) .....	11, 489568, 3690435 .....	11, 485862, 3687887.
San Luis Rey (j) .....	11, 485350, 3687335 .....	11, 463676, 3673857.
Agua Hedionda Creek (right fork) .....	11, 478544, 3668255 .....	11, 478368, 3668540.
Agua Hedionda Creek (left fork) .....	11, 479102, 3668675 .....	11, 478368, 3668540.
Agua Hedionda Creek (east) .....	11, 478368, 3668540 .....	11, 477313, 3668413.
Agua Hedionda Creek (west) .....	11, 477300, 3668395 .....	11, 476338, 3667736.
Santa Ysabel River .....	11, 510002, 3661282 .....	11, 513775, 3664649.
San Diego River (north) .....	11, 524742, 3650609 .....	11, 524200, 3648866.
San Diego River (south) .....	11, 524334, 3648051 .....	11, 521806, 3645774.
Sweetwater River (east) .....	11, 506745, 3622685 .....	11, 505588, 3621746.
Sweetwater River (west) .....	11, 505445, 3621626 .....	11, 503989, 3619356.

(ii) Map of San Diego Management  
Unit follows:



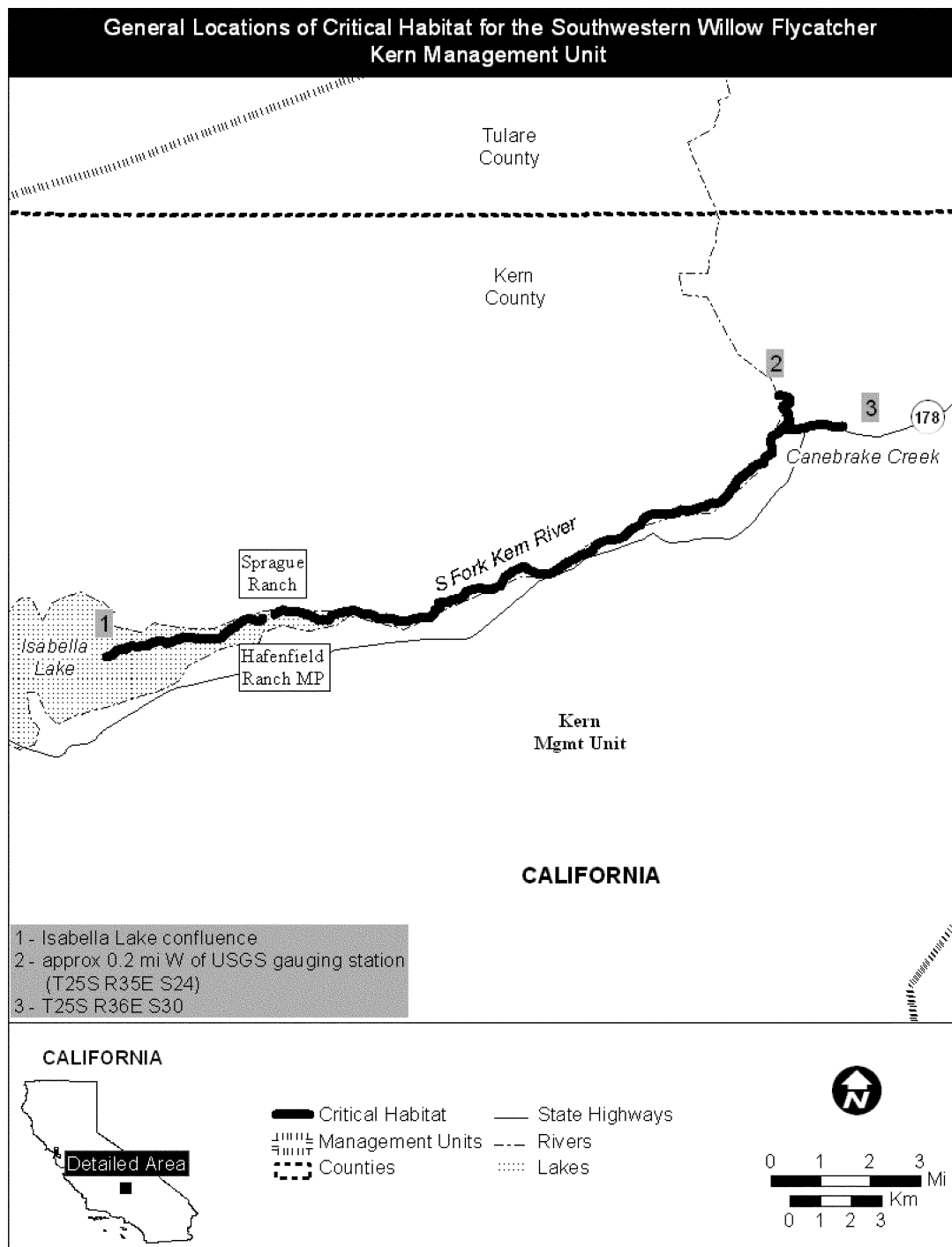
(10) Kern Management Unit.

(i)

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
South Fork Kern River (east) .....	11, 393579, 3955510 .....	11, 380211, 3948598.
South Fork Kern River (west) .....	11, 379924, 3948465 .....	11, 375779, 3947268.
Canebrake Creek .....	11, 395263, 3954472 .....	11, 393671, 3954409.

(ii) Map of Kern Management Unit follows:

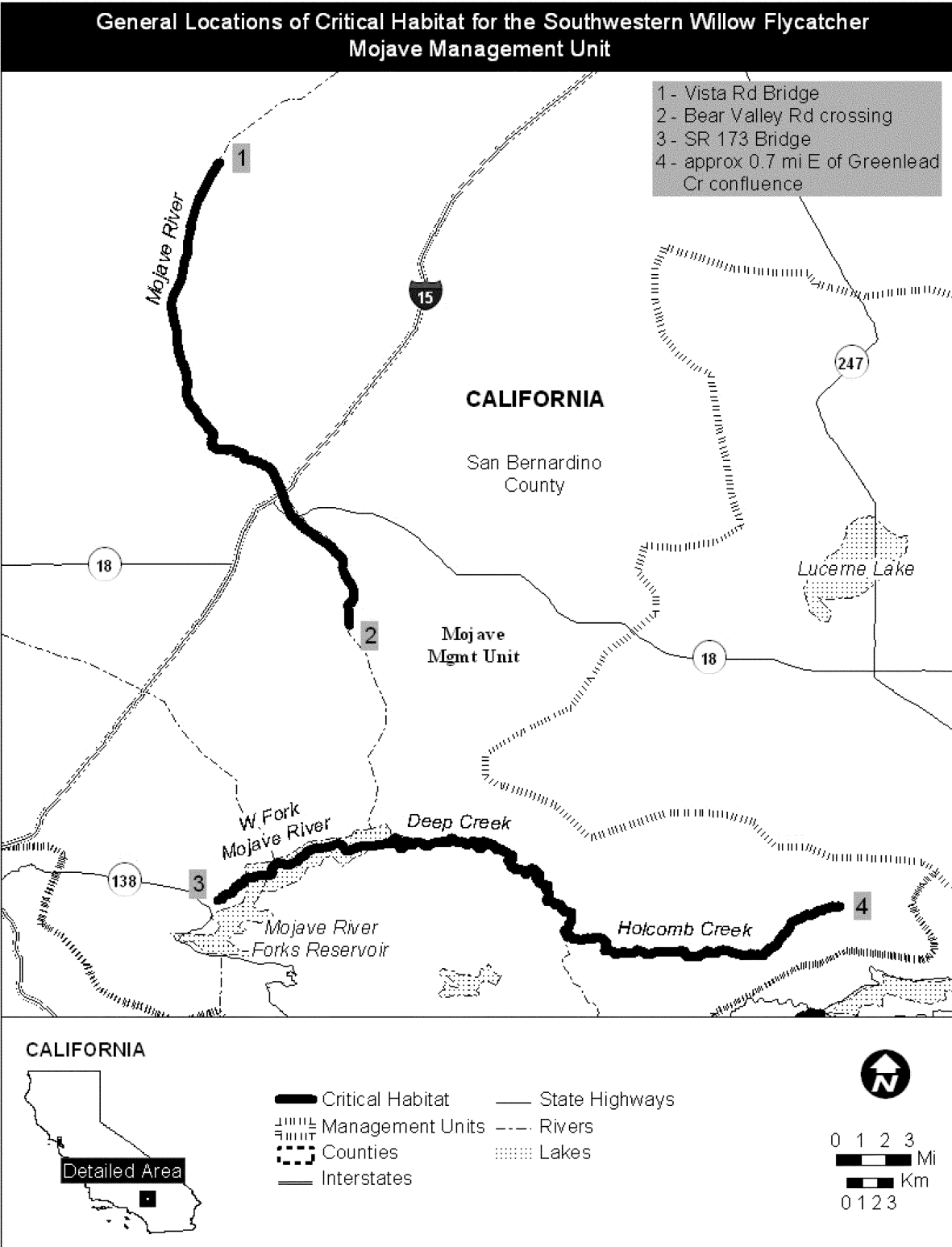




## (11) Mojave Management Unit. (i)

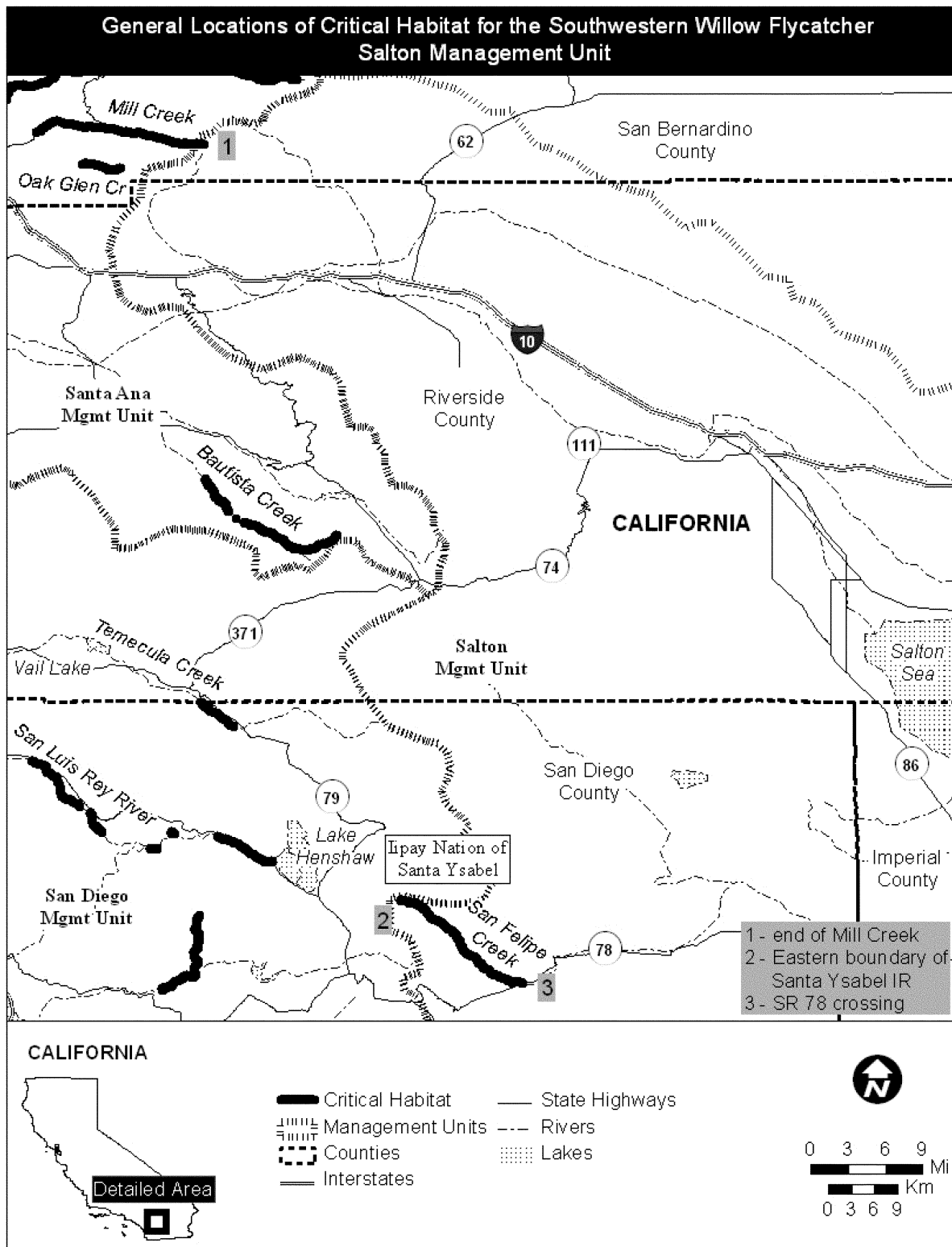
Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Mojave River .....	11, 469646, 3844680 .....	11, 476583, 3814381.
Holcomb Creek .....	11, 503127, 3796007 .....	11, 488326, 3794046.
Deep Creek .....	11, 488326, 3794046 .....	11, 478190, 3800025.
West Fork Mojave River .....	11, 478190, 3800025 .....	11, 469339, 3796375.

(ii) Map of Mojave Management Unit follows:



(12) Salton Management Unit.	(i)		
Stream segment		Start: UTM Zone, E, N	End: UTM Zone, E, N
San Felipe Creek .....		11, 549258, 3662280 .....	11, 535835, 3672883.
Mill Creek .....		11, 514349, 3770661 .....	11, 513502, 3770687.

(ii) Map of Salton Management Unit follows:

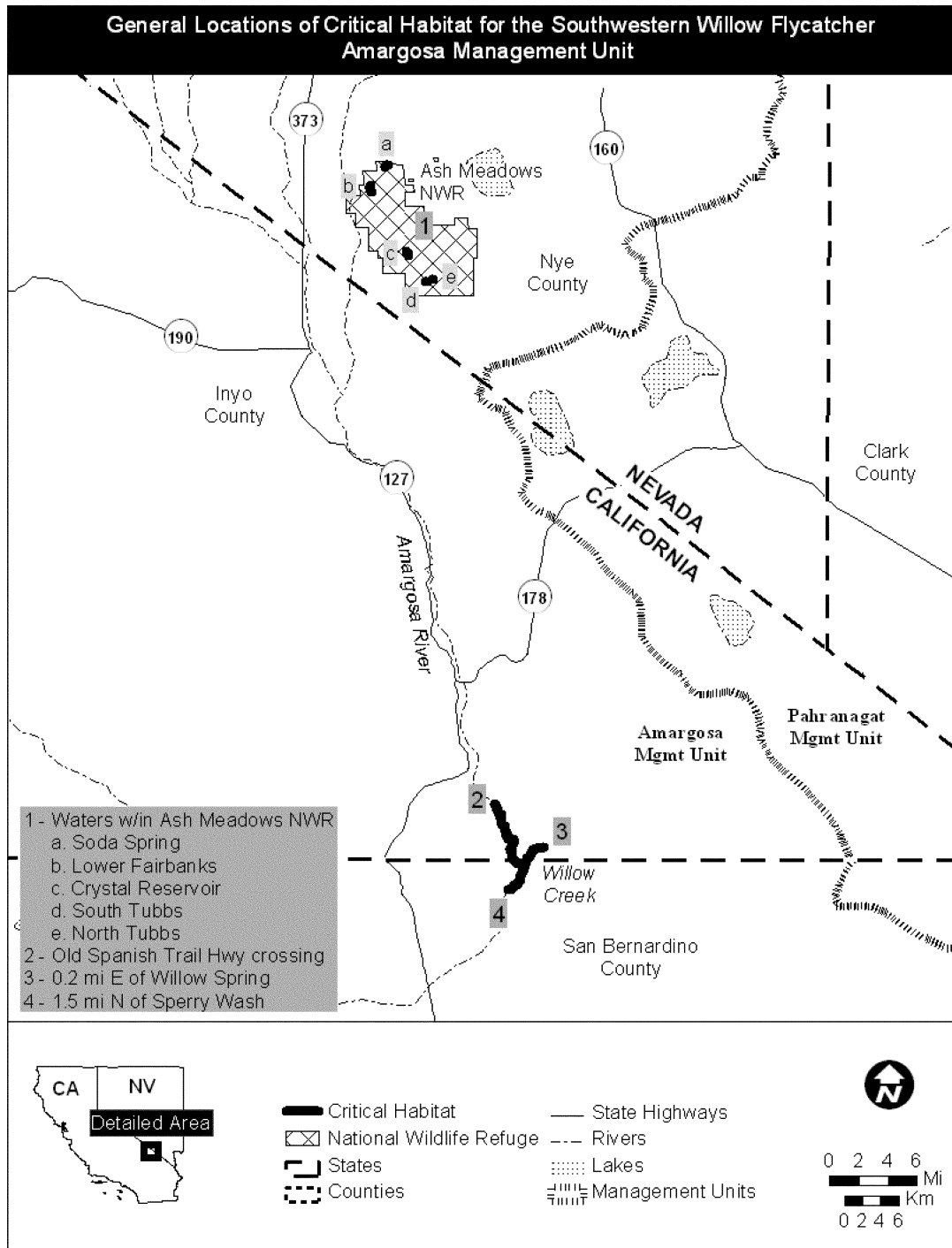


(13) Amargosa Management Unit.

(i)

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Amargosa River .....	11, 569473, 3967513 .....	11, 570730, 3958035.
Willow Creek .....	11, 574000, 3962736 .....	11, 572077, 3960419.
Soda Springs—Ash Meadows NWR .....	11, 559404, 4038346 .....	11, 559130, 4038028.
Lower Fairbanks—Ash Meadows NWR .....	11, 557831, 4036089 .....	11, 557907, 4035290.
Crystal Reservoir—Ash Meadows NWR .....	11, 561026, 4028705 .....	11, 561308, 4028268.
North Tubbs—Ash Meadows NWR .....	11, 562783, 4025401 .....	11, 562971, 4025329.
South Tubbs—Ash Meadows NWR .....	11, 563507, 4025681 .....	11, 563484, 4025649.

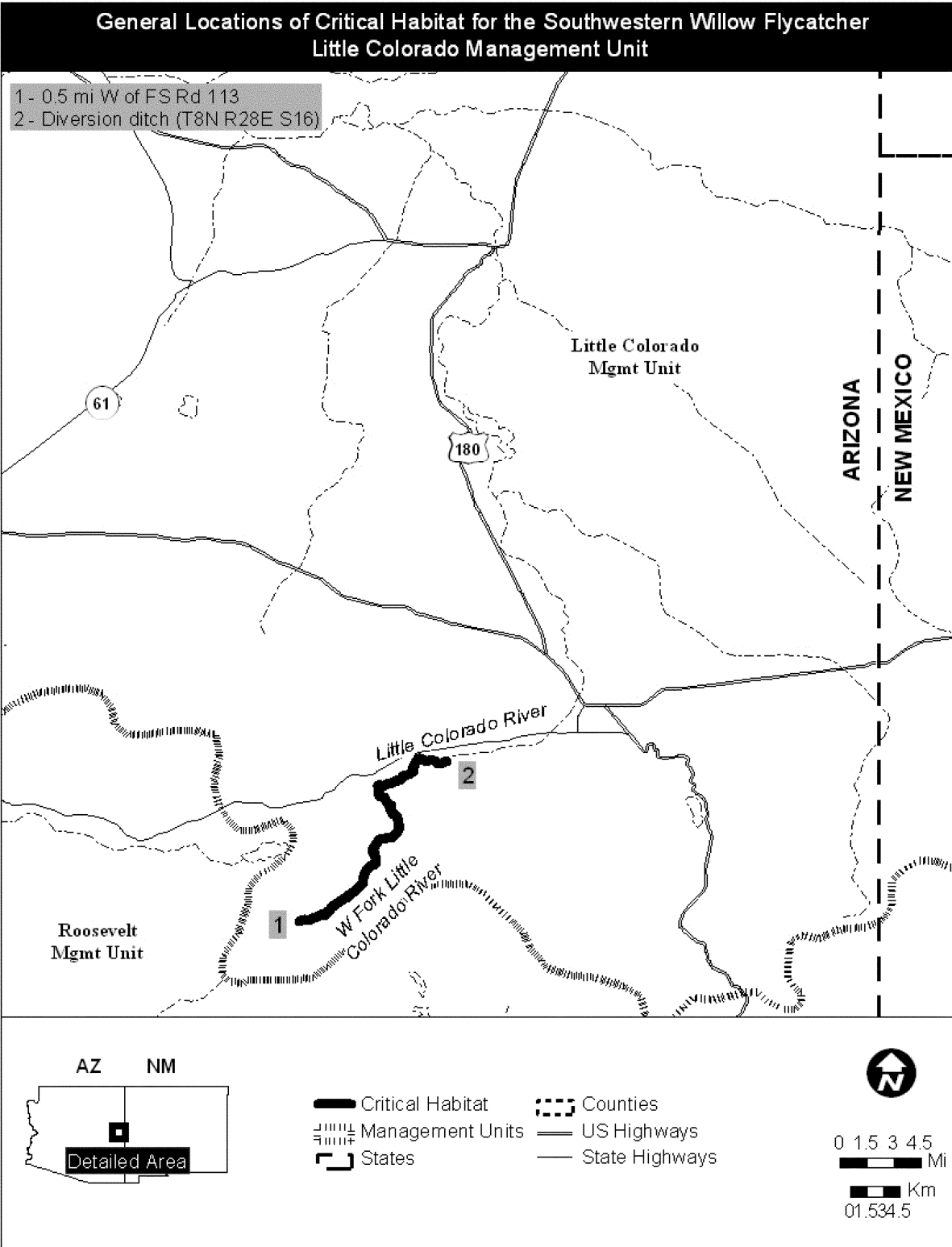
(ii) Map of Amargosa Management Unit follows:



(14) Little Colorado Management Unit. (i)

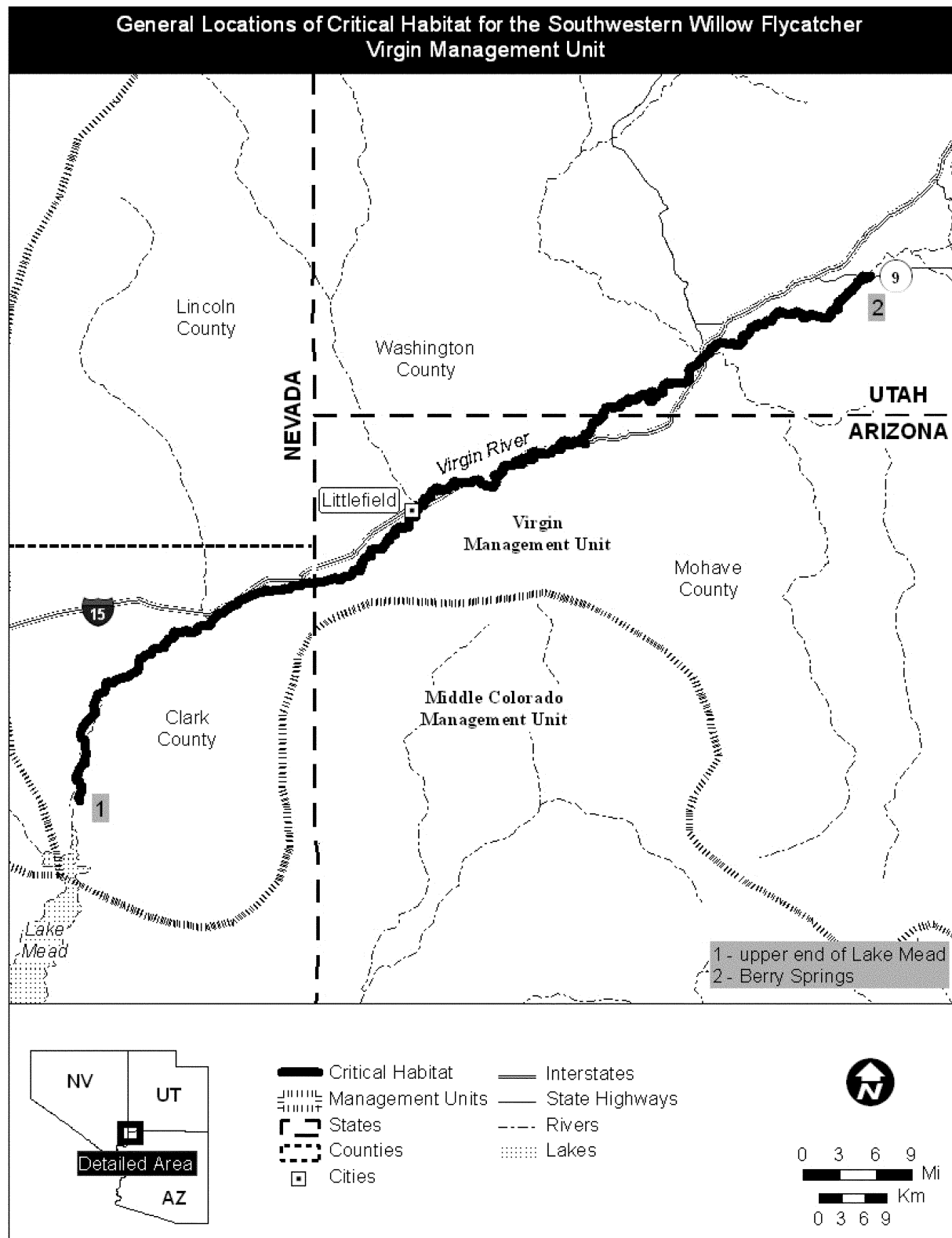
Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
West Fork Little Colorado River .....	12, 636971, 3758442 .....	12, 642537, 3763668.
Little Colorado River .....	12, 642537, 3763668 .....	12, 647842, 3773009.

(ii) Map of Little Colorado Management Unit follows:



(15) Virgin Management Unit. (i)		
Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Virgin River .....	12, 288341, 4116050 .....	12, 201782, 4048748.

(ii) Map of Virgin Management Unit follows:



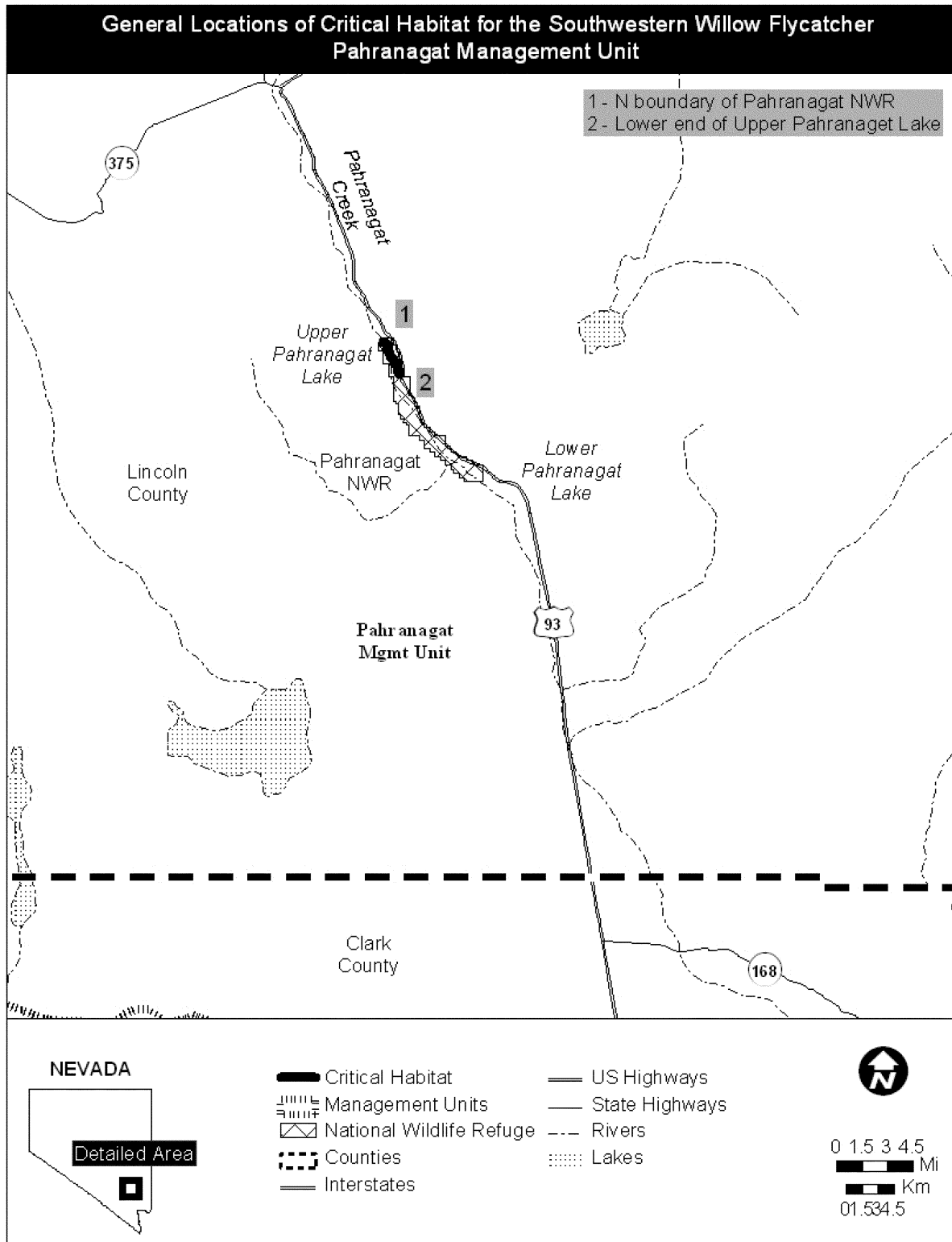
(16) Pahrangat Management Unit.

(i)



Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Pahrnagat River .....	11, 666731, 4128006 .....	11, 665370, 4131144.

(ii) Map of Pahrnagat Management Unit follows:



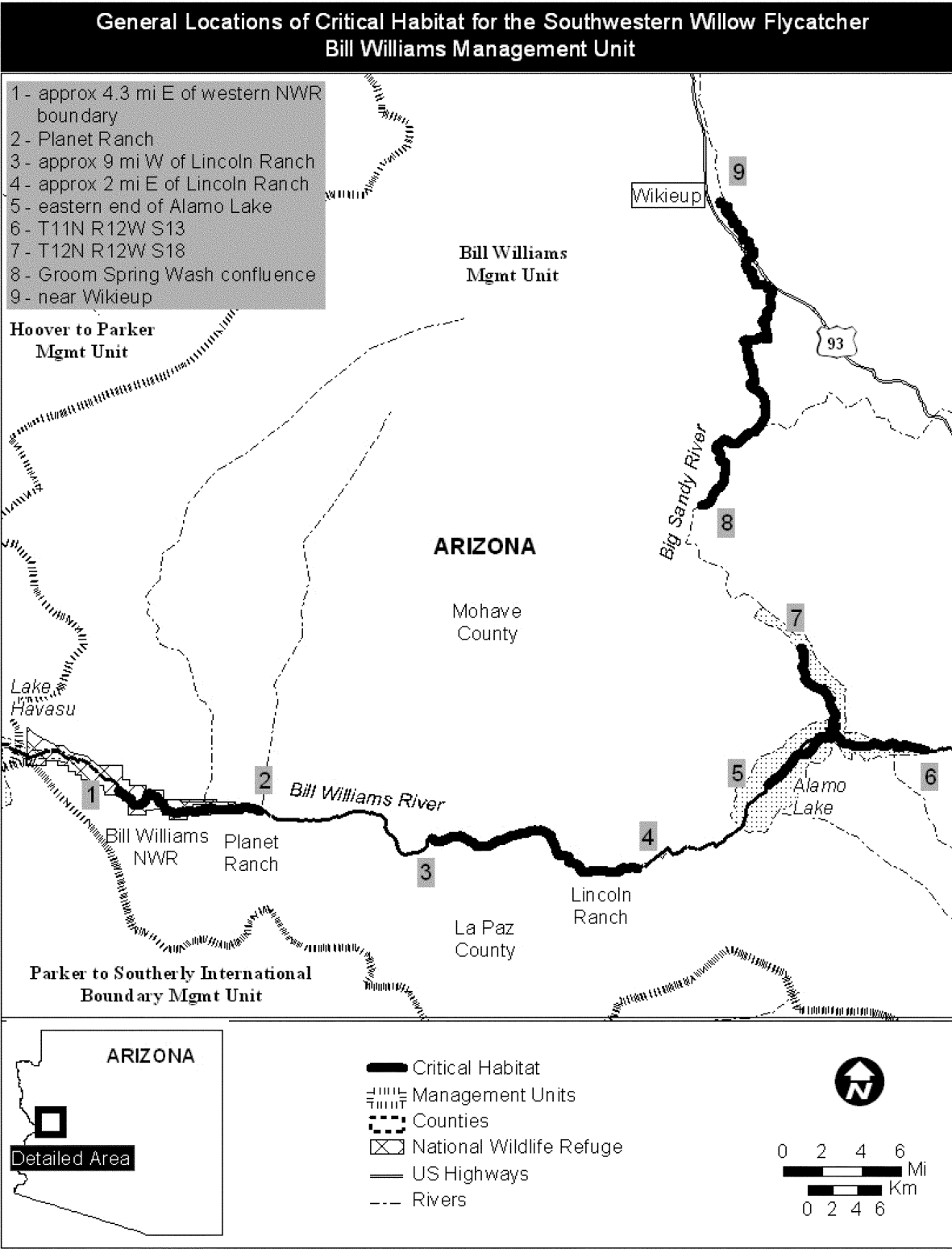
(17) Bill Williams Management Unit.

(i)

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Big Sandy River .....	12, 261621, 3843406 .....	12, 259631, 3818574.
Big Sandy River (Alamo Lake) .....	12, 266124, 3806764 .....	12, 267166, 3799203.
Santa Maria River (Alamo Lake) .....	12, 274410, 3798130 .....	12, 267166, 3799203.
Bill Williams River (Alamo Lake) .....	12, 263610, 3795533 .....	12, 267166, 3799203.
Bill Williams River (middle) .....	12, 254565, 3788878 .....	12, 240599, 3791815.
Bill Williams River (west) .....	12, 229050, 3794316 .....	11, 219463, 3796378.

(ii) Map of Bill Williams Management

Unit follows:

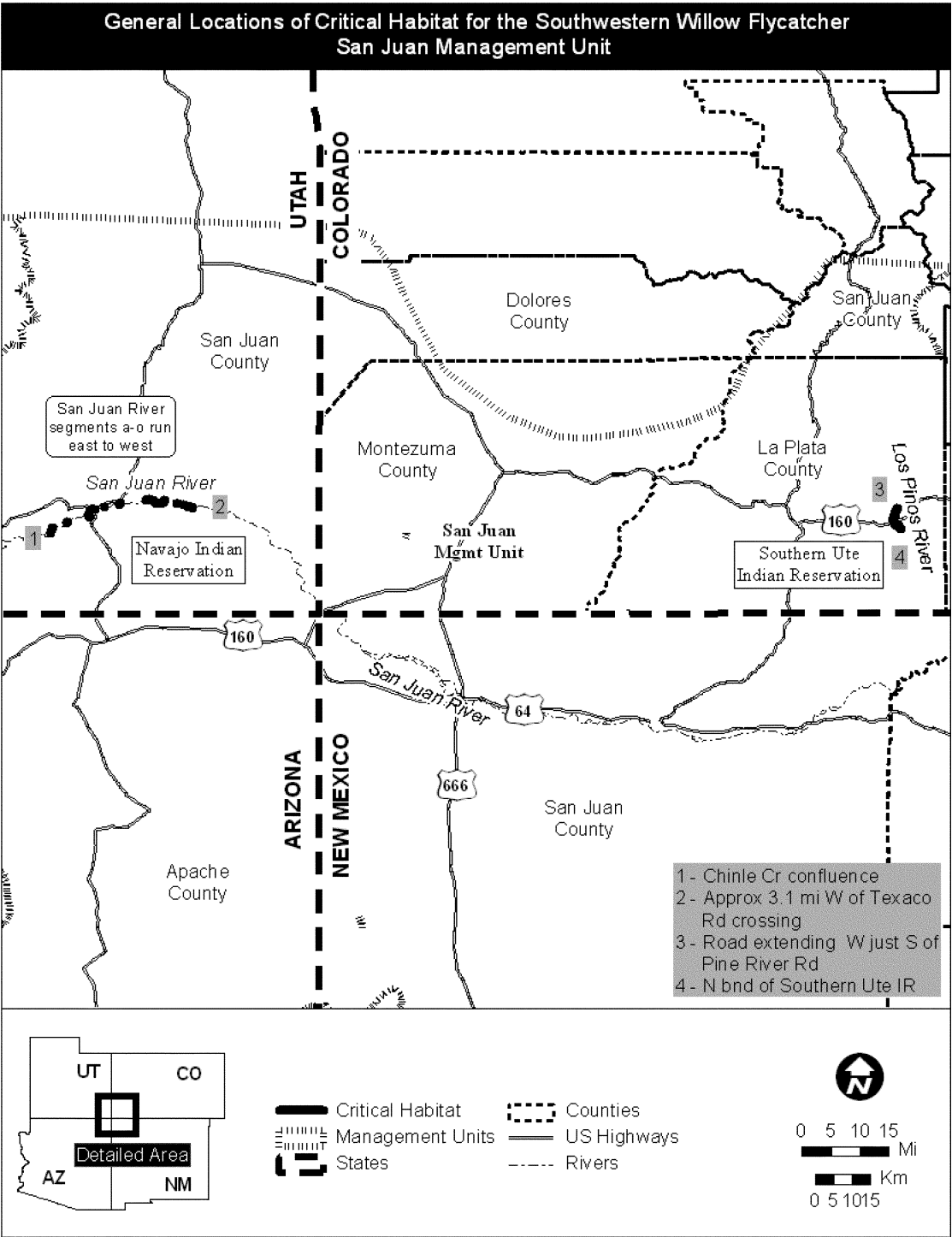


(18) San Juan Management Unit. (i)

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Los Pinos River .....	13, 270002, 4121643 .....	13, 269247, 4127372.
San Juan River (north bank) (a) .....	12, 645196, 4125489 .....	12, 644259, 4125816.
San Juan River (north bank) (b) .....	12, 643496, 4126221 .....	12, 643087, 4126308.
San Juan River (north bank) (c) .....	12, 642048, 4126642 .....	12, 641584, 4126669.
San Juan River (north bank) (d) .....	12, 639237, 4127496 .....	12, 638861, 4126738.

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
San Juan River (north bank) (e) .....	12, 638284, 4126485 .....	12, 637792, 4126469.
San Juan River (north bank) (f) .....	12, 637202, 4126657 .....	12, 637106, 4126797.
San Juan River (north bank) (g) .....	12, 636634, 4127216 .....	12, 634726, 4127362.
San Juan River (north bank) (h) .....	12, 629380, 4126564 .....	12, 629093, 4126125.
San Juan River (north bank) (i) .....	12, 625734, 4125285 .....	12, 625705, 4125263.
San Juan River (north bank) (j) .....	12, 623718, 4124823 .....	12, 622438, 4124358.
San Juan River (north bank) (k) .....	12, 622161, 4123347 .....	12, 622295, 4122911.
San Juan River (north bank) (l) .....	12, 622386, 4122629 .....	12, 622370, 4122575.
San Juan River (north bank) (m) .....	12, 617636, 4121043 .....	12, 617515, 4120863.
San Juan River (north bank) (n) .....	12, 614411, 4119430 .....	12, 614122, 4118982.
San Juan River (north bank) (o) .....	12, 614014, 4118335 .....	12, 613916, 4117990.

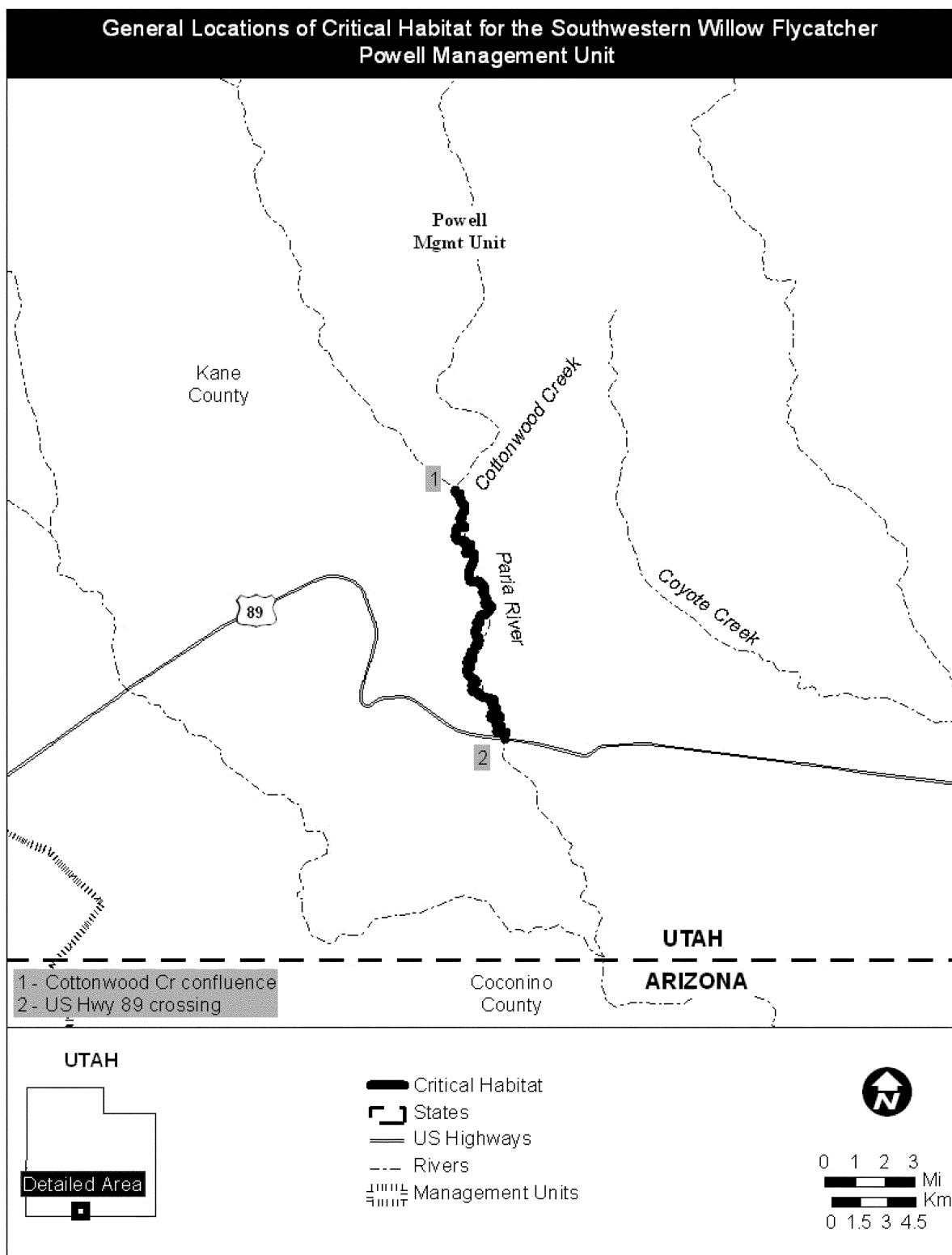
(ii) Map of San Juan Management Unit follows:



(19) Powell Management Unit. (i)

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Paria River .....	12, 417429, 4120619 .....	12, 419459, 4107235.

(ii) Map of Powell Management Unit follows:



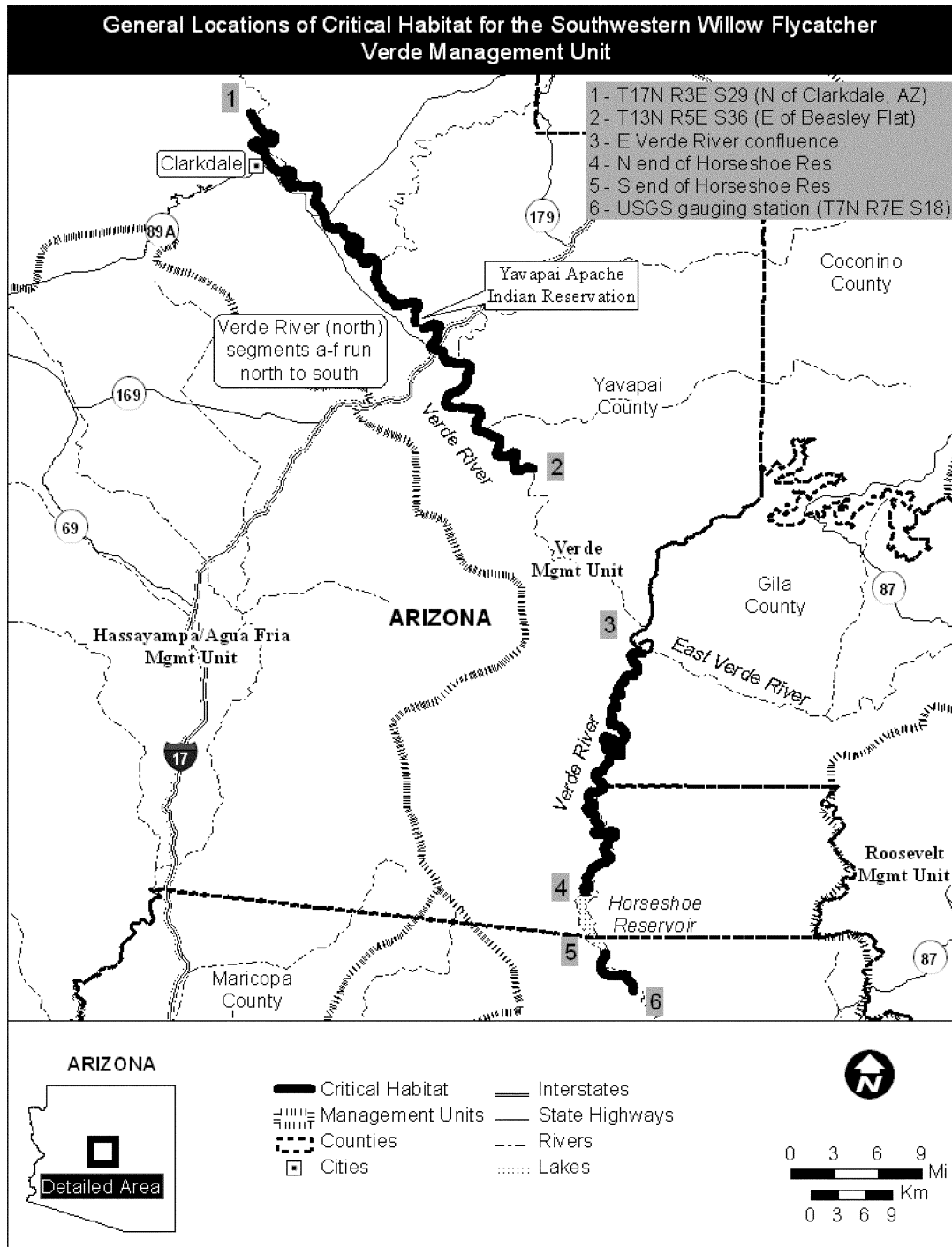
(20) Verde Management Unit.

(i)

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Verde River (north) (a) .....	12, 402583, 3854022 .....	12, 417654, 3832237.
Verde River (north) (b) .....	12, 417505, 3832092 .....	12, 417501, 3831831.
Verde River (north) (c) .....	12, 417492, 3831154 .....	12, 417486, 3830684.
Verde River (north) (d) .....	12, 418260, 3830003 .....	12, 420778, 3821249.
Verde River (north) (e) .....	12, 420842, 3821249 .....	12, 420946, 3821249.

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Verde River (north) (f) .....	12, 421564, 3821197 .....	12, 428120, 3814335.
Verde River (middle) .....	12, 438102, 3793821 .....	12, 432660, 3767298.
Verde River (south) .....	12, 434407, 3760594 .....	12, 436961, 3756352.

(ii) Map of Verde Management Unit follows:



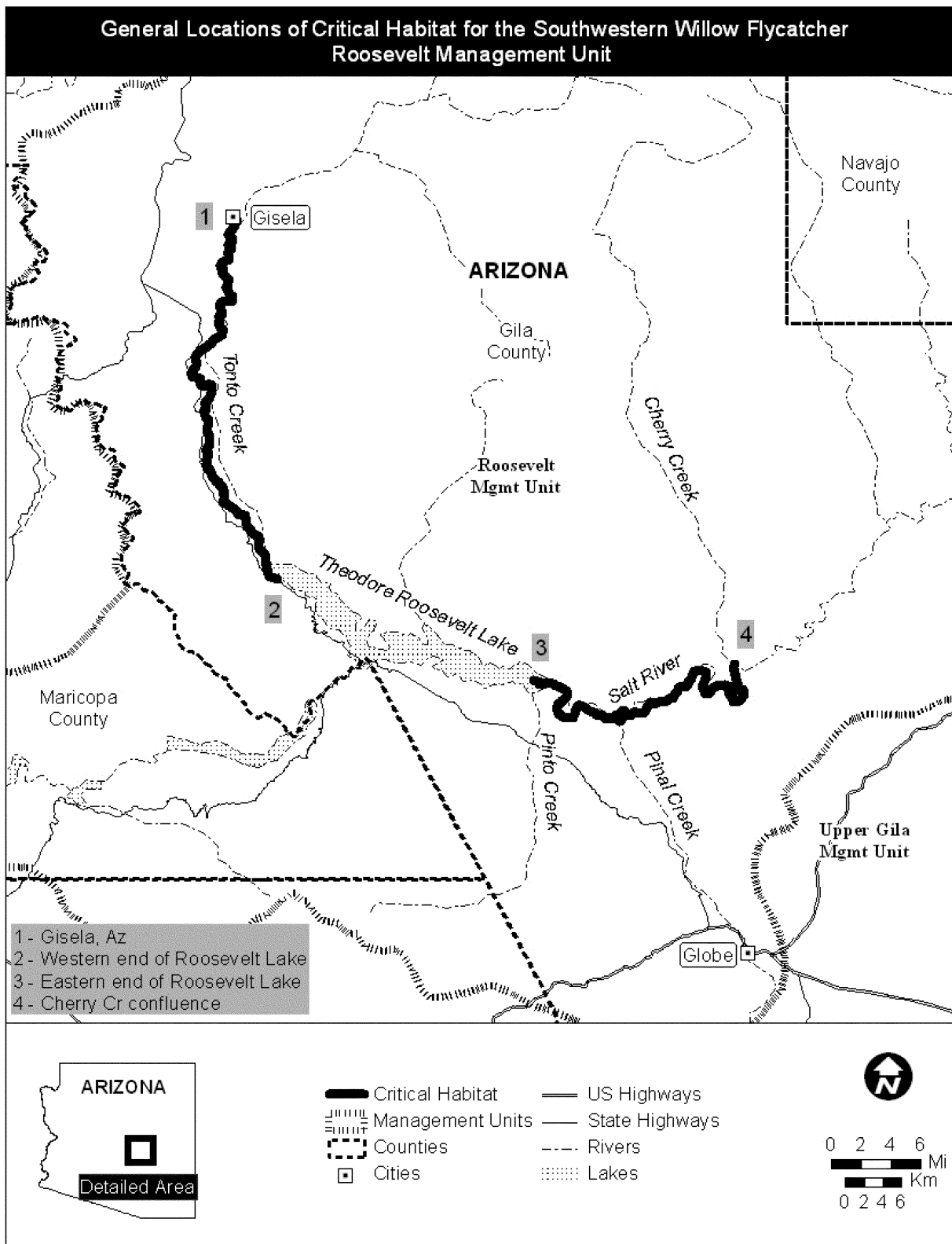
(21) Roosevelt Management Unit.

(i)



Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Tonto Creek .....	12, 477856, 3734906 .....	12, 474349, 3773074.
Salt River .....	12, 500594, 3724174 .....	12, 518565, 3725825.

(ii) Map of Roosevelt Management  
Unit follows:



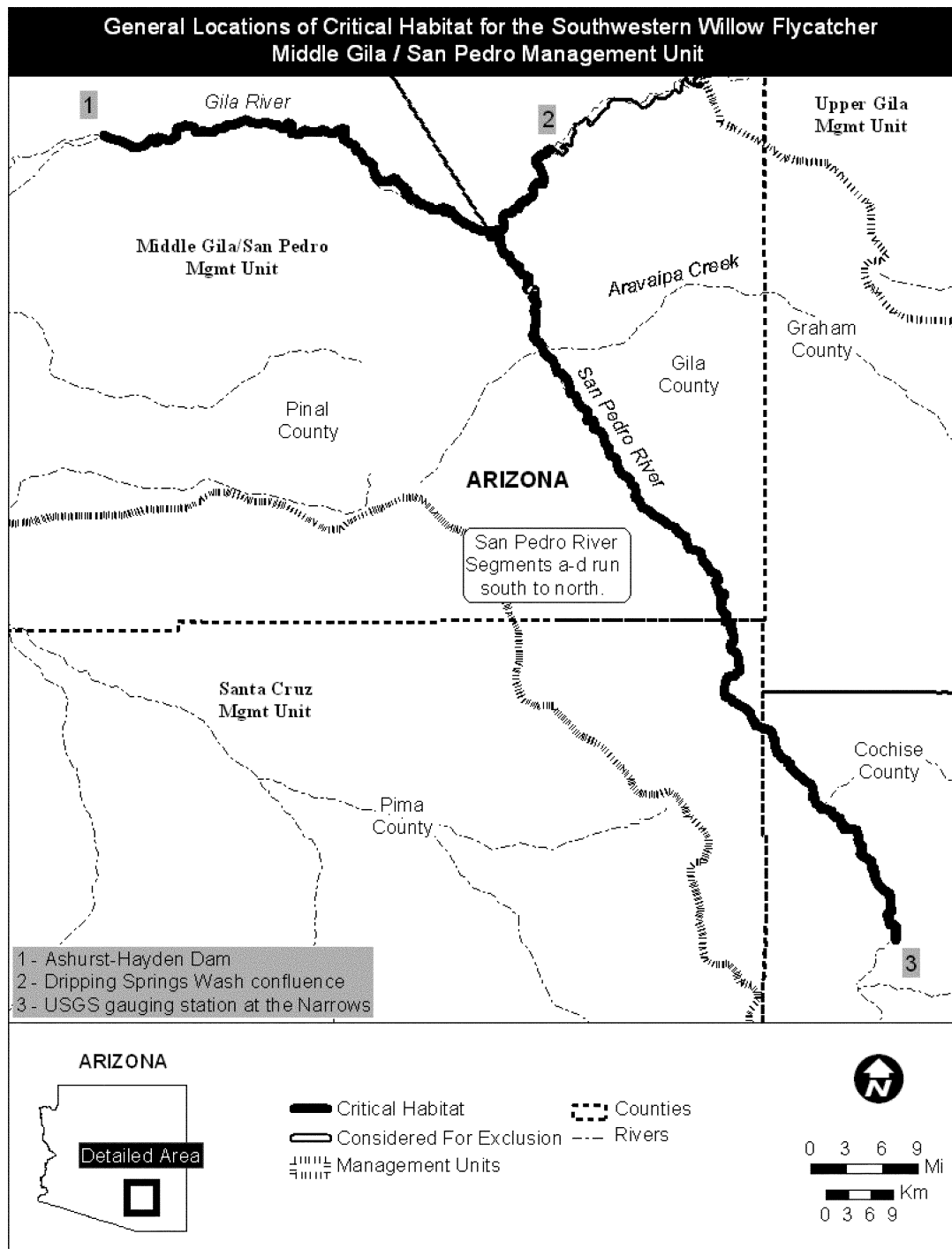
(22) Middle Gila and San Pedro  
Management Unit.

(i)

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Gila River .....	12, 527193, 3660545 .....	12, 476979, 3662407.
San Pedro River (d) .....	12, 566945, 3554766 .....	12, 525343, 3640631.

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
San Pedro River (c) .....	12, 525384, 3640762 .....	12, 525584, 3641024.
San Pedro River (b) .....	12, 525629, 3641438 .....	12, 525358, 3641744.
San Pedro River (a) .....	12, 525001, 3641712 .....	12, 520287, 3649594.

(ii) Map of Middle Gila and San Pedro Management Unit follows:

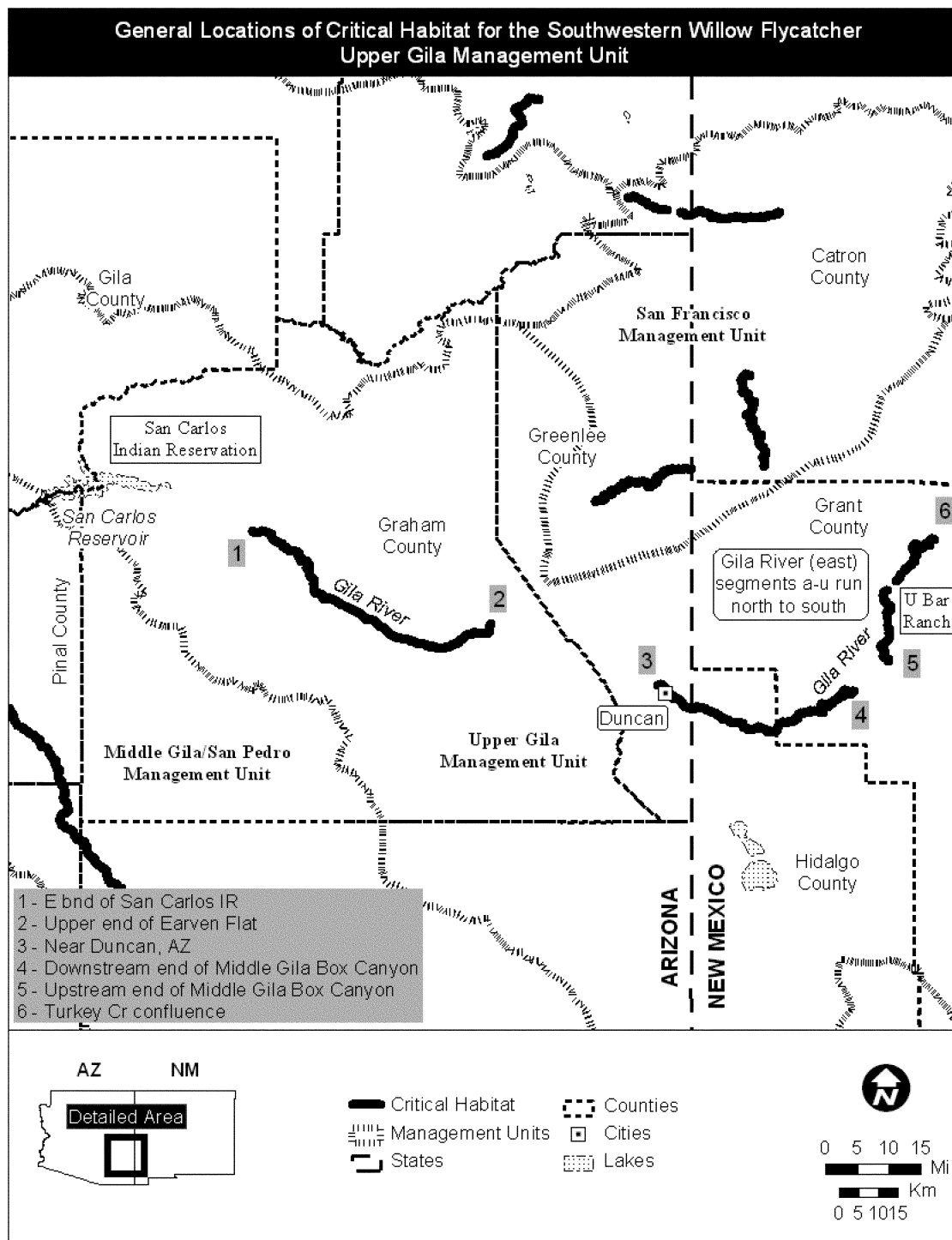


(23) Upper Gila Management Unit.

(i)

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Gila River (east) (a) .....	12, 734274, 3662473 .....	12, 728739, 3655290.
Gila River (east) (b) .....	12, 728580, 3655097 .....	12, 728537, 3655057.
Gila River (east) (c) .....	12, 728427, 3654997 .....	12, 728137, 3654656.
Gila River (east) (d) .....	12, 728113, 3654588 .....	12, 727938, 3654314.
Gila River (east) (e) .....	12, 727498, 3653376 .....	12, 727395, 3653367.
Gila River (east) (f) .....	12, 727387, 3653367 .....	12, 727033, 3652562.
Gila River (east) (g) .....	12, 726825, 3652154 .....	12, 726768, 3652095.
Gila River (east) (h) .....	12, 726395, 3651745 .....	12, 726361, 3651686.
Gila River (east) (i) .....	12, 724538, 3649297 .....	12, 724416, 3649186.
Gila River (east) (j) .....	12, 723879, 3648880 .....	12, 723637, 3648711.
Gila River (east) (k) .....	12, 723626, 3648220 .....	12, 723707, 3648074.
Gila River (east) (l) .....	12, 723726, 3647982 .....	12, 723726, 3647894.
Gila River (east) (m) .....	12, 723769, 3647188 .....	12, 725465, 3644450.
Gila River (east) (n) .....	12, 724871, 3643867 .....	12, 724533, 3643574.
Gila River (east) (o) .....	12, 724794, 3642783 .....	12, 724788, 3641978.
Gila River (east) (p) .....	12, 724913, 3640498 .....	12, 724873, 3640376.
Gila River (east) (q) .....	12, 725055, 3639520 .....	12, 724887, 3639586.
Gila River (east) (r) .....	12, 725319, 3639100 .....	12, 725232, 3639274.
Gila River (east) (s) .....	12, 725376, 3638811 .....	12, 724678, 3636350.
Gila River (east) (t) .....	12, 724616, 3636306 .....	12, 723917, 3635619.
Gila River (east) (u) .....	12, 724979, 3631107 .....	12, 723787, 3635503.
Gila River (middle) .....	12, 717951, 3623479 .....	12, 675537, 3624185.
Gila River (west) .....	12, 639563, 3639230 .....	12, 588063, 3662184.

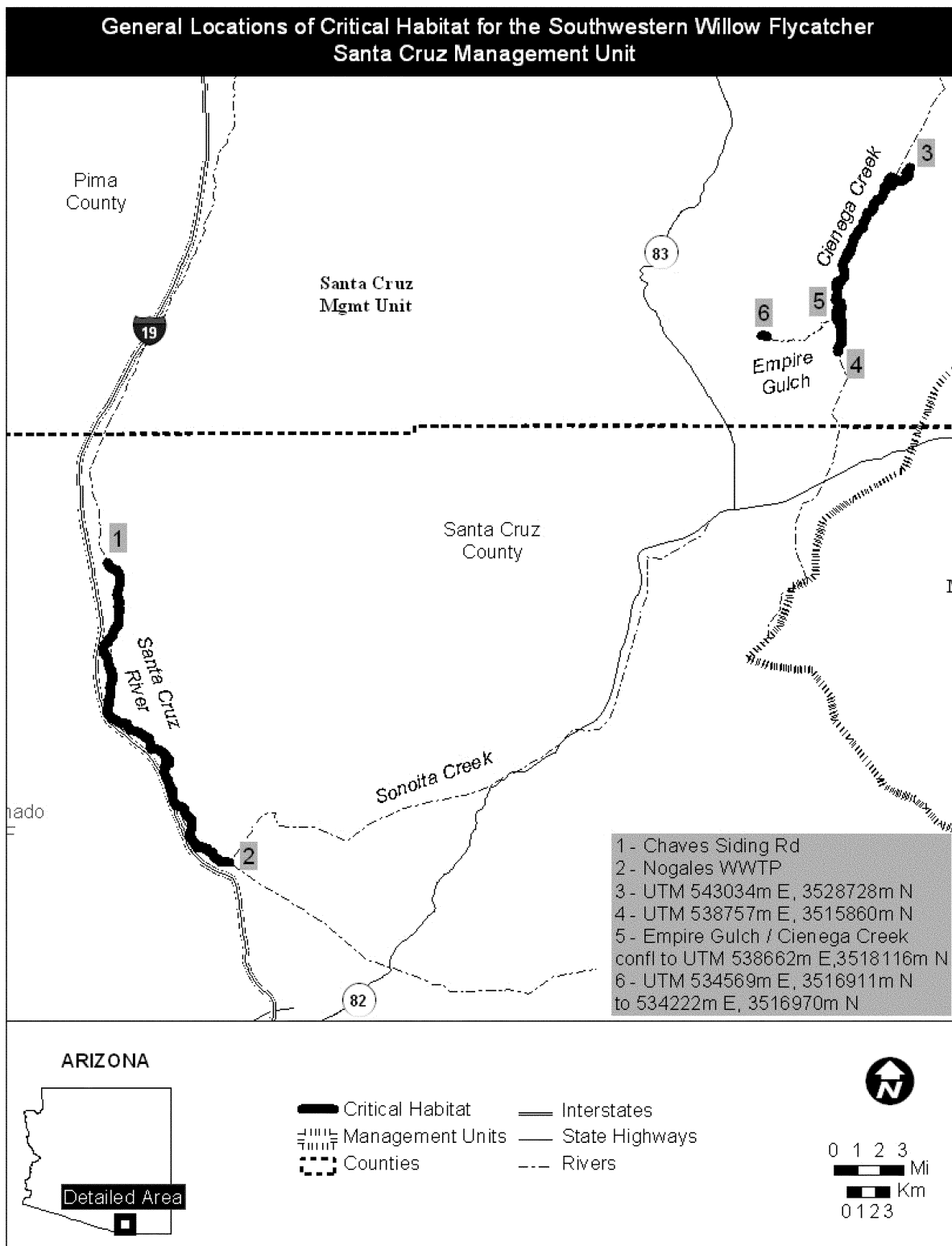
(ii) Map of Upper Gila Management  
Unit follows:



## (24) Santa Cruz Management Unit. (i)

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Santa Cruz River .....	12, 502742, 3480432 .....	12, 495504, 3501179.
Cienega Creek .....	12, 543034, 3528728 .....	12, 538757, 3515860.
Empire Gulch (west) .....	12, 534569, 3516911 .....	12, 534222, 3516970.
Empire Gulch (confluence with Cienega Creek) .....	12, 538826, 3519337 .....	12, 538662, 3518116.

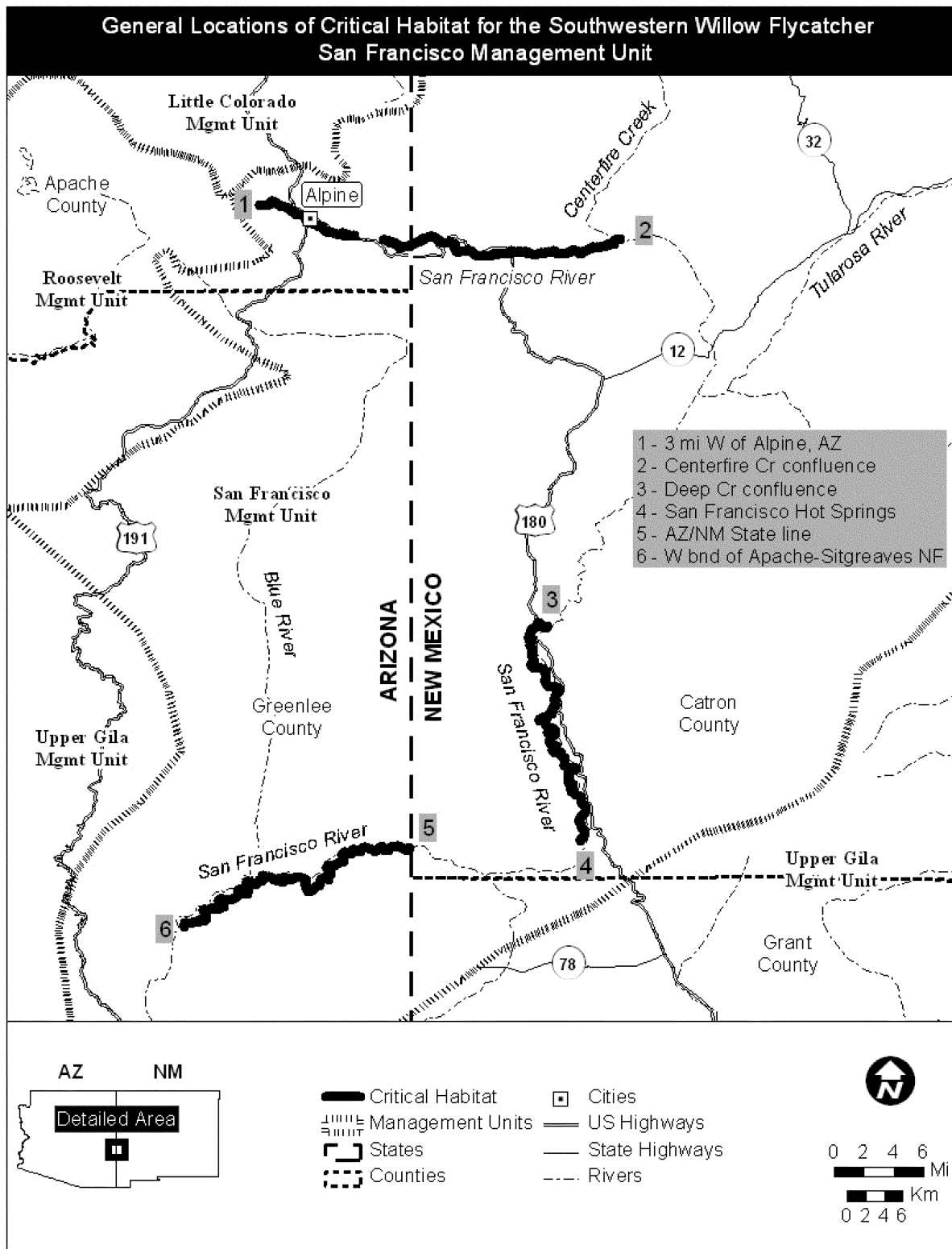
(ii) Map of Santa Cruz Management Unit follows:



(25) San Francisco Management Unit. (i)

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
San Francisco River (north) (west segment) .....	12, 666982, 3748335 .....	12, 675606, 3745177.
San Francisco River (north) (east segment) .....	12, 678191, 3744748 .....	12, 699562, 3745269.
San Francisco River (middle) (New Mexico) .....	12, 693857, 3703486 .....	12, 697331, 3680357.
San Francisco River (south) (Arizona) .....	12, 661571, 3670502 .....	12, 681790, 3679428.

(ii) Map of San Francisco Management Unit follows:

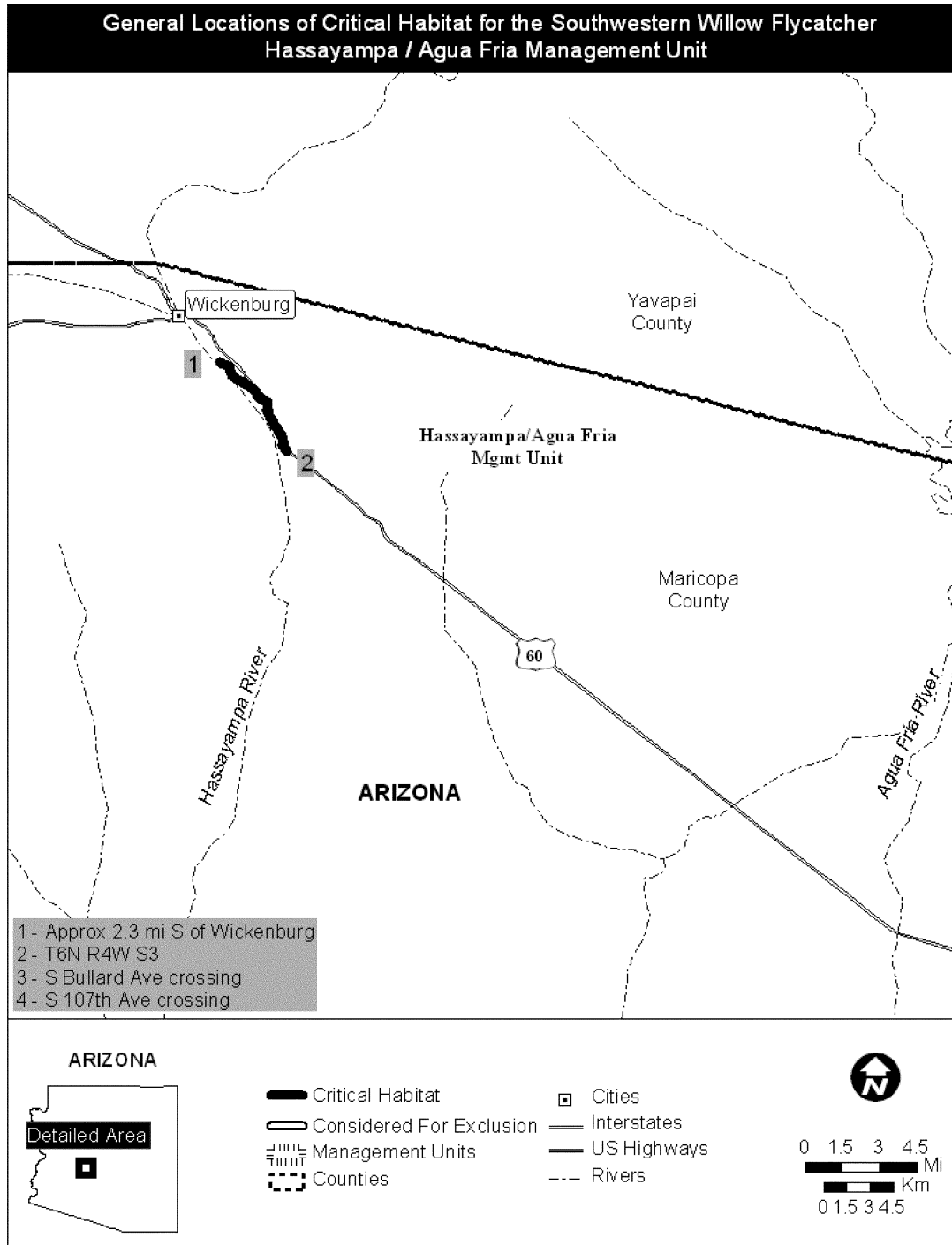


(26) Hassayampa and Agua Fria Management Unit.

(i)

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Hassayampa River .....	12, 342308, 3757092 .....	12, 345848, 3751261.

(ii) Map of Hassayampa and Agua Fria Management Unit follows:



(27) San Luis Valley Management Unit.

(i)

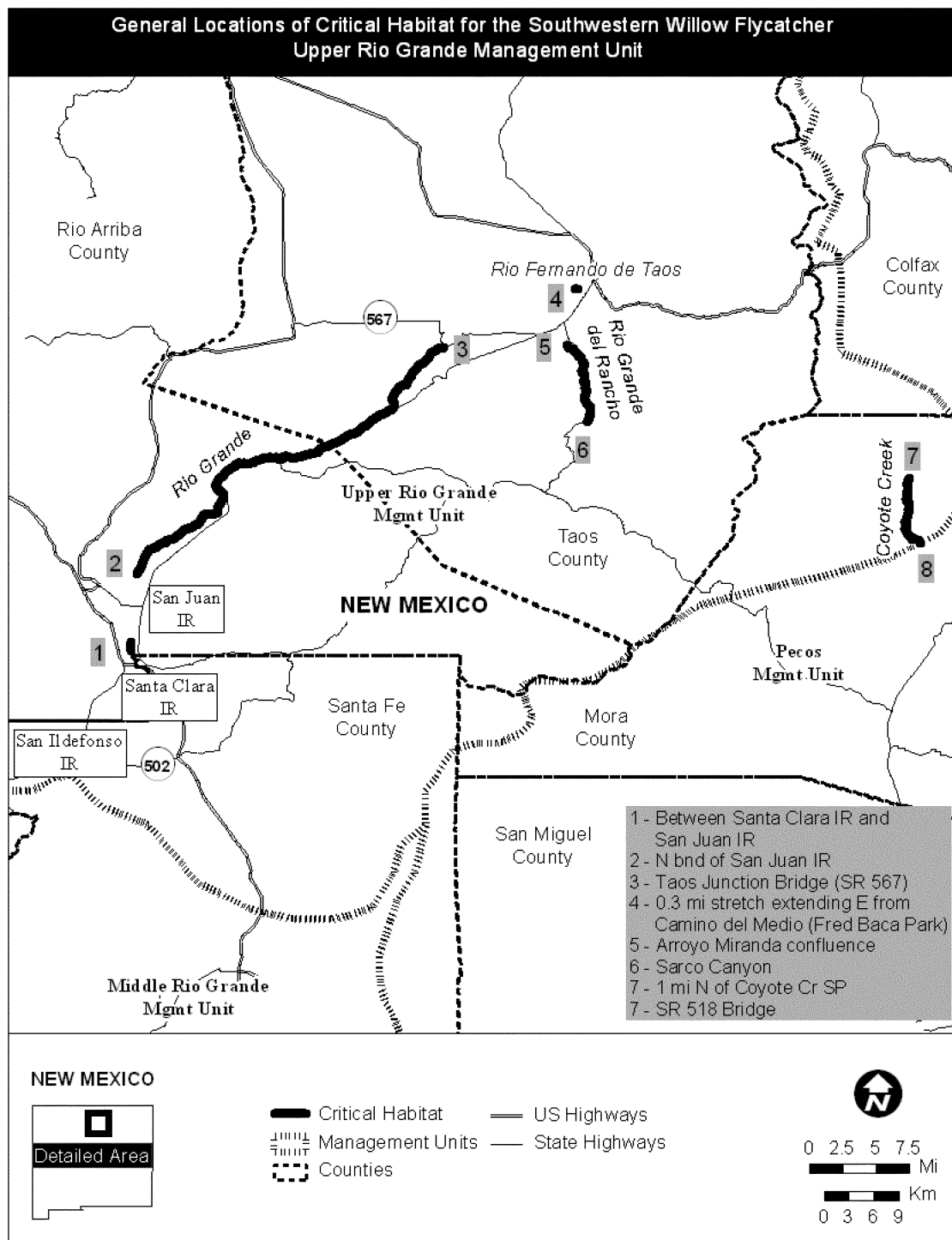


Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Conejos River (a) .....	13, 429852, 4128272 .....	13, 430156, 4128249.
Conejos River (b) .....	13, 428787, 4127864 .....	13, 429759, 4128320.
Conejos River (c) .....	13, 426944, 4126743 .....	13, 428019, 4127483.
Conejos River (d) .....	13, 426839, 4126661 .....	13, 426944, 4126712.
Rio Grande Alamosa NWR (a) .....	13, 425015, 4146872 .....	13, 424689, 4146861.
Rio Grande Alamosa NWR (b) .....	13, 425325, 4145894 .....	13, 425218, 4146803.
Rio Grande Alamosa NWR (c) .....	13, 425993, 4145065 .....	13, 425968, 4145195.
Rio Grande Alamosa NWR (d) .....	13, 426007, 4144674 .....	13, 425947, 4144875.
Rio Grande Alamosa NWR (e) .....	13, 426375, 4144517 .....	13, 426158, 4144551.
Rio Grande Alamosa NWR (f) .....	13, 426597, 4144617 .....	13, 426539, 4144526.
Rio Grande Alamosa NWR (g) .....	13, 426772, 4144724 .....	13, 427043, 4144549.
Rio Grande Alamosa NWR (h) .....	13, 427054, 4144318 .....	13, 427082, 4144368.
Rio Grande Alamosa NWR (i) .....	13, 426927, 4144080 .....	13, 426966, 4144240.
Rio Grande Alamosa NWR (j) .....	13, 427035, 4143868 .....	13, 426910, 4143984.
Rio Grande Alamosa NWR (k) .....	13, 427220, 4143816 .....	13, 427093, 4143789.
Rio Grande Alamosa NWR (l) .....	13, 427393, 4143996 .....	13, 427293, 4143901.
Rio Grande Alamosa NWR (m) .....	13, 427666, 4143776 .....	13, 427440, 4144028.
Rio Grande Alamosa NWR (n) .....	13, 427915, 4143464 .....	13, 427792, 4143694.
Rio Grande Alamosa NWR (o) .....	13, 428181, 4143345 .....	13, 427986, 4143362.
Rio Grande Alamosa NWR (p) .....	13, 428459, 4143470 .....	13, 428228, 4143377.
Rio Grande Alamosa NWR (q) .....	13, 428708, 4143582 .....	13, 428673, 4143555.
Rio Grande Alamosa NWR (r) .....	13, 429166, 4143276 .....	13, 428800, 4143661.
Rio Grande Alamosa NWR (s) .....	13, 430052, 4142873 .....	13, 429858, 4142950.
Rio Grande Alamosa NWR (t) .....	13, 430498, 4142399 .....	13, 430209, 4142812.
Rio Grande Alamosa NWR (u) .....	13, 430614, 4138902 .....	13, 430557, 4142367.
Rio Grande Alamosa NWR (v) .....	13, 431001, 4137666 .....	13, 430612, 4138731.
Rio Grande Alamosa NWR (w) .....	13, 432176, 4135160 .....	13, 431001, 4137611.
Rio Grande Alamosa NWR (x) .....	13, 432643, 4134711 .....	13, 432171, 4134988.
Rio Grande Alamosa NWR (y) .....	13, 432779, 4134527 .....	13, 432715, 4134634.
Rio Grande Alamosa NWR (z) .....	13, 432856, 4134398 .....	13, 432802, 4134495.
Rio Grande Alamosa NWR (aa) .....	13, 432979, 4134165 .....	13, 432938, 4134250.
Rio Grande Alamosa NWR (bb) .....	13, 433594, 4133899 .....	13, 433579, 4134077.
Rio Grande (south) .....	13, 434064, 41120967 ...	13, 432747, 4103848.

(ii) Map of San Luis Valley  
Management Unit follows:



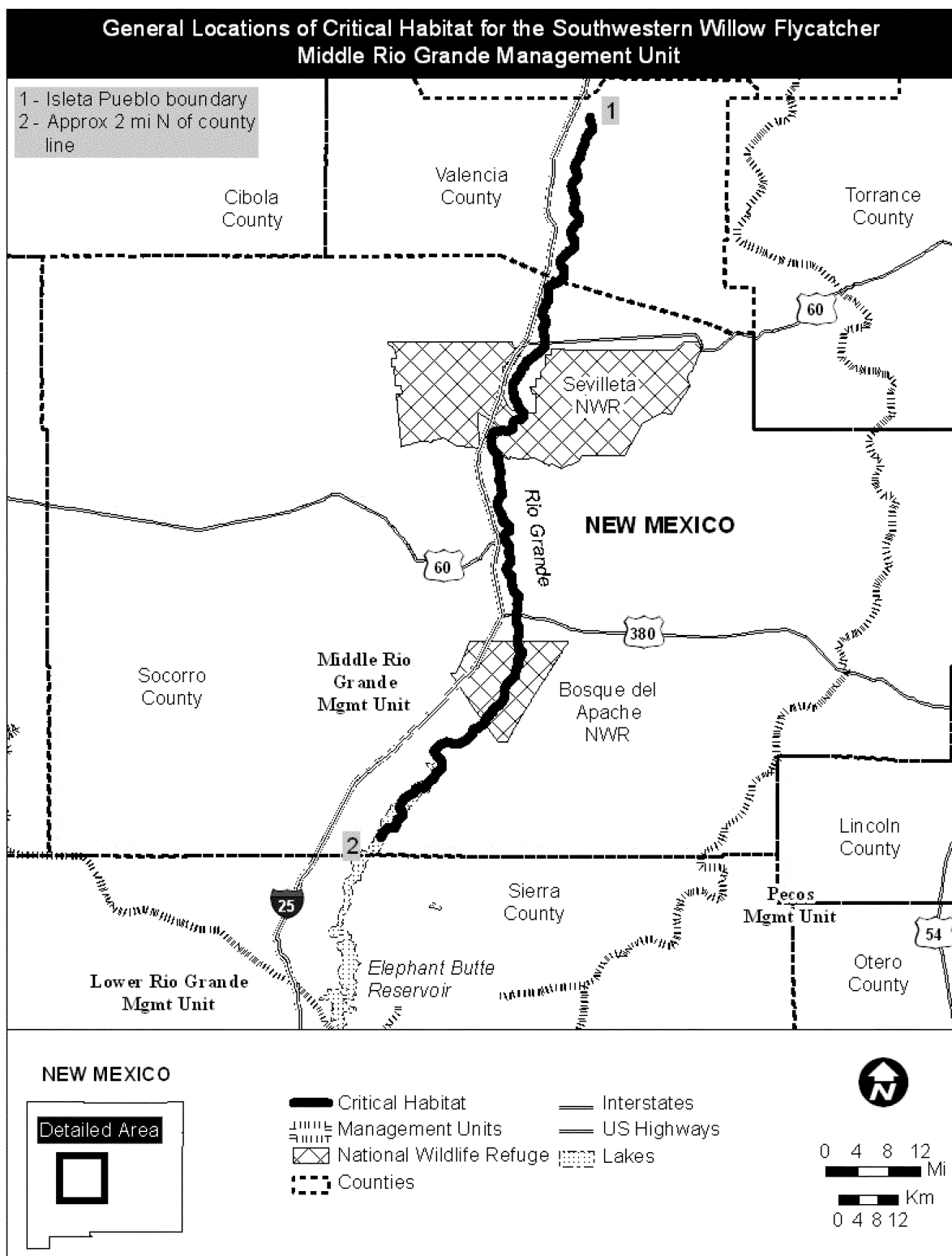
(ii) Map of Upper Rio Grande Management Unit follows:



(29) Middle Rio Grande Management Unit. (i)

Stream segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Rio Grande .....	13, 343067, 3856213 .....	13, 298922, 3683834.

(ii) Map of Middle Rio Grande Management Unit follows:



\* \* \* \* \*

Dated: December 11, 2012.

**Michael J. Bean,***Acting Assistant Secretary for Fish and  
Wildlife and Parks.*

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