

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R2-ES-2011-0053]

[MO 92210–0–0009]

RIN 1018-AX43

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

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to revise critical habitat for the southwestern willow flycatcher (*Empidonax traillii extimus*) (flycatcher) under the Endangered Species Act of 1973, as amended (Act). In total, approximately 3,364 km stream kilometers (2,090 stream miles) are being proposed for

designation as critical habitat. These areas are being proposed as stream segments, with the lateral extent including the riparian areas and streams that occur within the 100-year floodplain or flood-prone areas. The proposed critical habitat is located on a combination of Federal, State, tribal, and private lands in Imperial, Inyo, Kern, Los Angeles, Mono, Orange, 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, La Plata, and Rio Grande Counties in southern Colorado; Apache, Cochise, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Pima, Pinal, Santa Cruz, Yavapai, and Yuma Counties in Arizona; and Catron, Cibola, Dona Ana, Grant, Hidalgo, McKinley, Mora, Rio Arriba, Santa Fe, San Juan, Sierra, Socorro, Taos, and Valencia Counties in New Mexico.

DATES: We will accept comments received or postmarked on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive requests for public hearings, in writing, at the address shown in the **FOR FURTHER INFORMATION CONTACT** section by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments by one of the following methods:

(1) *Electronically:* Go to the Federal eRulemaking Portal:

http://www.regulations.gov. In the Enter Keyword or ID box, enter Docket No. FWS–R2–ES–2011–0053, which is the docket number for this rulemaking.

(2) *By hard copy*: Submit by U.S. mail or hand-delivery to: Public Comments Processing, Attn: FWS–R2–ES–2011–053; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, MS 2042–PDM; Arlington, VA 22203.

We will not accept e-mail or faxes. We will post all comments on <http://www.regulations.gov>. This generally means that we will post any personal information you provide us (see the **Public Comments** section below for more information).

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:

Public Comments

We intend that any final action resulting from this proposed rule will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from other concerned

government agencies, the scientific community, industry, or any other interested party concerning this proposed rule. We particularly seek comments concerning:

(1) The reasons why we should or should not designate habitat as “critical habitat” under section 4 of the Act (16 U.S.C. 1531 *et seq.*), including whether there are threats to the species from human activity, the degree of which can be expected to increase due to the designation, and whether that increase in threat outweighs the benefit of designation such that the designation of critical habitat may not be prudent.

(2) Specific information on:

(a) The amount and distribution of southwestern willow flycatcher habitat;

(b) What areas that were occupied at the time of listing that contain features essential to the conservation of the species should be included in the designation and why;

(c) What areas not occupied at the time of listing that meet our criteria for being essential to the conservation of the species should be included in the designation and why;

(d) Special management considerations or protection that may be needed for the physical or biological features essential to the conservation of the species in the critical habitat areas we are proposing, including managing for the potential effects of climate change;

(e) Stream segments, many of which are highlighted in the Southwestern Willow Flycatcher Recovery Plan (Recovery Plan) (Service 2002) and included in this proposed

rule, that are not now known to have flycatcher nesting territories or known to only have few nesting flycatchers that may be capable of being improved for flycatcher recovery purposes. We specifically seek information about streams within the Amargosa, Salton, Mohave, Powell, San Juan, Santa Cruz, and Hassayampa and Agua Fria Management Units. Please provide information on flycatcher distribution and abundance, habitat quality, habitat locations, habitat improvement projects, management actions needed to improve habitat, habitat quality limitations, habitat recovery potential, and any other flycatcher or flycatcher-habitat-specific information, and;

(f) Flycatcher habitat suitability in specific areas within the Santa Ana and San Diego Management Units in southern California. Please provide information on flycatcher habitat suitability for recovery at the following areas: (1) entirety of Temescal Wash including Alberhill Creek in Riverside County; (2) entirety of Murrieta Creek in Riverside County; (3) Potrero Creek near the city of Beaumont in Riverside County; (4) Cajon Creek from Lone Pine Canyon to California State Highway 138 in San Bernardino County; and (5) Tijuana River from Dairy Mart Road to the Tijuana River Estuary in San Diego County.

(3) Land use designations and current or planned activities in the subject areas and their possible impacts on proposed critical habitat.

(4) Information on the projected and reasonably likely impacts of climate change on the flycatcher, the features essential to its conservation and the areas proposed as critical habitat.

(5) Any probable economic, national security, environmental, cultural, or other relevant impacts of designating any area that may be included in the final designation; in particular, any impacts on small entities, and the benefits of including or excluding areas that exhibit these impacts.

(6) Whether any specific areas we are proposing for critical habitat designation should be considered for exclusion under section 4(b)(2) of the Act, and whether the benefits of potentially excluding any specific area outweigh the benefits of including that area under section 4(b)(2) of the Act, in particular.

(a) For specific lands that we should consider for exclusion under section 4(b)(2) of the Act, please provide us management plans, conservation easements, agreements, Habitat Conservation Plans (HCP), or other appropriate information, which describe the commitment and assurances of protection of the physical or biological features of flycatcher critical habitat; property boundaries; flycatcher status, distribution, and abundance; and management actions to protect the physical or biological features of flycatcher habitat.

(b) For lands we evaluated and excluded from critical habitat under section 4(b)(2) of the Act during the 2005 flycatcher critical habitat designation and those who wish to seek exclusion for this re-designation, please resubmit your request. In addition to your request, please include any updated information that pertains to the commitment and assurances of protection of flycatcher habitat; the physical or biological features of flycatcher critical habitat; property boundaries; flycatcher status, distribution, and

abundance; and management actions to protect the physical or biological features of flycatcher habitat. Include the specific results of implementing these management plans since our 2005 flycatcher critical habitat designation.

(c) Information concerning the benefits of excluding or retaining lands we identify in this proposed critical habitat rule under consideration for exclusion under section 4(b)(2) of the Act. We specifically seek information about the possible exclusion of Elephant Butte Reservoir; areas within the operating pool of the reservoir may be subject to exclusion under 4(b)(2) of the Act if we determine that the benefits of excluding the area due to potential impacts to water operations outweigh the benefits to the subspecies of including the area as critical habitat.

(7) Whether we could improve or modify our approach to designating critical habitat in any way to provide for greater public participation and understanding, or to better accommodate public concerns and comments.

You may submit your comments and materials concerning this proposed rule by one of the methods listed in the **ADDRESSES** section. We will not accept comments sent by e-mail or fax or to an address not listed in the **ADDRESSES** section. We will post your entire comment—including your personal identifying information—on <http://www.regulations.gov>. You may request at the top of your document that we withhold personal information such as your street address, phone number, or e-mail address from public review; however, we cannot guarantee that we will be able to do so.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on <http://www.regulations.gov>, or by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Arizona Ecological Services Office in Phoenix, Arizona (see **FOR FURTHER INFORMATION CONTACT**).

Background

It is our intent to include only those topics directly relevant to the designation of critical habitat for the southwestern willow flycatcher (flycatcher) in this proposed rule. Background information on the flycatcher can be found in 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); 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.* 2007a); the 2007 rangewide status report (Durst *et al.* 2008); and flycatcher survey protocol and natural history summary (Sogge *et al.* 2010). Other reports can be retrieved from the U.S. Geological Survey's (USGS) flycatcher site at <http://sbsc.wr.usgs.gov/cprs/research/projects/swwf>. The current 2005 critical habitat rule remains in effect while this rulemaking process proceeds.

The flycatcher is a small, insect-eating, neotropical migrant bird, from the taxonomic order Passeriformes. It grows to about 15 centimeters (5.8 inches) in length. The flycatcher 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. As an insect-eating generalist (Service 2002, p. 26), the flycatcher 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).

All willow flycatcher subspecies spend time migrating and breeding in the United States from April to September. 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). 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 and 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).

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, but the quantity of suitable habitat within that range is reduced from historical levels (Service 2002, pp. 7-10).

The known geographical area historically occupied by this flycatcher subspecies was once larger (Service 2002, pp. 7-10). Historical records described nesting birds in southern California, Nevada, Utah; Arizona and New Mexico; western Texas; southwestern Colorado; and extreme northwestern Mexico (Hubbard 1987, pp. 6-10; Unitt 1987, pp. 144-152; Browning 1993, pp. 248, 250). 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 nonbreeding, migrating, and dispersing flycatchers were not well known. In February 1995, 359 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 territories were estimated to exist in the July 23, 1993, flycatcher listing proposal (58 FR 39495, p. 39498).

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 bird's range has since refined this boundary (Paxton 2000, pp. 3, 18–20), and reduced the extent of the northern boundary of this 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.* 2007b). 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.* 2007b, 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.* 2007b, p. 17). They also described that this genetic overlap region will likely widen and contract over time based upon habitat changes (Paxton *et al.* 2007b, 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.* 2007b, 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).

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 Goodings willow (*Salix gooddingii*), coyote willow (*Salix exigua*), Geyers willow (*Salix geyerana*), 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 (*Eleagnus angustifolia*) (Service 2002, p. D-2). While there are exceptions, generally flycatchers are not found nesting in areas without willows, tamarisk, or both.

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 proposed rule, 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 (Sogge *et al.* 2010, p. 34). This is usually evidenced by the presence of a singing male, and possibly one or more mates (Sogge *et al.* 2010, p. 34).

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 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.

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 than with the addition of 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.* 2007a, p. 74). The USGS's 10-year flycatcher study in central Arizona (Paxton *et al.* 2007a) 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.* 2007a, p. 75). While USGS' study focused its effort in central Arizona at two of the largest breeding sites, it also included multiple auxiliary sites (up to 444 km or 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 and nest. Some long-distance season-to-season movement records captured flycatchers moving from the Basin and Mohave Recovery Unit 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.* 2007a, 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.

Because the breeding range of the flycatcher encompasses a broad geographic area with much site variation, management of recovery is approached in the Recovery Plan by dividing the flycatcher's range into 6 Recovery Units, each of which are further subdivided into 4 to 7 Management Units (for a total of 32 Management Units) (Service, 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 goals are recommended for 29 of the 32 Management Units (see Methodology Overview section). 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. This proposed designation of critical habitat is organized geographically within these Recovery Units and Management Units (see “Methodology Overview” section below).

The Recovery Plan (Service 2002) 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 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 and Plants), 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 proposal 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, displaced by such habitat loss or change, can readily move (Service 2002, p. 80).

Previous Federal Actions

The flycatcher was listed as endangered 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 Cattlegrower's 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, and required that we deliver a proposed rule for new revised critical habitat to the **Federal Register** by July 31, 2011, and a final rule by July 31, 2012.

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 under 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 translocation, 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 seeks or 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) 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.

For inclusion in a critical habitat designation, the habitat within the geographical area occupied by the species at the time it was listed must contain physical or biological features which are essential to the conservation of the species and which may require special management considerations or protection. 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), focusing on the principal biological or physical constituent elements (primary constituent elements) within an area that are essential to the conservation of the species (such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type). Primary constituent elements are the elements of physical or biological features that, when laid out in the appropriate quantity and spatial arrangement to provide for a species' life-history processes, are essential to the conservation of the species.

Under the Act, 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. 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. When the best available scientific data do not demonstrate that the conservation needs of the species require such additional areas, we will not designate critical habitat in areas outside the geographical area occupied by the species. An area currently occupied by the species but

that was not occupied at the time of listing may, however, be essential to the conservation of the species and may be included in the critical habitat designation.

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 Endangered Species 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 determine 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, or other unpublished materials and expert opinion or personal knowledge.

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 required 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) the prohibitions of section 9 of the Act if actions occurring in these areas may affect the species. 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 sections 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 (in this case a subspecies) at the time of listing to designate as critical habitat, we consider the physical or biological features essential to the conservation of the

flycatcher 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 required for the flycatcher from studies of this subspecies' habitat, ecology, and life history as described below. The most comprehensive, current, and thorough documents are the Recovery Plan (Service 2002, Appendix D), Survey Protocol and Natural History Summary (Sogge *et al.* 2010), and 10-year central Arizona ecology study (Paxton *et al.* 2007a).

In general, the areas proposed for designation 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 proposing any areas as critical habitat solely because they serve as a migration habitat. Instead, the areas we are proposing 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 proposing 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 the conservation of the flycatcher.

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 run-off, 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 the conservation of the flycatcher, 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 American 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 (PSDI) (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.* 2007a, 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 (Koronkiewicz *et al.* 2004, pp. 9–11) and throughout Arizona in 2004 (Munzer *et al.* 2005, Appendix C) were areas surveyed for nesting birds, but no breeding was 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 area 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 hatchings of aquatic insects along the Salt River arm of Roosevelt Lake, Arizona (Paxton *et al.* 2007a, 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 or biological 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 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 Goodings willow, coyote willow, Geyers 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

(*Platinus 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 proposal 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 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 Southwestern Willow Flycatcher

Under the Act and its implementing regulations, we are required to identify the physical or biological features essential to the conservation of the flycatcher in areas occupied at the time of listing, focusing on the features' primary constituent elements. We consider primary constituent elements to be the elements of physical or biological features that, when laid out in the appropriate quantity and spatial arrangement to provide for a species' life-history processes, 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 following elements are the primary constituent elements specific to the flycatcher:

(1) Primary Constituent Element 1— *Riparian vegetation*. Riparian habitat in a dynamic river or lakeside, 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, Geyers 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 m 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; and/or

(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; and/or

(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); and/or

(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); and

(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 proposed 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 appropriate quantity and spatial arrangement of the 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 the conservation of the flycatcher and presents our rationale as to why those features are being proposed. 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 mimic 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, 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 proposed 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 interspersions 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 and ecological distribution of the flycatcher population, 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.

Special Management Considerations or Protection

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 which are essential to the conservation of the species and which may require special management considerations or protection.

As mentioned briefly or referenced in this proposed 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 areas proposed as critical habitat 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 the conservation of the flycatcher. 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; 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 restoration 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). Rangewide, 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 K).

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. We are proposing to designate critical habitat in areas within the geographical area known to be occupied by nesting flycatchers at the time of listing in 1995. We also are proposing to designate 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 proposing to use “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, stream, 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, 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 flycatchers were found nesting 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 nesting areas 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 nest was located because flycatchers are a neotropical migrant traveling between Central America (and possibly northern South America) and the United States, 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 lower Colorado River in 2004 (Ellis *et al.* 2008, p. 26), where only a relatively few known breeding sites exist.

Similarly, flycatchers are known to have fidelity to a larger area along stream drainages (rather than specific nest site fidelity), and can regularly move their nesting locations about 30 to 40 km (18 to 25 mi) from year-to-year (Paxton *et al.* 2007a, p. 4). And 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.* 2007a, 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 proposed critical habitat designation, we believe it is most conservative and reasonable to conclude that any stream segment along a stream where flycatchers were found nesting 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 proposing as revised critical habitat are organized by Recovery and Management Units listed in Table 1 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 elements of physical or biological features which may require special management considerations or protection as described above. We also include whether flycatcher territories were detected on proposed stream segments not known to be occupied at the time of listing (but are essential for the conservation of the flycatcher).

Recovery Plan Guidance

We relied heavily on the Recovery Plan (Service 2002) to help us identify the areas that we are proposing 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 that should be proposed as critical habitat because they are essential to flycatcher conservation.

The Recovery Plan's strategy, rationale, and science for conservation of the flycatcher guided our efforts to identify the quantity and spatial arrangement of features 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 propose 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 proposing areas for critical habitat designation: (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 is 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 is proposed for 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 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 known to be occupied by flycatchers at the time of listing with 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 U.S. Geological Survey 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. We also examined 2008 to 2010 data that the Service in Arizona, Nevada, Utah, and Colorado compiled and entered into separate databases and spreadsheets. The USGS and U.S. Bureau of Reclamation provided the post-2007 Statewide database results for California and New Mexico, respectively. However, these post-2007 flycatcher data were difficult to comprehensively incorporate into this proposed 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. 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 Geographic Information System (GIS) coverages and habitat models.

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 proposed critical habitat. In other words, how much area around breeding sites should be considered as proposed 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.* 2007a, 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.* 2007a, p. 77). Juveniles disperse the farthest and were the only group of flycatchers to connect very distant populations (Paxton *et al.* 2007a, 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.* 2007a, 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.* 2007a, 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 would regularly 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 proposed 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.

Our methods were unable to distinguish a more specific area, in contrast to other Management Units, within the San Diego and Santa Ana Management Units in the Coastal California Recovery Unit. Instead, because of the wide distribution and proximity of occupied streams segments, nearly these entire Management Units were identified as a large population area.

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 to propose as critical habitat to meet recovery goals.

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. 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 proposing 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 proposal. 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 included as proposed critical habitat for the flycatcher are described below. Those streams included in this proposal that were not occupied at the time of listing were determined to be essential for the conservation of the flycatcher.

Migratory Habitat

Habitat for migrating flycatchers is captured in this proposal by our approach to propose critical habitat as “river segments” and distributing segments across 29 Management Units throughout 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, southwestern willow 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 look at flycatcher use along the Lower Colorado River (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 of their study areas and over half of their survey sites (McLeod *et al.* 2005, pp. 9–11; Koronkiewicz *et al.* 2006, pp. 11–13). Similarly, regular migratory movement of flycatchers was 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 designating 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 proposing areas surrounding nesting sites where migrant flycatchers are most often detected.

Lateral Extent

For the lateral extent of flycatcher proposed critical habitat stream segments, 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. Flycatchers use riparian habitat in a variety of conditions for breeding, feeding, sheltering, cover, dispersal, and migration stopover areas. 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 return flows can also influence riparian vegetation distribution. Rivers can and do 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 proposal, we consider the riparian zone 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 proposed 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). Geographic Information System 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 (NWI) digital data from the mid 1980s, 2001, and 2002; (2) Federal Emergency Management Agency (FEMA) 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 (DOQQs), black and white, 1990s era and 2001; (2) USGS DOQQs 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) National Wetlands Inventory aerial photographs, 2001–2002.

We refined all lateral extents for this proposed 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 proposed critical habitat designation since these areas do not contain the primary constituent elements (see *Primary Constituent Elements for the Southwestern Willow Flycatcher* section above), are not considered essential to the conservation of the flycatcher 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, utilities, mining, and extraction.

Mapping

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 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. Also, 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 left inside critical habitat boundaries shown on the maps of this proposed rule have been excluded by text in the

proposed rule and are not proposed for designation as critical habitat. Therefore, if the critical habitat is finalized as proposed, a Federal action involving these lands would not trigger section 7 consultation with respect to critical habitat and the prohibition of adverse modification unless the specific action would affect the physical or biological features in the adjacent critical habitat. Similarly, where there are long stretches of canyons or other portions of rivers that we know lack the physical or biological features within a river segment, we attempted to remove those areas from our proposed river segments.

Summary

Our initial steps and approach in proposing 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 essential physical or biological features which may require special management; and (2) that are essential to the conservation of the flycatcher 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 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 heavily 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 proposed 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 proposed stream segments represent flycatcher habitat known to be occupied at the time of listing and essential areas that have high value for recovery. The proposed 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 proposed stream segments provide habitat for a wide distribution of breeding flycatchers, including areas for population growth to meet numerical and habitat-related recovery goals. The proposed areas also support other important flycatcher needs such as migration, dispersal, foraging, and shelter to reach the geographic distribution and habitat-related recovery goals established within the Recovery Plan's 29 Management

Units with recovery goals.

Summary of Changes between Flycatcher Critical Habitat Proposals

Our improved knowledge about the flycatcher's distribution and abundance, development of a Recovery Plan (Service 2002), and our approach to determining essential habitat led to differences between the 1997 final flycatcher critical habitat designation (62 FR 39129) and our approach in the 2004 flycatcher critical habitat proposal (69 FR 60706). Our 1997 designation of flycatcher critical habitat was completed without extensive current knowledge about flycatcher distribution and abundance and prior to the finalization of the Recovery Plan (Service 2002). Subsequently, in our 2004 flycatcher critical habitat proposal, we had more information about flycatcher distribution and abundance; population dynamics; year-to-year movements; and defined conservation objectives, strategies, and recovery criteria. In 2004, our approach to determining essential flycatcher habitat was protecting large populations and those smaller populations that, in proximity, equaled a large population.

For this 2011 proposal, we have refined our definition of what areas are considered to be essential for the conservation of the species (see discussion below), and we continued to improve our knowledge about flycatcher habitat, distribution, and abundance. Because we will be re-analyzing potential exclusions, we present below the differences between our 2004 flycatcher proposed critical habitat rule and this 2011 flycatcher proposed critical habitat rule. We are comparing this proposal to the 2004 proposal instead of the final 2005 flycatcher critical habitat designation because that final

designation had a number of areas excluded under section 4(b)(2) of the Act. Our approach to conservation of the flycatcher and definition of essential habitat are the primary differences between the two proposals. We summarize the changes below.

(1) For this 2011 proposal, we define the critical habitat that is not occupied at the time of listing, but that is essential for the conservation of the species, as areas needed to support the distribution and abundance of territories and habitat-related recovery goals described in the Recovery Plan (Service 2002, pp. 77–85). In contrast, in 2004, we determined essential habitat was based on only those areas that supported large flycatcher populations (69 FR 60715–60716).

(2) For this 2011 proposal, we are proposing stream segments in all 29 Management Units where there are flycatcher territories and habitat-related recovery goals stated in the Recovery Plan, in contrast to our 2004 proposal where we proposed stream segments in only 21 Management Units.

(3) In this proposed rule we are using 35 km (22 mi) as the radius to guide our critical habitat areas surrounding large populations (equal or greater than 10 territories) and proximity of sites with smaller numbers that could equal a large population. This is the average distance between breeding sites that USGS described (30 to 40 km, 18 to 25 mi) as being highly connected. In our 2004 proposal, we used 30 km (18 mi) as the radius. Because USGS did not describe a value within this 30 to 40 km range (18 to 25 mi) that is more or less beneficial for the flycatcher, we believe using the average

accurately reflects the range of distance between highly connected breeding sites.

(4) To assist in generating critical habitat in Management Units where there are recovery goals, but there are no known large flycatcher population or collection of small populations in proximity that equaled a large population, we are using Recovery Plan guidance in this proposed rule to propose stream segments with substantial recovery value (Service 2002, pp. 86–92), known breeding sites (Durst *et al.* 2008; Sogge and Durst 2008), and other literature, reports, and local knowledge about flycatcher population dynamics and habitat. In contrast, in 2004, we did not attempt to propose critical habitat in these areas because our definition of essential habitat was focused on the presence of large populations (69 FR 60715–60716).

(5) In 2004 we identified the following stream segments as essential to the conservation of the flycatcher and proposed them as critical habitat. These segments are not included in this proposal because of further evaluation of habitat quality, additional information about flycatcher territories, and our revised definition of essential habitat.

Coastal California Recovery Unit

- Santa Ana Management Unit, CA: Yucaipa Creek and Wilson Creek.
- San Diego Management Unit, CA: Cuyamaca Reservoir and Agua Hedionda

Lagoon.

Lower Colorado Recovery Unit – Nevada, California and Arizona Border, Arizona, New

Mexico

- Little Colorado Management Unit, AZ: East and South Forks Little Colorado River.

Gila Recovery Unit – Arizona

- Roosevelt Management Unit, AZ: Pinto Creek.

(6) The following stream segments were not proposed as flycatcher critical habitat in 2004 but are now being proposed as flycatcher critical habitat. These areas are now identified as flycatcher critical habitat primarily due to the change in our criteria and consideration of the recovery goals (see items 1–4 above).

Coastal California Recovery Unit

- Santa Ynez Management Unit: Mono Creek.
 - At Vandenberg Air Force Base, a portion of the Santa Ynez River is exempted under section 4(a)(3) of the Act.
- Santa Clara Management Unit: Santa Clara River, Ventura River, Piru Creek, Castaic Creek, Big Tujunga Canyon, Little Tujunga Canyon, and San Gabriel River.
- Santa Ana Management Unit: Bautista Creek.
- San Diego Management Unit: Canada Gobernadora Creek, Fallbrook Creek, Sweetwater River (near Sweetwater Reservoir).
 - At Marine Corps Base, Camp Pendleton, portions of Cristianitos, San Mateo, San Onofre, Las Flores, Las Pulgas, and DeLuz Creeks and Santa

Margarita River are exempted from critical habitat under section 4(a)(3) of the Act.

- At Naval Weapons Station Seal Beach Detachment Fallbrook, portions of Pilgrim Creek and Santa Margarita River are exempted from critical habitat under section 4(a)(3) of the Act.

Basin and Mohave Recovery Unit – California and Nevada

- Kern Management Unit: Canebrake Creek, CA.
- Mohave Management Unit: West Fork Mohave River, CA.
- Amargosa Management Unit: Willow Creek, CA; Amargosa River CA, NV; and unnamed riparian areas and Carson Slough within Ash Meadows National Wildlife Refuge, NV.

Lower Colorado Recovery Unit – Nevada, California and Arizona border, Arizona, Utah, and New Mexico

- Little Colorado Management Unit: Rio Nutria and Zuni River, NM.

Upper Colorado Recovery Unit – Arizona, Utah, Colorado, and New Mexico

- San Juan Management Unit: Los Pinos River, CO; San Juan River, NM, UT.
- Powell Management Unit: Paria River, UT.

Gila Recovery Unit – Arizona and New Mexico

- Roosevelt Management Unit: Pinal Creek, AZ.

- Santa Cruz Management Unit: Santa Cruz River and Cienega Creek, AZ.
- San Francisco Management Unit: San Francisco River, AZ, NM.
- Hassayampa and Agua Fria Management Unit: Hassayampa River and Gila River, AZ.

Rio Grande Recovery Unit – New Mexico and Colorado

- Upper Rio Grande Management Unit: Rio Fernando, NM.
- Lower Rio Grande Management Unit: Rio Grande, NM.

(7) We are exempting, under section 4(a)(3) of the Act, areas that meet the definition of flycatcher critical habitat found on three military installations in the Coastal California Recovery Unit: Vandenberg Air Force Base; Naval Weapons Station Seal Beach Detachment Fallbrook; and Marine Corps Base, Camp Pendleton based on these military installations having Service approved Integrated Natural Resources Management Plans (INRMP) which are being implemented to conserve flycatchers and their habitat (see **Exemptions**).

(8) The end points of similar stream segments we proposed in 2004 have changed in many instances within this 2011 proposal, making some segments longer and others shorter. This is primarily due to: our goal of proposing stream segments that could reach recovery goals; changing the distance used to identify critical habitat and connect more distant populations (increased from 30 km [18 mi] to 35 km [22 mi]); and continuing to improve and document our knowledge about flycatcher distribution, abundance, and habitat. Please see the maps included at the end of this proposal for the specific stream

segment end points and also in the supplementary documents associated with this proposed rule found at <http://www.regulations.gov>.

(9) The length and area of some stream segments may be different in this 2011 proposal, even when the same end points occur under both the 2004 and 2011 proposals. When the end points are the same, the newer Geographic Information System (GIS) software used in 2011 was more accurate in calculating the bends and turns of streams resulting in larger calculations of stream length for some critical habitat stream segments. We also used updated information to generate the lateral extent of stream segments.

(10) We are also proposing to correct the information in the historic range column for the flycatcher in the table at 50 CFR 17.11(h). The historic range for the flycatcher should include Nevada.

Proposed Critical Habitat Designation

We are proposing stream segments in 29 Management Units found in six Recovery Units as critical habitat for the flycatcher. These stream segments occur in California, Nevada, Utah, Colorado, Arizona and New Mexico and include a total of approximately 3,364 km (2,090 mi) of streams. Table 1 lists all the streams included in this proposal and whether they are considered occupied at the time of listing and whether they are currently considered occupied. Approximate land ownership in each State where the proposed critical habitat occurs is provided in Table 2. The critical habitat areas

described below constitute our best assessment of areas that meet the definition of flycatcher critical habitat. In order to help further understand the location of these proposed stream segments, please see the associated maps found within this proposed rule. Maps in GIS format that include the lateral extent areas being proposed for designation can be found in the supplementary materials associated with this proposed rule at <http://www.regulations.gov>.

Coastal California Recovery Unit in California

(1) Santa Ynez Management Unit—Santa Ynez River and Mono Creek. Portions of Santa Ynez River within Vandenberg Air Force Base are exempted (see **Exemptions**).

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

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

(4) San Diego Management Unit—Canada Gobernadora Creek, Cristianitos Creek, Las Flores Creek, Las Pulgas Creek, San Mateo Creek, San Onofre Creek, Santa Margarita River, Fallbrook Creek, DeLuz Creek, San Luis Rey River, Pilgrim Creek, Agua Hedionda Creek, San Dieguito River, Santa Ysabel Creek, Temescal Creek, Temecula Creek, Sweetwater River, and San Diego River. Entire segments of San Mateo, San Onofre, Cristianitos, Las Flores, Las Pulgas, and Fallbrook Creeks are exempted, and portions of Santa Margarita River and DeLuz and Pilgrim Creeks that occur within Marine Corps Base Camp Pendleton and Naval Weapons Station Seal Beach

Detachment Fallbrook are exempted (see **Exemptions**).

Basin and Mohave Recovery Unit in California and Nevada

(5) Owens Management Unit—Owens River, CA.

(6) Kern Management Unit—South Fork Kern River (including upper Lake Isabella) and Canebrake Creek, CA.

(7) Mohave Management Unit—Deep Creek, Holcomb Creek, Mohave River, and West Fork Mohave River, CA.

(8) Salton Management Unit—San Felipe Creek and Mill Creek, CA.

(9) Amargosa Management Unit—Willow Creek, CA; Amargosa River CA and NV; Carson Slough and unnamed riparian areas within Ash Meadows National Wildlife Refuge, NV.

Lower Colorado Recovery Unit in Nevada, California and Arizona border, Arizona, Utah, and New Mexico

(10) Little Colorado Management Unit—Little Colorado River and West Fork Little Colorado River, AZ; Rio Nutria and Zuni River, NM.

(11) Virgin Management Unit—Virgin River, NV, AZ, and UT.

(12) Middle Colorado Management Unit—Colorado River, AZ.

(13) Pahrnagat Management Unit—Pahrnagat River and Muddy River, NV.

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

Santa Maria River (including upper Alamo Lake), AZ.

(15) Hoover to Parker Dam Management Unit— Bill Williams River, AZ;

Colorado River, CA and AZ.

(16) Parker Dam to Southerly International Border Management Unit—Colorado River, CA and AZ.

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

(17) San Juan Management Unit—Los Pinos River, CO; San Juan River, NM and UT.

(18) Powell Management Unit—Paria River, UT.

Gila Recovery Unit in Arizona and New Mexico

(19) Verde Management Unit—Verde River (including Horseshoe Lake), AZ.

(20) Roosevelt Management Unit—Salt River, Tonto Creek (including Roosevelt Lake), and Pinal Creek, AZ.

(21) Middle Gila and San Pedro Management Unit—Gila River and San Pedro River, AZ.

(22) Upper Gila Management Unit—Gila River in AZ and NM.

(23) Santa Cruz Management Unit—Santa Cruz River and Cienega Creek, AZ.

(24) San Francisco Management Unit—San Francisco River, AZ and NM.

(25) Hassayampa and Agua Fria Management Unit—Hassayampa River and Gila

River, AZ.

Rio Grande Recovery Unit in New Mexico and Colorado

(26) San Luis Valley Management Unit—Conejos River and Rio Grande, CO.

(27) Upper Rio Grande Management Unit—Coyote Creek, Rio Grande, Rio Grande del Rancho, and Rio Fernando, NM.

(28) Middle Rio Grande Management Unit—Rio Grande, NM.

(29) Lower Rio Grande Management Unit—Rio Grande, NM.

TABLE 1. Streams proposed for flycatcher critical habitat (1) occupied at time of listing based upon our criteria (1991-1994) and (2) territories detected (1991-2010).

Recovery Unit	Management Unit	Stream	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 (portion exempted)	Yes	Yes
	Santa Clara	Big Tujunga Canyon	No	No
		Castaic Creek	No	No
		Little Tujunga Canyon	No	No
		Piru Creek	No	Yes
		San Gabriel River	No	Yes
		Santa Clara River	Yes	Yes
		Ventura River	No	No
	Santa Ana	Bear Creek	No	Yes

Recovery Unit	Management Unit	Stream	Known to be Occupied at Time of Listing (1991-1994)	Territories detected (1991-2010)
		Mill Creek	No	Yes
		Oak Glen Creek	No	Yes
		San Timoteo Creek	No	Yes
		Santa Ana River	No	Yes
		Waterman Creek	No	Yes
		Bautista Creek	No	Yes
	San Diego	Agua Hedionda Creek	No	Yes
		Canada Gobernadora Creek	No	Yes
		Cristianitos Creek (exempted)	No	No
		DeLuz Creek (portion exempted)	No	Yes
		Fallbrook Creek (exempted)	No	Yes
		Las Flores Creek (exempted)	No	Yes
		Las Pulgas Creek (exempted)	No	No
		Pilgrim Creek (portion exempted)	Yes	Yes
		San Dieguito River	No	Yes
		San Diego River	No	Yes
		San Luis Rey River	Yes	Yes
		San Mateo Creek (exempted)	No	Yes
		San Onofre Creek (exempted)	No	No
		Santa Margarita River (portion exempted)	No	Yes
		Santa Ysabel Creek	No	Yes
		Sweetwater River	No	Yes
		Temecula Creek	No	Yes
		Temescal Creek	No	No
Basin and Mohave	Owens	Owens River	Yes	Yes

Recovery Unit	Management Unit	Stream	Known to be Occupied at Time of Listing (1991-1994)	Territories detected (1991-2010)
	Kern	Canebrake Creek	No	Yes
		South Fork Kern River	Yes	Yes
	Mohave	Deep Creek	No	No
		West Fork Mohave River	No	No
		Holcomb Creek	No	Yes
		Mohave River	No	Yes
	Salton	San Felipe Creek	No	Yes
		Mill Creek	No	Yes
	Amargosa	Amargosa River	No	Yes
		Willow Creek	No	No
		Ash Meadows Riparian Areas	No	Yes
		Carson Slough	No	Yes
Lower Colorado	Little Colorado	Little Colorado River	Yes	Yes
		Rio Nutria	Yes	Yes
		West Fork Little Colorado River	No	No
		Zuni River	Yes	Yes
	Virgin	Virgin River	No	Yes
	Middle Colorado	Colorado River	Yes	Yes
	Pahrnagat	Muddy River	No	Yes
		Pahrnagat River	No	Yes
	Bill Williams	Big Sandy River	Yes	Yes
		Bill Williams River	Yes	Yes
		Santa Maria River	Yes	Yes
	Hoover to Parker Dam	Colorado River	Yes	Yes
		Bill Williams River	Yes	Yes
	Parker Dam to Southerly	Colorado River	Yes	Yes

Recovery Unit	Management Unit	Stream	Known to be Occupied at Time of Listing (1991-1994)	Territories detected (1991-2010)
	International Border			
Upper Colorado	San Juan	San Juan River	No	Yes
		Los Pinos River	No	Yes
	Powell	Paria River	No	No
Gila	Verde	Verde River	Yes	Yes
	Roosevelt	Tonto Creek	Yes	Yes
		Salt River	Yes	Yes
		Pinal Creek	No	Yes
	Middle Gila and San Pedro	San Pedro River	Yes	Yes
		Gila River	Yes	Yes
	Upper Gila	Gila River	Yes	Yes
	Santa Cruz	Santa Cruz	No	No
		Cienega Creek	No	Yes
	San Francisco	San Francisco River	Yes	Yes
	Hassayampa and Agua Fria	Hassayampa River	No	Yes
		Gila River	Yes	Yes
Rio Grande	San Luis Valley	Rio Grande	Yes	Yes
		Conejos River	No	Yes
	Upper Rio Grande	Coyote Creek	Yes	Yes
		Rio Fernando	No	Yes
		Rio Grande	Yes	Yes
		Rio Grande Del Rancho	Yes	Yes
	Middle Rio Grande	Rio Grande	Yes	Yes
	Lower Rio Grande	Rio Grande	Yes	Yes

Note: Recovery Units and Management Units are from the 2002 Recovery Plan.

TABLE 2. Land ownership, by State, of proposed critical habitat areas for southwestern willow flycatcher, listed as approximate stream lengths in km (mi).

State	Federal	State	Tribal	Private	Other/Unclassified
AZ	478 (297)	53 (33)	112 (69)	378 (235)	0 (0)
CA	188 (117)	14 (9)	24 (15)	0 (0)	656 (407)
CA/AZ	190 (118)	19 (12)	110 (68)	45 (28)	12 (7)
CO	29 (18)	0 (0)	26 (16)	210 (131)	9 (6)
NV	120 (75)	14 (8)	0 (0)	22 (13)	0 (0)
NM	127 (79)	64 (40)	122 (76)	330 (205)	0 (0)
UT	68 (42)	0 (0)	52 (32)	42 (26)	0 (0)
Total	1199 (745)	164 (102)	445 (277)	1027 (638)	525 (326)

Notes: Totals do not sum because some stream segments have different ownership on each side of the bank resulting in those segments being counted twice. CA/AZ includes the stream segments along the Colorado River where California is on one stream bank and Arizona is on the other. Other/Unclassified includes some local government ownership and unclassified segments (where land ownership was not available).

We present brief descriptions below of all proposed 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 we will propose 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) and Flycatcher Rangewide Report (Durst *et al.* 2008).

Because of the abundance of information presented in each Management Unit description, we are providing a brief overview of the information presented in each 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 proposing as critical habitat and appropriate location and length descriptions. Any stream segments we propose 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 proposed segments that were known to be occupied by flycatchers at the time of listing. Finally, we explain how the proposed 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 the conservation of the flycatcher.

For each stream segment being proposed as critical habitat, we identify the State and County where it occurs and list the length rounded up to the nearest tenth of a kilometer or mile. The specific beginning and ending points of each proposed stream segment can be found below in the combination of textual descriptions and associated maps for each proposed critical habitat unit in the **Proposed Regulation Promulgation** section of this document. In addition, GIS data for all proposed 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 are being exempted under section 4(a)(3) under the Act or are being considered for possible exclusion from critical habitat under section 4(b)(2) of the Act. For more explanation of why any stream is being exempted or considered for exclusion, see the discussions under the **Exemptions** and **Exclusions** sections below.

All of the proposed 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 proposed 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 are included in this proposal when needed to reach recovery goals. The distribution and abundance of territories and habitat within each proposed 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; Durst and Sogge 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 proposed 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 known to be occupied at the time of listing (1991-1994) (Sogge and Durst 2008) where we are proposing 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

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 being proposed 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 proposing three Santa Ynez River segments and a segment of Mono Creek as flycatcher critical habitat. The lower 27.6-km (17.2-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 proposing 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. The proposed area of 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 unnamed tributaries (including Mono Creek) were described as having substantial recovery value in the Recovery Plan (Service 2002, p.

86). These proposed 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.

Although a 14.7-km (9.1-mi) portion of the lower Santa Ynez River segment was occupied at the time of listing, it occurs within the boundaries of Vandenberg Air Force Base (AFB). We are exempting this portion of the river from designation as critical habitat, under section 4(a)(3) of the Act, based on their INRMP which provides a benefit to the flycatcher (see **Exemptions**).

Santa Clara Management Unit

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 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 0 to 7 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 proposing as critical habitat a segment (79.6 km, 49.4 mi) of the Santa Clara River in Ventura and Los Angeles Counties. This segment was known to be occupied by flycatchers at the time of listing (Sogge and Durst 2008) and has 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 proposing as flycatcher critical habitat segments of the Ventura River (27.5 km, 17.1 mi) in Ventura County; and segments of Piru Creek (41.8 km, 26.0 mi), Castaic Creek (4.8 km, 3.0 mi), Little Tujunga (2.2 km, 1.4 mi) and Big Tujunga (4.9 km, 3.0 mi) Canyons, 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 the Little Tujunga Canyon and Castaic Creeks, these seven 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.

Santa Ana Management Unit

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.

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. Flycatcher territories have been detected along the Santa Ana River drainage at about 20 known breeding sites. 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.

We are proposing as critical habitat segments of the Santa Ana River and tributaries and other nearby streams. None of these areas was known to be occupied at the time of listing, but are essential for flycatcher conservation in order to meet recovery goals, as explained below. On the Santa Ana River, we are proposing an upper 42.3-km (26.3-mi) segment and a lower 47.8-km (29.7-mi) segment that occur in San Bernardino and Riverside Counties. Also occurring in both San Bernardino and Riverside Counties, we are proposing a 25.6-km (15.9-mi) segment of San Timoteo Creek. We are also proposing segments of the following Santa Ana River tributaries in San Bernardino County: a 14.8-km (9.2-mi) segment of Bear Creek; a 19.2-km (11.9-mi) segment of Mill Creek; a 4.6-km (2.9-mi) segment of Oak Glen Creek; and a 5.2-km (3.2-mi) segment of Waterman Creek (including small portions of the left and right forks). In Riverside County, we are proposing a 23.0-km (14.3-mi) segment of Bautista Creek.

This diverse and widely distributed group of seven streams (eight stream segments) 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 eight 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.

We will consider excluding portions of the Santa Ana River, San Timoteo Creek, Bautista Creek and Temecula Creek (including Vail Lake) within the planning area boundary for the Western Riverside MSHCP from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act. We intend to exclude critical habitat from areas covered by the Western Riverside MSHCP based on the protections described below (see **Exclusions**) and per the provisions laid out in the MSHCP's implementing agreement, to the extent consistent with the requirements of 4(b)(2) of the Act.

Also, a portion of Bautista Creek occurs on tribal lands managed by the Ramona Band of Cahuilla, California. We will also consider our partnership with this tribe and evaluate the conservation planning and management that occurs for potential exclusion under section 4(b)(2) of the Act (see **Exclusions**).

San Diego Management Unit

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), and an estimated 77 territories occurred in 2007 (Durst *et al.* 2008, p. 12).

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 (2 segments), Pilgrim Creek, Agua Hedionda Creek, San Dieguito River, Santa Ysabel Creek, San Diego River (2 segments), Temescal Creek, and Sweetwater River. A segment of Temecula Creek travels across San Diego and Riverside Counties and a Canada Goberandora Creek segment occurs in Orange County.

The San Luis Rey River and Pilgrim Creek were the only streams in this management unit known to be occupied by flycatchers at the time of listing. The

remaining proposed critical habitat stream segments will help reach flycatcher recovery goals within the San Diego Management Unit.

Because of the large number of proposed stream segments within this Management Unit, unlike other Management Unit descriptions within this proposed rule, the descriptions of proposed critical habitat segments within the San Diego Management Unit are separated into smaller groups. We will describe the length and general location of each proposed stream segment, the status of flycatcher territories, and whether a portion is exempted under section 4(a)(3) of the Act or identified for possible exclusion under section 4(b)(2) of the Act.

San Luis Rey River

Flycatcher territories were first detected on San Luis Rey River, in San Diego County, California, in 1993. In 2001, a high of 62 territories were detected at the 7 known breeding sites found on this river. A single site on the upper San Luis Rey River typically represents a large proportion of all territories known to occur. For example, total of 53 flycatcher territories were detected at this site in 2001.

We are proposing as critical habitat two river segments of the San Luis Rey River in San Diego County, California. The upper San Luis Rey River segment (28.6 km, 17.8 mi) extends from Lake Henshaw to Wilson Way, while the lower segment (52.3 km, 32.5 mi) extends from near the downstream end of the Pauma Country Club to near Interstate

5. These segments are known to be occupied 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 Rincon and La Jolla Bands of Luiseno Indians have developed Management Plans that we will consider for possible exclusion under section 4(b)(2) of the Act (see **Exclusions**). The Pala Band of Luiseno Mission Indians also have tribal lands on the San Luis Rey River, therefore we will consider our partnership with this tribe and evaluate conservation planning and management that occurs for potential exclusion under section 4(b)(2) of the Act (see **Exclusions**).

Santa Margarita River and Pilgrim, De Luz, Las Flores, Las Pulgas, and Fallbrook Creeks

With the exception of Las Pulgas Creek, single flycatcher breeding sites have been detected on each of these stream segments. Small numbers of flycatcher territories at a single known breeding site have been detected annually on Pilgrim Creek (0-4 territories), Las Flores Creek (0-3 territories), De Luz Creek (0-1 territories), and Fallbrook Creek (0-2 territories) (Sogge and Durst 2008). In contrast, the lone known flycatcher breeding site on the Santa Margarita River had as many as 23 flycatcher territories in 2003 (Sogge and Durst 2008).

We are proposing as critical habitat an 18.5-km (11.5-mi) segment along Pilgrim Creek (including portions of its left and right forks). This segment is known to be

occupied 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 also proposing segments of flycatcher habitat along the Santa Margarita River (41.3 km, 25.6 mi), Fallbrook Creek (5.3 km, 3.3 mi), De Luz Creek (11.1 km, 6.9 mi), and a continuous Las Flores Creek-Las Pulgas Creek segment (9.6 km, 6.0 mi) in San Diego County, California. These segments were not 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.

The portions of the Santa Margarita River (31.8 km, 19.8 mi), De Luz Creek (7.8 km, 4.8 mi), Fallbrook Creek (5.3 km, 3.3 mi), Las Flores Creek-Las Pulgas Creek (9.6 km, 6.0 mi), and Pilgrim Creek (including its left and right forks) (13.5 km, 8.4 mi) that fall within the boundaries of Marine Corps Base Camp Pendleton and Naval Weapons Station Seal Beach Detachment Fallbrook will be exempted from this critical habitat designation under section 4(a)(3) of the Act because Camp Pendleton and Fallbrook's INRMPs provide benefits to the flycatcher (see **Exemptions**).

Because all the flycatcher habitat of Las Flores, Las Pulgas, and Fallbrook Creeks occurs entirely within the boundaries of Marine Corps Base Camp Pendleton and Naval Weapons Station Seal Beach Detachment Fallbrook, no portions of these three streams are proposed as flycatcher critical habitat. However, there are remaining upstream

segments of the Santa Margarita River, and DeLuz and Pilgrim Creeks that we are proposing as flycatcher critical habitat. The remaining proposed flycatcher critical habitat includes a 9.4-km (5.8-mi) Santa Margarita River segment, a 3.3-km (2.1-mi) De Luz Creek segment, and a 5.0-km (3.1-mi) Pilgrim Creek segment.

Canada Gobernadora Creek

Canada Gobernadora Creek has had one to two territories detected annually between 1999 and 2003 (Sogge and Durst 2008). We are proposing as flycatcher critical habitat a 5.9-km (3.6-mi) segment of Canada Gobernadora Creek in Orange County, California. This segment was not known to be occupied at the time of listing, but is essential for flycatcher conservation in order to help meet recovery goals.

We will consider excluding a portion of Canada Gobernadora Creek within the planning area boundary for the Orange County Southern Subregion HCP from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act. We intend to exclude critical habitat from areas covered by the Orange County Southern Subregion HCP based on the protections described below (see **Exclusions**) and per the provisions laid out in the HCP's implementing agreement, to the extent consistent with the requirements of 4(b)(2) of the Act. We encourage any public comment in relation to this consideration.

San Mateo, Cristianitos, and San Onofre Creeks

We identified segments of flycatcher habitat along San Mateo Creek (8.4 km, 5.2 mi), Cristianitos Creek (3.9 km, 2.4 mi), and San Onofre Creek (6.6 km, 4.1 mi) in San Diego County, California. A single breeding site was detected on San Mateo Creek, with a lone territory detected in 1995, 1997, and 2007 (Sogge and Durst 2008). No flycatcher territories have been detected on Cristianitos and San Onofre Creeks.

Because these segments of Cristianitos, San Mateo, and San Onofre Creeks occur entirely within the boundaries of Marine Corps Base Camp Pendleton, these stream segments will be exempted from this critical habitat proposal under section 4(a)(3) of the Act because Camp Pendleton's INRMP provides benefits to the flycatcher (see **Exemptions**). Therefore, no portions of San Mateo, Cristianitos, or San Onofre Creeks are proposed as flycatcher critical habitat.

Agua Hedionda Creek

A single site and flycatcher territory was detected on Agua Hedionda Creek in 1998 and 1999 (Sogge and Durst 2008). We are proposing two separate segments of Agua Hedionda Creek. The upstream segment of Agua Hedionda Creek includes small portions of the north (1.0 km, 0.6 mi) and south forks (0.4 km, 0.2 mi). The upstream segment extends from La Miranda Drive (south fork) and Sycamore Avenue (north fork) and extends along the mainstem Agua Hedionda Creek for 5.9 km (3.7 mi) downstream to just east of the Rancho Carlsbad Golf Course. The downstream segment of Agua

Hedionda Creek extends from Cannon Road for 2.1 km (1.3 mi) to Agua Hedionda Lagoon. These segments were not known to be occupied at the time of listing, but are essential for flycatcher conservation because they will help meet recovery goals in this Management Unit.

We will consider excluding portions of Agua Hedionda Creek within the Carlsbad HMP from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act. We intend to exclude critical habitat from areas covered by the Carlsbad HMP based on the protections described below (see **Exclusions**) and per the provisions laid out in the HCP's implementing agreement, to the extent consistent with the requirements of 4(b)(2) of the Act. We encourage any public comment in relation to this consideration.

San Diego, San Dieguito, and Sweetwater Rivers and Santa Ysabel and Temescal Creeks

We identified and are proposing as flycatcher critical habitat segments of the San Diego River, San Dieguito River, Santa Ysabel Creek, Temescal Creek, and Sweetwater River that occur within San Diego County, California.

Three flycatcher breeding sites are known on the San Dieguito River and Santa Ysabel and Temescal Creeks within San Diego County, California. Flycatcher territories were first detected there in 1996 (and annually between 1996 and 2003), with a high of 5 territories in 1997 (Sogge and Durst 2008). We are proposing a continuous 10.3 km (6.3 mi) segment of that extends along Santa Ysabel Creek from Ysabel Creek Road

downstream (1.1 km, 0.7 mi) to the San Dieguito River and continues downstream (9.2 km, 5.7 mi) until it terminates at Interstate 15 and Lake Hodges in San Diego County, California. At the headwaters of the San Dieguito River, we are proposing connected segments of Santa Ysabel Creek (9.8 km, 6.1 mi) and Temescal Creek (7.6 km, 4.7 mi). These segments were not known to be occupied at the time of listing, but are essential for flycatcher conservation because they will help meet recovery goals.

A lone breeding site was detected on the San Diego River in 2001, with 2 territories (Sogge and Durst 2008). We are proposing two essential segments of the San Diego River that are separated by El Capitan Reservoir and a long stretch of stream downstream from El Capitan Reservoir in San Diego County, California. The upper 7.0-km (4.3-mi) San Diego River segment extends from just north of the Cedar Creek confluence down to El Capitan Reservoir. The lower 9.5-km (5.9-mi) San Diego River segment begins at Magnolia Avenue and ends at Mission Trails Regional Park. These segments were not known to be occupied at the time of listing, but are essential for the flycatcher conservation because they will help meet recovery goals.

A single site and flycatcher territory were detected on the Sweetwater River (located south of the San Diego River) from 1997 to 1999 (Sogge and Durst 2008). We are proposing as critical habitat a 6.6-km (4.1-mi) segment of the Sweetwater River in San Diego County, California, from the Rancho San Diego Golf Course downstream to Sweetwater Reservoir.

We will consider excluding portions of the San Dieguito, San Diego, and Sweetwater Rivers and Santa Ysabel Creek within the planning area boundary for the San Diego MSCP and HCP from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act. We intend to exclude critical habitat from areas covered by the San Diego MSHCP and HCP based on the protections described below (see **Exclusions**) and per the provisions laid out in the HCP's implementing agreement, to the extent consistent with the requirements of 4(b)(2) of the Act. We encourage any public comment in relation to this consideration.

Also, a portion of the San Diego River occurs within the land of the Capitan Grande Band of Diegueno Mission Indians of California (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). We will also consider our partnership with this tribe and evaluate the conservation planning and management that occurs for potential exclusion under section 4(b)(2) of the Act (see **Exclusions**).

Temecula Creek

A total of two breeding sites, holding one flycatcher territory each in 1997 and 1998, are known from Temecula Creek (Sogge and Durst 2008). We have identified and are proposing as critical habitat a 23.9-km (14.8-mi) segment of Temecula Creek in Riverside and San Diego Counties, California, from Vail Lake (including Vail Lake) to Chihuahua Creek. This segment was not known to be occupied at the time of listing, but

is essential for the flycatcher conservation because it will help meet recovery goals.

Where Temecula Creek occurs within the Western Riverside MSHCP, it will be considered for exclusion under section 4(b)(2) of the Act (see **Exclusions**).

San Diego Management Unit Summary

The Santa Margarita River, DeLuz Creek, San Luis Rey River, Pilgrim Creek, Agua Hedionda Creek, San Dieguito River, San Diego River, Sweetwater River, Temecula Creek, and Canada Gobernadora Creek were identified in the Recovery Plan as having substantial recovery value (Service 2002, p. 87). The Temescal and Santa Ysabel Creeks were also found to have substantial recovery value. Together these 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 12 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.

Basin and Mohave Recovery Unit

The Basin and Mohave 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, Mohave, Salton, and Amargosa Management Units. The stream segments proposed as critical habitat are described below in their appropriate Management Units.

Based upon our occupancy criteria (see above), within the Basin and Mohave Recovery Unit, the South Fork Kern (1993) and Owens Rivers (1993) are streams that were known to be occupied at the time of listing (1991-1994) (Sogge and Durst 2008) where we are proposing critical habitat segments. 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 Mohave Recovery Unit.

Owens Management Unit, CA

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 Mohave 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 are proposing as critical habitat a 128.5-km (79.9-mi) continuous segment of the Owens River (from Long Lake Dam to just north of Tinemaha Reservoir) within Inyo and Mono Counties, California.

The segment of the Owens River proposed as critical habitat is 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 we are proposing 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.

This entire Owens River segment occurs within the boundaries of land owned and managed by the Los Angeles Department of Water and Power that we are considering for

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

Kern Management Unit, CA

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 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 (see below). Canebrake Creek (a tributary to the South Fork Kern River) was not known to be occupied at the time of listing, but territories were

detected in 1998 (Sogge and Durst 2008).

We are proposing as critical habitat a 23.8-km (14.8-mi) portion of the South Fork Kern River (including the upper 1.0-km, 0.6-mi, of Lake Isabella) and a 1.7-km (1.0-mi) segment of Canebrake Creek in Kern County, California.

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). This South Fork Kern River segment and the additional Canebrake Creek segment 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.

Because the South Fork Kern River is located within the South Fork Kern River Wildlife Area (which includes the upper portion of Lake Isabella), Haffenfeld Ranch, and Sprague Ranch, this segment will be considered for exclusion under section 4(b)(2) of the Act (see **Exclusions**).

Mohave Management Unit, CA

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

There are no large flycatcher nesting populations in the Mohave 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 (see below).

Flycatchers were first detected nesting on the Mohave River in 1995 and Holcomb Creek in 1999. A total of five breeding sites occur along the Mohave 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 Mohave River and Deep Creek.

We are proposing as 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 Mohave 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 Mohave River Forks Reservoir) in San Bernardino County, California, near the Town of Victorville. Deep Creek connects Holcomb Creek with the Mohave Forks Reservoir. All of these segments were not 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 (Mohave River, West Fork Mohave 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 proposed 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, CA

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 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 proposing as critical habitat a 21.2-km (13.2-mi) segment of San Felipe Creek and a short 1.0-km (0.6 mi) segment of Mill Creek in San Diego County, California. This short portion of Mill Creek is connected to the proposed 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.

Part of San Felipe Creek occurs within the Iipay Nation of Santa Ysabel, California (formerly the Santa Ysabel Band of Diegueno Mission Indians of the Santa Ysabel Reservation), so we will consider our Tribal partnership and evaluate the conservation and management of the area for exclusion under section 4(b)(2) of the Act (see **Exclusions**).

Amargosa Management Unit, CA and NV

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 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 National Wildlife Refuge (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 are proposing, as flycatcher critical habitat, 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. We are also proposing approximately 5.7 km (3.5 mi) of Carson Slough and 100.1 km (62.2 mi) of associated unnamed riparian areas that occur within the Ash Meadows National Wildlife Refuge in Nye County, Nevada. No known breeding sites have yet to be detected on the Amargosa River and Willow Creek segments in California. None of the proposed segments were known to be occupied at the time of listing.

Carson Slough and the unnamed riparian areas within the Ash Meadows National Wildlife Refuge, 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 four proposed 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.

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, Pahranaagat, 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 lower Colorado River 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). 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 Pahranaagat 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, Pahranaagat, 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 known to be occupied at the time of listing (1991-1994) (Sogge and Durst 2008) where we are proposing 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 by nesting birds, 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, AZ and NM

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 2 and 6 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 (see below). No flycatcher territories are known from the West Fork Little Colorado River.

We are proposing as 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 U.S. Forest Service (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 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 was not 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.

We are also proposing as critical habitat a contiguous segment of the Rio Nutria (35.8 km, 22.2 mi) and the Zuni River (55.4 km, 34.4 mi) in McKinley County, New Mexico. The Rio Nutria segment begins at the Nutria Diversion Dam, extends to the Zuni River, and continues along the Zuni River to the Arizona and New Mexico State Line. Both of these segments were known to be occupied 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 Little Colorado River, Rio Nutria, and Zuni River, and the West Fork Little Colorado River segments were all identified in the Recovery Plan as areas with substantial recovery value (Service 2002, p. 89). These four stream segments that we are proposing as critical habitat within the Little Colorado 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 are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

We will consider our partnership and evaluate the conservation and management of the Zuni River and Rio Nutria where they occur within the Navajo Nation and the Zuni Pueblo for exclusion under section 4(b)(2) of the Act (see **Exclusions**).

Virgin Management Unit, UT, AZ, and NV

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 proposing as 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 was not known to be occupied at the time of listing, but is being proposed as critical habitat because it is essential for the conservation of the flycatcher 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 proposing 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.

Where the Virgin River occurs through the planning area of the Clark County Multiple Species HCP and the Overton State Wildlife Area, we will consider those segments for exclusion under section 4(b)(2) of the Act (see **Exclusions**).

Middle Colorado Management Unit, AZ

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 are proposing 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 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 are proposing 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.

Where the Colorado River occurs within the planning area of the Lower Colorado River Multi-Species Conservation Plan (LCR MSCP) (due to the completed HCP) and Hualapai Indian Tribal land (due to their Management Plan), it will be considered for exclusion under section 4(b)(2) of the Act (see **Exclusions**).

Pahranagat Management Unit, NV

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 (Durst and Sogge 2008).

We are proposing as critical habitat a 6.3-km (3.9-mi) river segment of the

Pahranagat River through the Key Pittman Wildlife Area in Lincoln County, Nevada, and a 17.3-km (10.8-mi) segment of the Pahranagat River through the Pahranagat National Wildlife Refuge in Clark County, Nevada. We are also proposing as critical habitat a 3.1-km (1.9 mi) segment of the Muddy River within the Overton Wildlife Area in Clark County, Nevada. These segments were not known to be occupied at the time of listing, but are being proposed as critical habitat because they are essential for flycatcher conservation in order to meet recovery goals in the Pahranagat Management Unit.

The Pahranagat and Muddy River segments were identified as having substantial recovery value in the Recovery Plan (Service 2002, p. 89-90). These essential river segments we are proposing as critical habitat within the Pahranagat 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 are anticipated to support the strategy, rationale, and science of flycatcher conservation in order to meet territory and habitat-related recovery goals.

We will consider excluding the Pahranagat River where it occurs within the Key Pittman State Wildlife Area and the Muddy River within the Overton State Wildlife Area as result of completed Management Plans under section 4(b)(2) of the Act (see **Exclusions**).

Bill Williams Management Unit, AZ

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 this Management Unit.

We identified a large flycatcher nesting population in this 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 (Durst and Sogge 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 proposing as 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, Santa Maria, and Bill Williams Rivers converge, we are proposing, 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 proposing 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, we

are proposing as critical habitat the last 21.3 km (13.2 mi) of the Bill Williams River before it reaches the Colorado River at Lake Havasu, from Planet Ranch through the Bill Williams National Wildlife Refuge. All of these areas are 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 all identified as having substantial recovery value in the Recovery Plan (Service 2002, p. 90). These river segments we are proposing 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.

We will consider excluding the Bill Williams, Santa Maria, and Big Sandy Rivers at the upper end of Alamo Lake within the Alamo Lake Wildlife Area due to a completed Management Plan and the Bill Williams River where it occurs within the planning area of the Lower Colorado River MSCP under section 4(b)(2) of the Act (see **Exclusions**).

Hoover to Parker Dam Management Unit, AZ and CA

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 within Mohave and La Paz Counties, Arizona, and San Bernardino County, California. Flycatchers were first detected nesting 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 (Durst and Sogge 2008).

We are proposing as critical habitat a 106.9-km (66.4-mi) river segment of the Colorado River from near Davis Dam downstream through Lake Havasu to Parker Dam. We are also proposing a small 1.7-km, (1.0-mi) portion of the Bill Williams River immediately adjacent to the Colorado River. Both of these segments are 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.

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.

We will consider excluding portions of the Colorado and Bill Williams Rivers in this segment that occur within the planning area of the LCR MSCP and those portions of the Colorado River that occur on Fort Mohave and Chemehuevi tribal lands as result of their Management Plans under section 4(b)(2) of the Act (see **Exclusions**).

Parker Dam to Southerly International Border Management Unit, AZ and CA

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 nesting 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 (Durst and Sogge 2008). In 2007, it was estimated that only one territory occurred within these two river segments (Durst and Sogge 2008).

We are proposing as critical habitat two Colorado River segments: (1) A 65.0-km

(40.4-mi) river segment from Parker Dam downstream past Highway 62, (2) a more southern 148.0-km (92.0-mi) segment from near Highway 10 downstream to near the Town of Yuma. The Colorado River is 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, as described above.

These segments of the Colorado 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.

We will consider excluding portions of the Colorado River that occur within the planning area of the LCR MSCP and that occur on Colorado Indian and Quechan (Fort Yuma) Tribal lands as result of their Management Plans under section 4(b)(2) of the Act (see **Exclusions**).

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. The stream segments proposed as critical habitat are described below in their appropriate 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, CO, NM, AZ, and UT

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).

We are proposing as critical habitat a segment of the Los Pinos River in La Plata County, Colorado (46.0 km, 28.6 mi); a segment of the San Juan River in San Juan County, New Mexico (3.5 km, 2.2 mi); and a segment of the San Juan River in San Juan County, Utah (51.7 km, 32.1 mi). The Los Pinos River segment begins near County Road 501 and occurs through the Town of Bayfield and ends near the Colorado and New

Mexico State Line. The San Juan River segment in New Mexico occurs in northwestern New Mexico, just upstream and downstream of Malpais Arroyo near the Town of Shiprock. The San Juan River, Utah, segment occurs from upstream of the State Route 262 Bridge downstream to Chinle Creek. These segments were not 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.

We will consider our partnership and evaluate the conservation and management of the Los Pinos River in Colorado, where it occurs within the Southern Ute Tribal Land, and the San Juan River where it occurs on the Navajo Nation for exclusion under section 4(b)(2) of the Act (see **Exclusions**).

Powell Management Unit, UT and AZ

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 proposing as 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 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. As noted earlier in this proposed rule (see **Public Comments**), we are specifically seeking information about this proposed Paria River segment, as well as information about other flycatcher habitat, management, and detections in the Powell 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. The Upper Gila, Middle Gila and San Pedro, and Roosevelt Management Units had, following the 2007 rangewide estimate (Durst *et al.* 2008, p. 12), 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 known to be occupied at the time of listing (1991-1994) (Sogge and Durst 2008) where we are proposing 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, AZ

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 proposing as critical habitat two segments of the Verde River. We are proposing an upper 74.0-km (46.0-mi) segment of the Verde River that occurs in the Verde Valley in Yavapai County from above Tuzigoot National Monument near the Town of Clarkdale, downstream through the towns of Cottonwood and Camp Verde to Beasley Flat. We are also proposing a 62.7-km (38.9-mi) segment in the middle Verde River that extends from the East Verde River confluence down through Horseshoe Lake and a short distance along the river below Horseshoe Dam to the USGS gauging station and cable crossing. These segments of the Verde River are 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.

We will consider excluding the water conservation space of the Verde River within Horseshoe Lake due to the conservation included in the Horseshoe and Bartlett

Dam HCP and those portions of the Verde River that occur on Yavapai Apache tribal land as result of their Management Plan under section 4(b)(2) of the Act (see **Exclusions**).

Roosevelt Management Unit, AZ

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 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 proposing as critical habitat segments of Tonto Creek, the Salt River, the confluence of these two streams that comprise Roosevelt Lake, and Pinal Creek. The proposed lower 49.1-km (30.5-mi) segment of Tonto Creek extends from near 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 proposing a 39.0-km (24.2-mi) portion of the Salt River from the confluence with Cherry Creek to the high water mark of the conservation space of Roosevelt Lake. Joining these Tonto Creek and Salt River segments, we are proposing as critical habitat the 29.1-km (18.1-mi) lakebed at Roosevelt Lake (comprised of the Tonto Creek and Salt River confluence). These three areas were 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.

Additionally, we are proposing a separate 5.7-km (3.5-mi) essential segment of Pinal Creek that occurs downstream of the water treatment plant north of the Town of Globe. This segment was not known to be occupied at the time of listing, but it currently supports nesting flycatchers and was determined to be essential for flycatcher conservation in order to help meet recovery goals in this Management Unit.

The segments of Tonto Creek, the Salt River, and their confluence that makes up Roosevelt Lake were identified as having substantial recovery value in the Recovery Plan (Service 2002, p. 91). Together, these segments, along with the essential Pinal Creek 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.

The conservation space of Roosevelt Lake, due to the Roosevelt HCP, will be considered for exclusion under section 4(b)(2) of the Act (see **Exclusions**).

Middle Gila and San Pedro Management Unit, AZ

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 proposing as critical habitat the lowest 127.2-km (79.0-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 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.

Upper Gila Management Unit, AZ and NM

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.

Based upon our methodology, 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).

We are proposing as proposed critical habitat three segments of the Gila River that occur between the Turkey Creek confluence on the Gila National Forest, New Mexico, and Coolidge Dam (creating San Carlos Lake) on San Carlos Apache Tribal land. The most upstream 49.3-km (30.6-mi) Gila River segment extends from Turkey Creek through the Cliff-Gila Valley to the upstream entrance of the middle Gila Box Canyon on the Gila National Forest. The second 62.2-km (38.7-mi) Gila River segment occurs from the downstream end of the Middle Gila Box Canyon near the Town of Red Rock and extends downstream across the Arizona State line through the Town of Duncan, Arizona (this segment spans Grant and Hidalgo Counties, New Mexico, and Greenlee County, Arizona). The third 134.5-km (83.5-mi) Gila River segment occurs from the upper end of Earven Flat, near the Bonita Creek confluence, above the Town of

Safford, Arizona, and extends through the Town of Safford and San Carlos Apache Land until it ends at Coolidge Dam. The Gila River is 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.

The Gila River segments were identified in the Recovery Plan as areas with substantial recovery value (Service 2002, p. 91). These three Gila 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.

We will consider the Gila River (including the lakebed of San Carlos Lake), where it occurs within San Carlos Apache Tribal land in Arizona, and the U-Bar Ranch in the Cliff-Gila Valley, New Mexico, for exclusion due to Management Plans under section 4(b)(2) of the Act (see **Exclusions**).

Santa Cruz Management Unit, AZ

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 (see below). A single flycatcher territory was detected on Cienega Creek in 2001 (Sogge and Durst 2008). No flycatcher territories have been detected on the Santa Cruz River.

We are proposing as critical habitat a 7.0-km (4.4-mi) segment of Cienega Creek (including part of Las Cienegas National Conservation Area) in Pima County, Arizona, and a 26.7-km (16.6-mi) segment of the Santa Cruz River (Nogales Waste Water Treatment Plant to Chavez Siding Road) in Santa Cruz County, Arizona. These segments were not 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. As noted earlier in this proposed rule (see **Public Comments**), we are specifically seeking information about these proposed Santa Cruz and Cienega Creek segments, as well as information about other flycatcher habitat, management, and detections in the Santa Cruz 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). These two 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, AZ and NM

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).

We are proposing as critical habitat three segments of the San Francisco River in Arizona and New Mexico. We are proposing a 42.6-km (26.5-mi) segment on the San Francisco River that extends from near the Town of Alpine, Arizona, to Centerfire Creek in Catron County, New Mexico; a second 36.4-km (22.6-mi) segment that extends from the Deep Creek confluence to San Francisco Hot Springs, in Catron County, New Mexico; and a third 36.9-km (22.9-mi) segment from the Arizona and New Mexico border to the western boundary of the Apache-Sitgreaves National Forest, in Apache County, Arizona. The San Francisco River is 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.

These three San Francisco River segments were identified in the Recovery Plan as having substantial recovery value (Service 2002, pp. 90–91). These three 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, AZ

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 has been detected on the Gila River and Hassayampa River in this Management Unit, with the first territories found in 1997 (Sogge and Durst 2008). The number of territories detected has ranged from one and three from 1997 to 2007 (Sogge and Durst 2008).

We are proposing as critical habitat an 8.7-km (5.4-mi) segment of the Gila River, downstream from its confluence with the Salt River from 107th Avenue to Bullard Avenue in Maricopa County, Arizona. The Gila River is 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 also proposing as critical habitat a 7.4-km (4.6 mi) segment of the Hassayampa River that occurs south of the Town of Wickenburg and Highway 60 Bridge in Maricopa County, Arizona. This segment was not 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.

These segments of the Gila River and Hassayampa Rivers were both identified in the Recovery Plan as having substantial recovery value (Service 2002, p. 91). These two 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 Gila River segment within the Tres Rios Safe Harbor Agreement Area will be considered for exclusion under section 4(b)(2) of the Act (see **Exclusions**).

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 proposed 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 known to be occupied at the time of listing (1991-1994) (Sogge and Durst 2008) where we are proposing 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, CO

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 proposing as critical habitat a segment of the Rio Grande and a segment of the Conejos River within the San Luis Valley. The 159.4-km (99.0-mi) upper Rio Grande segment extends from the Hanna Lane County Road 17 Bridge downstream through the Alamosa National Wildlife Refuge to the County Road G Bridge. The Rio Grande is 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 also proposing as critical habitat a 69.8-km (43.4-mi) segment of the Conejos River from near where the D5 Road crosses the Conejos River (just downstream from Fox Creek) and extends down to its confluence with the Rio Grande. This segment was not 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 two 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.

Both the Rio Grande and Conejos River occur within the conservation planning area established by the San Luis Valley Partnership and within their developing HCP; as a result, we will consider the Conejos River and Rio Grande within this conservation and planning area for exclusion under section 4(b)(2) of the Act (see **Exclusions**).

Upper Rio Grande Management Unit, NM

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). Flycatcher territories were recently detected on the Rio Fernando, which occurs within our large population area.

We are proposing as critical habitat a 75.1-km (46.7-mi) segment of the Rio Grande that extends from the Taos Junction Bridge (State Route 520) downstream to the Otowi Bridge (State Route 502). We are proposing as 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. We are also proposing as critical habitat 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. These segments are 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.

We are also proposing as critical habitat a 0.4-km (0.2-mi) segment of the Rio

Fernando that is about 3.2 km (2.0 mi) upstream from the Rio Lucero confluence. This segment was not 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.

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 and planning efforts on the Rio Grande, we will consider these Pueblos for exclusion under section 4(b)(2) of the Act (see **Exclusions**).

Middle Rio Grande Management Unit, NM

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, Socorro, and Sierra 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).

We are proposing as critical habitat a 211.8-km (131.6 mi) segment of the Rio Grande that extends from below the Bernalillo and Valencia County line downstream past Bosque del Apache and Sevilleta National Wildlife Refuges and through Elephant Butte Reservoir in Valencia, Socorro, and Sierra Counties, New Mexico. The Rio Grande is 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.

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. The population of flycatchers in this segment is currently the largest population of

flycatchers in their range, with a total of 221 pairs and 291 nests documented within the Elephant Butte Reservoir conservation pool, according to a 2009 study (Moore and Ahlers 2010, p. 43).

Based on an initial evaluation of potential impacts on water operations of the Elephant Butte Dam and Reservoir, we will consider excluding the portion of this segment that occurs within the reservoir pool of Elephant Butte Reservoir from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act (see **Exclusions**).

Lower Rio Grande Management Unit, NM

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). Three breeding sites have been detected along the Rio Grande, with the first territories found in 1993 (Sogge and Durst 2008). The number of flycatcher territories detected annually has

fluctuated between zero and eight from 1993 to 2007 (Sogge and Durst 2008).

We are proposing as critical habitat a 74.2-km (46.1-mi) segment of the Rio Grande in Sierra and Dona Ana Counties, New Mexico, from Caballo Dam to Leasburg Dam. The Rio Grande is 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.

This Rio Grande segment was identified as having substantial recovery value in the Recovery Plan (Service 2002, p. 92). This Rio Grande 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.

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 U.S. Army Corps of Engineers 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, or 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 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 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 reinitiate 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 reinitiation 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 restoration 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, 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 available to ungulates; 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 by brown-headed cowbirds, alter watershed and soil characteristics, alter stream morphology, 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) requires each military installation that includes land and water suitable for the conservation and management of natural resources to complete an INRMP. 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 proposed critical habitat designation for the

flycatcher to determine if they are exempt under section 4(a)(3) of the Act. The following areas in southern California (Table 3) are Department of Defense lands with completed, Service-approved INRMPs within the proposed 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)

Approved INRMPs

Vandenberg Air Force Base (VAFB) – Santa Ynez Management Unit, CA

Vandenberg Air Force Base 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 proposed 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 the conservation of the flycatcher 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 proposed revised critical habitat designation because of this exemption.

Marine Corps Base Camp Pendleton (MCB Camp Pendleton) – San Diego Management Unit, CA

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 (Biological Opinion for Programmatic Activities and Conservation Plans in Riparian, Estuarine, and Beach Ecosystems on Marine Corps Base, Camp Pendleton (also known as "Riparian BO"; (1-6-95-F-02)), 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 BO, 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 60920; 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* 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 200 ft (61 m) 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 (Fallbrook Naval Weapons Station) in this proposed revised critical habitat designation because of this exemption.

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

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 60927; 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 National Environmental Policy Act (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 proposed 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 critical 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.

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, and in cases

where a Federal nexus exists, increased habitat protection for the flycatcher due to the protection from adverse modification or destruction of critical habitat. In practice, a Federal nexus exists primarily on Federal lands or for projects undertaken by Federal agencies. Since the flycatcher was listed in 1995, we have had some projects on privately owned lands that had a Federal nexus to trigger consultation under section 7 of the Act. On Federal lands, we have been consulting with Federal agencies on their effects to the flycatcher since the subspecies was listed. These consultations have, in some instances, resulted in comprehensive conservation planning for specific areas across its 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 receive, we will evaluate whether certain lands in the proposed critical habitat designation (Table 4) are appropriate for exclusion from the final designation under section 4(b)(2) of the Act. The mapped location of these lands we are considering for exclusion can be viewed in the supplementary documents associated with this proposed rule found at <http://www.regulations.gov>. If the analysis indicates that the benefits of excluding lands from the final designation outweigh the benefits of designating those lands as critical habitat, then the Secretary may exercise his discretion to exclude the lands from the final designation.

TABLE 4. Plan type, stream segments, and approximate stream length being considered for exclusion from flycatcher critical habitat under section 4(b)(2) of the Act by Management Unit.

Basis for Possible Exclusion	Streams Segments Considered for Exclusion	Approximate Stream Length Considered for Exclusion in km (mi)
Santa Ana Management Unit		
Western Riverside County Multiple Species HCP	Santa Ana River San Timoteo Creek Bautista Creek Temecula Creek (see San Diego Management Unit)	34.1 km (21.2 mi) 21.4 km (13.3 mi) 22.6 km (14.0 mi) —
Ramona Band of Cahuilla	Bautista Creek	0.44 km (0.27 mi)
San Diego Management Unit		

Basis for Possible Exclusion	Streams Segments Considered for Exclusion	Approximate Stream Length Considered for Exclusion in km (mi)
San Diego County Multiple Species HCP	San Dieguito River San Diego River Santa Ysabel Creek (upper) Santa Ysabel Creek (lower) Sweetwater River	9.2 km (5.7 mi) 9.5 km (5.9 mi) 2.4 km (1.5 mi) 1.0 km (0.6 mi) 6.6 km (4.1 mi)
Western Riverside County Multiple Species HCP	Temecula Creek (including Vail Lake)	18.7 km (11.6 mi)
Orange County Southern Subregional HCP	Canada Gobernadora Creek	5.9 km (3.7 mi)
City of Carlsbad Habitat Management Plan	Agua Hedionda Creek (upper) Agua Hedionda Creek (lower)	3.4 km (2.1 mi) 2.1 km (1.3 mi)
La Jolla Band of Luiseno Indians Management Plan	San Luis Rey River	11.5 km (7.2 mi)
Rincon Band of Luiseno Mission Indians Management Plan	San Luis Rey River	2.4 km (1.5 mi)
Pala Band of Luiseno Mission Indians	San Luis Rey River	3.7 km (2.3 mi)
The Barona and Viejas Groups of Capitan Grande Band of Diegueno Mission Indians	San Diego River	4.7 km (2.9 mi)
Owens Management Unit		
Los Angeles Department of Water and Power Management Plan	Owens River	128.5 km (79.9 mi)
Kern Management Unit		
Sprague Ranch Management Plan	South Fork Kern River (north side)	4.0 km (2.5 mi)
Haffenfeld Ranch Management Plan	South Fork Kern River (south side)	0.80 km (0.50 mi)
South Fork Kern River Wildlife Area Management Plan	South Fork Kern River South Fork Kern River (Lake Isabella)	2.5 km (1.5 mi) 0.29 km (0.18 mi)
Salton Management Unit		
Iipay Nation of Santa Ysabel	San Felipe Creek	1.6 km (0.98 mi)
Little Colorado Management Unit		
Zuni Pueblo	Rio Nutria Zuni River	35.8 km (22.2 mi) 39.9 km (24.8 mi)
Navajo Nation	Zuni River	15.5 km (9.6 mi)
Virgin River Management Unit		
Clark County MSHCP	Virgin River	42.0 km (26.1 mi)
Overton State Wildlife Area Management Plan	Virgin River	6.5 km (4.0 mi)
Middle Colorado Management Unit		
Lower Colorado River MSCP	Colorado River (Lake Mead)	24.1 km (15.0 mi)
Hualapai Tribe Management Plan	Colorado River	50.0 km (31.0 mi)
Pahranagat Management Unit		
Key Pittman State Wildlife Area Management Plan	Pahranagat River	4.0 km (2.5 mi)
Overton State Wildlife Area Management Plan	Muddy River	3.1 km (1.9 mi)
Bill Williams Management Unit		

Basis for Possible Exclusion	Streams Segments Considered for Exclusion	Approximate Stream Length Considered for Exclusion in km (mi)
Alamo Lake State Wildlife Area Management Plan	Bill Williams River (Alamo Lake) Santa Maria River (Alamo Lake) Big Sandy River (Alamo Lake)	5.4 km (3.3 mi) 8.4 km (5.2 mi) 9.6 km (6.0 mi)
Lower Colorado River MSCP	Bill Williams River	0.7 km (0.5 mi)
Hoover to Parker Dam Management Unit		
Lower Colorado River MSCP	Colorado River (two segments)	24.7 km (15.3 mi)
Fort Mohave Tribe Management Plan	Colorado River	17.0 km (10.6 mi)
Chemehuevi Tribe Management Plan	Colorado River	21.9 km (13.6 mi)
Lower Colorado River MSCP	Bill Williams River	1.7 km (1.0 mi)
Parker Dam to Southerly International Border Management Unit		
Lower Colorado River MSCP	Colorado River (two segments)	70.5 km (43.8 mi)
Colorado River Indian Tribes Management Plan	Colorado River	47.7 km (29.7 mi)
Quechan (Fort Yuma) Indian Tribe Management Plan	Colorado River	23.0 km (14.3 mi)
San Juan Management Unit		
Navajo Nation	San Juan River (New Mexico) San Juan River (Utah)	3.5 km (2.2 mi) 51.7 km (32.1 mi)
Southern Ute Tribe	Los Pinos River	25.9 km (16.1 mi)
Verde Management Unit		
Salt River Project Horseshoe and Bartlett Dams HCP	Verde River (Horseshoe Lake)	9.6 km (6.0 mi)
Yavapai Apache Tribal Management Plan	Verde River	2.7 km (1.7 mi)
Roosevelt Management Unit		
Salt River Project Roosevelt Lake HCP	Tonto Creek (Roosevelt Lake) Salt River (Roosevelt Lake)	12.8 km (7.9 mi) 16.3 km (10.1 mi)
Upper Gila Management Unit		
U-Bar Ranch Management Plan	Gila River	14.0 km (8.7 mi)
San Carlos Apache Tribal Management Plan	Gila River Gila River (San Carlos Lake)	31.3 km (19.5 mi) 26.8 km (16.6 mi)
Hassayampa and Agua Fria Management Unit		
Tres Rios Safe Harbor Agreement	Gila River	8.7 km (5.4 mi)
San Luis Valley Management Unit		
San Luis Valley Partnership	Rio Grande Conejos River	159.4 km (99.0 mi) 69.8 km (43.4 mi)
Upper Rio Grande Management Unit		
San Ildefonso Pueblo Partnership	Rio Grande	7.7 km (4.8 mi)
Santa Clara Pueblo Partnership	Rio Grande	10.3 km (6.4 mi)
San Juan Pueblo (Ohkay Owingue) Partnership	Rio Grande	9.3 km (5.8 mi)
Middle Rio Grande Management Unit		
Elephant Butte Reservoir	Rio Grande	45.7 km (28.4 mi)
	Total	1254.3 km (779.4 mi)

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 are preparing an analysis of the economic impacts of the proposed critical habitat designation and related factors.

We will announce the availability of the draft economic analysis as soon as it is completed, at which time we will seek public review and comment. At that time, copies of the draft economic analysis will be available for downloading from the Internet at <http://www.regulations.gov>, or by contacting the Arizona Ecological Services Office directly (see **FOR FURTHER INFORMATION CONTACT** section). During the development of a final designation, we will consider economic impacts, public comments, and other new information, and areas may be excluded from the final critical habitat designation under section 4(b)(2) of the Act and our implementing regulations at 50 CFR 424.19.

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 (DOD) where a national security impact might exist. In preparing this proposal, we have exempted from the designation of critical habitat those Department of Defense lands with completed INRMPs determined to provide a benefit to the southwestern willow flycatcher. We have also determined that the remaining lands within the proposed designation of critical habitat for the species are

not owned or managed by the Department of Defense, and, therefore, we anticipate no impact on national security. Consequently, the Secretary does not propose to exert his discretion to exclude any areas from the 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 tribal management in recognition of their capability to appropriately manage their own resources, 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.

Land and Resource Management Plans, Conservation Plans, or Agreements Based on Conservation Partnerships

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, Partnerships, and Agreements may fulfill the above criteria, and will consider the exclusion of these Federal and non-Federal lands covered by these plans that provide for the conservation of the flycatcher.

We are requesting comments on the benefit to flycatcher from these following HCPs, Plans, Partnerships, and Agreements; however, at this time, we are not proposing the exclusion of any areas in this proposed revised critical habitat designation for the flycatcher. However, we specifically solicit comments on the inclusion or exclusion of such areas.

In the paragraphs below, organized by Recovery Unit and Management Unit, we identify lands we are considering for exclusion under section 4(b)(2) of the Act.

Coastal California Recovery Unit

Santa Ana Management Unit

Habitat Conservation Plans

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

The Western Riverside County MSHCP is a regional, multi-jurisdictional HCP encompassing approximately 1.26 million ac (510,000 ha) of land in western Riverside County. The Western Riverside County MSHCP addresses 146 listed and unlisted “covered species,” including the southwestern willow flycatcher. The Western Riverside County MSHCP is a multispecies conservation program designed to minimize and mitigate the expected loss of habitat and associated incidental take of covered species resulting from covered development activities in the Plan area. 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). The Service anticipates the proposed actions will affect the southwestern willow 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 southwest willow flycatcher habitats or areas otherwise determined to have long-term conservation value for the species (Service 2004, p. 227). We concluded in our biological opinion (Service 2004b, p. 227) that implementation of

the Plan, as proposed, was not likely to jeopardize the continued existence of the southwestern willow 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 southwestern willow 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 conservation objectives are included in the Western Riverside County MSHCP for southwestern willow flycatcher. 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.

We 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.

We will consider excluding portions of the Santa Ana River, San Timoteo Creek, Bautista Creek, and Temecula Creek (including Vail Lake) within the planning area boundary for the Western Riverside County MSHCP from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act. We intend to exclude critical habitat from areas covered by the Western Riverside County MSHCP based on the protections outlined above and per the provisions laid out in the HCP's implementing agreement, to the extent consistent with the requirements of 4(b)(2) of the Act. We encourage any public comment in relation to this consideration.

Tribal Management Plans and Partnerships

Ramona Band of Cahuilla, California

The Ramona Band of Cahuilla, California, occurs within the Santa Ana Management Unit, California. A proposed essential segment of Bautista Creek occurs on

lands managed by the Ramona Band of Cahuilla. We will coordinate with the Ramona Band of Cahuilla and examine what flycatcher conservation actions, management plans, and commitments and assurances occur on these lands for potential exclusion from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

San Diego Management Unit

Habitat Conservation Plans

San Diego County MSCP

In southwestern San Diego County, the San Diego MSCP and HCP encompasses more than 236,000 ha (582,000 ac) and involves the participation of the County of San Diego and 11 cities, including the City of San Diego. This regional HCP is also a regional subarea plan under the NCCP program and has been developed in cooperation with California Department of Fish and Game. The MSCP provides for the establishment of approximately 69,573 ha (171,000 ac) of preserve areas to provide conservation benefits for 85 federally listed and sensitive species, including the flycatcher, over the life of the permit (50 years).

Portions of lands within the boundaries of the San Diego MSCP and HCP contain essential areas for the conservation of the flycatcher, including stream segments along the

San Dieguito, San Diego, and Sweetwater Rivers. These particular areas lie within the boundaries of the approved subarea plans.

Conservation measures specific to the flycatcher within the San Diego MSCP and HCP include the preservation and management of 3,845 ha (9,500 ac) (81 percent) of the riparian habitat within the planning area, as well as eight of the nine known breeding locations at the time of the plan's development. Surveys are required for projects potentially affecting this species, and breeding habitat will be identified and avoided. Specific management directives include measures to provide appropriate flycatcher habitat, upland buffers for all known flycatcher populations, cowbird control, specific measures to protect against detrimental edge effects, and monitoring.

We will consider excluding portions of the San Dieguito, San Diego, Santa Ysabel, and Sweetwater Rivers within the San Diego MSCP and HCP from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act. We intend to exclude critical habitat from areas covered by the San Diego MSCP and HCP based on the protections outlined above and per the provisions laid out in the HCP's implementing agreement, to the extent consistent with the requirements of 4(b)(2) of the Act. We encourage any public comment in relation to this consideration.

Orange County Southern Subregional HCP

The Orange County Southern Subregional HCP was issued permits based on the plan by the Service on January 10, 2007, that covers a 75-year period. The Orange County Southern Subregion HCP encompasses approximately 34,811 ha (86,021 ac) in southern Orange County. The Southern Subregional HCP was developed in support of applications for incidental take permits for 32 covered species, including the flycatcher, by the Orange County, Rancho Mission Viejo, and the Santa Margarita Water District in connection with proposed residential development and related actions in southern Orange County.

The Orange County Southern Subregional HCP provides for the conservation of covered species, including southwestern willow flycatcher, through the establishment of an approximately 12,313 ha (30,426 ac) habitat reserve and 1,803 ha (4,456 ac) of supplemental open space areas (Service 2007, pp 10,19). The Southern Subregional HCP is expected to conserve the flycatcher through implementing the following conservation measures: (1) Conservation of 57 percent of nesting and foraging habitat within the Habitat Reserve and adaptively managed on Rancho Mission Viejo lands; (2) inclusion in the Habitat Reserve of 100 percent of flycatcher locations in the Lower Canada Gobernadora “important” population in a “key” location, (3) creation of 2 ha (6 ac) of willow riparian habitat within a Supplemental Open Space area on the Prima Deshecha Landfill; (4) management of nonnative invasive plant species (*Tamarisk ramosissima* (tamarisk), *Arundo donax* (arundo), and *Ricinus communis* (castor bean)); (5) assessment of effects from and trapping of nonnative animal species (cowbird); (6) and managing livestock grazing (Service 2007, pp. 120–123).

We will consider excluding a portion of Canada Gobernadora Creek within the Orange County Southern Subregional HCP from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act. We intend to exclude critical habitat from areas covered by the Orange County Southern Subregional HCP based on the protections outlined above and per the provisions laid out in the HCP's implementing agreement, to the extent consistent with the requirements of 4(b)(2) of the Act. We encourage any public comment in relation to this consideration.

City of Carlsbad Habitat Management Plan (HMP)

The City of Carlsbad's HMP was approved October 15, 2004. This plan is one of seven subarea plans being developed under the umbrella of the North County Multiple Habitat Conservation Plan (MHCP) in northern San Diego County. Participants in this regional conservation planning effort include the cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista. The subarea plans in development are also proposed as subregional plans under the State's Natural Community Conservation Planning program and are being developed in cooperation with the California Department of Fish and Game (CDFG). We have determined that portions of lands within the boundaries of the HMP contain lands with features essential to the conservation of the flycatcher, including portions of Agua Hedionda Creek.

Approximately 9,943 ha (24,570 ac) of land are within the Carlsbad HMP planning area, with about 3,561 ha (8,800 ac) remaining as natural habitat for species covered under the plan. Of this remaining habitat, the Carlsbad HMP proposes to establish a preserve system for approximately 2,746 ha (6,786 ac). Conservation measures specific to the flycatcher within the Carlsbad HMP include the conservation of 200 ha (494 ac) (86 percent) of the riparian vegetation in the city and 10 ha (25 ac) (86 percent) of oak woodland. Preserved lands include the four highest quality habitat areas for flycatchers identified within the plan area, including lands along Agua Hedionda Creek. For proposed projects in or adjacent to suitable habitat outside of preserve areas, mandatory surveys will be conducted, with impacts to breeding flycatchers completely avoided or reduced, as described in the paragraph below. 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.

Area-specific management directives shall include measures to provide appropriate flycatcher habitat, cowbird control, specific measures to protect against detrimental edge effects, and removal of invasive, exotic species (*Arundo donax*). Human access to flycatcher-occupied breeding habitat will be restricted during the breeding season (May 1 to September 15), except for qualified researchers or land managers performing essential preserve management, monitoring, or research functions. Projects that cannot be conducted without placing equipment or personnel in or adjacent

to sensitive habitats shall be timed to ensure that exotic vegetation habitat (*Arundo donax*) is removed prior to the initiation of the breeding season.

Projects having direct or indirect impacts to the flycatcher shall adhere to the following measures to avoid or reduce impacts: (1) The removal of native vegetation and habitat shall be avoided and minimized to the maximum extent practicable; (2) For temporary impacts, the work site shall be returned to pre-existing contours and revegetated with appropriate native species; (3) Revegetation specifications shall ensure creation and restoration of riparian woodland vegetation to a quality that eventually is expected to support nesting flycatchers, recognizing that it may take many years (depending on type of activity and timing of flood events, etc.) to achieve this state; (4) Construction noise levels at the riparian canopy edge shall be kept below 60 dBA Leq (measured as Equivalent Sound Level) from 5 a.m. to 11 a.m. during the peak nesting period of March 15 to July 15. For the balance of the day or season, the noise levels shall not exceed 60 decibels, averaged over a 1-hour period on an A-weighted decibel (dBA) (*i.e.*, 1 hour Leq/dBA); (5) Brown-headed cowbirds and other exotic species that impact the flycatcher shall be removed from the site; (6) For new developments adjacent to preserve areas that create conditions attractive to brown-headed cowbirds, jurisdictions shall require monitoring and control of cowbirds; (7) Biological buffers of at least 30 m (100 ft) shall be maintained adjacent to breeding flycatcher habitat, measured from the outer edge of riparian vegetation. Within this 30-m (100-ft) buffer, no new development shall be allowed, and the area shall be managed for natural biological values as part of the preserve system; (8) Suitable unoccupied breeding habitat preserved within the protected

areas shall be managed to maintain or mimic effects of natural stream or river processes (e.g., periodic substrate scouring and depositions); and (9) Natural riparian connections with upstream riparian habitat shall be maintained to ensure linkage to suitable occupied and unoccupied breeding habitat.

We will consider excluding portions of Agua Hedionda Creek within the Carlsbad HMP from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act. We intend to exclude critical habitat from areas covered by the Carlsbad HMP based on the protections outlined above and per the provisions laid out in the HCP's implementing agreement, to the extent consistent with the requirements of 4(b)(2) of the Act. We encourage any public comment in relation to this consideration.

Tribal Management Plans and Partnerships

La Jolla Band of Luiseno Indians

The La Jolla Band of Luiseno Indians have a segment of proposed flycatcher critical habitat along the San Luis Rey River within the San Diego Management Unit, in northern San Diego County, California. The La Jolla Tribe has developed a Southwestern Willow Flycatcher Management Plan (SWFMP).

The La Jolla Band of Luiseno Indian's SWFMP described a collection of measures, protections, and efforts they are and will be undertaking to protect flycatchers

and their riparian habitat. To address environmental issues, the La Jolla Band of Luiseno Indians maintains permanent staff, which includes a professional biologist. The Tribe will work to maintain open space along the river, with a particular emphasis on the western 2-km (3.5-mi) stretch of the San Luis Rey River. The La Jolla Band of Luiseno Indians are working to establish this piece of river as a reserve for environmental and cultural purposes. Management of native riparian vegetation and removal of exotic vegetation is occurring that could improve the quality and abundance of native plants, and decrease the risk of wildfire. They will actively reduce the impact of recreation in riparian areas by continuing to educate Tribal Members through outreach programs and newsletters. Additionally, they are working to discourage use of off-road vehicles in riparian areas through education, movement of roads, closures, and development of ordinances. The La Jolla Band of Luiseno Indians will explore future opportunities for research to determine how to best manage for flycatchers.

We will consider excluding The La Jolla Band of Luiseno Indian's land from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Rincon Band of Luiseno Mission Indians of the Rincon Reservation

The Rincon Band of Luiseno Mission Indians land contains a proposed segment of flycatcher critical habitat along the San Luis Rey River within the San Diego Management Unit, in northern San Diego County, California. The Rincon Band of Luiseno Mission Indians have developed a SWFMP.

The Rincon Band of Luiseno Mission Indian's SWFMP addresses implementation of a variety of protective flycatcher habitat measures. The Rincon Band of Luiseno Mission Indians will monitor and remove introduced exotic plants that could reduce the quality and abundance of native species, and increase the risk of wildfire. They will exclude activities in the floodplain that could remove or reduce riparian habitat quality such as mining and livestock grazing. The Rincon Band of Luiseno Mission Indians will exclude unauthorized recreational uses and off-road vehicle use. Signs, boundaries, and other measures will be taken to educate the public and prevent unauthorized recreational use. The Rincon Band of Luiseno Mission Indians will dedicate funding to this effort, report progress, and coordinate with the Service on SWMP updates.

We will consider excluding The Rincon Band of Luiseno Mission Indian's land from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Pala Band of Luiseno Mission Indians and the Capitan Grande Band of Diegueno Mission Indians of California

The Pala Band of Luiseno Mission Indians and the Capitan Grande Band of Diegueno Mission Indians of California occur within the San Diego Management Unit, San Diego County, California. The Pala Band of Luiseno Mission Indian's Tribal Land occurs along a segment of proposed flycatcher critical habitat on the San Luis Rey River. A proposed essential segment of the San Diego River occurs on the land of the Capitan

Grande Band of Diegueno Mission Indians of California (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).

We will coordinate with these tribes and examine what flycatcher conservation actions, management plans, and commitments and assurances occur on these lands for potential exclusion from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Basin and Mohave Recovery Unit, CA and NV

Owens Management Unit

Partnerships, Conservation Plans, or Conservation Easements on Private Lands

Los Angeles Department of Water and Power (LADWP) Conservation Strategy

The LADWP owns and manages a proposed segment of flycatcher critical habitat along the Owens River within the Owens Management Unit, in Inyo County, California. It is believed that LADWP owns and manages the entire extent of flycatcher habitat within this Management Unit needed to reach recovery goals.

The Service and the LADWP signed a memorandum of understanding in 2005 to implement a flycatcher conservation strategy designed to proactively manage flycatchers in the Owens Management Unit. The conservation strategy addresses three elements, livestock grazing, recreational activities, and wildfires that have the potential to adversely affect flycatcher habitat. The conservation strategy provides specific measures that: (1) Are designed to create suitable breeding habitat for the flycatcher; and (2) avoid and minimize potential adverse effects, such as the degradation or loss of habitat that may be associated with grazing activities, recreational activities, and wild land fires. The document also states the LADWP will implement the aforementioned measures with the goal of promoting the establishment of 50 flycatcher territories, which is the number of territories needed to reach recovery goals identified in the Recovery Plan.

We will consider excluding LADWP lands from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Kern Management Unit

Partnerships, Conservation Plans, or Conservation Easements on Private Lands

Haffenfeld Ranch Conservation Easement

The Haffenfeld Ranch owns and manages a segment of proposed flycatcher critical habitat along the South Fork Kern River within the Kern River Management Unit, in Kern County, California.

The Haffenfeld Ranch has developed a Conservation Easement and Plan with the Natural Resources Conservation Service that provides management and protections for flycatcher habitat. The Haffenfeld Parcel completes a continuous corridor of willow-cottonwood riparian habitat along the South Fork of the Kern River that connects the east and west segments of the Audubon Society's Kern River Preserve. The Conservation Easement and Plan establishes that these lands are managed for the benefit of the flycatcher by restoring, improving, and protecting its habitat. Management activities include: (1) Limiting public access to the site, (2) winter-only grazing practices (outside of the flycatcher nesting season), (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 to promote the moisture regime and wetland and riparian vegetation for the conservation of the flycatcher. Other prohibitions of the easement that would benefit the conservation of the flycatcher 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.

We will consider excluding Haffenfeld Ranch lands from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Federal Wildlife Conservation Areas

Sprague Ranch

The Sprague Ranch is an approximately 1,003-ha (2,479-ac) parcel, which includes approximately 395 ha (975 ac) of flycatcher floodplain habitat located along the South Fork of the Kern River in Kern County, California. The Sprague Ranch was purchased by the U.S. Army Corps of Engineers (Corps) as a result of biological opinions for the long-term operation of Lake Isabella Dam and Reservoir (Service File Nos. 1-1-96-F-27; 1-1-99-F-216; and 1-1-05-F-0067) specifically to provide habitat and conservation for the flycatcher. During the periods of time flycatcher habitat is not available as a result of short-term inundation from Isabella Dam operations, the Sprague Ranch is expected to provide habitat for the flycatcher.

As a result of the expertise of the National Audubon Society (Audubon) and the California Department of Fish and Game (CDFG) in management of flycatcher habitat on adjacent and nearby properties along the Kern River, management of the Sprague Ranch is a joint venture between these two parties and the Corps. The Sprague Ranch is

important flycatcher habitat and 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). The Sprague Ranch contains existing riparian forest that can support and maintain nesting territories and migrating and dispersing flycatchers. But other portions of the Ranch are believed to require restoration and management in order become nesting flycatcher habitat. Activities such as cowbird trapping, exotic vegetation control, and native tree plantings are other management activities expected to occur. Sprague Ranch is currently being managed in accordance with the terms and conditions of the biological opinions specifically for the flycatcher.

We will consider excluding the South Fork Kern River on the Sprague Ranch from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

South Fork Kern River Wildlife Area (SFWA)

The SFWA is an approximately 514-ha (1,270-ac) parcel of mature willow-cottonwood, riparian flycatcher habitat located along the South Fork of the Kern River, Kern County, California, west of historic Patterson Lane, including a portion of upper Lake Isabella. The SFWA is jointly managed by the Corps and the Forest Service. Isabella Dam and flycatcher habitat in the SFWA is managed as a result of long-term biological opinions for Corps operation of Lake Isabella Dam and Reservoir (Service File Nos. 1-1-96-F-27; 1-1-96-F-150; 1-1-99-F-216; and 1-1-05-F-0067) and on-the-ground management by the Forest Service. These opinions resulted in the long-term

management of Lake Isabella Dam that maintains the dynamic processes to establish flycatcher habitat over the long term and resulted in the acquisition of the Sprague Ranch (immediately upstream of the SFWA) to compensate for short-term losses in habitat, and management of SFWA for flycatchers.

Lake Isabella Dam operations that periodically inundate and create conditions for flycatcher habitat establishment are managed by the Corps in accordance with the terms and conditions of the biological opinions. These terms and conditions require conservation actions for flycatchers, including long-term studies of flycatcher habitat and demographics; implementation and monitoring of a cowbird trapping program; a nest-moving protocol to prevent inundation of nests during high water events; measures to control watercraft in coordination with the Forest Service; and the acquisition of 465 ha (1,150 ac) of land to compensate for incidental take resulting from the periodic inundation of the SFWA. Funding for the implementation of these measures is provided by the Corps in accordance with terms and conditions of the biological opinions.

The SFWA is managed by the Forest Service within Lake Isabella (after the water recedes) and along the Kern River immediately upstream. Through consultation with the Forest Service, measures for the conservation of flycatchers have been implemented, including: restricting the speed of watercraft to 8 km per hour (5 mi per hour) within 30.5 m (100 ft) of the SFWA; and prohibition of overnight camping, motorized vehicles, and campfires in the South Fork Wildlife Area. The SFWA is fenced, and the fencing is maintained to enforce the exclusion of unauthorized uses, including cattle grazing.

We will consider excluding the South Fork Kern River and upper end of Lake Isabella within the SFWA from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Salton Management Unit

Tribal Management Plans and Partnerships

Iipay Nation of Santa Ysabel

The Iipay Nation of Santa Ysabel, California (formerly the Santa Ysabel Band of Diegueno Mission Indians of the Santa Ysabel Reservation), occurs along an essential segment of proposed flycatcher critical habitat on San Felipe Creek in the Salton Management Unit, San Diego County, California.

We will coordinate with The Iipay Nation and examine what flycatcher conservation actions, management plans, and commitments and assurances occur on these lands for potential exclusion from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Lower Colorado Recovery Unit, NV, AZ, CA, UT, and NM

Little Colorado River Management Unit

Tribal Management Plans and Partnerships

Navajo Nation and Zuni Pueblo

The Navajo Nation and Zuni Pueblo contain segments of the Rio Nutria and Zuni River proposed as flycatcher critical habitat in McKinley County, New Mexico. Both river segments occur within the Little Colorado River Management Unit.

We will coordinate with these tribes and examine what flycatcher conservation actions, management plans, and commitments and assurances occur on these lands for potential exclusion from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Virgin Management Unit

Habitat Conservation Plans

Clark County Multiple Species Habitat Conservation Plan

The Clark County Multiple Species Habitat Conservation Plan (MSHCP) was completed in November 2000, and the incidental take permit was issued on January 9,

2001. The flycatcher, as well as five additional riparian obligate species, was included in the MSHCP and permit application. The permit issued for the MSHCP covered the County, the Cities of Clark County, and Nevada Department of Transportation (permittees) for take of the covered species on all non-Federal Land with the County, up to a maximum loss of 58,681 ha (145,000 ac) of habitat within a 30-year period.

Due to the relatively large percentage of riparian habitat that occurs on non-Federal lands, the permit obligated the County to fulfill certain conditions prior to authorization of take of the avian riparian obligate species. These conditions include: (1) The development of conservation management plans that identify the management and monitoring actions needed for desert riparian habitats along the Muddy River, Virgin River, and Meadow Valley Wash; and (2) the acquisition of private lands in desert riparian habitats along the Muddy River, Virgin River, and Meadow Valley Wash, with the total number and location of hectares (acres) within each watershed to be identified in the conservation management plans.

In 2005, these two conditions were not yet fulfilled during our previous designation of flycatcher critical habitat; therefore, the permittees were not authorized for incidental take of the flycatcher, and were subsequently short of meeting the criteria for exclusion under section 4(b)(2) of the Act. Clark County is currently in the process of amending their MSHCP, but the plan is under development and decisions regarding the conservation strategy for riparian birds will not be made until the amendment to the plan and the permit are approved. Habitat conservation planning has been initiated for the

Virgin River as part of the development of the Virgin River Habitat Conservation and Recovery Program, but, similar to the Clark County MSHCP amendment, the Program has not yet been approved and permitted. We will re-evaluate flycatcher conservation planning and implementation progress along the Virgin River within these two planning efforts during this critical habitat designation process.

State Wildlife Areas

Overton State Wildlife Area

The Overton State Wildlife Area contains segments of both the Virgin River (Virgin Management Unit) and Muddy River (Pahranagat Management Unit). Please see our description of this area in the Pahranagat Management Unit.

Middle Colorado Management Unit

Tribal Management Plans and Partnerships

Hualapai Tribe

Hualapai Tribal land contains a proposed flycatcher critical habitat segment of the Colorado River on the south side of the channel in the Middle Colorado Management

Unit above Lake Mead in Mohave County, Arizona. The Hualapai Tribe has finalized a SWFMP that was adopted by the Hualapai Tribal Council.

The Hualapai Tribe's SWFMP's objectives are to manage riparian vegetation to maximize continued presence of native plant species suitable for use by flycatchers, ensure that existing land uses (which presently include recreational activities) will not result in net loss or reduction in quality of flycatcher habitat, and continue their Department of Natural Resources partnership in the management of the lower Colorado River, including those associated with the LCR MSCP (see Hoover to Parker Dam Management Unit section describing potential *Habitat Conservation Plan* exclusions).

We will consider excluding the Colorado River alongside Hualapai Tribal land from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Pahrnagat Management Unit

State Wildlife Areas

Key Pittman State Wildlife Area

The Key Pittman State Wildlife Area is located in Lincoln County, Nevada, and contains a wide diversity of habitats within its 539 ha (1,332 ac). Essential flycatcher habitat occurs along the Pahrnagat River as it travels through portion of the Key Pittman

State Wildlife Area, including Nesbitt Lake, an impounded area along the river. The State of Nevada's Department of Wildlife owns and manages this property. The Nevada Fish and Game Commission purchased portions of the area in 1962 and 1966, primarily for waterfowl hunting, and as a secondary goal, habitat for other wetland species. A draft management plan was completed in November 2003, and provided the framework for the next 10 years. The plan went through stakeholder meetings and public review.

The State of Nevada fences the known flycatcher habitat in order to protect it from livestock grazing, manages water to maintain habitat, monitors the status of flycatchers, and is actively planting riparian plants to improve the distribution of riparian habitat. The area has been under management for wildlife since the 1960s, with conservation efforts targeted toward waterfowl, wetland species, and specifically the flycatcher.

Within the Key Pittman Wildlife Area, we will consider excluding the Pahrangat River from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Overton State Wildlife Area

The Overton State Wildlife Area is located in Clark County, Nevada, and contains a wide diversity of habitats within its 7,146 ha (17,657 ac). The Muddy River and Virgin River (in the Virgin Management Unit) travel through a small portion of the State

Wildlife Management Area near Lake Mead. The State of Nevada's Department of Wildlife owns and manages this property. A management plan was completed in December 2000, and provides the framework for the next 10 years. The plan went through stakeholder meetings and public review.

We determined that essential segments of the Muddy and Virgin Rivers (located within both the Pahrangat and Virgin Management Units) for the conservation of the flycatcher occur through the boundaries of the Overton State Wildlife Area. A minimum of a quarter-acre willow patch and varying amount of cottonwood, mesquite, and hackberry will be planted annually in locations able to support native riparian trees, and water is being managed to improve and maintain riparian habitat. Riparian habitat is protected from livestock grazing, because no grazing occurs in the Wildlife Area. This Wildlife Area was developed primarily for wetland habitat and waterfowl activities (including hunting).

Within the Overton Wildlife Area, we will consider excluding the Virgin and Muddy Rivers from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Bill Williams Management Unit

State Wildlife Areas

Alamo Lake State Wildlife Area (AWA)

The Alamo Lake State Wildlife Area (AWA) in La Paz and Mohave Counties, Arizona, was created under provisions of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), Public Land Order 492 (PLO 492), and the General Plan agreement between the Secretary of the Army, Secretary of the Interior, and Director of Arizona Game and Fish, signed January 19, 1968 (Arizona Game and Fish Department-Arizona State Parks 1997). A lease agreement between the Arizona Game and Fish Department Commission and the U.S. Army Corps of Engineers was signed in 1970, establishing the AWA for fish and wildlife conservation and management purposes (Arizona Game and Fish Department—Arizona State Parks 1997). The present lease area encompasses approximately 9,140 ha (22,586 ac). Public input was solicited and addressed in development of the AWA Management Plan through scoping and the NEPA (Arizona Game and Fish Department—Arizona State Parks 1997). Proposed flycatcher critical habitat occurs along the Big Sandy, Santa Maria, and Bill Williams Rivers, which make up the upper portion of Alamo Lake.

The AWA Management Plan describes the unique riparian, wetland, and aquatic aspects of the area for a variety of species, specifically identifying the flycatcher. As a result, two of the specific resources that management emphasizes are directed toward the habitat needs of the flycatcher: (1) Maintain and enhance aquatic and riparian habitats to benefit wildlife; and (2) restore, manage, and enhance habitats for wildlife of special concern. In order to accomplish this goal, no cattle grazing is allowed in the riparian areas on the upper end of Alamo Lake and the lower portions of the Santa Maria and Big

Sandy Rivers. Also, management of recreation (i.e., off-road vehicles) is identified as important management objective.

We will consider excluding the Bill Williams, Santa Maria, and Big Sandy Rivers within the Alamo Lake State Wildlife Area from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Habitat Conservation Plans

Lower Colorado River MSCP

A portion of the Bill Williams River at the Colorado River confluence occur within the planning area of the Lower Colorado River MSCP. Please see the Hoover to Parker Dam Management Unit below for a description of the LCR MSCP.

Hoover to Parker Dam Management Unit

Habitat Conservation Plans

Lower Colorado River MSCP

The LCR MSCP was developed for areas along the lower Colorado River along the borders of Arizona, California, and Nevada from the conservation space of Lake

Mead to Mexico, 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 covers activities associated with water storage, delivery, diversion, and hydroelectric production. The Record of Decision was signed by the Secretary of the Interior 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 Bureau of Reclamation for lower Colorado River operations.

The Federal agencies involved in the LCR MSCP include the Bureau of Reclamation, Bureau of Indian Affairs, National Park Service, Bureau of Land Management, Western Area Power Administration, and U.S. Fish and Wildlife Service. The permittees covered in Arizona are: The Arizona Department of Water Resources; Arizona Electric Power Cooperative, Inc.; Arizona Game and Fish Department; 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, Basic Water Company, and the Southern Nevada Water Authority.

The LCR MSCP primarily surrounds proposed flycatcher critical habitat along the Colorado River within the Hoover to Parker Dam and Parker Dam to Southerly International Border Management Units. Streams in the Middle Colorado (Colorado River and Lake Mead), Virgin (Virgin River), and Pahrnagat (Muddy River) Management Units in Arizona, Utah, and Nevada, are briefly represented where they surround Lake Mead (including the conservation space of Lake Mead which extends up the Colorado River to Separation Canyon). Also, a portion of the Bill Williams River at the Colorado River confluence at Lake Havasu (Bill Williams Management Unit) occurs within the LCR MSCP planning area.

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 over the 50-year life of the permit (2005 to 2055). Additional research, management, monitoring, and protection of flycatchers and flycatcher habitat from fire, nest predators, and brood parasites will

occur. The development of flycatcher habitat will occur specifically throughout the Hoover to Parker Dam and Parker Dam to Southerly International Border Management Units, and is expected to meet conservation goals of the flycatcher identified in the Recovery Plan by increasing numbers of territories in appropriate Management Units. Portions of tributaries to the Colorado River, such as the Virgin and Muddy Rivers, may occur within the LCR MSCP planning area. Management and tasks associated with the HCP will result in improving and maintaining important migration stopover habitat, improving metapopulation stability, and reducing the risk of catastrophic losses due to fire. In addition to creation and subsequent management of flycatcher habitats, provision is made in the LCR MSCP to provide funds to ensure the maintenance of existing flycatcher habitats within the Management Units. Flycatcher management associated with the LCR MSCP works in conjunction with management occurring on the National Wildlife Refuges (Bill Williams, Havasu, Cibola, and Imperial) and tribal lands (Hualapai, Fort Mohave, Chemehuevi, Colorado River, and Quechan Tribes) along the LCR.

We will consider excluding portions of the Colorado River from the uppermost storage space of Lake Mead (in the Middle Colorado River Management Unit) downstream through the Hoover to Parker Dam Management Unit to the Southerly International Border and portions of tributaries (Virgin, Muddy, and Bill Williams Rivers) to the Colorado River that may occur within the LCR MSCP planning area that are located in other Management Units (Virgin, Pahrangat, and Bill Williams) from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Tribal Management Plans and Partnerships

Fort Mojave Tribe

Fort Mojave Tribal land contains a proposed Colorado River segment of flycatcher critical habitat in the Hoover to Parker Dam Management Unit above Lake Havasu in Mohave County, Arizona. The Fort Mojave Tribe has finalized a SWFMP.

The Fort Mojave Tribe's SWFMP describes that within the Tribe's budgetary constraints, they commit management to sustain the current value of saltcedar, willow, and cottonwood vegetation that meets moist soil conditions necessary to maintain flycatcher habitat; to carry out monitoring to determine flycatcher presence and vegetation status in cooperation with the Service; and to continue to provide wildfire response and law enforcement to protect flycatcher habitats. In addition, flycatcher management on Tribal Land may work in conjunction with additional flycatcher management associated with the LCR MSCP (see the Hoover to Parker Dam Management Unit above for a description).

We will consider excluding the Colorado River within Fort Mojave Tribal land from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Chemehuevi Tribe

Chemehuevi Tribal land contains a proposed Colorado River segment of flycatcher critical habitat along the on the west side of the channel in the Hoover to Parker Dam Management Unit adjacent to the Colorado River and Lake Havasu in Mohave County, Arizona. The Chemehuevi Tribe has finalized a SWFMP.

The Chemehuevi Tribe's SWFMP describes that within funding limits, they will commit to conduct a variety of flycatcher and flycatcher habitat management actions. The management actions include wildfire control, improvement of native riparian plants through vegetation improvement projects, minimization of impacts associated with recreational or other use along the river and lake shorelines, and collaboration with the Service to improve conditions for the flycatcher by discussing and implementing projects to reduce burro damage. The SWFMP identifies the management of riparian saltcedar and native willow, cottonwood, and mesquite to maximize native plant presence. Management will be done in cooperative work effort with the Service to identify restoration sites and provide early control response to wildfires that would result in no net loss or permanent modification detrimental to the flycatcher or its habitat as specified by the Recovery Plan. Any river or lakeshore land use changes, such as recreational or other developments, will take flycatcher habitat needs into account and will be done in mutual consultation with the Service to minimize detrimental impacts to flycatcher habitat. The SWFMP identifies continued cooperation between the Tribe and Service to ensure continued management of or improvement to flycatcher habitat. In addition, flycatcher management on Tribal Land may work in conjunction with additional flycatcher

management associated with the LCR MSCP (see the Hoover to Parker Dam Management Unit above for a description).

We will consider excluding the Colorado River within Chemehuevi Tribal land from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Parker Dam to Southerly International Border Management Unit

Tribal Management Plans and Partnerships

Colorado River Indian Tribes (CRIT)

The CRIT contains a proposed Colorado River segment of flycatcher habitat in the Parker Dam to Southerly International Border Management Unit in La Paz County, Arizona. The Colorado River Indian Tribes have finalized a SWFMP.

The CRIT's SWFMP describes a commitment to conduct a variety of flycatcher and flycatcher habitat management actions. The SWFMP identifies schedules for breeding habitat surveys and monitoring flycatcher nesting activity. The SWFMP also identifies the assessment, identification, and protection of flycatcher migration habitat. The SWFMP identifies protecting breeding habitat with the Ahakhav Tribal Preserve and in any areas established for flycatchers with the LCR MSCP. Seasonal closures of occupied flycatcher habitat during the breeding season may be necessary and established

by the CRIT. Protection of flycatcher habitat from fire is established in the SWFMP, as well as protections from other possible stressors such as overgrazing, recreation, and development. In addition, flycatcher management on Tribal Land may work in conjunction with additional flycatcher management associated with the LCR MSCP (see the Hoover to Parker Dam Management Unit above for a description).

We will consider excluding the Colorado River within CRIT land from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Quechan (Fort Yuma) Indian Tribe

Quechan Tribal land contains a proposed Colorado River segment of flycatcher critical habitat in the Parker Dam to Southerly International Border Management Unit near the City of Yuma in Yuma County, Arizona. The Quechan Tribe has completed a SWFMP.

The Quechan Tribe's SWFMP describes a commitment to conduct a variety of flycatcher and flycatcher habitat management actions. The 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 and support flycatcher 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

Tribe will establish collaborative relationships with the Service to benefit the flycatcher, including monitoring for flycatcher presence and habitat condition, all within the constraints of available funds to the Tribe. In addition, flycatcher management on Tribal Land may work in conjunction with additional flycatcher management associated with the LCR MSCP (see the Hoover to Parker Dam Management Unit above for a description).

We will consider excluding the Colorado River within Quechan Tribal land from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Upper Colorado Recovery Unit, AZ, UT, CO, and NM

San Juan Management Unit

Tribal Management Plans and Partnerships

Navajo Nation and Southern Ute Tribe

The Navajo Nation contains two different essential segments of the San Juan River in San Juan County, Utah, and San Juan County, New Mexico. Additionally, the Southern Ute Tribe contains an essential segment of the Los Pinos River in La Plata County, Colorado. All three of these river segments occur within the San Juan Management Unit.

We will coordinate with these tribes and examine what flycatcher conservation actions, management plans, and commitments and assurances occur on these lands for potential exclusion from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Gila Recovery Unit, AZ and NM

Verde Management Unit

Habitat Conservation Plans

Horseshoe and Bartlett Dam HCP

Salt River Project (SRP) developed the 50-year Horseshoe and Bartlett Dam HCP to provide habitat conservation for federally listed, candidate, and other species of concern that inhabit Horseshoe and Bartlett lakes and the Verde River above and below the two dams in Gila and Maricopa Counties, while allowing the continued operation of the two reservoirs. The Record of Decision was signed by the Service's Region 2 Director on June 13, 2008. SRP provides water from Horseshoe and Bartlett directly to various beneficiaries of these storage facilities for irrigation and other uses. Water from Horseshoe, Bartlett, and SRP's other reservoirs is provided directly by SRP to shareholder lands for irrigation and other uses, and is delivered to the cities of Avondale,

Chandler, Gilbert, Glendale, Mesa, Peoria, Phoenix, Scottsdale, Tempe, and Tolleson for municipal use on shareholder lands. Water deliveries are also made under specific water rights in Horseshoe and Bartlett held by the City of Phoenix, Salt River Pima Maricopa Indian Community, and Fort McDowell Yavapai Nation. In addition, water is delivered from the SRP reservoir system to the cities, Gila River Indian Community, Buckeye Irrigation Company, RWCD, and others in satisfaction of their independent water rights. Finally, exchange agreements between a number of entities and SRP pursuant to State and Federal law are facilitated by stored water from Horseshoe and Bartlett.

The Verde Management Unit, and specifically the water storage space within Horseshoe Reservoir, is the primary area where impacts to the flycatcher are anticipated to occur through periodic inundation and drying of flycatcher habitat. Water storage and periodic inundation of an annual average of up to 200 acres of flycatcher habitat would likely result in delayed or lost breeding attempts, decreased productivity and survivorship of dispersing adults in search of suitable breeding habitat, and decreased productivity of adults that attempt to breed at Horseshoe Lake.

The conservation goals of the HCP for the flycatcher would be accomplished by a number of minimization and mitigation measures, including maintaining and managing riparian habitat within Horseshoe Lake, minimizing water storage impacts, and mitigating water storage impacts by acquiring and managing flycatcher habitat along the Verde River, Gila River, or elsewhere in central Arizona to provide a diversity of geographic locations. Impacts within the lake's water storage space will be minimized by modifying

reservoir operations to make riparian habitat available earlier in the nesting season and also to maintain riparian vegetation at higher elevations in the reservoir, which are farther away from inundation impacts.

We will consider excluding the water storage area of Horseshoe Lake from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Tribal Management Plans and Partnerships

Yavapai Apache Nation

The Yavapai Apache Nation contains Verde River segments of proposed flycatcher critical habitat in the Verde Management Unit in Yavapai County, Arizona. The Yavapai Apache Nation has completed a SWFMP.

The Yavapai Apache Nation's SWFMP addresses and presents assurances for flycatcher habitat conservation. The Nation will, through zoning, Tribal ordinances and code requirements, and measures identified in the Recovery Plan, take all practicable steps to protect known flycatcher habitat located along the Verde River. The Nation will take all reasonable measures to assure that no net habitat loss or permanent modification of flycatcher habitat will result from recreational and road construction activities, or habitat restoration activities, and will take all reasonable steps to coordinate with the Service so that flycatcher habitat is protected. Within funding limitations and under confidentiality guidelines established by the Tribe, the Tribe will cooperate with the

Service to monitor and survey habitat for breeding and migrating flycatchers, conduct research, and perform habitat restoration, cowbird trapping, or other beneficial flycatcher management activities.

We will consider excluding the Verde River segments within Yavapai Apache Nation from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Roosevelt Management Unit

Habitat Conservation Plans

Roosevelt Lake HCP

An HCP for Salt River Project (SRP) was completed for the operation of Roosevelt Dam in Gila and Maricopa Counties, Arizona, which included as the action area the perimeter of Roosevelt Lake's high water mark (ERO 2002). The Record of Decision for the HCP was dated February 27, 2003. The land within the Roosevelt Lake perimeter is Federal land withdrawn by the U.S. Bureau of Reclamation and managed by the Forest Service.

The flycatcher population at Roosevelt Lake, depending on the year, can be the largest population of nesting flycatchers across the subspecies' range (approximately 150 territories, plus an unknown number of unmated, nonbreeding flycatchers and fledglings).

The confluence of Tonto Creek and the Salt River, which comprise the Roosevelt Lake water storage area, is proposed as flycatcher critical habitat. Operation of Roosevelt Dam during low water years can yield as much as 506 ha (1,250 ac) of occupied flycatcher habitat within the perimeter of the high water mark. Annually, the total available habitat varies as reservoir levels fluctuate depending on annual precipitation with dry years yielding proportionally more habitat.

Flycatcher habitat at Roosevelt Lake varies depending on how and when the lake recedes as a result of water in-flow and subsequent storage capacity and delivery needs. As the lake recedes, flat gradient, fine moist soils are exposed which provide seed beds for riparian vegetation. However, even in the expected high-water years, we determined that some flycatcher habitat would persist at Roosevelt Lake.

The HCP covers Roosevelt Dam operations for 50 years and involves the conservation of a minimum of 607 ha (1,500 ac) of flycatcher habitat off-site, outside of the Roosevelt Management Unit, on the San Pedro, Verde, and Gila Rivers, and possibly other streams in Arizona, and implementation of conservation measures to protect up to an additional 304 ha (750 ac) of flycatcher habitat. Measures in the HCP to protect habitat at Roosevelt Lake include having the Forest Service hire a Forest Service employee 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, etc., and to develop habitat at the off-site Rock House Farm Site.

We will consider excluding the water storage area of Roosevelt Lake from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Upper Gila Management Unit

Partnerships, Conservation Plans, or Conservation Easements on Private Lands

U-Bar Ranch

Pacific Western Land Company (PWLC), a Freeport McMorran (formerly Phelps Dodge) subsidiary, owns and manages the U-Bar Ranch (Ranch) near Cliff, in Grant County, New Mexico, where a proposed segment of flycatcher critical habitat occurs along the Gila River within the Upper Gila Management Area.

The U-Bar Ranch has developed a plan that provides measures to conserve, protect, and manage one of the largest known nesting flycatcher populations. Many of the flycatcher territories on the Ranch are found outside of the flood-prone area, off-channel in a unique situation, where flycatchers nest in the canopy of mature box elder trees along irrigation ditches. Through the efforts of PWLC and its long-time lessee, Mr. David Ogilvie, Freeport McMorran has demonstrated a commitment to management practices on the Ranch that have conserved and benefited flycatcher populations in that area for over a decade. In addition, privately funded scientific research at and in the vicinity of the Ranch has developed data that have contributed to the understanding of flycatcher habitat selection, distribution, prey base, and threats. Some specific

management practices, varying in different grazing pastures, which relate to the flycatcher and its habitat are: (1) Grazing is limited to November through April to 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 flycatcher habitat; (4) restoration efforts follow flood events that destroy habitat; and (5) herbicide and pesticides are only used in rare circumstances and are not used near occupied territories during breeding season.

We will consider excluding U-Bar Ranch lands from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Tribal Management Plans and Partnerships

San Carlos Apache Tribe

San Carlos Apache Tribe land contain proposed flycatcher critical habitat within the conservation space of San Carlos Lake and the Gila River upstream from San Carlos Lake, all within the Upper Gila Management Unit in Gila County, Arizona. The San Carlos Apache Tribe has finalized a Southwestern Willow Flycatcher Management Plan (SWFMP).

Implementation of the San Carlos Apache Tribe's SWFMP will protect all known flycatcher habitat on San Carlos Tribal Land and assure no net habitat loss or permanent

modification will result. All habitat restoration activities (whether to rehabilitate or restore native plants) will be conducted under reasonable coordination with the Service. All reasonable measures will be taken to ensure that recreational activities do not result in a net habitat loss or permanent modification. All reasonable measures will be taken to conduct livestock grazing activities under the guidelines established in the Recovery Plan. Within funding limitations and under confidentiality guidelines established by the Tribe, the Tribe will cooperate with the Service to monitor and survey habitat for breeding and migrating flycatchers, conduct research, and perform habitat restoration, cowbird trapping, or other beneficial flycatcher management activities.

We will consider excluding San Carlos Apache Tribal land from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Hassayampa and Agua Fria Management Unit

Partnerships, Conservation Plans, or Conservation Easements on Private Lands

Tres Rios Safe Harbor Agreement

The City of Phoenix is in the process of developing a programmatic Safe Harbor Agreement with the Service for a continuous section (about 11 km, 7 mi) of the Gila River immediately downstream from its confluence with the Salt River (Tres Rios). This area would encompass a segment of proposed flycatcher critical habitat along the Gila River in the Hassayampa and Agua Fria Management Unit in Maricopa County, Arizona.

The draft Tres Rios Safe Harbor Agreement currently describes that the City of Phoenix will enhance or maintain (or both) approximately 927 acres of City of Phoenix-owned land, and seek to enroll another 150 acres owned by the State of Arizona through a certificate of inclusion for a period of 50 years. The Permittee would agree to enhance and maintain Sonoran Desert and riparian biotic communities, which would include, but are not necessarily limited to, planting and maintaining native riparian vegetation. The flycatcher would be one of the primary targets of this agreement.

The enrolled lands are owned by the Permittee and are being managed for the purposes of riparian habitat recovery, flood protection, and passive recreation. Improvements include installing several types of wetland and riparian biotic communities, including mesquite bosque, cottonwood and willow forest, freshwater marsh, floodplain terrace, open water, and aquatic strand. Prior to the Permittee's conservation efforts, most areas of the enrolled lands were agricultural or contained mostly nonnative species with minimal wildlife habitat value. After the conservation measures are implemented, the lands will be managed with the primary goal of habitat conservation.

We will consider excluding Tres Rios lands along the Gila River from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Rio Grande Recovery Unit, CO and NM

San Luis Valley Management Unit

Partnerships, Conservation Plans, and Conservation Easements on Private Lands

San Luis Valley Partnership

The San Luis Valley in south-central Colorado surrounds all proposed flycatcher critical habitat along the Rio Grande and Conejos Rivers within the San Luis Valley Management Unit.

A partnership within the San Luis Valley has been formed between a collection of south-central Colorado cities, counties, communities, and the State of Colorado toward conservation. This partnership is developing an HCP in the San Luis Valley. The State of Colorado received a \$384,000 HCP Section 6 Planning Grant on behalf of the Rio Grande Water Conservation District in 2004 to develop the HCP for five counties, two cities, the State of Colorado, and 14 other smaller communities. In September 2005 and April 2009, the State received Section 6 grants of \$120,000 each to draft NEPA documents and finalize the HCP. Preliminary drafts of the San Luis Valley Regional HCP have been developed and submitted to the Service for review. The HCP as proposed would cover nearly 809,000 ha (2 million ac) and 241 km (150 mi) of habitat for the flycatcher and yellow-billed cuckoo. The acreage covered by the HCP encompasses the entire Colorado portion of the San Luis Valley Management Unit, as described in the Recovery Plan, and extends well beyond the two stream segments along the Rio Grande and Conejos Rivers that we have proposed as flycatcher critical habitat.

We will consider excluding San Luis Valley lands from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Upper Rio Grande Management Unit

Tribal Management Plans and Partnerships

San Ildefonso Pueblo

The San Ildefonso Pueblo contains proposed flycatcher habitat along the Rio Grande within the Upper Rio Grande Management Unit in Santa Fe County, New Mexico.

The San Ildefonso Pueblo has conducted a variety of voluntary measures, restoration projects, and management actions to conserve the flycatcher and its habitat on their lands. Multiple-use practices of the river and riparian habitat resources are an important component of Tribal activities and culture, and as a result, the Pueblo has taken steps to manage all the components of the riparian habitat. The Pueblo has implemented vegetation management actions to reduce flammable exotic vegetation within the floodplain and replace it with native riparian trees and shrubs. The Pueblo's long-term management objectives include efforts to reestablish and maintain sustainable native

plant communities in the Rio Grande floodplain and improve habitat, including wetland restoration, for culturally important plant and wildlife species, including the flycatcher.

We will consider excluding San Ildefonso Pueblo land from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Santa Clara Pueblo

The Santa Clara Pueblo contains proposed flycatcher critical habitat along the Rio Grande within the Upper Rio Grande Management Unit in Rio Arriba County, New Mexico.

The Santa Clara Pueblo has conducted a variety of voluntary measures, restoration projects, and management actions to conserve the flycatcher and its habitat on their lands. Santa Clara Pueblo made a commitment to develop an integrated resources management plan to address multi-use, enhancement, and management of their natural resources. The Pueblo has implemented fuel reduction of flammable exotic riparian vegetation and native tree restoration projects in the riparian area since 2001, carefully progressing in incremental stages to reduce the overall effects to wildlife.

We will consider excluding Santa Clara Pueblo lands from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

San Juan Pueblo (Ohkay Owingue)

The San Juan Pueblo contains proposed flycatcher critical habitat along the Rio Grande within the Upper Rio Grande Management Unit in Rio Arriba County, New Mexico.

The San Juan Pueblo has conducted a variety of voluntary measures, restoration projects, and management actions to conserve the flycatcher and its habitat on their lands. The Pueblo has engaged in riparian vegetation and wetland improvement projects, while managing to reduce the occurrence of wildfire due to the abundance of exotic flammable riparian vegetation. Project implementation included conservation, monitoring, and management for the flycatcher. The long-term goal of the Pueblo's riparian management is to increase habitat for breeding flycatchers, as well as implement innovative restoration techniques, decrease fire hazards by restoring native vegetation, share information with other restoration practitioners, utilize restoration projects in the education of the tribal community and surrounding community, and provide a working and training environment for the people of the Pueblo.

We will consider excluding San Juan Pueblo (Ohkay Owingue) lands from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Middle Rio Grande Management Unit

Federal Land Management

Elephant Butte Reservoir

The Middle Rio Grande Management Unit includes Elephant Butte Reservoir, a reservoir on the Rio Grande in New Mexico, 5 miles (8.0 km) north of Truth or Consequences. It is impounded by Elephant Butte Dam, owned and operated by the U.S. Bureau of Reclamation, and is the largest reservoir in New Mexico. The reservoir is part of the Rio Grande Project, a project to provide power and water for irrigation to south-central New Mexico and west Texas. It can hold 2,065,010 acre-feet (2,547,152,330 m³) of water from a drainage of 28,900 square miles (74,850 km²), and provides irrigation to 178,000 acres (720 km²) of land.

The gradual recession of Elephant Butte Reservoir during the late 1990s exposed an additional 32 km of lake bottom in this unit. Riparian habitat developed alongside the Rio Grande within the exposed conservation space. Since 1999, this riparian vegetation has developed into flycatcher nesting habitat and the number of flycatcher territories dramatically increased. The area within the conservation space of Elephant Butte Reservoir is currently the largest known flycatcher population in their range; in 2009, a total of 221 pairs and 291 nests were documented (Moore and Ahlers 2010, p. 43). The Bureau of Reclamation develops plans for the operation of the reservoir, the most recent being *Elephant Butte Reservoir Five-Year Operational Plan: Biological Assessment* (Reclamation 2009), which includes an assessment of the recent flycatcher population numbers within Elephant Butte Reservoir and the near reach of the Rio Grande.

Based on an initial evaluation of potential impacts on water operations of the Elephant Butte Dam and Reservoir, we will consider excluding the water storage area of Elephant Butte Reservoir from the final designation of flycatcher critical habitat under section 4(b)(2) of the Act.

Peer Review

Peer Review

In accordance with our joint policy on peer review published in the **Federal Register** on July 1, 1994 (59 FR 34270), we will seek the expert opinions of at least three appropriate and independent specialists regarding this proposed rule. The purpose of peer review is to ensure that our critical habitat designation is based on scientifically sound data, assumptions, and analyses. We will invite these peer reviewers to comment during this public comment period on our specific assumptions and conclusions in this proposed designation of critical habitat.

We will consider all comments and information we receive during this comment period on this proposed rule during our preparation of a final determination. Accordingly, the final decision may differ from this proposal.

Required Determinations

Regulatory Planning and Review—Executive Order 12866

The Office of Management and Budget (OMB) has determined that this rule is not significant and has not reviewed this proposed rule under Executive Order 12866 (Regulatory Planning and Review). OMB bases its determination upon the following four criteria:

(1) Whether the rule will have an annual effect of \$100 million or more on the economy or adversely affect an economic sector, productivity, jobs, the environment, or other units of the government.

(2) Whether the rule will create inconsistencies with other Federal agencies' actions.

(3) Whether the rule will materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients.

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA), whenever an agency is required to 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 effect of the rule on small entities (*i.e.*, 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. SBREFA amended RFA to require Federal agencies

to provide a statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

At this time, we lack the available economic information necessary to provide an adequate factual basis for the required RFA finding. Therefore, we defer the RFA finding until completion of the revised draft economic analysis prepared under section 4(b)(2) of the Act and Executive Order 12866. We previously conducted an economic analysis in 2005 for the 2004 proposed critical habitat for flycatchers, which included an analysis of the effects on small entities. We will revise the draft economic analysis for this proposed rule to provide the required factual basis for the RFA finding for this revised critical habitat proposal. Upon completion of the revised draft economic analysis, we will announce availability of the draft economic analysis of the proposed designation in the **Federal Register** and reopen the public comment period for the proposed designation. We will include with this announcement, as appropriate, an initial regulatory flexibility analysis or a certification that the rule will not have a significant economic impact on a substantial number of small entities accompanied by the factual basis for that determination.

Energy Supply, Distribution, or Use—Executive Order 13211

On May 18, 2001, the President issued an Executive Order (E.O. 13211) on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking

certain actions. This proposed rule to designate revised critical habitat for the flycatcher not expected to significantly affect energy supplies, distribution, or use because there are no pipelines, distribution facilities, power grid stations, etc., within the boundaries of proposed revised critical habitat. Therefore, this action is not a significant energy action and no Statement of Energy Effects is required. We will, however, further evaluate this issue as we conduct our economic analysis and, as appropriate, review and revise this assessment as warranted.

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 would 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) Based in part on an analysis conducted for the previous designation of flycatcher

critical habitat (70 FR 60886, October 19, 2005) and extrapolated to this designation, we do not expect this rule to significantly or uniquely affect small governments. Small governments will be affected only to the extent that any programs having Federal funds, permits, or other authorized activities must ensure that their actions will not adversely affect the critical habitat. Therefore, a Small Government Agency Plan is not required. However, we will further evaluate these issues as we conduct our economic analysis, and review and revise this assessment as warranted.

Takings—Executive Order 12630

In accordance with Executive Order 12630 (“Government Actions and Interference with Constitutionally Protected Private Property Rights”), this rule is not anticipated to have significant takings implications. 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. Due to current public knowledge of the species protections and the prohibition against take of the species both within and outside of the proposed areas, we do not anticipate that property values would be affected by this revised critical habitat designation. However, we have not yet completed the economic analysis for this proposed rule. Once the revised economic analysis is available, we will review and revise this preliminary assessment as warranted, and prepare a Takings Implication Assessment.

Federalism—Executive Order 13132

In accordance with Executive Order 13132 (Federalism), this proposed rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, this proposed critical habitat designation with appropriate State resource agencies in Arizona, Utah, Nevada, California, New Mexico, and Colorado. 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 because 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) would 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 requirements of sections 3(a) and 3(b)(2) of the Order. We have proposed designating critical habitat in accordance with the provisions of the Act. This proposed 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 will undertake a NEPA analysis for critical habitat designation and notify the public of the availability of the draft environmental assessment for this proposal when it is finished.

Clarity of the Rule

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

- (1) Be logically organized;
- (2) Use the active voice to address readers directly;
- (3) Use clear language rather than jargon;
- (4) Be divided into short sections and sentences; and
- (5) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in the **ADDRESSES** section. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

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 are tribal lands in California, Utah, Arizona, Colorado, and New Mexico included in this proposed designation of 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 have determined that all of the areas proposed for designation on tribal lands are essential to the conservation of the species. We will seek government-to-government consultation with these tribes throughout the proposal and development of the final designation of flycatcher critical habitat. We will consider these areas for exclusion from final critical habitat designation to the extent consistent with the requirements of 4(b)(2) of the Act. We recently informed tribes of how we are evaluating section 4(b)(2) of the Act and of our interest in consulting with them on a government-to-government basis.

References Cited

A complete list of references cited in this rulemaking is available on the Internet at <http://www.regulations.gov> and upon request from the Arizona Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this package are the staff members of the Arizona Ecological Services Field Office.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Proposed Regulation Promulgation

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

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. In § 17.11(h), revise 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 population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						

* * * * *

BIRDS

* * * * *

Flycatcher, southwestern willow	<i>Empidonax traillii extimus</i>	U.S.A. (AZ,CA, CO, NM, NV, TX,UT), Mexico	Entire.....	E	577	17.95(b)	NA
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* * * * *

3. In § 17.95, amend paragraph (b) by revising the entry for “Southwestern Willow Flycatcher (Empidonax traillii extimus),” in the same alphabetical order that the species appears in the table at § 17.11(h), 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 Imperial, Inyo, Kern, Los Angeles, Mono, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura Counties in California; Clark, Lincoln, and Nye Counties in Nevada; Kane, San Juan, and Washington Counties in Utah; Alamosa, Conejos, Costilla, La Plata, and Rio Grande Counties in Colorado; Apache, Cochise, Gila, Graham, Greenlee, La Paz, Maricopa, Mohave, Pima, Pinal, Santa Cruz, Yavapai, and Yuma Counties in Arizona; and Catron, Cibola, Dona Ana, Grant, Hidalgo, McKinley, Mora, Rio Arriba, Santa Fe, San Juan, Sierra, 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) Primary Constituent Element 1— *Riparian vegetation*. Riparian habitat in a dynamic river or lakeside, 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, Geyers 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 m 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; and/or

(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; and/or

(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); and/or

(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); and

(ii) 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).

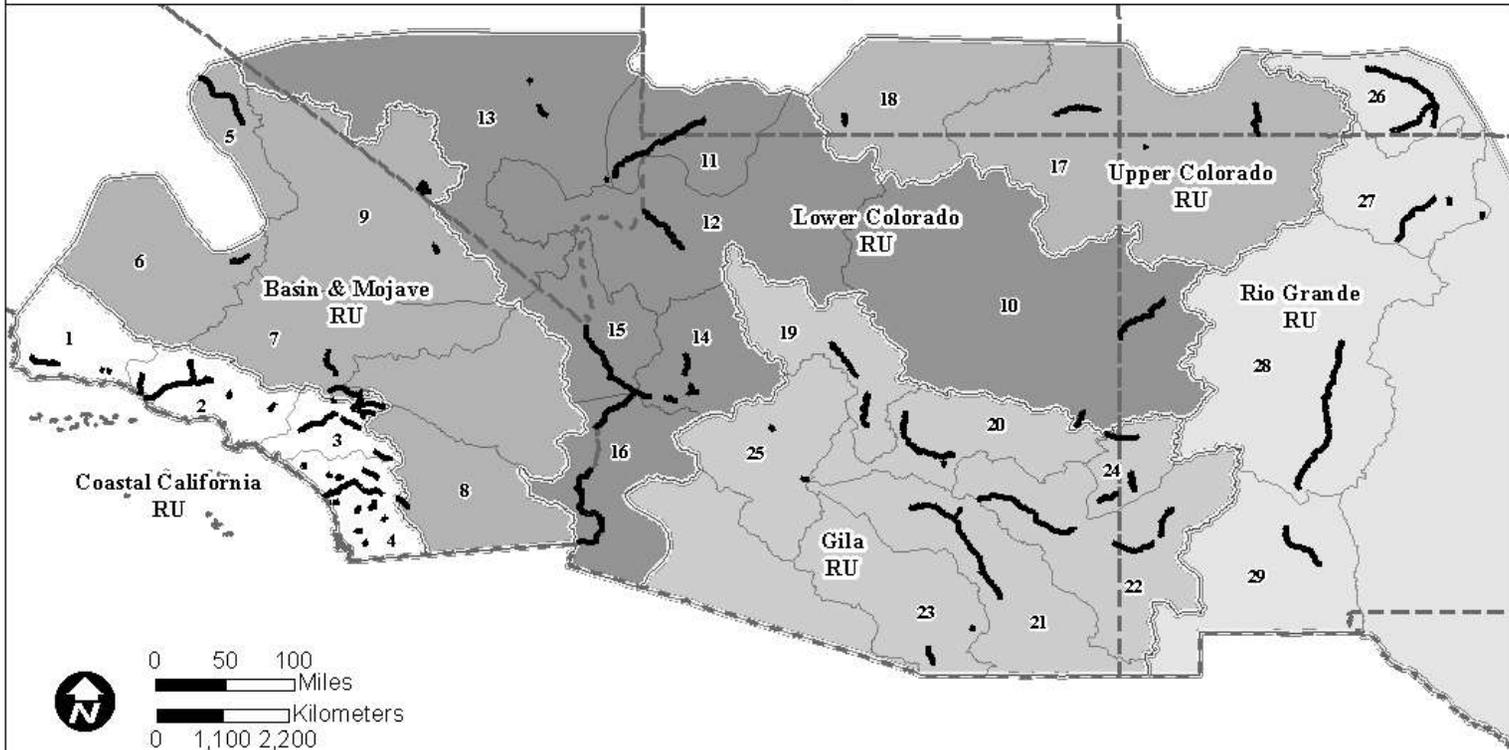
(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on the effective date of this rule.

(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 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) Note: Index map of southwestern willow flycatcher critical habitat units follows:

General Locations of Critical Habitat for the Southwestern Willow Flycatcher Overview Map



- | | |
|---|---|
| <p>— Critical Habitat</p> <p>□ State Boundaries</p> <p>Recovery Units</p> <ul style="list-style-type: none"> □ Coastal California □ Basin & Mojave □ Lower Colorado □ Upper Colorado □ Gila □ Rio Grande | <p>Management Units</p> <ul style="list-style-type: none"> • 1 - Santa Ynez • 2 - Santa Clara • 3 - Santa Ana • 4 - San Diego • 5 - Owens • 6 - Kern • 7 - Mojave • 8 - Salton • 9 - Amargosa • 10 - Little Colorado • 11 - Virgin • 12 - Middle Colorado • 13 - Pahrnagat • 14 - Bill Williams • 15 - Hoover-Parker • 16 - Parker-Southerly International Boundary • 17 - San Juan • 18 - Powell • 19 - Verde • 20 - Roosevelt • 21 - Middle Gila/San Pedro • 22 - Upper Gila • 23 - Santa Cruz • 24 - San Francisco • 25 - Hassayampa/Agua Fria • 26 - San Luis Valley • 27 - Upper Rio Grande • 28 - Middle Rio Grande • 29 - Lower Rio Grande |
|---|---|

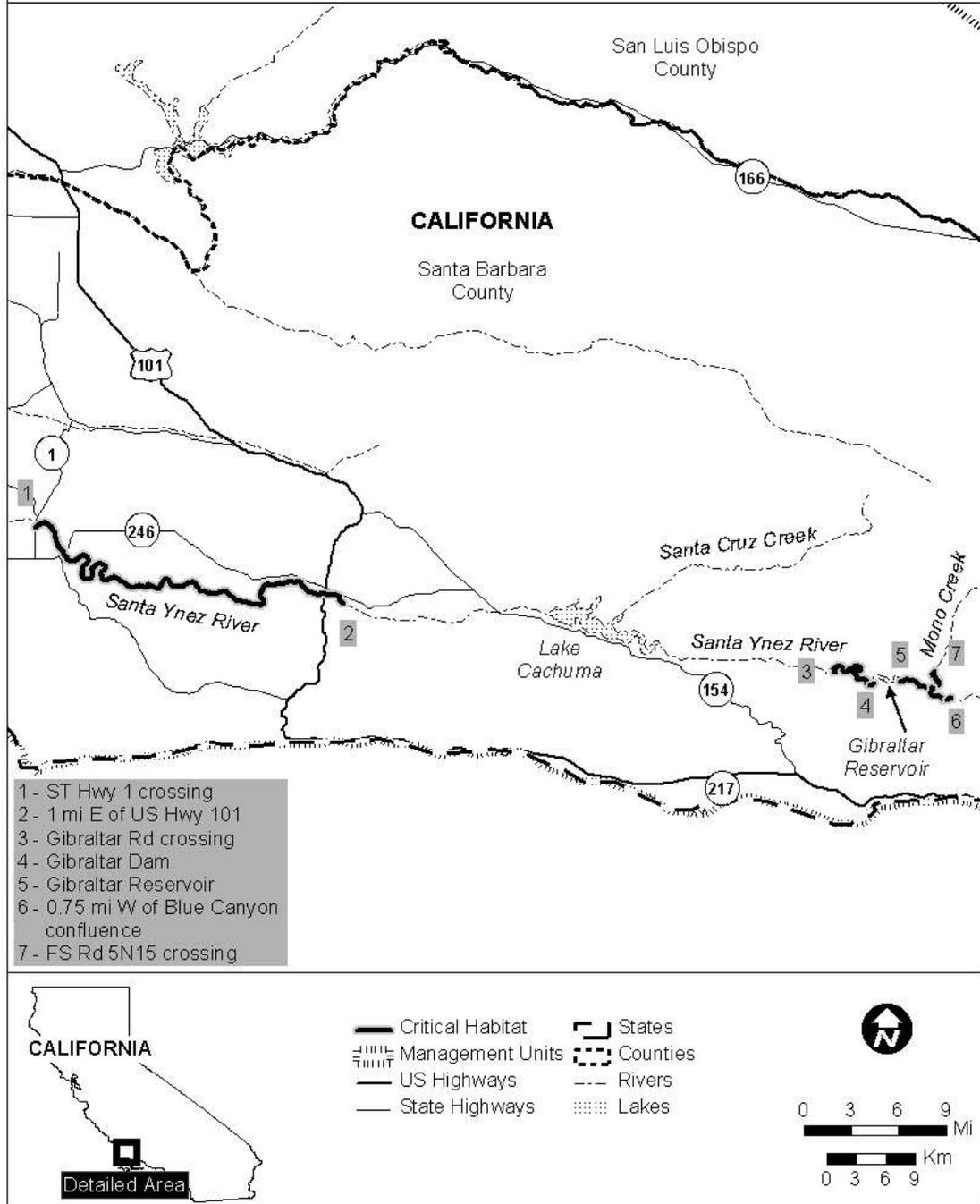
(6) Santa Ynez Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Santa Ynez River (upper)	11, 259890, 3821926	11, 255550, 3823716
Santa Ynez River (middle)	11, 253343, 3823606	11, 249967, 3824847
Santa Ynez River (lower)	10, 759116, 3832075	10, 732972, 3839168
Mono Creek	11, 258529, 3824766	11, 258310, 3822974

(ii) Note: Map of Santa Ynez Management Unit follows:

**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Santa Ynez Management Unit**



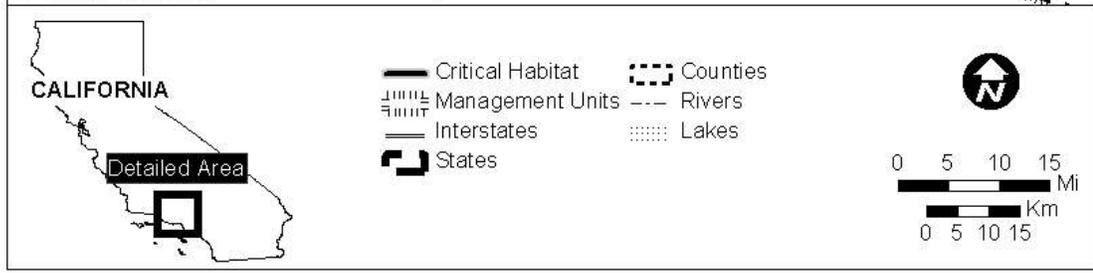
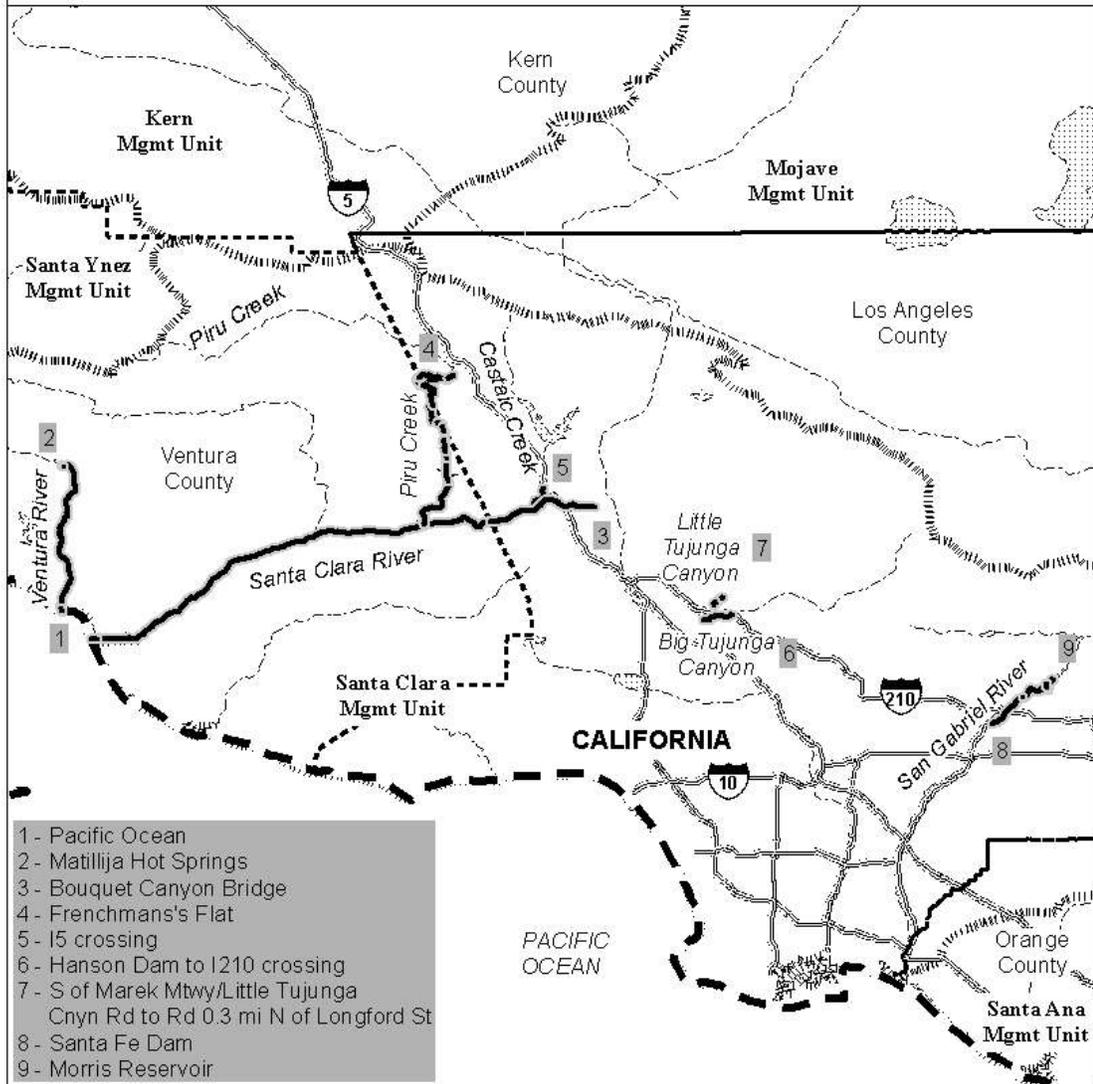
(7) Santa Clara Management Unit.

(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, 358481, 3810219	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
Little Tujunga Canyon Creek	11, 375223, 3795681	11, 373846, 3794336
San Gabriel River	11, 418737, 3781999	11, 410558, 3775011

(ii) Note: Map of Santa Clara Management Unit follows:

**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Santa Clara Management Unit**



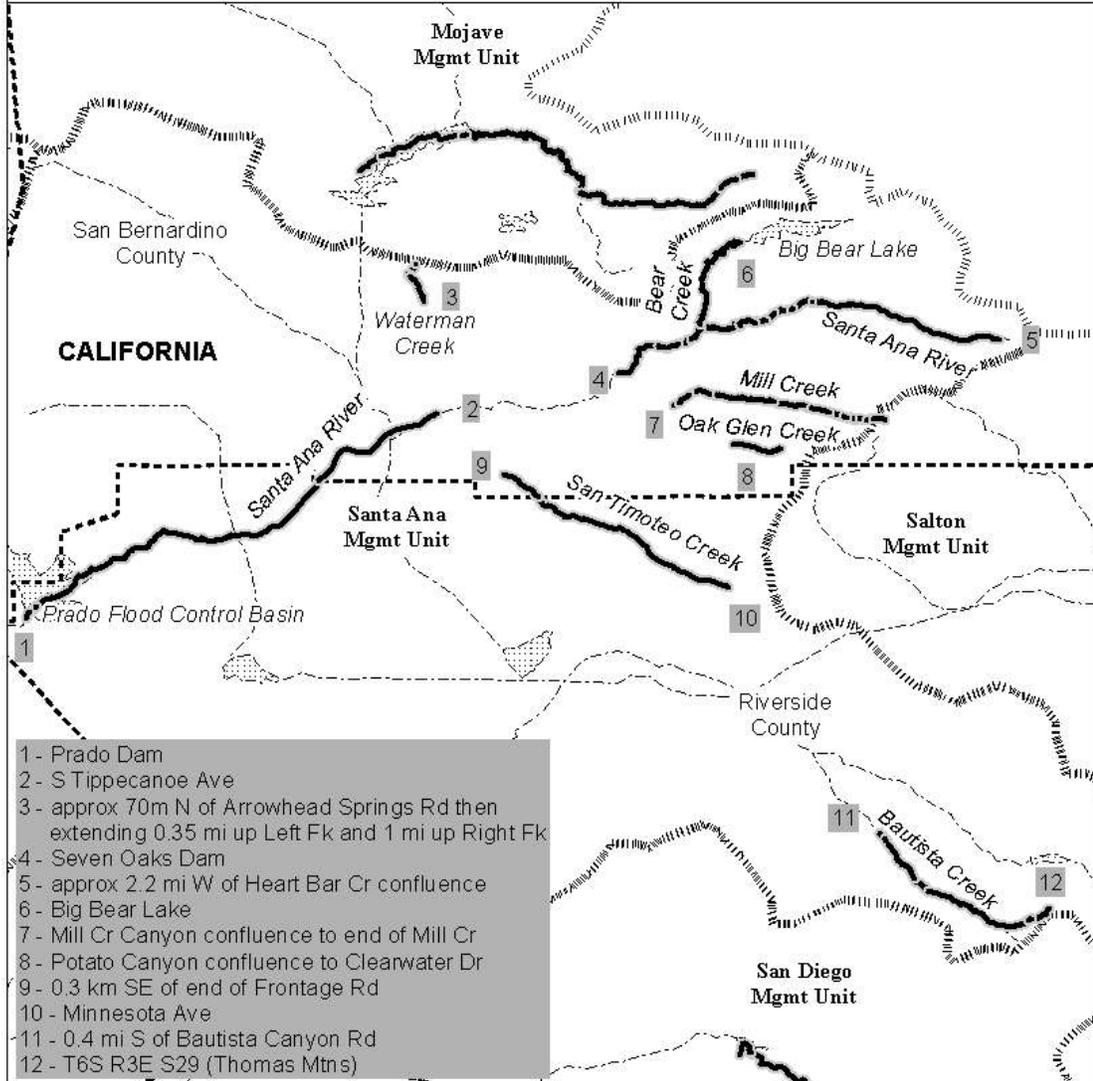
(8) Santa Ana Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Santa Ana River (upper)	11, 524293, 3778965	11, 491603, 3775416
Santa Ana River (lower)	11, 476054, 3771257	11, 440482, 3750310
Waterman Creek	11, 474905, 3782822	11, 473755, 3785448
Waterman Creek (left fork)	11, 473453, 3785826	11, 473755, 3785448
Waterman Creek (right fork)	11, 474240, 3786803	11, 473755, 3785448
Bear Creek	11, 502121, 3788996	11, 498606, 3779948
Mill Creek	11, 514496, 3770619	11, 496356, 3772092
Oak Glen Creek	11, 505534, 3767595	11, 501351, 3768018
San Timoteo Creek	11, 501075, 3753255	11, 481625, 3764986
Bautista Creek	11, 528791, 3720143	11, 514049, 3727872

(ii) Note: Map of Santa Ana Management Unit follows:

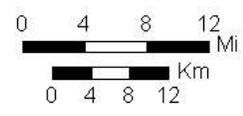
**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Santa Ana Management Unit**



- 1 - Prado Dam
- 2 - S Tippecanoe Ave
- 3 - approx 70m N of Arrowhead Springs Rd then extending 0.35 mi up Left Fk and 1 mi up Right Fk
- 4 - Seven Oaks Dam
- 5 - approx 2.2 mi W of Heart Bar Cr confluence
- 6 - Big Bear Lake
- 7 - Mill Cr Canyon confluence to end of Mill Cr
- 8 - Potato Canyon confluence to Clearwater Dr
- 9 - 0.3 km SE of end of Frontage Rd
- 10 - Minnesota Ave
- 11 - 0.4 mi S of Bautista Canyon Rd
- 12 - T6S R3E S29 (Thomas Mtns)



Critical Habitat
 Rivers
 Management Units
 Lakes
 Counties



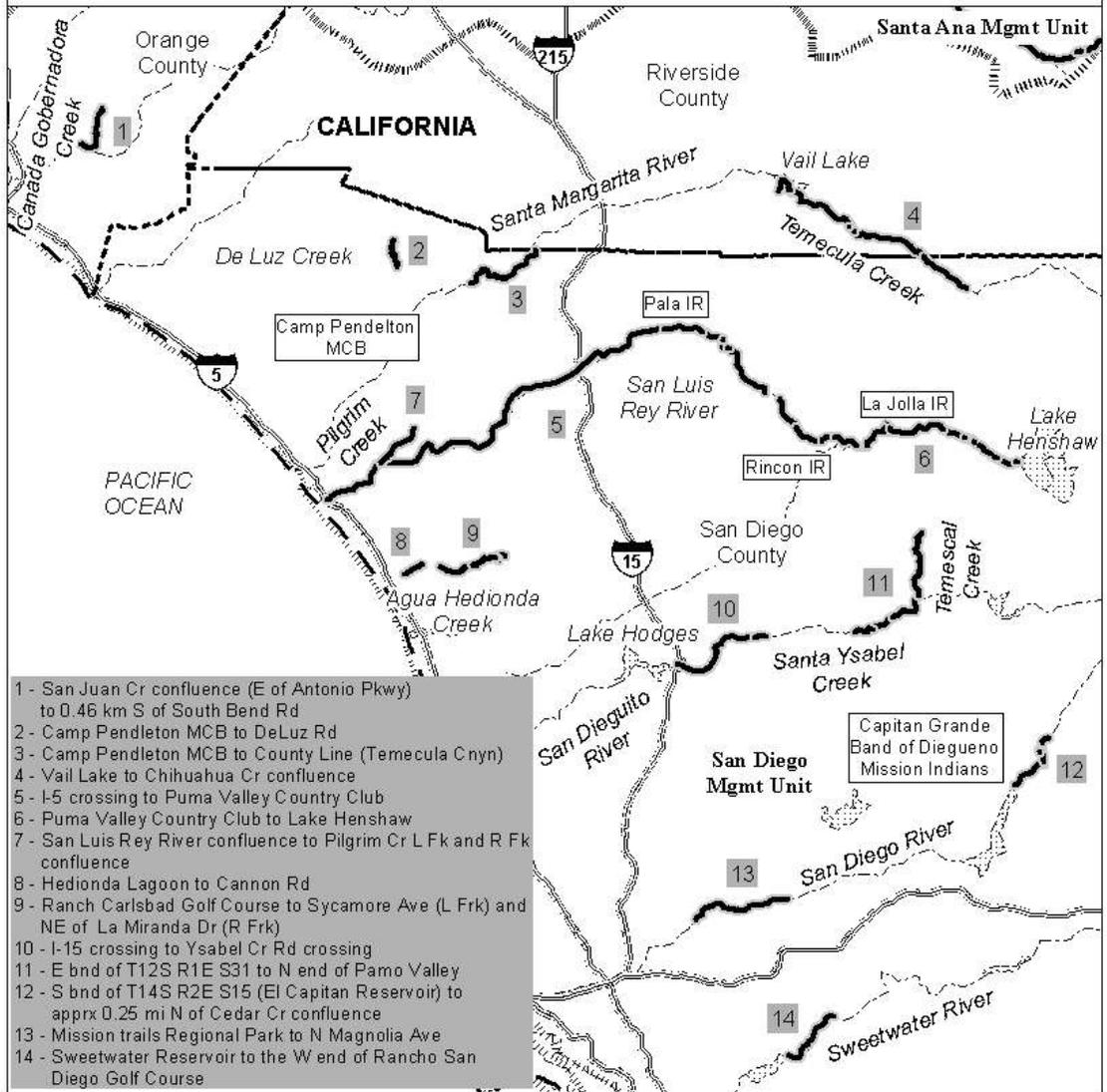
(9) San Diego Management Unit.

(i)

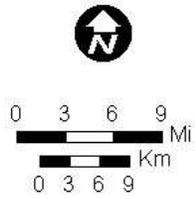
Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Canada Gobernadora Creek	11, 443758, 3709886	11, 445478, 3713561
DeLuz Creek	11, 469888, 3700258	11, 470085, 3697512
Santa Margarita River	11, 481662, 3699235	11, 476206, 3695949
Temecula Creek	11, 517749, 3695379	11, 502050, 3704986
Pilgrim Creek	11, 471495, 3681452	11, 468703, 3677979
San Luis Rey (upper)	11, 522199, 3678133	11, 502102, 3684334
San Luis Rey (lower)	11, 500948, 3684975	11, 464169, 3674286
Agua Hedionda Creek (upper)	11, 473644, 3667656	11, 478368, 3668540
Agua Hedionda Creek (lower)	11, 470613, 3666848	11, 472211, 3667859
Agua Hedionda Creek (right fork)	11, 478544, 3668255	11, 478368, 3668540
Agua Hedionda Creek (left fork)	11, 479102, 3668675	11, 478368, 3668540
Temescal Creek	11, 514095, 3671020	11, 513763, 3664632
Santa Ysabel River (upper)	11, 508395, 3661105	11, 513763, 3664632
San Dieguito River/Santa Ysabel River (lower)	11, 500998, 3660643	11, 493522, 3657877
San Diego River (upper)	11, 524742, 3650609	11, 521804, 3645772
San Diego River (lower)	11, 495073, 3632262	11, 502847, 3634390
Sweetwater River	11, 506745, 3622685	11, 502808, 3618825

(ii) Note: Map of San Diego Management Unit follows:

**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
San Diego Management Unit**



- Critical Habitat
- Counties
- Management Units
- Rivers
- Interstates
- Lakes
- States



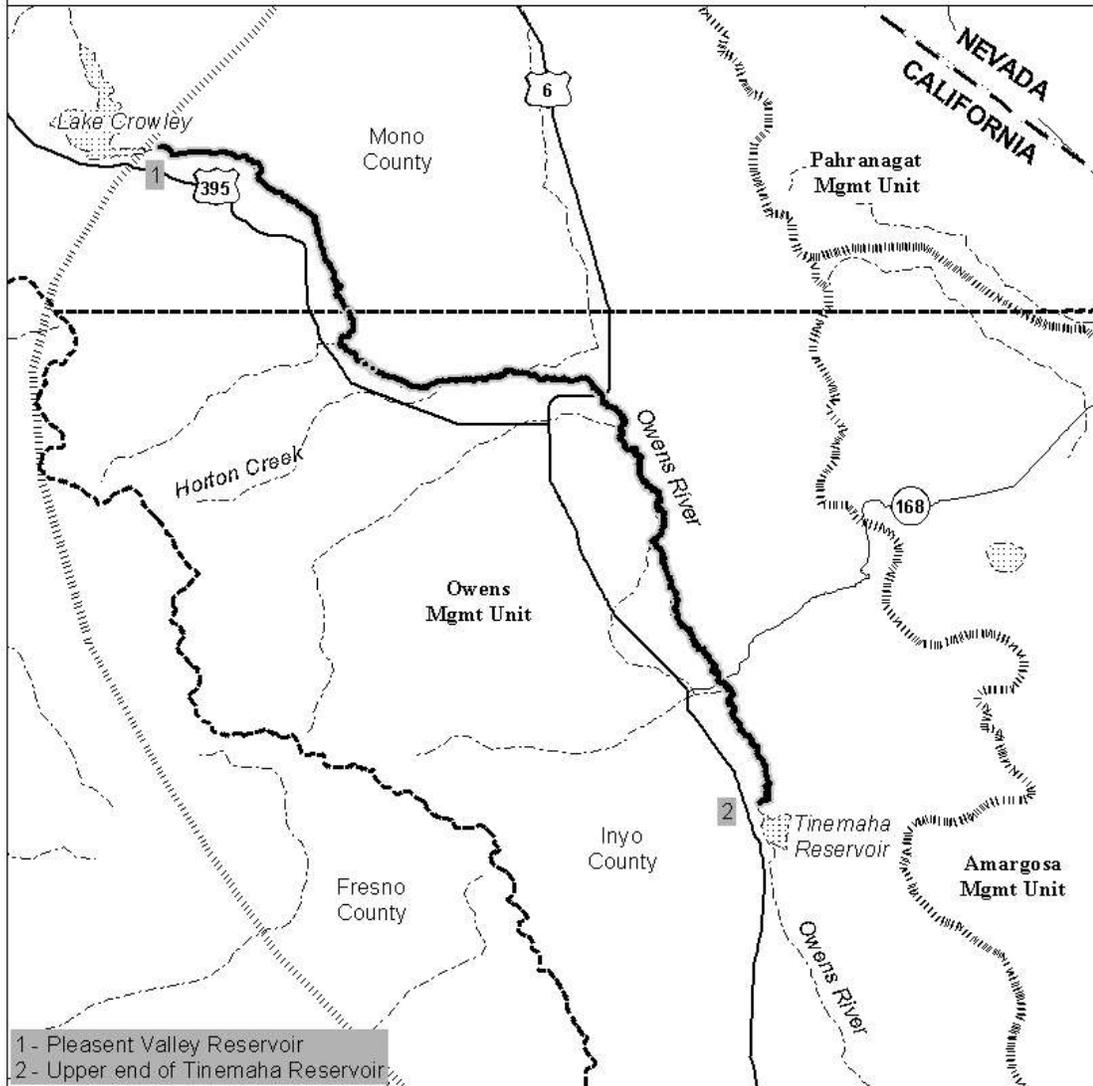
(10) Owens Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Owens River	11, 350379, 4161519	11, 765571, 4009492

(ii) Note: Map of Owens Management Unit follows:

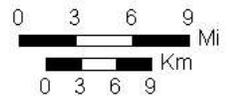
**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Owens Management Unit**



1 - Pleasant Valley Reservoir
2 - Upper end of Tinemaha Reservoir



- | | |
|------------------|----------|
| Critical Habitat | States |
| Management Units | Counties |
| US Highways | Rivers |
| State Highways | Lakes |



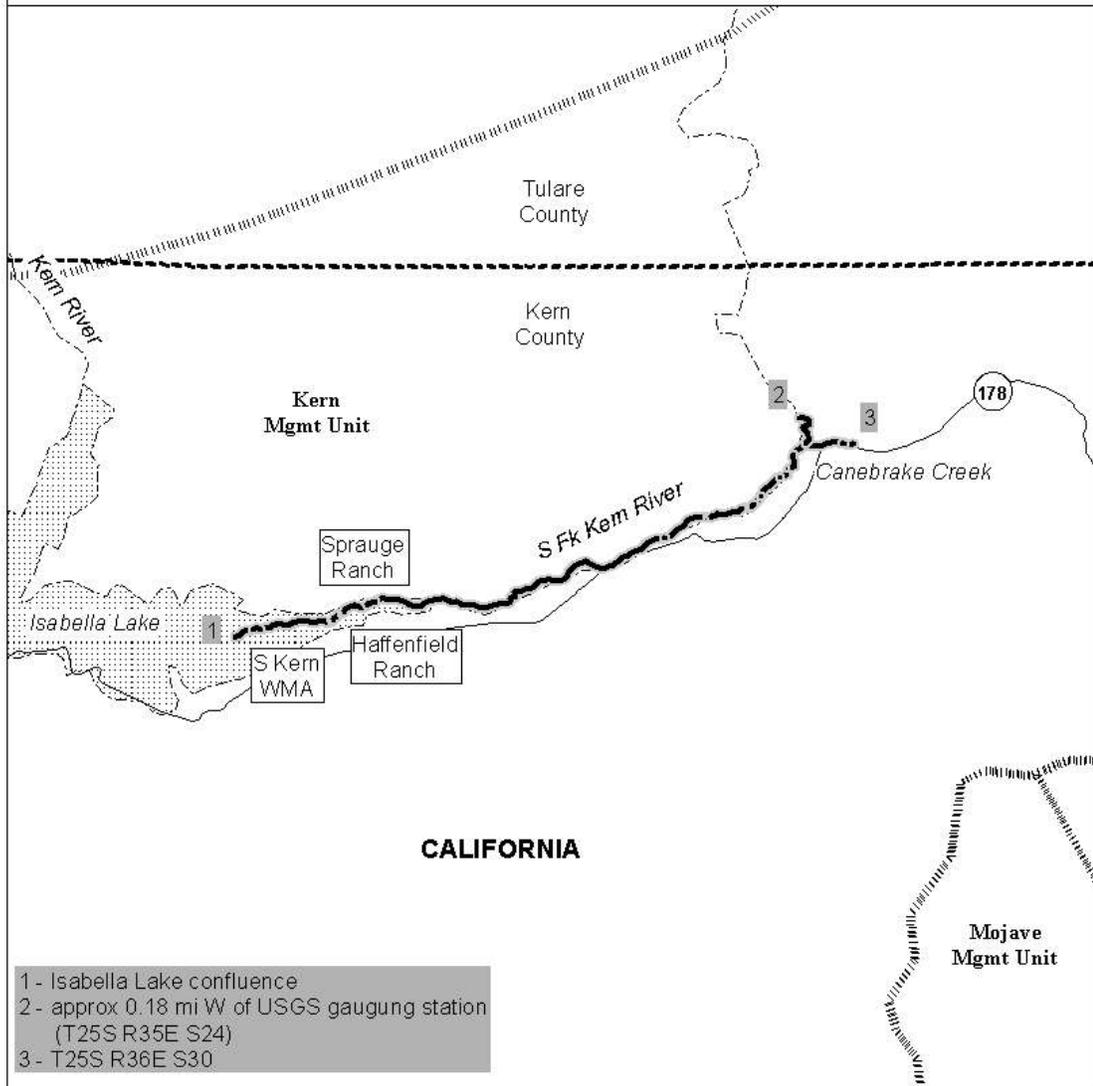
(11) Kern Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
South Fork Kern River	11, 393579, 3955510	11, 375779, 3947268
Canebrake Creek	11, 395263, 3954472	11, 393671, 3954409

(ii) Note: Map of Kern Management Unit follows:

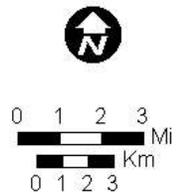
**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Kern Management Unit**



- 1 - Isabella Lake confluence
- 2 - approx 0.18 mi W of USGS gauging station (T25S R35E S24)
- 3 - T25S R36E S30



- | | |
|------------------|----------|
| Critical Habitat | Counties |
| Management Units | Rivers |
| State Highways | Lakes |



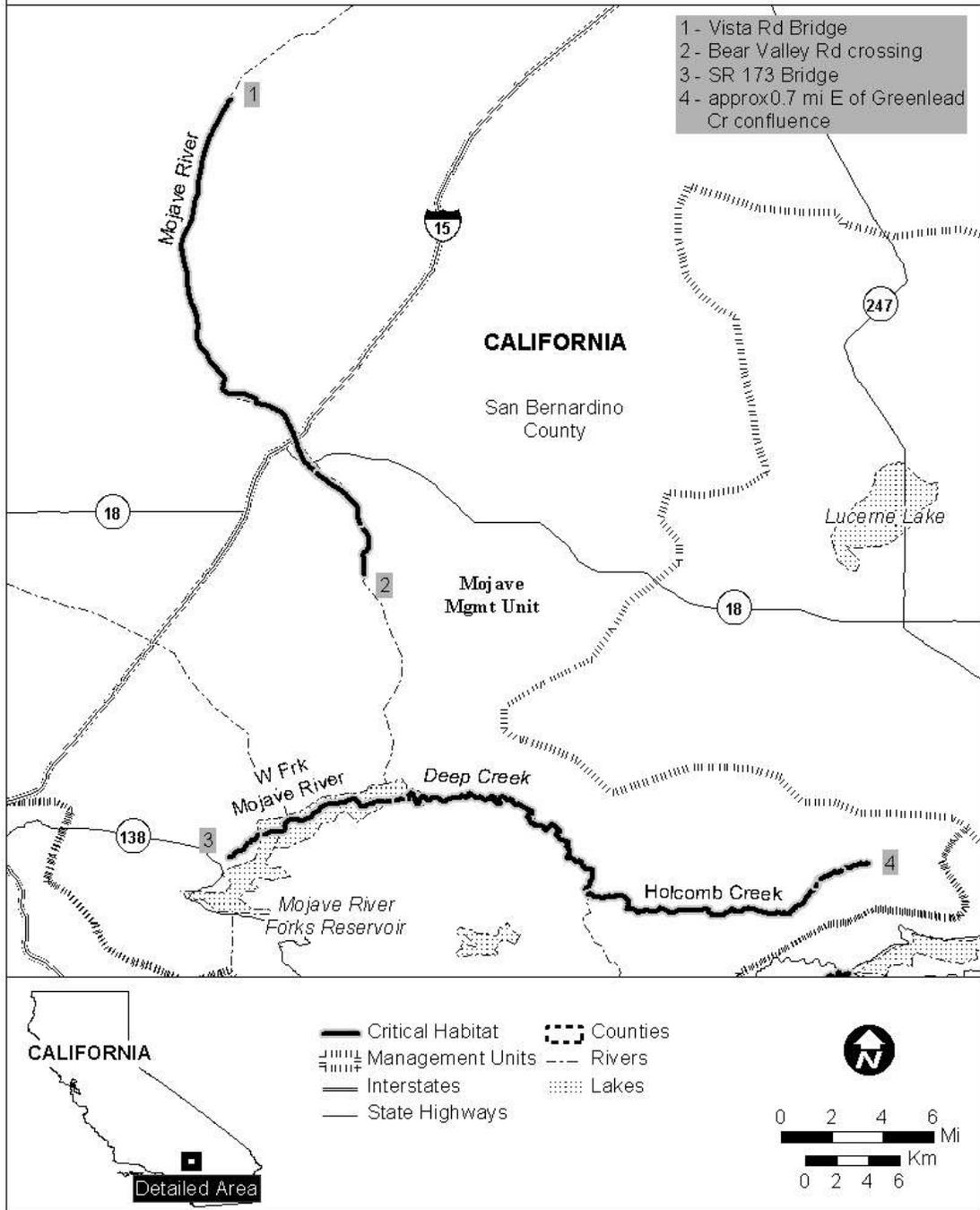
(12) Mojave Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Mojave River	11, 469646, 3844680	11, 476583, 3814381
West Fork Mojave River	11, 469339, 3796375	11, 478190, 3800025
Deep Creek	11, 478190, 3800025	11, 488326, 3794046
Holcomb Creek	11, 503127, 3796007	11, 488326, 3794046

(ii) Note: Map of Mojave Management Unit follows:

**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Mojave Management Unit**



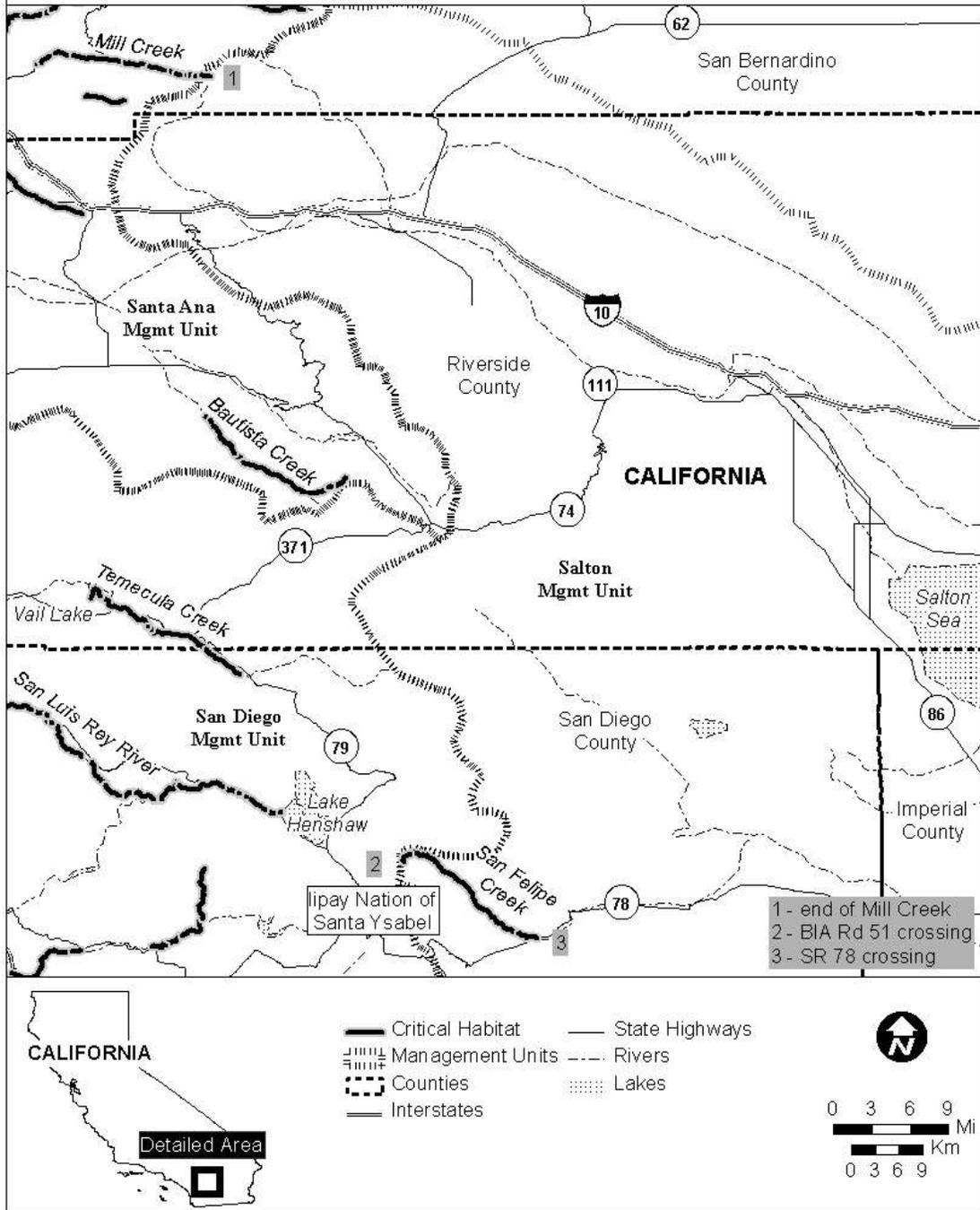
(13) Salton Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
San Felipe Creek	11, 535067, 3671838	11, 549258, 3662280
Mill Creek	11, 514496, 3770619	11, 496356, 3772092

(ii) Note: Map of Salton Management Unit follows:

**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Salton Management Unit**



(14) 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

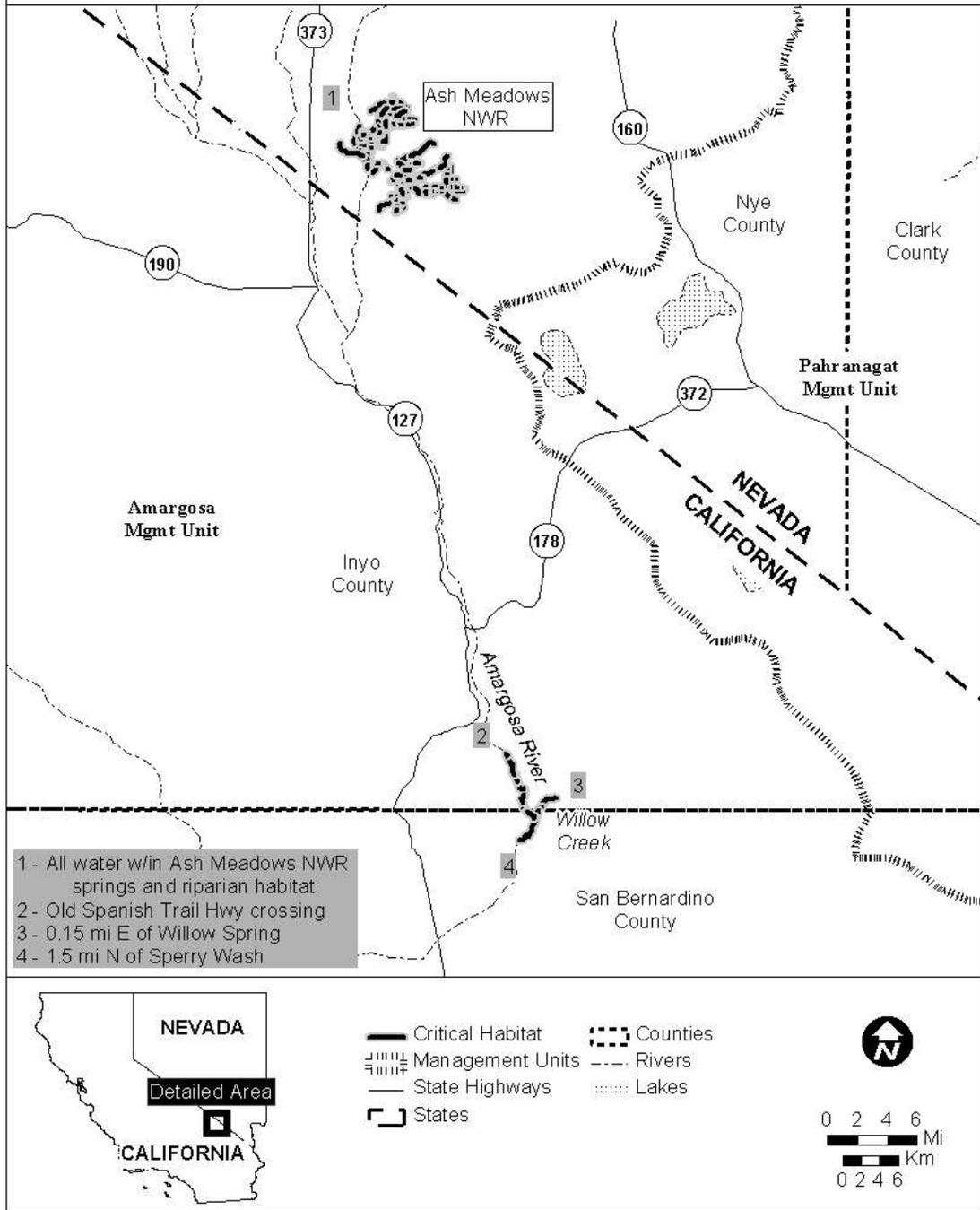
(ii) Ash Meadows Riparian Areas and Carson Slough (UTM zone 11, E, N):

559058.51, 4038462.72; 559169.18, 4038088.61; 559257.50, 4037821.45; 559388.34, 4037661.69; 559778.65, 4037503.73; 560038.12, 4037505.53; 559928.15, 4037772.53; 560533.55, 4037776.76; 560493.50, 4037321.28; 560571.70, 4035420.70; 560182.40, 4035417.98; 559813.81, 4035549.30; 559773.33, 4035147.38; 558519.07, 4035112.01; 558573.22, 4033505.81; 559395.43, 4033484.65; 559465.49, 4032735.40; 560244.32, 032740.79; 560271.74, 4031910.92; 560986.12, 4031862.37; 561078.15, 4031086.51; 561424.94, 4031008.64; 561397.41, 4031838.51; 561873.41, 4031841.90; 561890.65, 4029432.17; 562691.62, 4029411.15; 562704.34, 4030642.95; 564305.88, 4030627.93; 564333.69, 4029798.07; 564658.52, 4029773.72; 564738.26, 4027792.87; 561469.58, 4027769.05; 561442.43, 4028545.36; 561052.25, 4028622.93; 560229.19, 4028697.49; 560263.14, 4026930.51; 559895.10, 4026927.96; 559857.36, 4026124.42; 559055.73, 4026199.25; 558941.05, 4030321.96; 558616.44, 4030319.75; 558621.57, 4032756.41; 558232.15, 4032753.78; 558180.93, 4030718.45; 557791.43, 4030715.84; 557767.10, 4031117.32; 556641.56, 4031163.43; 556566.66, 4032689.17; 555701.11, 4032710.32;

555755.65, 4034317.23; 556166.45, 4034346.67; 556120.93, 4034694.46; 556964.48,
4034699.98; 556891.48, 4035931.20; 557323.83, 4035960.84; 557319.38, 4036630.21;
557687.18, 4036605.88; 557638.92, 4037355.30; 558417.16, 4037387.30; 558393.18,
4037735.23; 558760.75, 4037737.73; 558755.83, 4038460.66; 559058.51, 4038462.72.

(iii) Note: Map of Amargosa Management Unit follows:

**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Amargosa Management Unit**



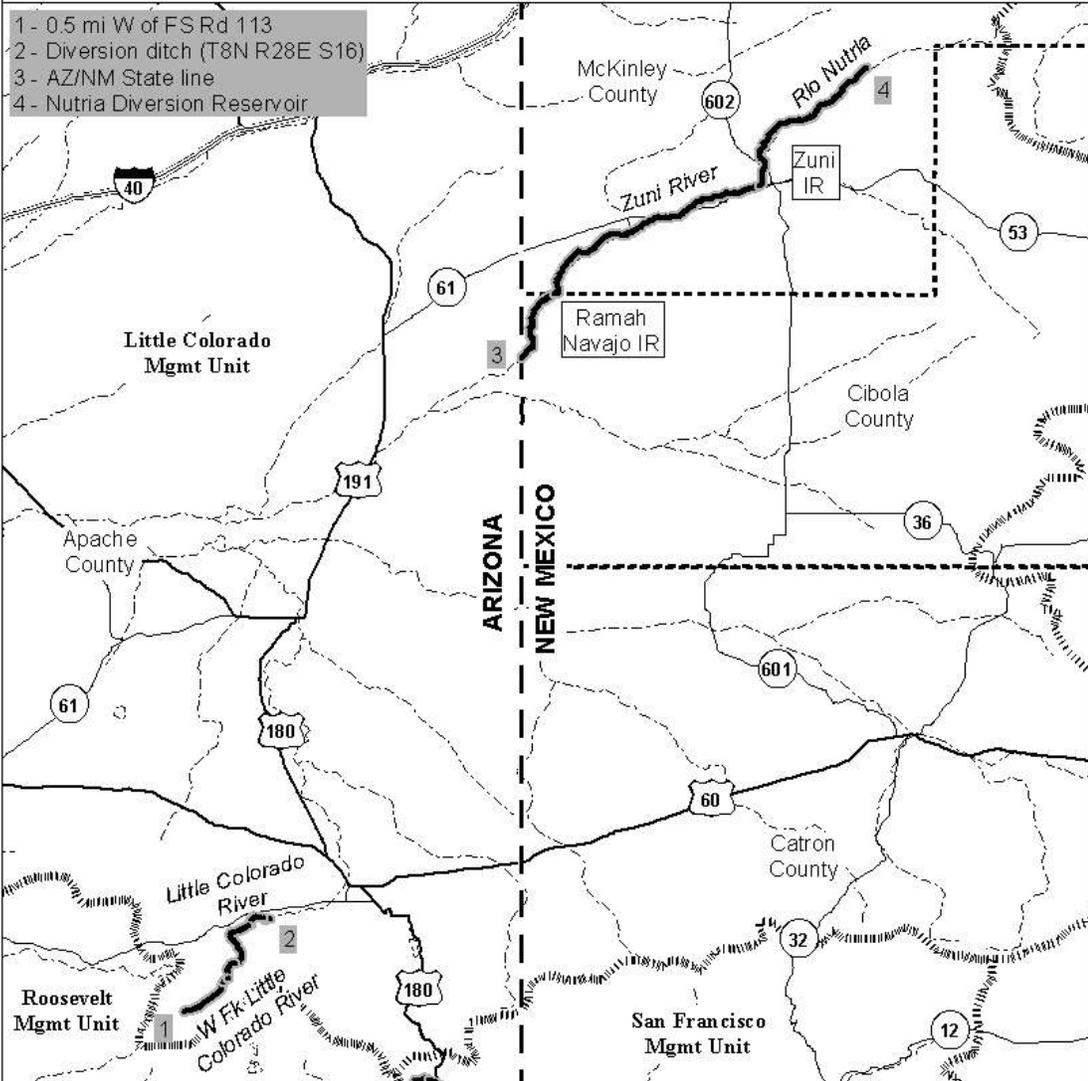
(15) Little Colorado Management Unit.

(i)

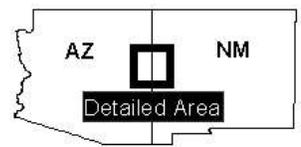
Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Little Colorado River	12, 647842, 3773009	12, 642537, 3763668
West Fork Little Colorado River	12, 636971, 3758442	12, 642537, 3763668
Zuni River	12, 678602, 3860436	12, 708162, 3887682
Rio Nutria	12, 721505, 3906369	12, 708162, 3887682

(ii) Note: Map of Little Colorado Management Unit follows:

**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Little Colorado Management Unit**



- 1 - 0.5 mi W of FS Rd 113
- 2 - Diversion ditch (T8N R28E S16)
- 3 - AZ/NM State line
- 4 - Nutria Diversion Reservoir



- Critical Habitat
- Management Units
- US Highways
- Interstates
- State Highways
- States
- Counties
- Rivers



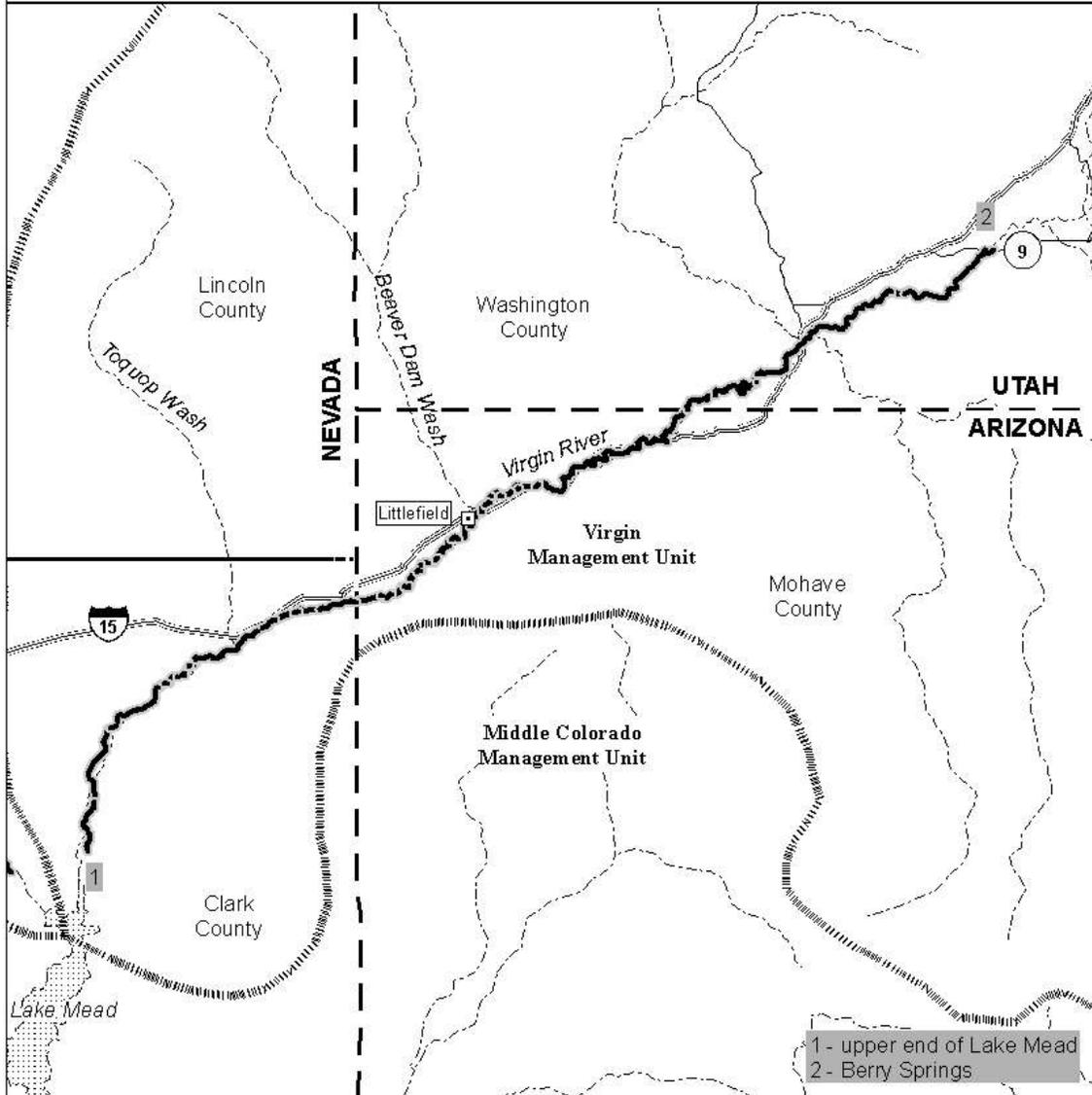
(16) Virgin Management Unit.

(i)

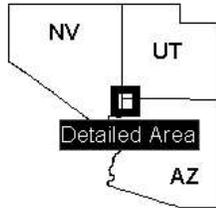
Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Virgin River	12, 288341, 4116050	11, 738928, 4046898

(ii) Note: Map of Virgin Management Unit follows:

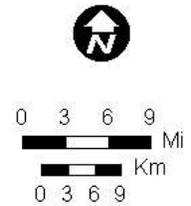
General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Virgin Management Unit



1 - upper end of Lake Mead
2 - Berry Springs



- Critical Habitat
- Management Units
- States
- Counties
- Cities
- Interstates
- State Highways
- Rivers
- Lakes



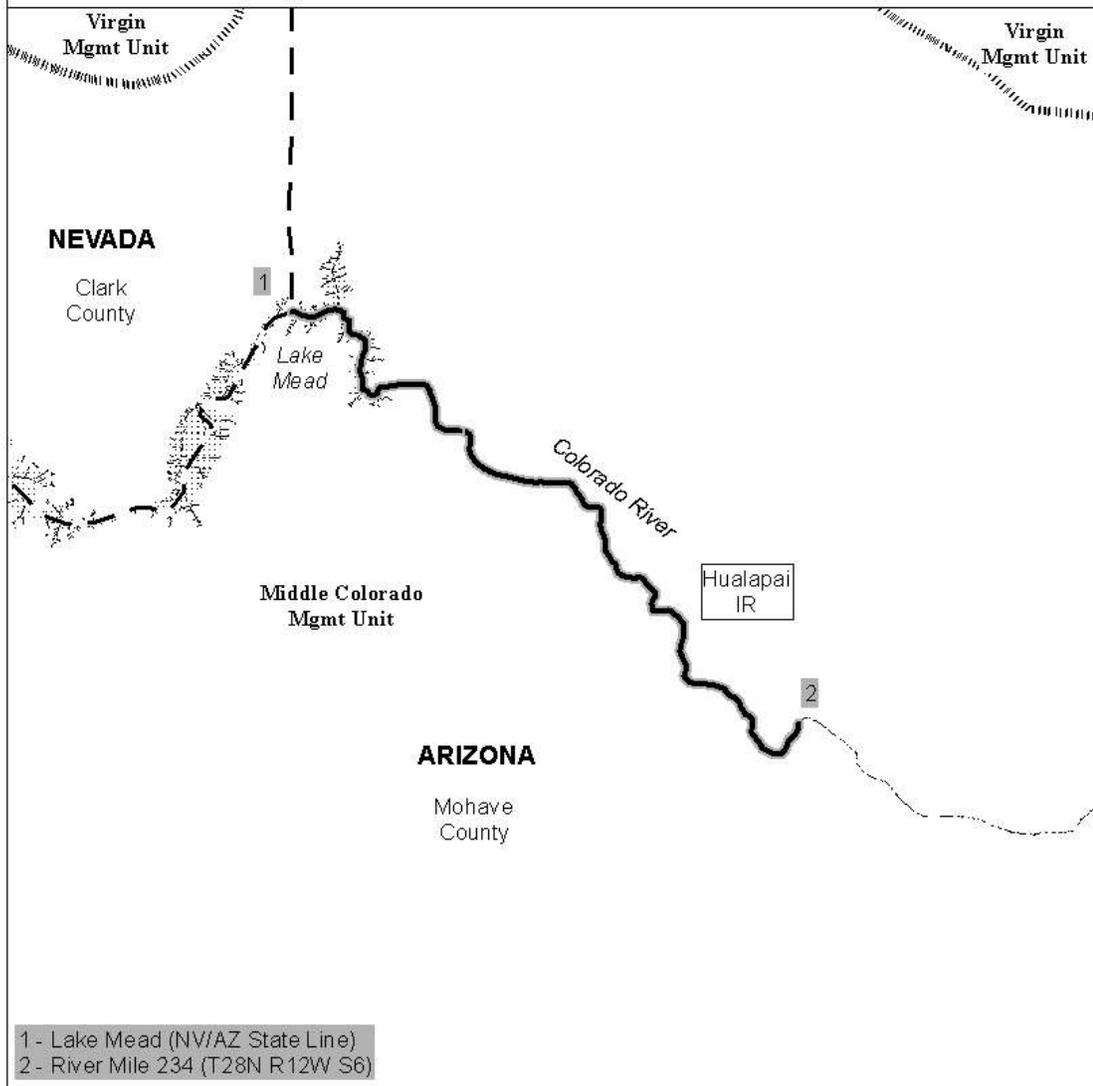
(17) Middle Colorado Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Colorado River	12, 263719, 3969968	11, 765571, 4009492

(ii) Note: Map of Middle Colorado Management Unit follows:

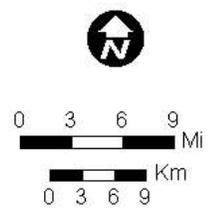
**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Middle Colorado Management Unit**



1 - Lake Mead (NV/AZ State Line)
2 - River Mile 234 (T28N R12W S6)



- Critical Habitat
- Management Units
- States
- Counties
- Lakes
- Rivers



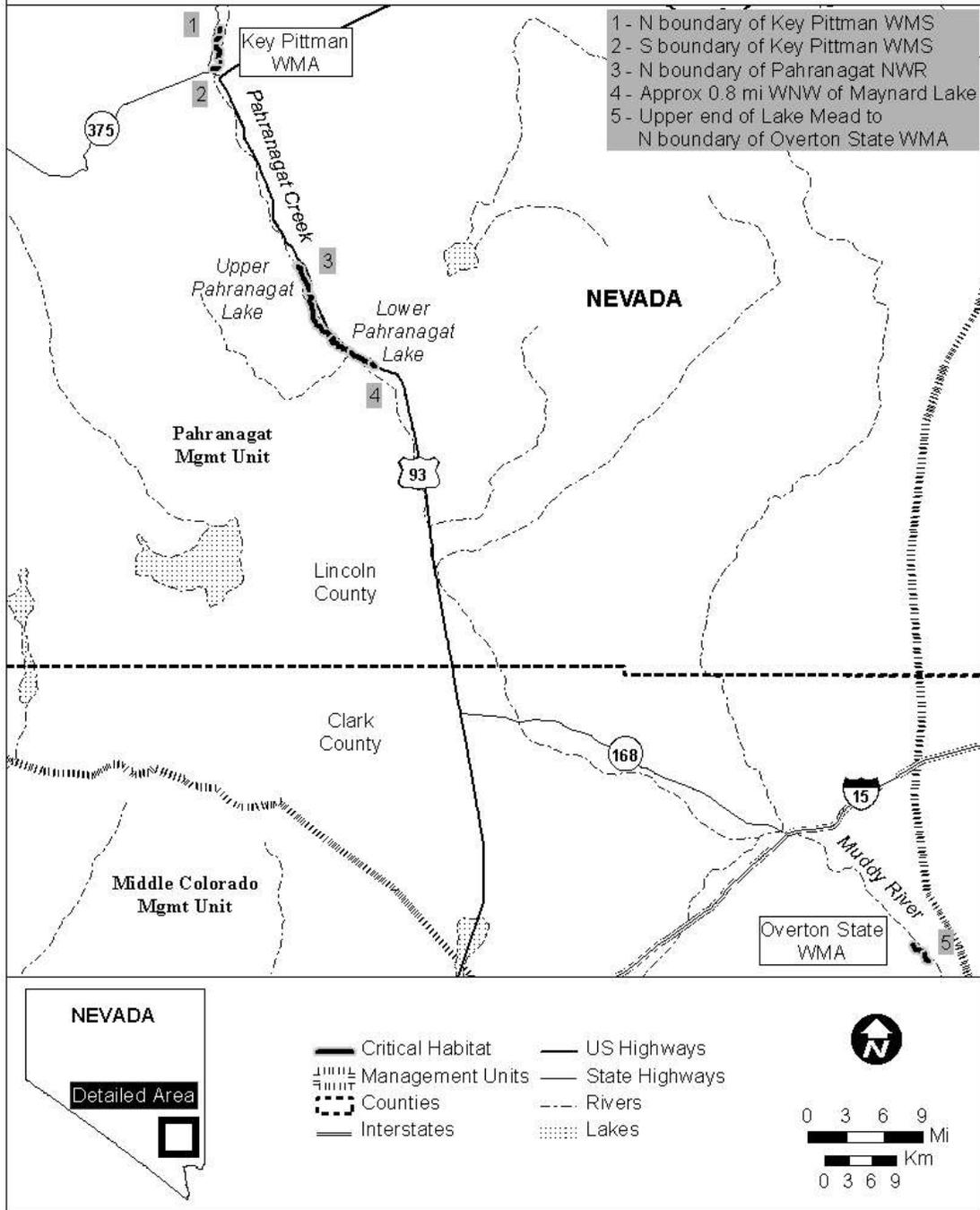
(18) Pahrnagat Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Pahrnagat River (upper)	11, 657017, 4161188	11, 656269, 4155884
Pahrnagat River (lower)	11, 673597, 4118506	11, 665370, 4131144
Muddy River	11, 730143, 4046415	11, 731860, 4044267

(ii) Note: Map of Pahrnagat Management Unit follows:

**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Pahranaagat Management Unit**



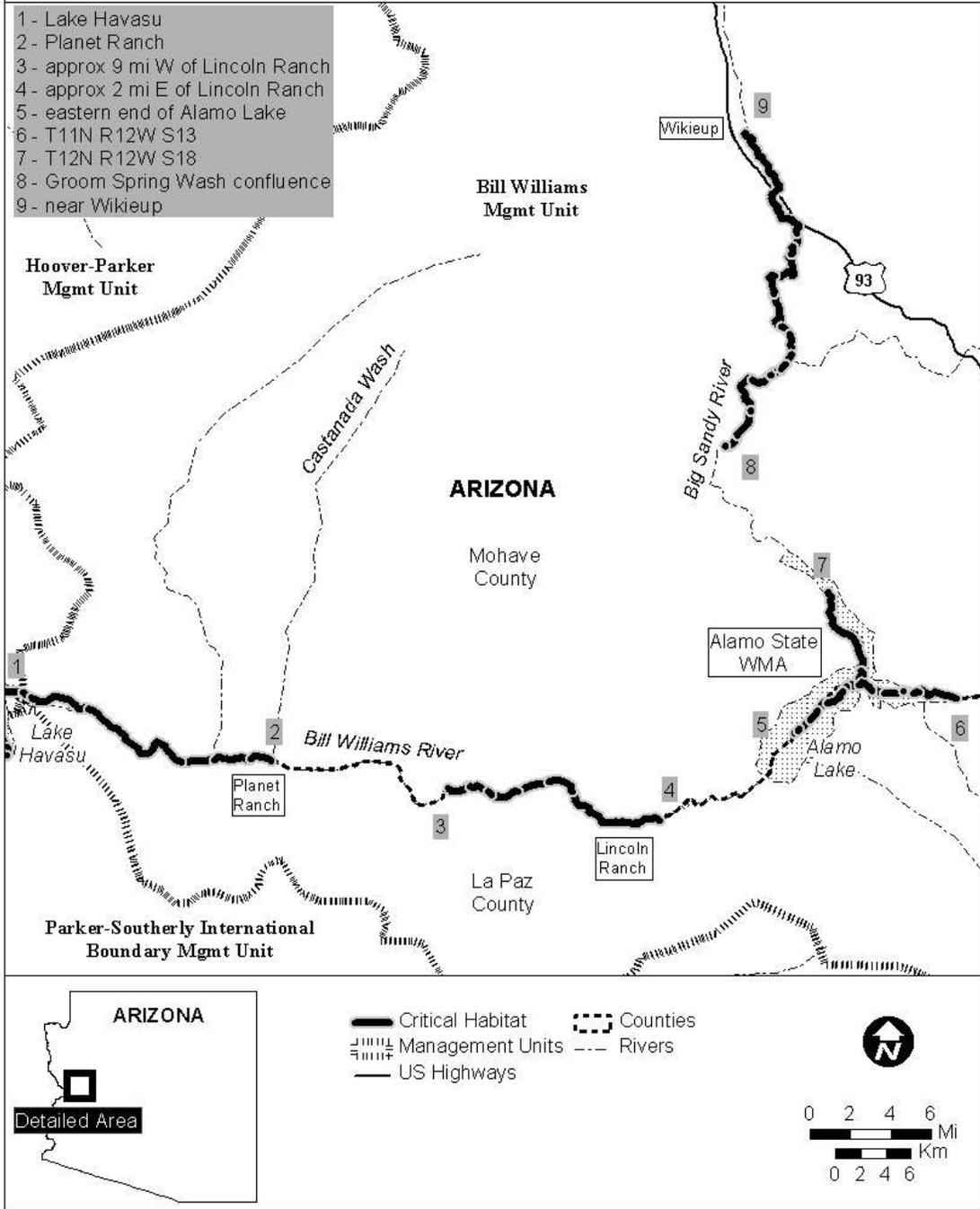
(19) Bill Williams Management Unit.

(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 (lower)	12, 229050, 3794316	11, 769317, 3798440

(ii) Note: Map of Bill Williams Management Unit follows:

**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Bill Williams Management Unit**



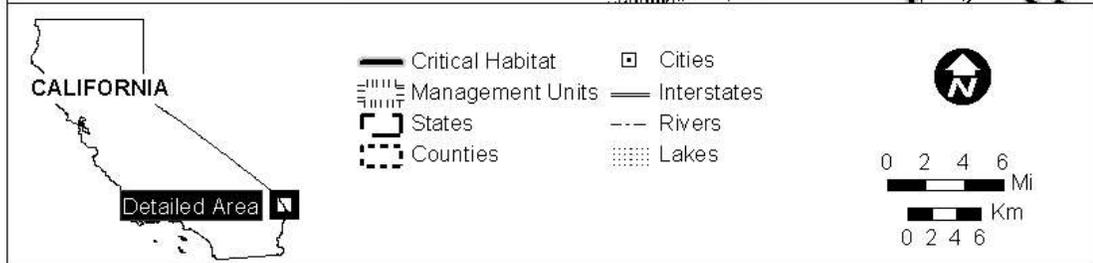
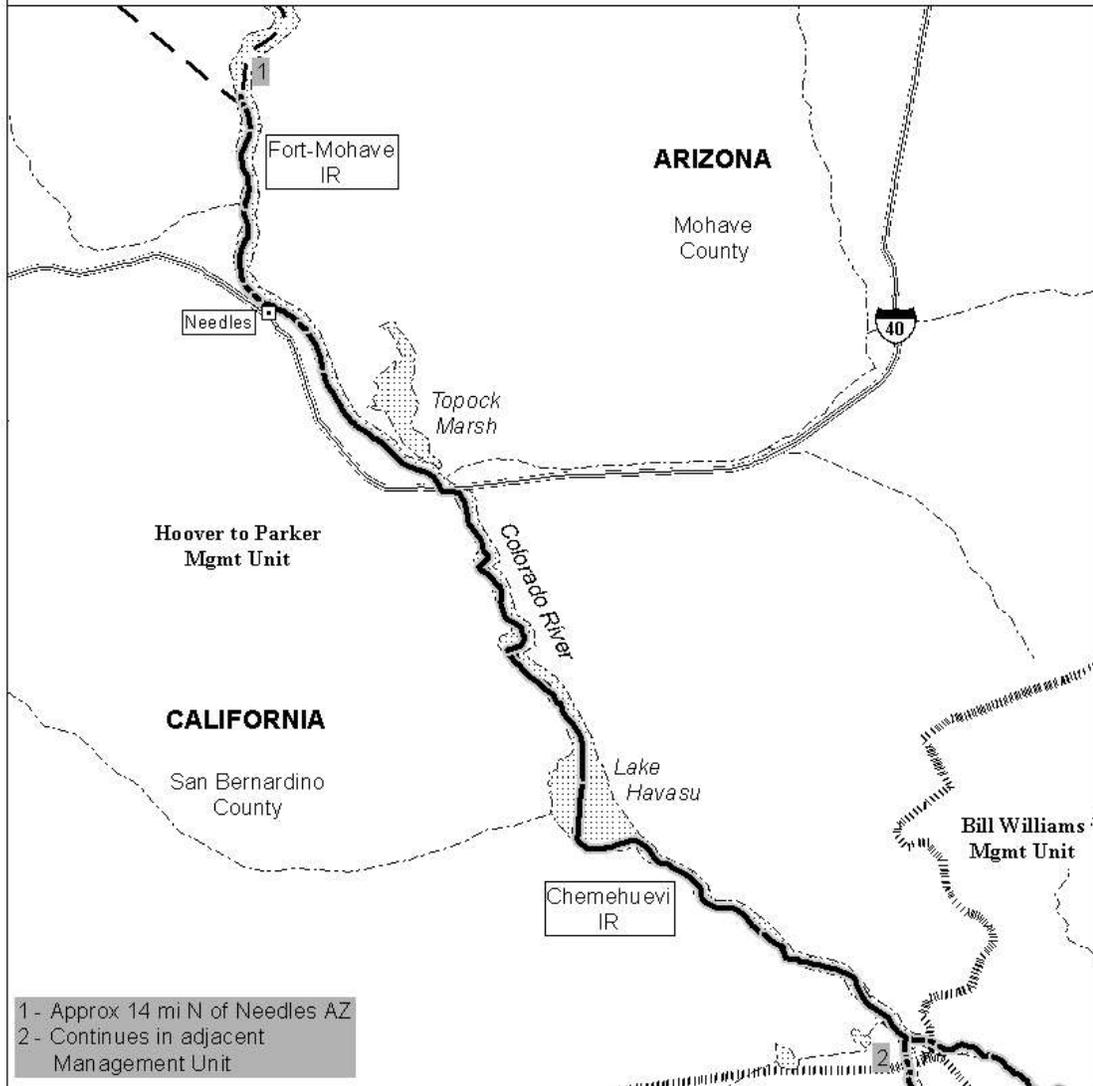
(20) Hoover to Parker Dam Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Colorado River	11, 715649, 3876762	11, 727771, 3757030
Bill Williams River	11, 769317, 3798440	11, 769317, 3798440

(ii) Note: Map of Hoover to Parker Dam Management Unit, follows:

**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Hoover to Parker Management Unit**



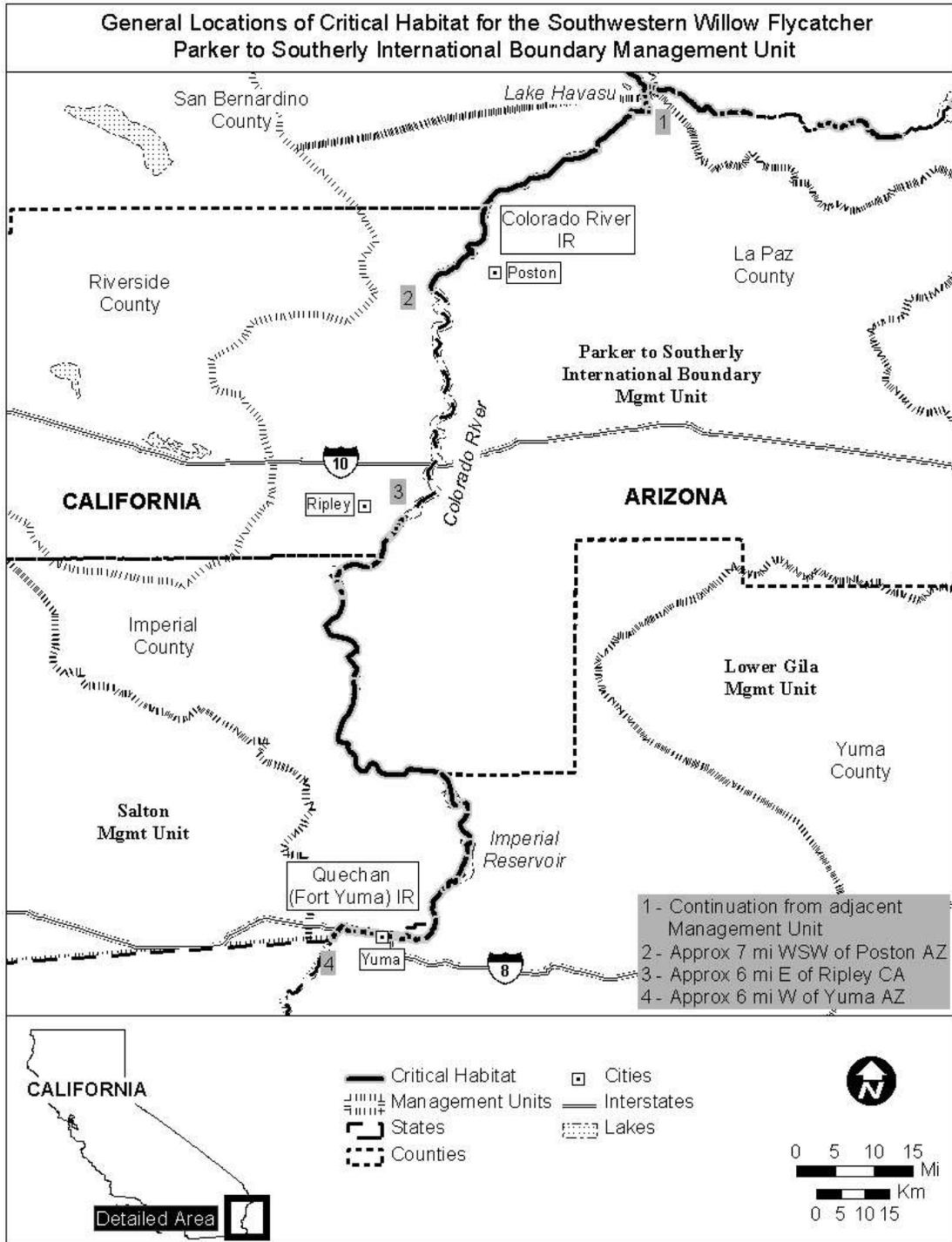
(21) Parker Dam to Southerly International Border Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Colorado River (upper)	11, 727771, 3757030	11, 724019, 3709582
Colorado River (lower)	11, 724019, 3709582	11, 713921, 3622846

(ii) Note: Map of Parker Dam to Southerly International Border Management Unit

follows:



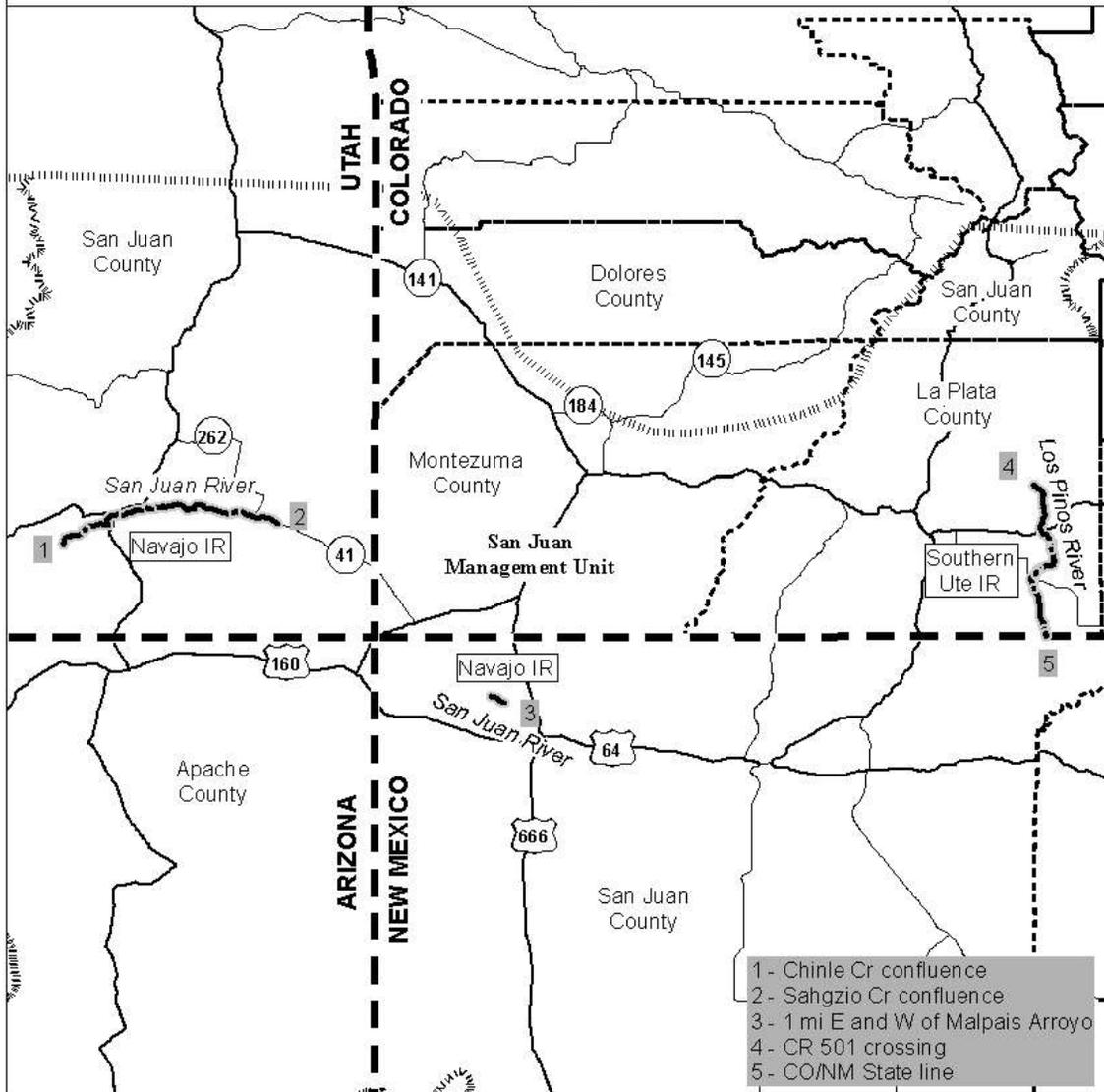
(22) San Juan Management Unit.

(i)

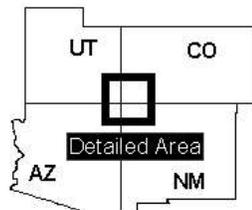
Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Los Pinos River	13, 267242, 4134582	13, 268541, 4098153
San Juan River (New Mexico)	12, 699204, 4081392	12, 696480, 4082859
San Juan River (Utah)	12, 654810, 4123395	12, 613885, 4117721

(ii) Note: Map of San Juan Management Unit follows:

**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
San Juan Management Unit**



- 1 - Chinle Cr confluence
- 2 - Sahgzio Cr confluence
- 3 - 1 mi E and W of Malpais Arroyo
- 4 - CR 501 crossing
- 5 - CO/NM State line



- Critical Habitat
- Management Units
- US Highways
- State Highways
- States
- Counties



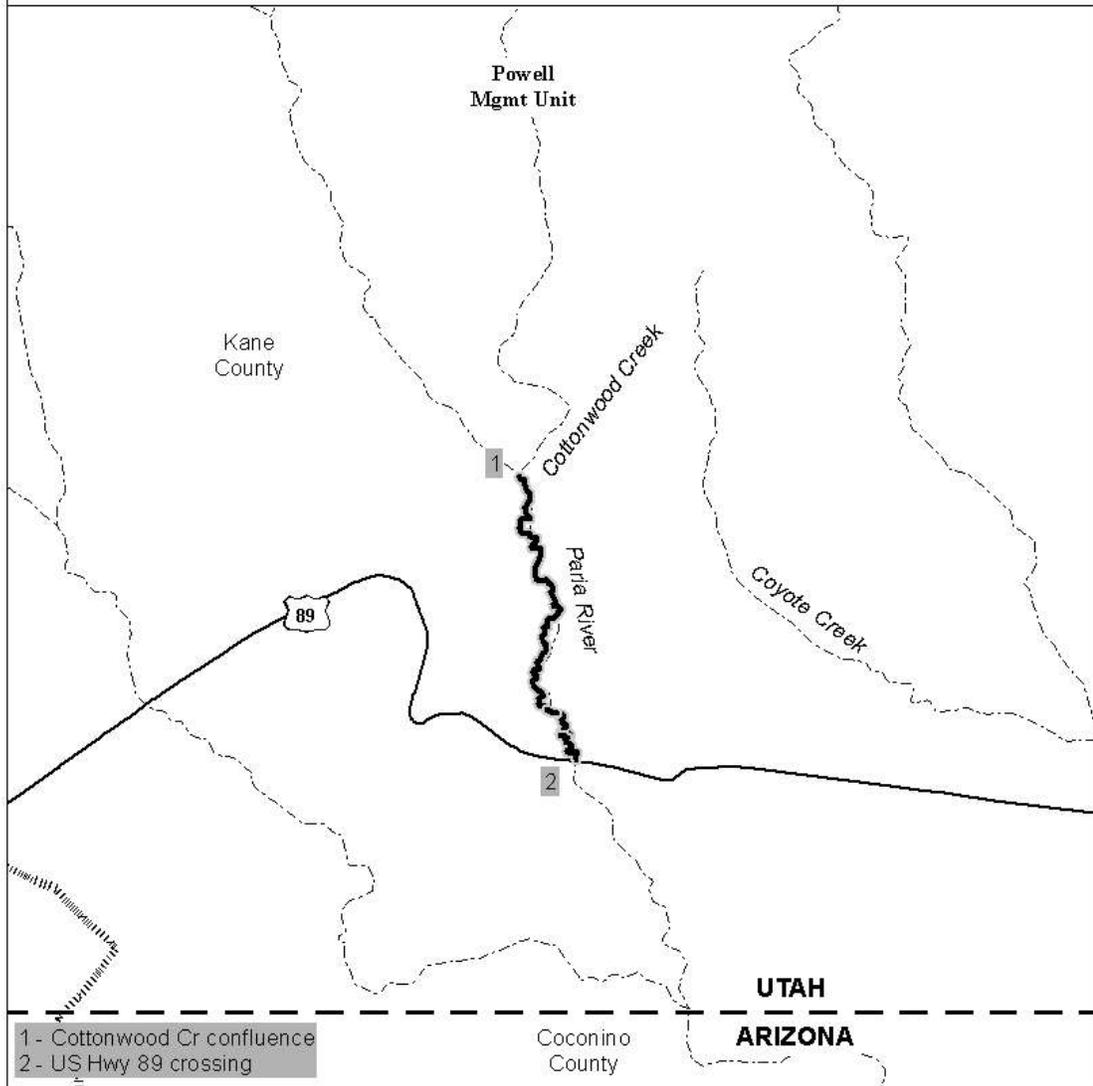
(23) Powell Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Paria River	12, 417429, 4120619	12, 419459, 4107235

(ii) Note: Map of Powell Management Unit follows:

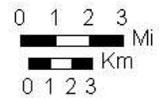
**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Powell Management Unit**



- 1 - Cottonwood Cr confluence
- 2 - US Hwy 89 crossing



- Critical Habitat
- Management Units
- US Highways
- States
- Rivers



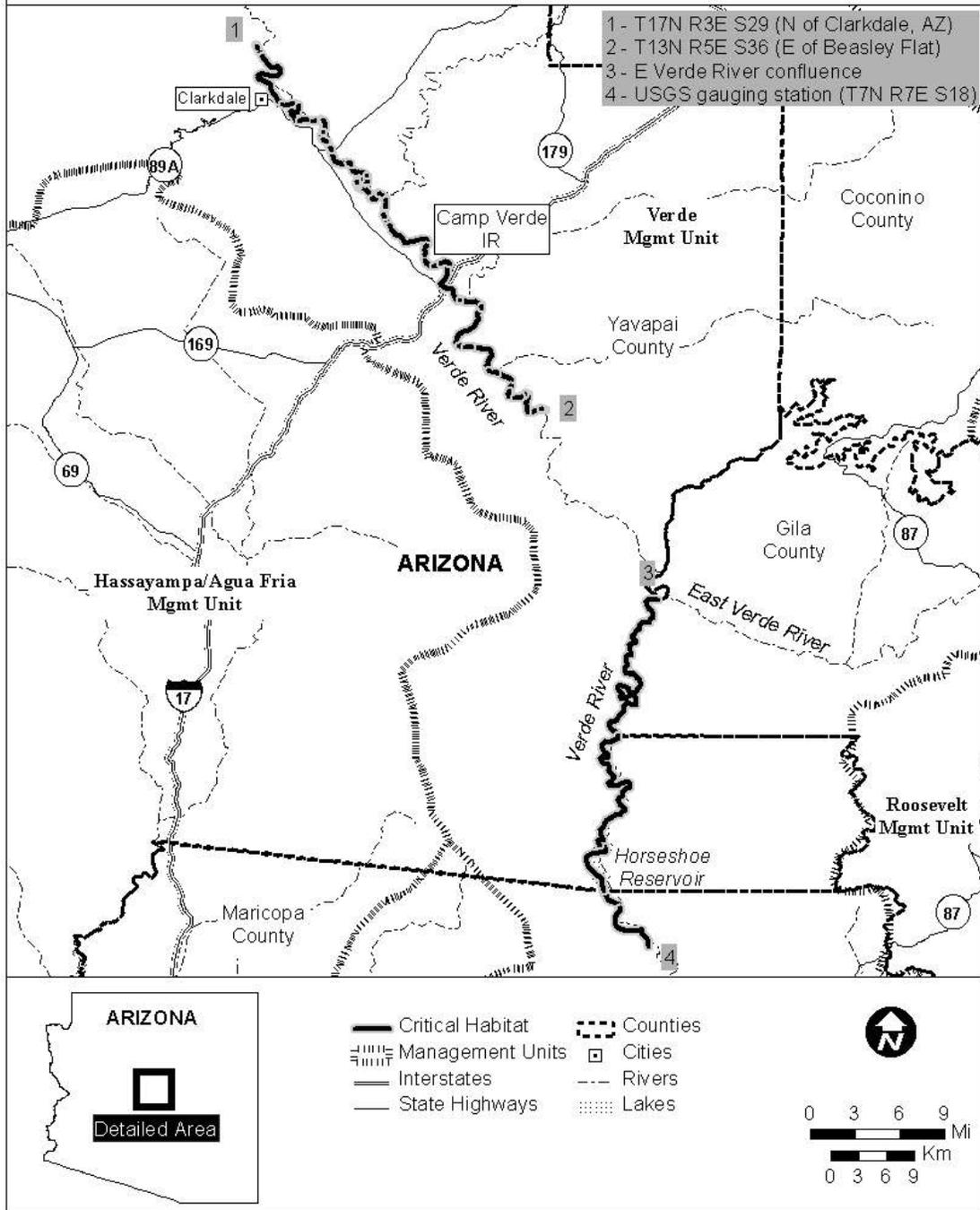
(24) Verde Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Verde River (upper)	12, 402583, 3854022	12, 428120, 3814335
Verde River (lower)	12, 438102, 3793821	12, 436961, 3756352

(ii) Note: Map of Verde Management Unit follows:

**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Verde Management Unit**



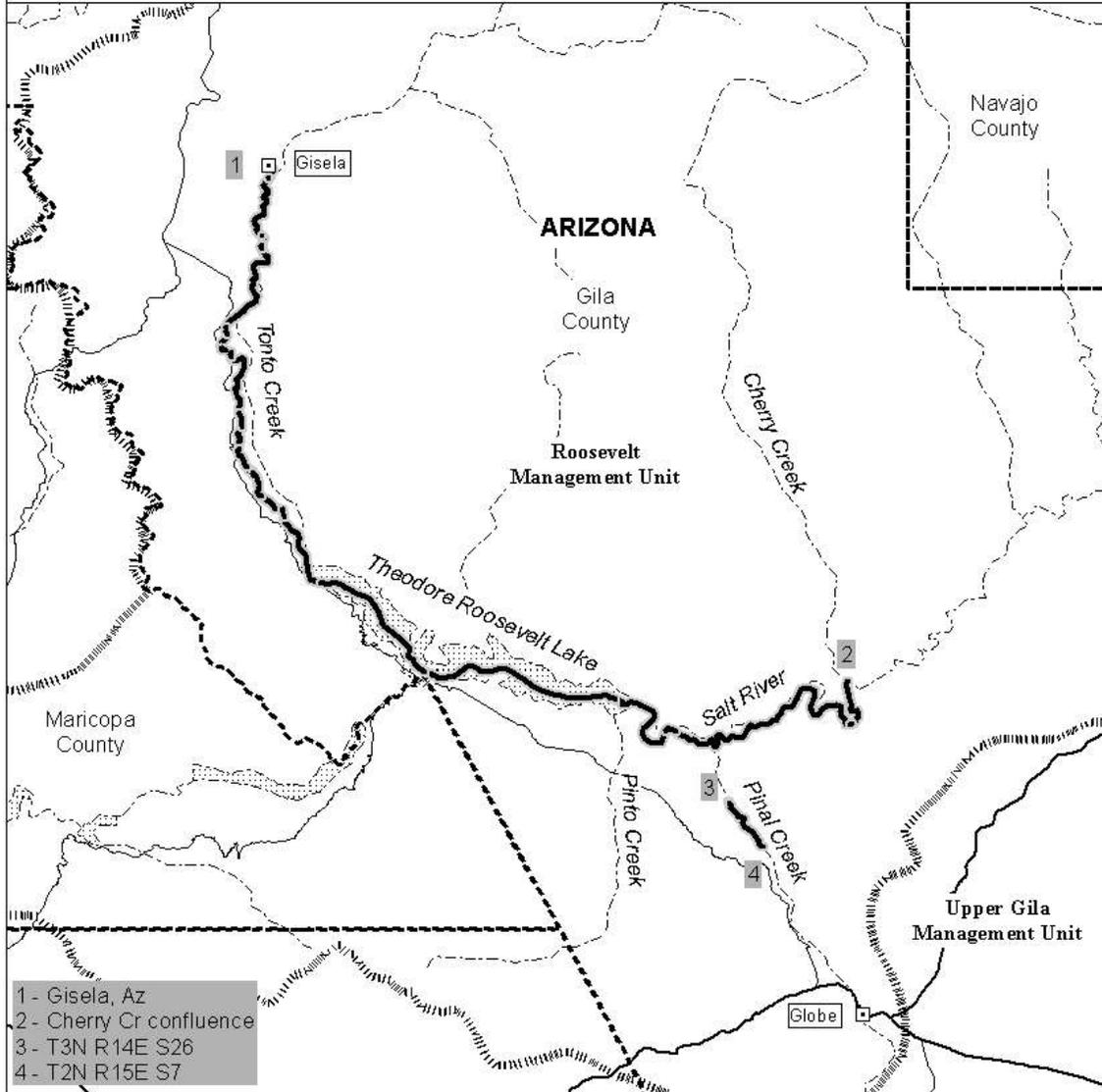
(25) Roosevelt Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Tonto Creek	12, 474349, 3773074	12, 477856, 3734906
Roosevelt Lake	12, 477856, 3734906	12, 500594, 3724174
Salt River	12, 518565, 3725825	12, 500594, 3724174
Pinal Creek	12, 511992, 3710574	12, 509313, 3714692

(ii) Note: Map of Roosevelt Management Unit follows:

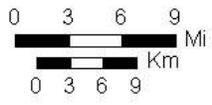
**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Roosevelt Management Unit**



- 1 - Gisela, Az
- 2 - Cherry Cr confluence
- 3 - T3N R14E S26
- 4 - T2N R15E S7



- Critical Habitat
- Counties
- Cities
- US Highways
- State Highways
- Rivers
- Lakes
- Management Units



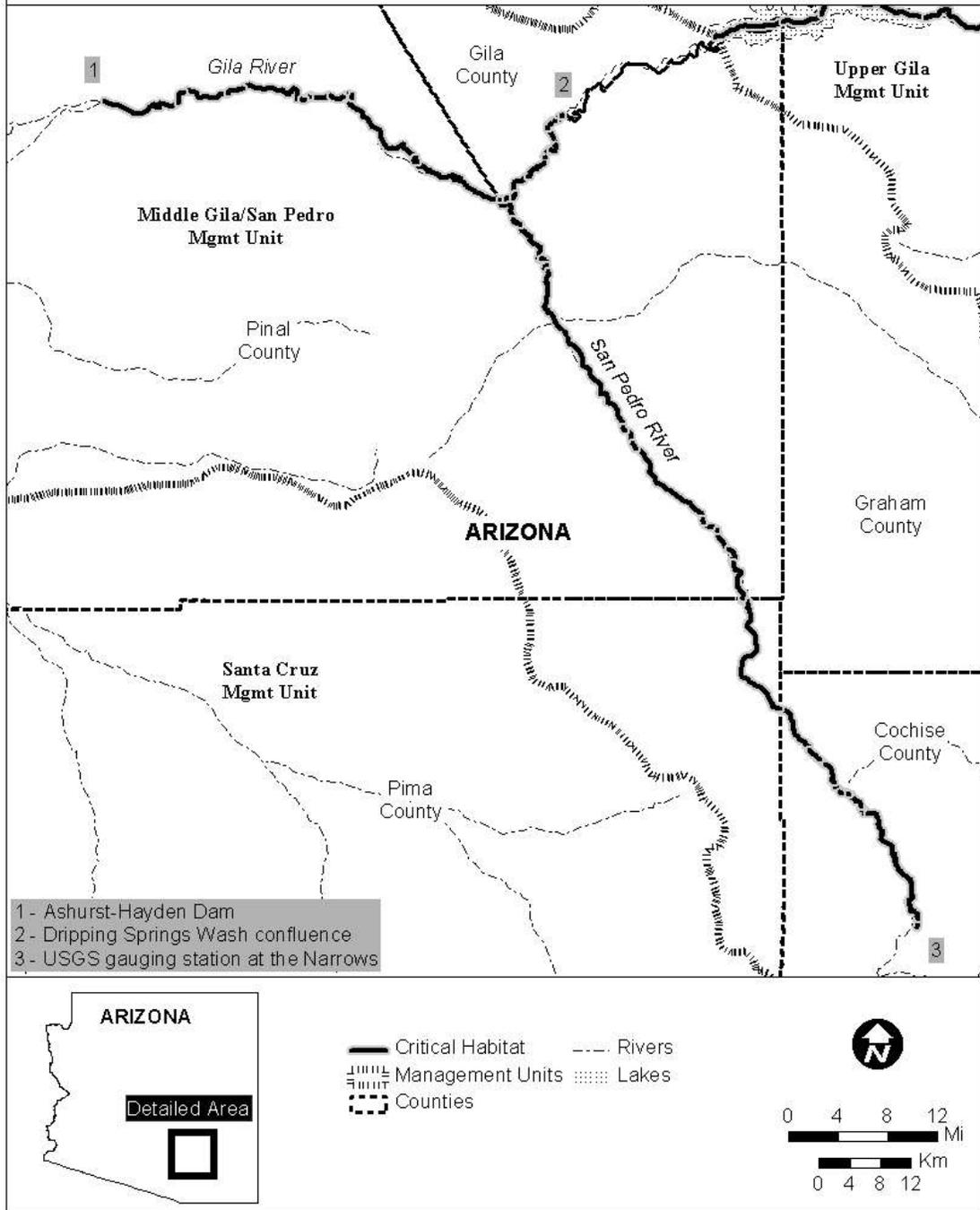
(26) Middle Gila and San Pedro Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Gila River	12, 527193, 3660545	12, 476979, 3662407
San Pedro River	12, 566945, 3554766	12, 520287, 3649594

(ii) Note: Map of Middle Gila San Pedro Management Unit follows:

**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Middle Gila / San Pedro Management Unit**



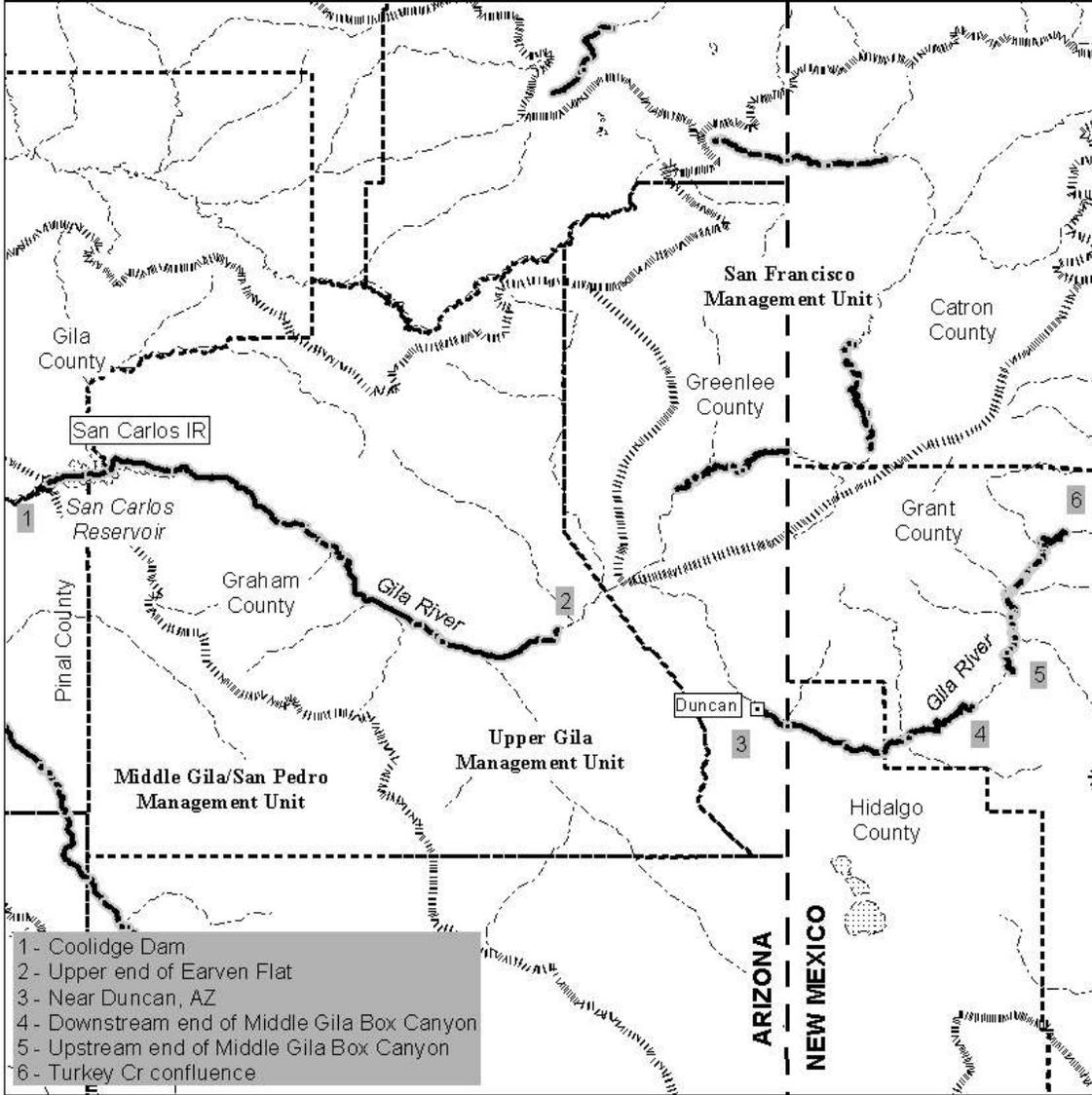
(27) Upper Gila Management Unit.

(i)

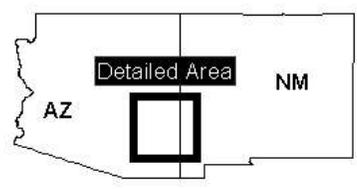
Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Gila River (upper)	12, 734274, 3662473	12, 724979, 3631107
Gila River (middle)	12, 639563, 3639230	12, 544025, 3670779
Gila River (lower)	12, 717951, 3623479	12, 677635, 3622749

(ii) Note: Map of Upper Gila Management Unit follows:

**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Upper Gila Management Unit**



- 1 - Coolidge Dam
- 2 - Upper end of Earven Flat
- 3 - Near Duncan, AZ
- 4 - Downstream end of Middle Gila Box Canyon
- 5 - Upstream end of Middle Gila Box Canyon
- 6 - Turkey Cr confluence



- Critical Habitat
- Management Units
- States
- Counties
- Cities
- Rivers
- Lakes



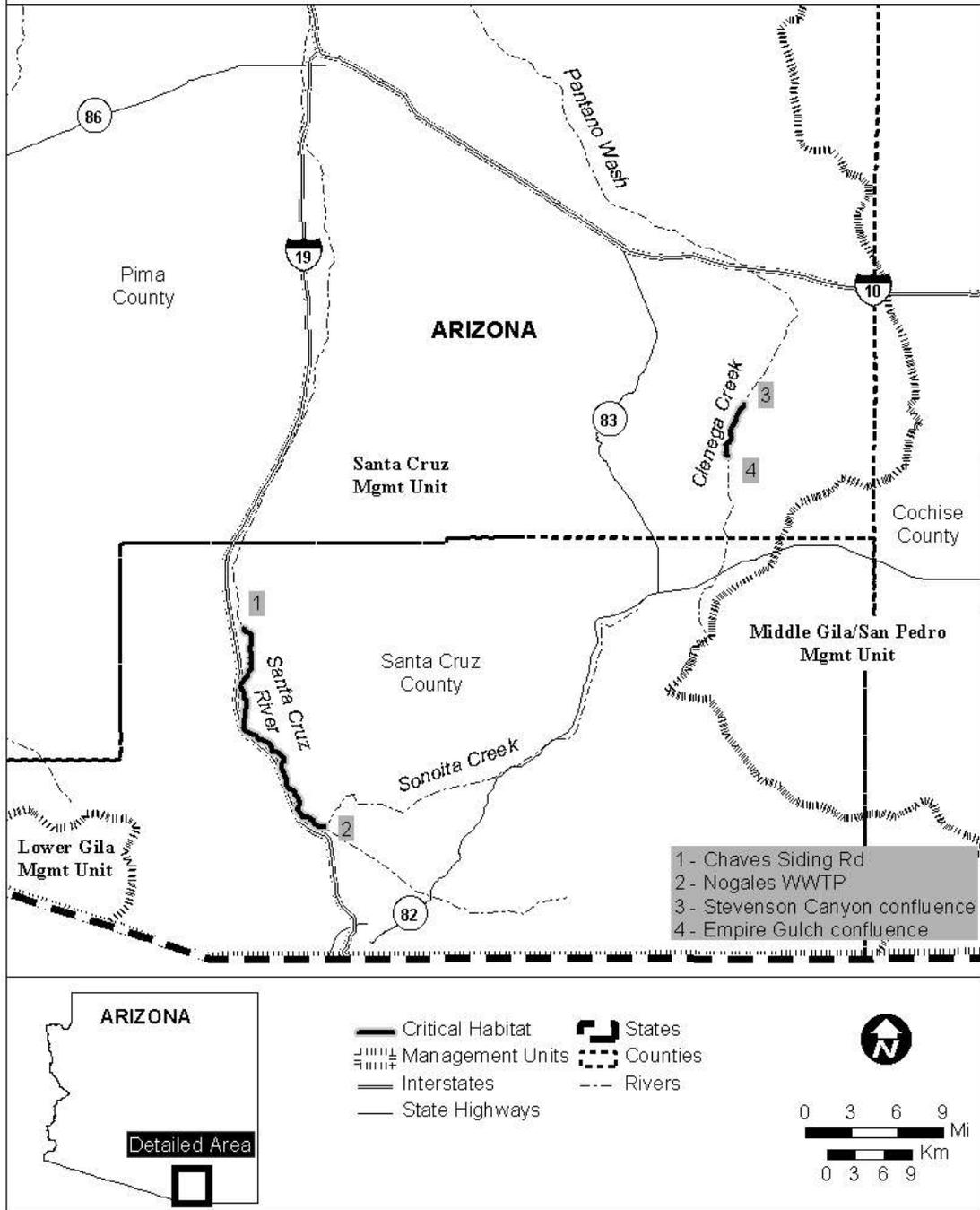
(28) Santa Cruz Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Santa Cruz River	12, 502742, 3480432	12, 502742, 3480432
Cienega Creek	12, 538826, 3519337	12, 540238, 3524746

(ii) Note: Map of Santa Cruz Management Unit follows:

General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Santa Cruz Management Unit



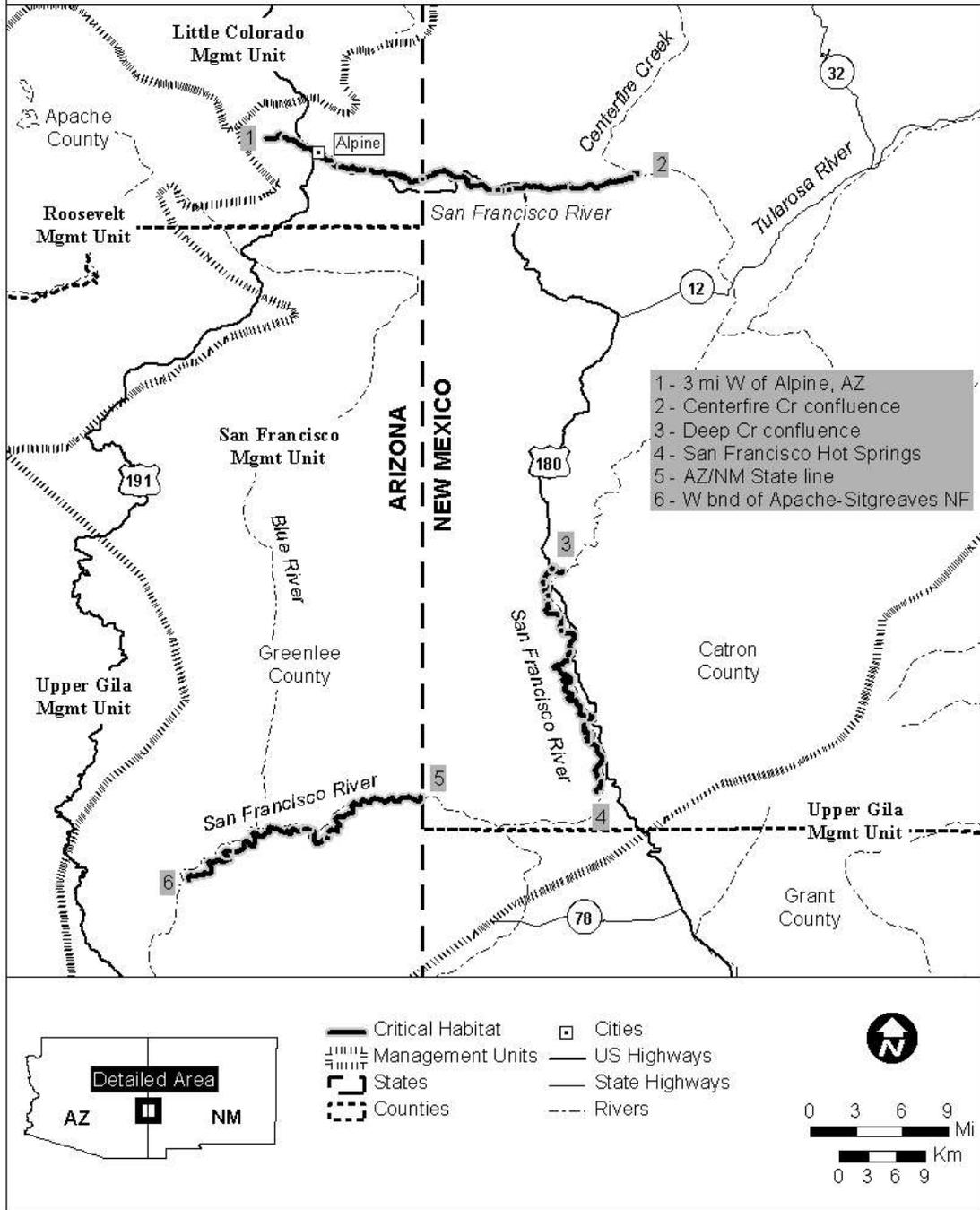
(29) San Francisco Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
San Francisco River (upper)	12, 681827, 3679571	12, 661571, 3670502
San Francisco River (middle)	12, 693857, 3703486	12, 697331, 3680357
San Francisco River (lower)	12, 666982, 3748335	12, 699562, 3745269

(ii) Note: Map of San Francisco Management Unit follows:

**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
San Francisco Management Unit**



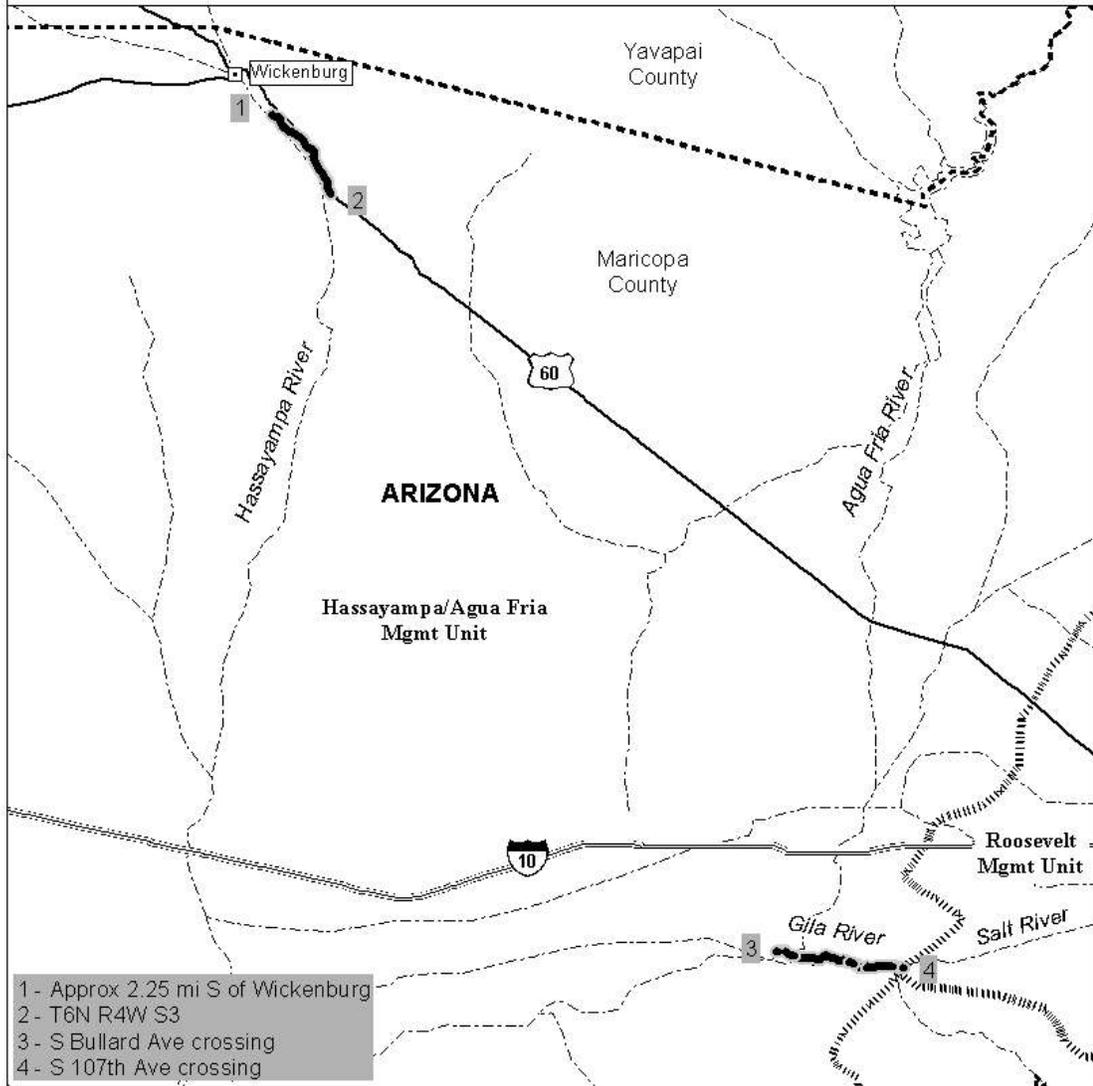
(30) Hassayamapa and Agua Fria Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Hassayampa River	12, 342308, 3757092	12, 345848, 3751261
Gila River	12, 379985, 3694255	12, 372194, 3695509

(ii) Note: Map of Hassayamapa and Agua Fria Management Unit follows:

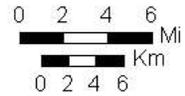
**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Hassayampa / Agua Fria Management Unit**



- 1- Approx 2.25 mi S of Wickenburg
- 2- T6N R4W S3
- 3- S Bullard Ave crossing
- 4- S 107th Ave crossing



- Critical Habitat
- Counties
- Management Units
- Cities
- US Highways
- Rivers
- Interstates

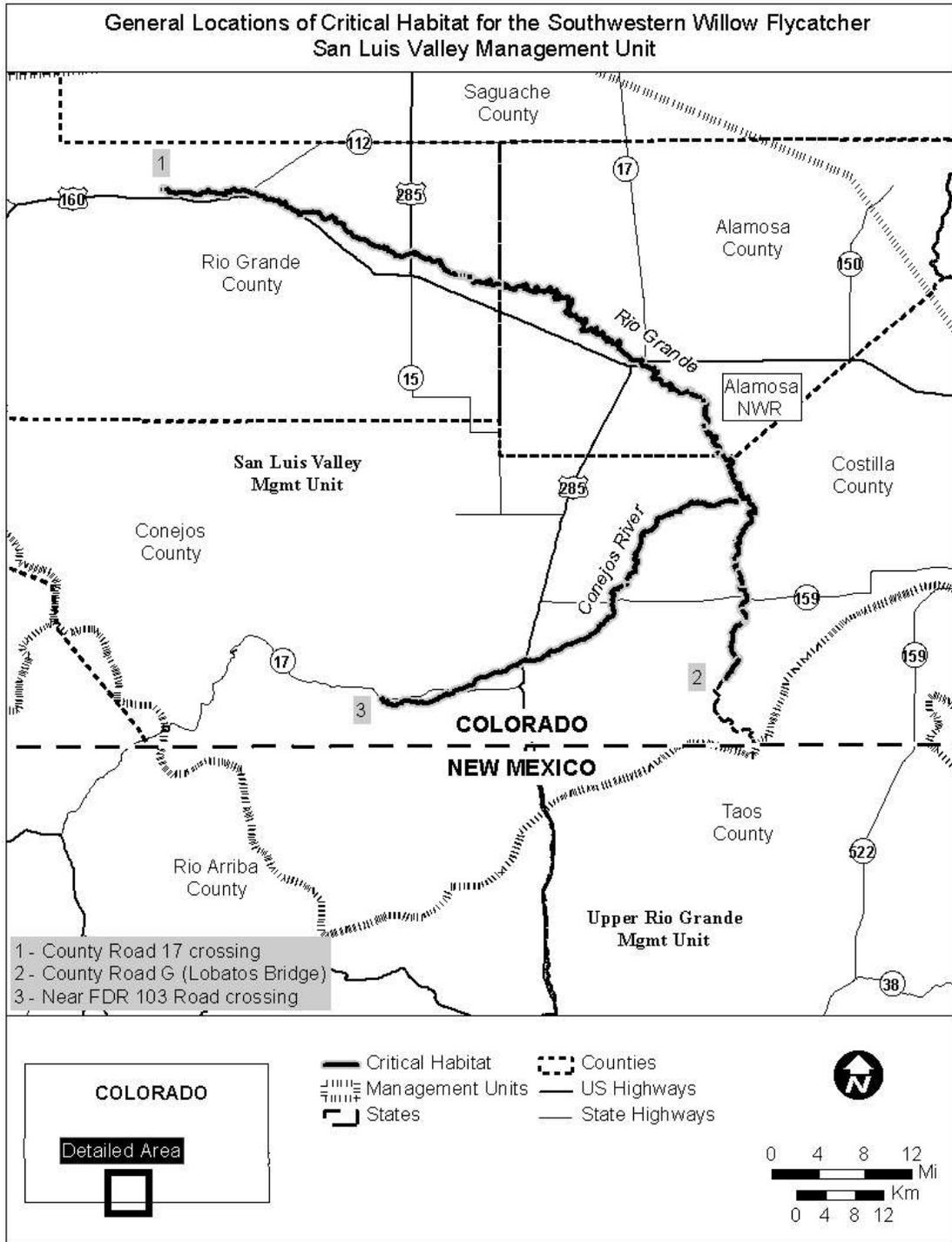


(31) San Luis Valley Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Conejos River	13, 394419, 4101506	13, 434790, 4128834
Rio Grande	13, 371291, 4172297	13, 432747, 4103848

(ii) Note: Map of San Luis Valley Management Unit follows:



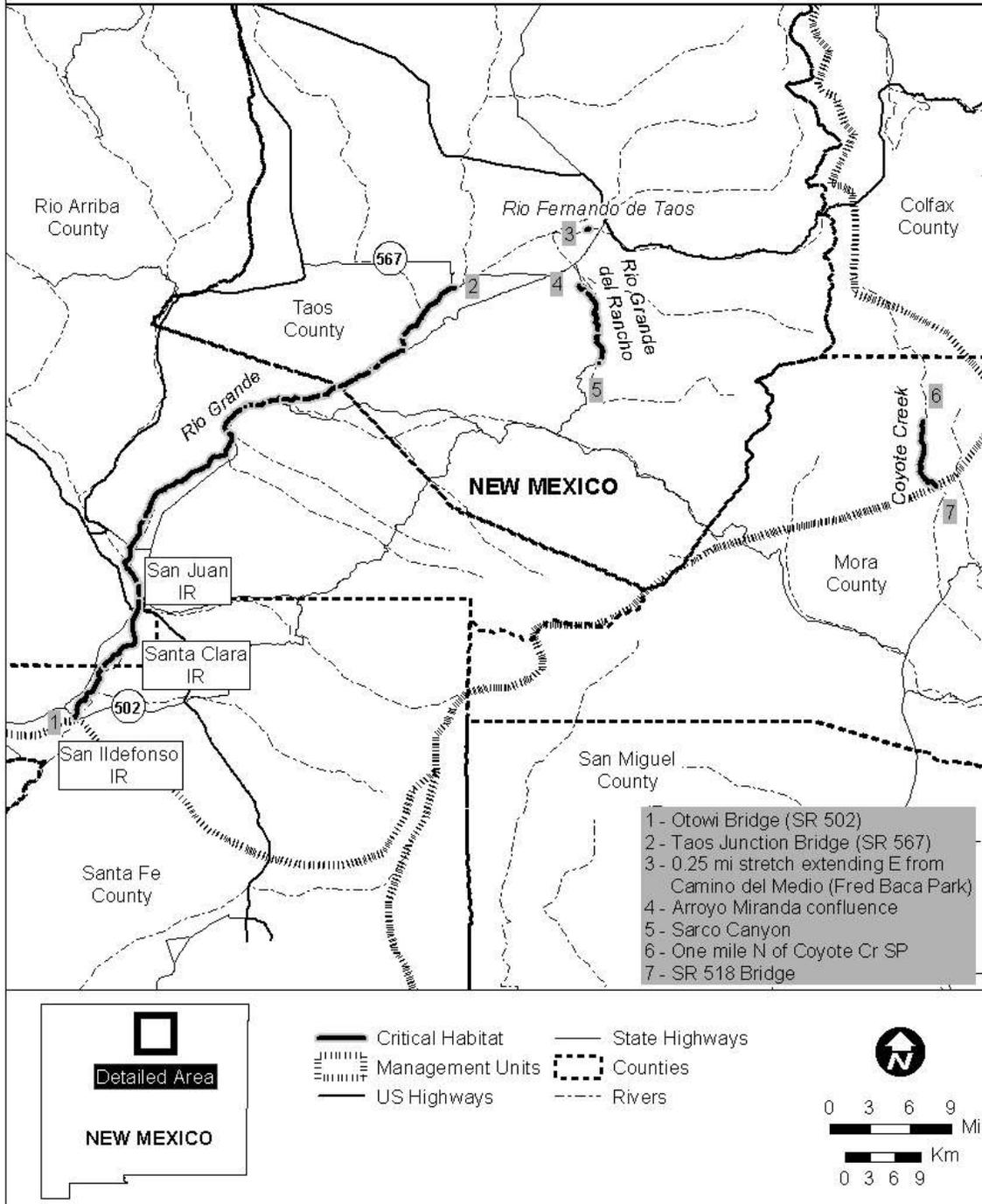
(32) Upper Rio Grande Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Rio Grande	13, 434154, 4021496	13, 396993, 3970707
Coyote Creek	13, 479246, 4005468	13, 480419, 3997620
Rio Grande del Rancho	13, 447971, 4012369	13, 446044, 4021640
Rio Fernando	13, 447152, 4028423	13, 446856, 4028320

(ii) Note: Map of Upper Rio Grande Management Unit follows:

**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Upper Rio Grande Management Unit**

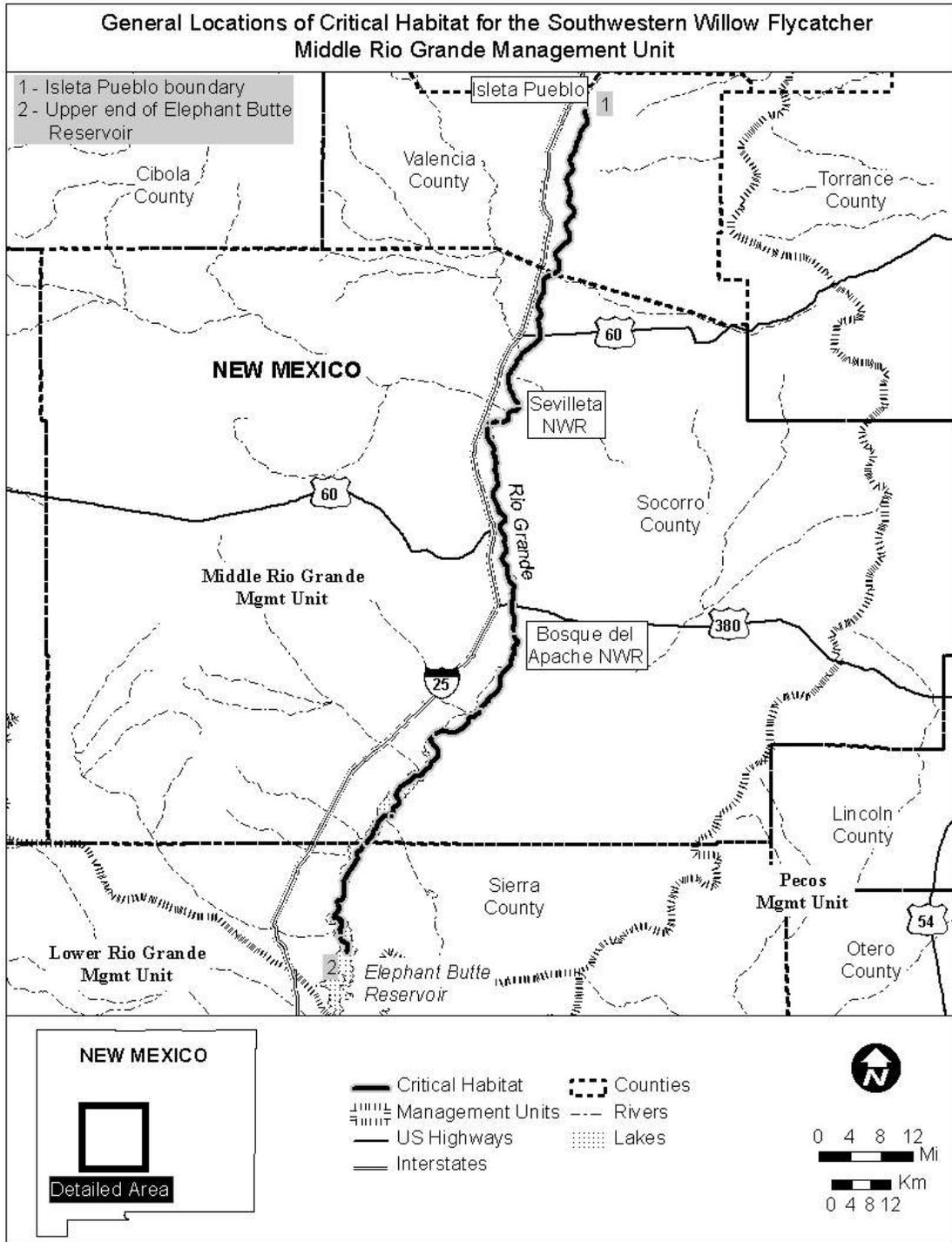


(33) Middle Rio Grande Management Unit.

(i)

Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Rio Grande	13, 343067, 3856213	13, 298922, 3683834

(ii) Note: Map of Middle Rio Grande Management Unit follows:



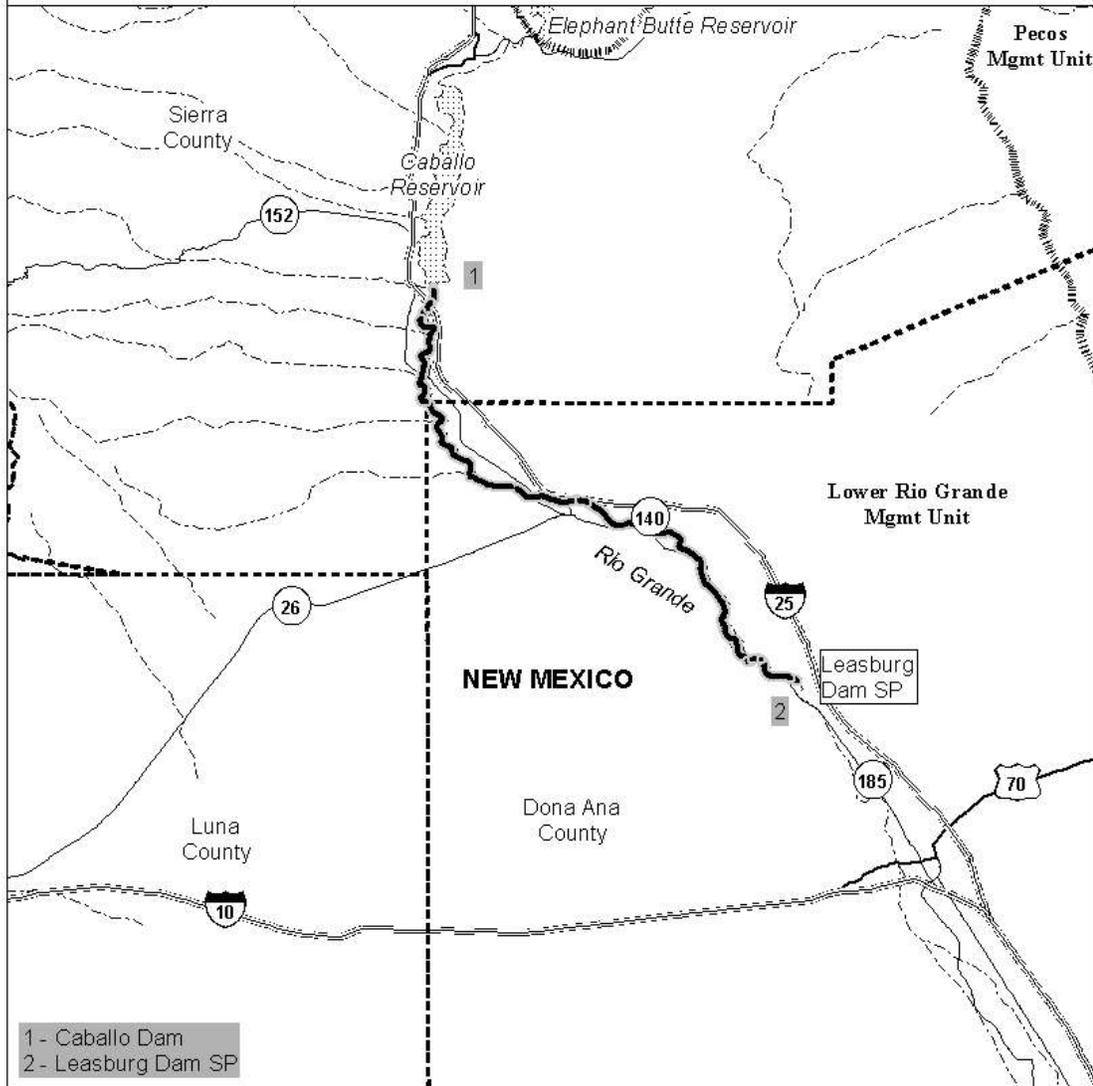
(34) Lower Rio Grande Management Unit.

(i)

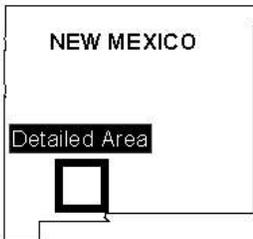
Stream Segment	Start: UTM Zone, E, N	End: UTM Zone, E, N
Rio Grande	13, 285590, 3642144	13, 319325, 3597154

(ii) Note: Map of Lower Rio Grande Management Unit follows:

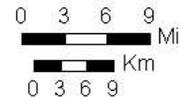
**General Locations of Critical Habitat for the Southwestern Willow Flycatcher
Lower Rio Grande Management Unit**



1 - Caballo Dam
2 - Leasburg Dam SP



- | | |
|------------------|----------------|
| Critical Habitat | State Highways |
| Management Units | Counties |
| US Highways | Rivers |
| Interstates | Lakes |



* * * * *

Dated: July 22, 2011

/s/ Rachel Jacobsen

Acting Assistant Secretary for Fish and Wildlife and Parks

~~[Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for
Southwestern Willow Flycatcher (*Empidonax traillii extimus*)]~~

Billing Code 4310-55-P