DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018—AA95

Endangered and Threatened Wildlife and Plants; Revised Proposed Determination of Critical Habitat for the Least Bell's Vireo (Vireo bellii pusillus)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Revised proposed rule.

SUMMARY: The U.S. Fish and Wildlife Service (Service) originally proposed designation of critical habitat for the least Bell's vireo (*Vireo bellii pusillus*) on May 3, 1985. The Service hereby revises its proposed designation of critical habitat for this federally listed endangered species under the authority contained in the Endangered Species Act of 1973, as amended (Act). The proposed designation encompasses portions of Los Angeles, Riverside, San Bernardino, San Diego, Santa Barbara, and Ventura counties in California. This proposed critical habitat designation would result in additional protection requirements under section 7 of the Act for activities that are funded, authorized, or carried out by a Federal agency. Section 4 of the Act requires the Service to consider economic and other relevant impacts prior to making a final decision on the size and scope of critical habitat. The Service solicits data and comments from the public on all aspects of this proposal, including additional information on the economic impacts (costs and benefits) of the designation, methods of evaluating costs and benefits accruing from the designation, and why any particular lands (regardless of ownership) should or should not be designated as critical habitat.

DATES: Comments from all interested parties must be received by November 5, 1992. In anticipation of a request, the Service intends to conduct two public hearings. Information on the public hearings will be published in the **Federal Register** at a later date.

ADDRESSES: Comments and materials concerning this proposal should be sent to the Field Supervisor, U.S. Fish and Wildlife Service, Southern California Field Station, 2730 Loker Avenue West, Carlsbad, California 92008. The complete file for this rule, including comments and materials received, will be available for inspection, by appointment, during normal business hours at the address listed above.

FOR FURTHER INFORMATION CONTACT: Larry Salata, Fish and Wildlife Biologist (see **ADDRESSES** above) at 619/431-9440.

SUPPLEMENTARY INFORMATION:

Background

Ecological Considerations

The least Bell's vireo is a small gray migratory songbird that has declined dramatically in both numbers and distribution. This subspecies was once widespread and abundant throughout the Central Valley and other low elevation riverine areas of California. Least Bell's vireos historically bred in riparian woodlands from the interior of northern California (near Red Bluff, Tehama County) to northwestern Baja California, Mexico. Its current breeding distribution is restricted to a few localities in southern California and northwestern Baja California, Mexico (Franzreb 1989).

Least Bell's vireos nest primarily in willows (*Salix* spp.) but also use a variety of other shrub and tree species for nest placement (Gray and Greaves 1984, Salata 1987). Least Bell's vireos forage in riparian and adjoining upland habitats (Salata 1983, Kus and Miner 1987). Preliminary studies of vireo foraging behavior along the Santa Ynez River and within the Mono Creek Basin (Santa Barbara County) indicated that a large percentage of their foraging may occur in the adjacent chaparral community up to 300 or more yards from the nest (Tom Keeney, biologist, U.S. Army Corps of Engineers, *in litt.*, July 31, 1985).

The reduction of least Bell's vireo numbers and distribution is associated with widespread loss of riparian habitats and brood parasitism by the brown-headed cowbird (*Molothrus ater*). Destruction or significant alteration of riparian woodlands may have rendered the least Bell's vireo population incapable of withstanding the increase in brown-headed cowbird numbers that began in the 1920's (Grinnell and Miller 1944, Gaines 1974).

The population decline of the vireo has been well documented. In 1973, no least Bell's vireos were found during an intensive search in nearly all remaining riparian habitat between Red Bluff, Tehama County, and Stockton, San Joaquin County (Gaines 1974). In 1977 the U.S. Fish and Wildlife Service reviewed the literature, examined museum material, and contacted numerous National Audubon Society chapters and knowledgeable field observers for information on the status of the least Bell's vireo (Wilbur 1980). Since then, several intensive surveys

virtually all potential breeding habitat in California have been conducted (Gaines 1977, Goldwasser 1978, Goldwasser *et al.* 1986, RECON 1988, unpublished data on file with the Fish and Wildlife Service). Least Bell's vireos remain at only about 40 of over 150 historically occupied sites (some localities cover many miles of a water course) surveyed in the United States from 1977 through 1991. Most of these locations contain fewer than five pairs of vireos. About 76 percent of the U.S. population is found at just five localities. The current breeding population of the least Bell's vireo in California consists of approximately 500 pairs. Less than several hundred pairs are estimated to occur in Mexico.

Previous Federal Actions

On November 8, 1979, the Service received a petition from James M. Greaves to list the Arizona *V. b. arizonae*) and least Bell's vireos as endangered. A notice of acceptance of the petition and status review was published on February 6, 1980 (45 FR 8030). Based on the best scientific and commercial data available and comments submitted during the status review, the Service found that the petitioned action was warranted for the least Bell's vireo on October 13, 1983 (49 FR 2485, January 20, 1984); however, a listing action was precluded by other pending listing actions, in accordance with section 4(b)(3)(C)(i) of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*). Section 4(b)(3)(C)(i) recycles such petitions, resulting in a new finding deadline of October 13, 1984. A finding was made on October 12, 1984, that this action was still warranted but precluded. The Service published a proposed rule to determine the least Bell's vireo to be an endangered species, and to designate critical habitat for the species on May 3, 1985 (50 FR 18968). This proposed rule constituted the next finding required under section 4(b)(3)(B)(ii) of the Act. A correction to some of the legal descriptions of the proposed critical habitat was published in the June 4, 1985, Federal Register (50 FR 23458). Rather than delay protected status for the vireo while the economic analysis that must accompany the final rule designating critical habitat was being prepared, the Service decided to make final only the listing portion of the rule so that immediate protection of the least Bell's vireo would be possible. Section 4(b)(6)(c)(ii) of the Act allows the Service to postpone designation of critical habitat for up to 12 months. On May 2, 1986, the vireo was listed as endangered and the comment period on proposed designation of critical habitat was reopened for an additional 90 days (51 FR 16483). A further extension of the comment period to January 1, 1987, was published on July 31, 1986 (51 FR 27429). Several administrative delays have resulted in lack of a final decision regarding designation of critical habitat for the least Bell's vireo. Much of the information has been updated, but due to the length of these delays, and in order to allow for the fullest possible consideration of public comment on the economic and other relevant impacts of designation, the Service is publishing this revised proposed rule. Public comments on this revised proposed rule will be accepted until November 5, 1992.

Relationship to Recovery

Section 2(c)(1) of the Act declares that all Federal departments and agencies shall seek to conserve endangered and threatened species and shall utilize their authorities in furtherance of the purposes of this Act. Section 3(3) of the Act defines conservation to include all measures needed to recover the species and justify its removal from the list of endangered and threatened wildlife and plants. The Act mandates the conservation of listed species through different mechanisms, such as: Section 7 (requiring Federal agencies to further the purposes of the Act by carrying out conservation programs and insuring that Federal actions will not likely jeopardize the continued existence of the listed species or result in the destruction or adverse modification of designated critical habitat); section 9 (prohibition of taking of listed species); section 10 (wildlife research permits and conservation planning on State and private lands); section 6 (cooperative State and Federal grants); land acquisition; and research.

Recovery planning under section 4(f) of the Act is the "umbrella" that eventually guides all of these activities and promotes a species' conservation and eventual delisting. Recovery plans provides guidance, which may include population goals and identification of areas in need of protection or special management, so that a species can be removed from the list of endangered and threatened wildlife and plants. Recovery plans usually include management recommendations for areas proposed or designated as critical habitat.

The Service considers the conservation of a species in its designation of critical habitat. The designation of critical habitat will not, in itself, lead to the recovery of the species, but is one of several measures available to contribute to the conservation of a species. Critical habitat helps focus conservation activities by identifying areas that contain essential habitat features (primary constituent elements) that require special management. The protection given critical habitat under section 7 also immediately increases the protection given to these primary constituent elements and essential areas and preserves options for the long-term conservation of the species. The protection of these areas may also shorten the time needed to achieve recovery.

Designating critical habitat does not create a management plan; it does not establish numerical population goals; it does not proscribe specific management actions (inside or outside of critical habitat); and it has no direct effect on areas not designated. Specific management recommendations for critical habitat are more appropriately addressed in recovery plans and in section 7 consultation. Areas outside of critical habitat also have an important role in the conservation of a listed species that is not addressed through designation of critical habitat.

The designation of critical habitat may be reevaluated and revised at any time that new information indicates that changes are warranted. The Service will reassess proposals for designation of critical habitat if land management plans, recovery plans, or other conservation strategies are developed and fully implemented that may reduce the need for the additional protection provided by any critical habitat designation.

Critical Habitat

Definition

Critical habitat is defined in section 3(5)(A) of the Act as: (i) the specific areas within the geographical area occupied by a species on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection, and (ii) specific areas outside the geographical area occupied by a species at the time it is listed, upon determination that such areas are essential for the conservation of the species.

The term "conservation," as defined in section 3(3) of the Act, means to use and the use of all methods and procedures which are necessary to bring an endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary.

The Service believes that the definition of critical habitat, while

explicitly mentioning the features essential to conservation of a species, implicitly requires that the areas themselves be essential to the species' survival and recovery. Not all areas containing those features of a listed species' habitat are necessarily essential to its conservation. Conversely, areas not currently containing all of the essential features, but with the capability to do so in the future, may be proposed as critical habitat. However, areas not included in critical habitat that contain one or more of the essential features are also important to the species' conservation and would be addressed under other facets of the Act and other conservation laws and regulations.

Primary Constituent Elements

The Service is required to base critical habitat proposals upon the best scientific data available (50 CFR 424.12). In determining what areas are to be proposed as critical habitat, the Service considers those physical and biological attributes that are essential to the conservation of the species and that may require special management considerations or protection. Such requirements, as stated in 50 CFR 424.12, include, but are not limited to, the following:

- Space for individual and population growth, and for normal behavior;
- Food, water, or other nutritional or physiological requirements;
- Cover or shelter;
- Sites for breeding, reproduction, rearing of offspring; and generally;
- Habitats that are protected from disturbance or are representative of the historic geographical and ecological distribution of a species.

The Service has determined that the physical and biological habitat features (referred to as the primary constituent elements) that support feeding, nesting, roosting and sheltering are essential to the conservation of the least Bell's vireo. These habitat features can be described as riparian woodland vegetation that contains both canopy and shrub layers, and includes some associated upland habitats. Vireos meet their survival and reproductive needs (food, cover, nest sites, nestling and fledgling protection) within the ripiarian zone in most areas. In some areas they also forage in adjacent upland habitats.

Consideration of New Information

The revised proposal is based on new biological and economic data, and material received during the comment period for the proposed rule and from State and Federal agencies.

Total Acres Included in Critical Habitat

The Service now proposes to designate critical habitat for the least Bell's vireo at 10 areas encompassing approximately 48,025 acres (19,210 ha) in Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, and San Diego Counties, California. These 10 areas are occupied by about 88 percent of the known vireo population in the United States. Proposed critical habitat for the vireo occurs on the Santa Ynez River (Santa Barbara County), Santa Clara River (Ventura and Los Angeles Counties), Santa Ana River (Riverside and San Bernardino Counties), and Santa Margarita River, San Luis Rey River, Sweetwater River, San Diego River, Tijuana River, Coyote Creek, and Jamul-Dulzura Creeks (San Diego County).

Federal land within the revised proposed critical habitat consists of approximately 20,579 acres (8,232 ha) including approximately 7,600 (3,040 ha) in Santa Barbara County under the jurisdiction of the Forest Service, 3,338 acres (1,335 ha) in Riverside and San Bernardino Counties under the jurisdiction of the Corps of Engineers, and 9,641 acres (3,856 ha) in San Diego County under the jurisdiction of the Marine Corps and International Boundary and Water Commission. The remainder of the revised proposed critical habitat is in State, county, city, Indian, or private ownership.

Differences from Previous Proposal

The Service has used more recent information to update the May 3, 1985, proposal, but has followed the same approach in this revised proposed rule. The areas that were proposed as critical habitat in the May 3, 1985, proposal form the basis for the areas proposed for designation in this rule. The May 3, 1985, proposed rule identified approximately 43,000 acres for designation as critical habitat. In preparing this revised proposal, it was discovered that the 43,000-acre critical habitat figure was in error and should have been reported as approximately 45,805 acres. Therefore, this rule and associated documents will refer to the 45,805-acre figure as the correct acreage figure from the May 3, 1985, proposed designation.

The area encompassed by the 10 critical habitat areas has been adjusted from approximately 45,805 acres (18,322 ha) in the original proposed rule to 48,025 acres (19,210 ha) in this revised proposed rule. In adjusting the boundaries, 1,400 acres (560 ha) were deleted from the proposed critical habitat on the Santa Ynez River and 3,620 acres (1,448 ha) were added, resulting in a net increase of 2,220 acres (888 ha). This adjustment was recommended by the Forest Service and was based on the results of additional field research on the status, distribution, and behavior of the least Bell's vireo on the Santa Ynez River during the 1986 breeding season. An additional 120 acres (48 ha), adjacent to the northern border of Gibraltar Reservoir, were also recommended for deletion by the Forest Service but the Service does not believe that this change is warranted because this area contains potential nesting habitat. All the land suggested for either withdrawal or addition to the Santa Ynez River critical habitat is under the jurisdiction of the U.S. Forest Service. The additional 3,620 acres (1,448 ha) that were added are under Federal jurisdiction, withdrawn from mineral entry, and without any private or commercial interests.

Available Conservation Measures

Section 7 Consultation

Section 4(b)(8) of the Act requires, for any proposed or final regulation that designates critical habitat, a brief description and evaluation of those activities (public or private) that may adversely modify such habitat or may be affected by such designation. Regulations found at 50 CFR 402.02 define destruction or adverse modification of critical habitat as a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.

If critical habitat is designated, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to destroy or adversely modify critical habitat. This Federal responsibility accompanies, and is in addition to, the requirement in section 7(a)(2) of the Act that Federal agencies insure that their actions are not likely to jeopardize the continued existence of any listed species. As required by 50 CFR 402.14, a Federal agency must consult with the Service if it determines an action may affect a listed species or critical habitat. Thus, the requirement to consider adverse modification of critical habitat is an incremental section 7 consideration above and beyond section 7 review to evaluate jeopardy and incidental take. Regulations implementing this interagency

cooperation provision of the Act are codified at 50 CFR part 402.

Prior to formal designation of critical habitat, section 76(a)(4) of the Act and 50 CFR 402.10 of the regulations require Federal agencies to confer with the Service on any action that is likely to result in destruction or adverse modification of proposed critical habitat.

If an agency requests, and the Service concurs, a formal conference report may be issued. Formal conference reports on proposed critical habitat contain a biological opinion that is prepared according to 50 CFR 402.14 as if the critical habitat were designated, not proposed. Such a formal conference report may be adopted pursuant to 50 CFR 402.10(d) as the biological opinion when the critical habitat is designated if no significant information or changes in the action alter the content of the opinion.

Conference on Current Activities

A number of Federal agencies or departments fund, authorize, carry out actions that affect lands that the Service proposes to designate as critical habitat. Among these agencies are the Forest Service, Corps of Engineers, Marine Corps, Federal Highway Administration, and International Boundary and Water Commission. The Service has identified several activities within the range of the least Bell's vireo that are the subject of formal or informal section 7 consultations. These include a Corps of Engineers flood control project, the Clean Water Act permit program, a water quality and siltation control program; Federal Highway Administration bridge replacement and highway projects; and Forest Service recreation and fire management programs.

Federal agencies are responsible for determining whether or not to confer with the Service on their actions and should consider a number of factors when determining whether any proposed action may destroy or adversely modify proposed critical habitat. Among these factors are impacts of the action on the primary constituent elements of feeding, nesting, roosting, and sheltering; the extent of fragmentation or current habitat suitability within the critical habitat site; the level of incidental take associated with the action; and the extent of the action (e.g., campground maintenance versus new construction of a highway or food control project). The Service will review the action agency's determination on a case-by-case basis and will concur whether or not the action is likely to destroy or adversely modify critical habitat. In order to concur, the Service will consider the effect of the proposed action on the above elements along with the reasons why that particular site was proposed to be critical habitat.

Basis for Analysis

The evaluation of actions that may adversely modify least Bell's vireo critical habitat should consider a number of factors such as the present condition of the habitat, the number of current pairs, the reproductive success of breeding pairs, the expected time to regenerate sufficient habitat to support an effective population in a particular site, and local and regional problems. Although the Service considered the entire range of the least Bell's vireo in determining an approach to critical habitat designation, its section 7 analysis of actions that may adversely affect vireo critical habitat will consider the significance of impacts at individual critical habitat areas as well as the entire range. All proposed actions should be viewed as to their impact on all four constituent elements relative to the potential for adverse modification on individual critical habitat areas.

Examples of Proposed Actions Affecting Critical Habitat

Activities that disturb or remove the primary constituent elements within propose critical habitat areas may constitute destruction or adverse modification of critical habitat. In the case of the vireo, these activities include: (1) Removal or destruction of riparian vegetation, (2) thinning of riparian growth, particularly near ground level, (3) removal or destruction of adjacent chaparral or other upland habitats used for foraging, and (4) increases in human-associated or human-induced disturbance. Specific actions that could adversely affect vireo critical habitat include stream channelization, water impoundment or extraction, water diversion, livestock grazing, intensive recreation, and conversion of presently existing riparian or adjacent upland areas to residential, agricultural, or commercial use. Complete or major destruction of riparian vegetation would result in the extirpation of the least Bell's vireo from the affected area, which could further endanger the species throughout the remainder of its range and prelude opportunities for recovery. Thinning or selectively removing components of riparian vegetation could cause vireos to abandon an area because suitable nesting and foraging sites are scarce or absent or could result in lowered reproductive success because of diminished habitat quality. Increases in recreation could cause actual destruction of nests or could disrupt nesting activities which in turn could cause nest abandonment, lowered hatching success, increased rates of cowbird parasitism and depredation events, and a decrease in the number of fledged young.

Other Conservation Measures: Non-Federal Lands

Section 9 of the Act prohibits intentional and unintentional "take" of listed species and applies to all landowners regardless of whether or not their lands are within critical habitat. Section 10(a)(1)(B) authorizes the Service to issue permits for the taking of listed species incidental to otherwise lawful activities such as agriculture, sand and gravel mining, and urban development. Incidental take permits must be supported by a habitat conservation plan (HCP) that identifies conservation measures that the permittee agrees to implement to conserve the species, usually on the permittee's lands. A key element of the Service's review of an HCP is a determination of the plan's effect upon the long-term conservation of the species. An HCP would be approved and a section 10(a)(1)(B) permit issued if it would minimize and mitigate the impacts of the taking and would not appreciably reduce the likelihood of the survival and recovery of that species in the wild.

The San Diego Association of Governments (SANDAG) is coordinating the development of HCPs for the San Diego River and Sweetwater River proposed critical habitat areas. This effort also included the development of draft plans for the Santa Ana River and San Luis Rey River proposed critical habitat areas, but these plans are no longer under consideration. The intent of these plans is to address land use conflicts and to conserve the vireo and its habitat. The Service will issue section 10(a)(1)(B) permits, if the HCPs are acceptable. In November 1991, the Service received two permit applications and final draft HCPs from SANDAG for the incidental take of vireos on the San Diego and Sweetwater Rivers. The Service is currently reviewing the HCPs and a draft Environmental Impact Statement is under preparation. Based on the review of drafts of these plans, the Service anticipates that they will be compatible with the designation of critical habitat.

Summary of Economic Analysis

Section 4(b)(2) of the Act requires the Service to designate critical habitat on the basis of the best scientific data available and to consider the economic impact and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude any area from critical habitat if he determines that the benefits of such exclusions outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned. The Act thus requires the Service to evaluate those economic and other effects likely to take place due to the designation of critical habitat, and to consider whether to exclude some critical habitat based upon those impacts.

The economic effects of designating critical habitat for the least Bell's vireo are the project-related costs of habitat mitigation within the 10 areas proposed for critical habitat designation over and above those costs that would be incurred as a result of listing the vireo as an endangered species in May 1986.

Affected Agencies

The Service assumes in the economic analysis that the impacts to Federal agencies are related to activities that physically alter critical habitat. The Forest Service, Marine Corps, Corps of Engineers, Federal Highway Administration, and International Boundary and Water Commission are the agencies most likely to be affected by the proposed critical habitat designation.

Economic Effects

The economic effects resulting from adverse modification of critical habitat (effects above those of listing the species and other land management decisions) are the subject of the economic analysis (USFWS 1992). It identifies and quantifies (where possible) the added probable costs and benefits that may result from critical habitat designation for the least Bell's vireo. Economic effects are the costs or benefits to society of precluding or limiting specific land uses.

Private lands within proposed critical habitat are used primarily for agriculture. Existing agricultural practices, (farming, ranching, dairy facilities) should not be economically affected by the designation of critical habitat because there are no known proposals requiring Federal approval for new agricultural activities within proposed critical habitat.

Federal agencies that would likely incur economic costs as a result of the designation of critical habitat include the Forest Service, Corps of Engineers, and the International Boundary and Water Commission.

The Forest Service anticipates an increased cost of $2,000 per year for fire suppression and $1,000 per year for ranger patrols to protect vireo habitat in the Santa Ynez River proposed critical habitat area.

The Corps of Engineers conducts a number of activities in the Prado Basin of the Santa Ana River proposed critical habitat area. Future changes in some of these existing activities could affect the vireo and its proposed critical habitat, and project proponents may incur economic costs as a result. These costs are primarily associated with creating habitat to replace habitat destroyed by project construction and operation. For actions directly affecting critical habitat or the vireo, the Service could require replacement prior to the destruction or adverse modification of the affected habitat. Based on projects which have created vireo habitat prior to its destruction, the Service estimates a maximum cost of $75,000 per acre. This cost represents the difference between replacement prior to destruction and concurrent replacement, and assumes no cost for land (USFWS 1992). This estimate attempts to consider only those impacts attributable to critical habitat designation and separate them from impacts to the vireo and its habitat attributable to listing.

Sand and gravel mining activities that are regulated under the Clean Water Act and require a permit from the Corps of Engineers could affect critical habitat, especially along the San Luis Rey River. No specific cost estimates are available for economic impacts on these activities due to critical habitat, so the added cost of $75,000 per acre for habitat replacement is used again. In certain parts of the San Luis Rey River critical habitat area, land values are high and applicants may avoid destroying vireo habitat, thus resulting in lower total project costs.

The International Boundary and Water Commission (Commission) maintains a portion of an existing flood control project that is located within the proposed Tijuana River critical habitat area. The Commission has not requested formal consultation pursuant to section 7(a)(2) of the Act pertaining to the effect of its operation on the vireo and has not provided data that the Service requested on potential economic impacts of critical habitat designation. This project and other Commission activities (e.g., clearing of vegetation by the Border Patrol) are expected to affect proposed critical habitat and be affected by designation. However, the economic impact on these activities due to critical habitat is unknown at this time.

The proposed critical habitat consists of 10 areas that encompass 48,025 acres (19,210 ha). The following summarizes existing and planned activities within the proposed critical habitat areas and costs attributable to designation:

Area 1. Santa Ynez River

The City of Santa Barbara has proposed a 20-foot increase in the height of Gibraltar dam which could result in the inundation of most of the proposed critical habitat in the Santa Ynez River area. Currently, this expansion has been postponed indefinitely and no costs associated with critical habitat designation have been computed. The Forest Service estimates additional patrols to control off-road vehicles and additional fire management activities in proposed critical habitat would cost approximately $1,000 and $2,000 per year, respectively. No other costs have been identified that are attributable to critical habitat designation in the Santa Ynez River area.

Area 2. Santa Clara River

An oil pipeline extends across the Santa Clara River through proposed critical habitat. A ruptured pipeline in February 1991 resulted in an oil spill within proposed critical habitat. Unocal informed the Service that it has methods of rapidly containing any future spill and minimizing adverse impacts on the riparian habitat. No costs for these containment measures have been attributed to critical habitat designation. The Service recently learned of a project to widen State Route 126 which is the northern boundary of the Santa Clara River proposed critical habitat. The potential effects of this project on proposed critical habitat and associated costs attributable to critical habitat designation are unknown at this time.

Area 3. Santa Ana River

Planning has been completed for the Corps of Engineers' Santa Ana River Project, including section 7 consultation to address adverse impact to the least Bell's vireo. The Service and Corps of Engineers have agreed to a compensation plan and no additional costs attributed to critical habitat designation are anticipated. The Orange County Water District (District), Corps of Engineers, and the Service are pursuing a long-term agreement to

mitigate the adverse effects of storm flow retention at Prado Dam on the vireo. The draft agreement is being implemented and no additional costs attributable to critical habitat designation have been identified. Implementation of the Corps' recreation management plan for the Prado Basin may adversely affect proposed critical habitat, but costs are not determinable at this time. Construction of the Hamner Avenue bridge would adversely modify proposed critical habitat. A compensation program has been agreed to by the California Department of Transportation and Federal Highway Administration at a cost attributable to critical habitat designation of $113,400.

Area 4. Coyote Creek

No costs attributable to critical habitat designation have been identified.

Area 5. Santa Margarita River

The Service and Marine Corps are currently implementing an agreement for vireo management within proposed critical habitat on Camp Pendleton. No costs to the Marine Corps from critical habitat designation have been identified. The Fallbrook Public Utility District is considering alternatives for water storage and delivery on the Santa Margarita River. Construction and maintenance of a pipeline to utilize water from the live-stream discharge project would preclude the need for dam construction and avoid all impacts to proposed critical habitat.

Area 6. San Luis Rey River

Section 7 consultation has been completed with the Corps of Engineers on the San Luis Rey Flood Control Project. The Corps has agreed to implement the reasonable and prudent alternative offered by the Service in the 1987 biological opinion which stated that the project, as proposed, was likely to jeopardize the continued existence of the least Bell's vireo. By implementing the reasonable and prudent alternatives, the Corps has avoided a jeopardy situation and will not affect proposed critical habitat. The City of Oceanside has modified a channel maintenance project to clear phreatophyte vegetation so that proposed critical habitat would not be affected. This project modification was done at no additional cost to the City. The Federal Highway Administration and California Department of Transportation assisted in designing a plan to mitigate the adverse effects of the State Route 76 Bypass on least Bell's vireo and its habitat that resulted in a saving of $2.2 million. The savings can be attributed to replacement of habitat prior to its destruction requiring less land. Sand and gravel mining may incur additional costs estimated by the Service at $75,000 per acre to replace habitat for areas of vireo habitat destroyed. Such costs are presently not determinable.

Area 7. San Diego River

The Federal Highway Administration and California Department of Transportation developed a plan to mitigate adverse affects of the State Route 52 East Project on the vireo and its habitat. No additional costs to the project would result from critical habitat designation. The Service and Corps of Engineers developed a compensation plan to offset the impacts of the Old Mission Dam rehabilitation on least Bell's vireo. None of the cost of implementing the compensation plan is attributed with the proposed designation of critical habitat. A proposed road crossing of the San Diego River associated with the Mission Trails Regional Park could adversely affect proposed critical habitat. The project is still in planning stages and the amount of habitat that would be affected is not known. The Service estimates that up to 5 acres of habitat may need to be replaced at a total cost of $375,000.

Area 8. Sweetwater River

The Service and Sweetwater Authority (a joint powers agency) are working to avoid or minimize impacts to the vireo from the Upper Sweetwater Reservoir Habitat Management Plan. No estimate of costs attributable to critical habitat designation are currently available. The Home Capital Development Group has planned the Rancho San Diego project which may adversely affect proposed critical habitat. Currently, the Service estimates that up to 4 acres of habitat may need to be replaced at a total cost of $300,000. San Diego Association of Governments' (SANDAG) Sweetwater River Habitat Conservation Plan is likely to be compatible with critical habitat designation and no additional costs are anticipated.

Area 9. Jamal-Dulzura Creeks

No costs attributable to critical habitat designation have been identified.

Area 10. Tijuana River

Maintenance of the Tijuana River Flood Control Project may adversely affect proposed critical habitat. The amount of proposed critical habitat that may be affected is unknown at this time and no cost estimate is possible. Construction of sewage treatment plants and associated pipelines in the Tijuana River valley has the potential to adversely affect proposed critical habitat. The amount of proposed critical habitat that may be affected is unknown at this time and no cost estimate is possible.

Some agencies have avoided proposed critical habitat in their project designs and have realized overall cost savings resulting from purchasing less land. Savings to project costs that the Service is aware of total approximately $2.2 million (USFWS 1992).

Based on information available to the Service at this time, total costs associated with designating 48,025 acres of critical habitat for the least Bell's vireo in Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, and San Diego Counties are approximately $0.8 million (USFWS 1992).

Summary of Comments and Recommendations

In the proposed rule published May 3, 1985, and associated notifications, all interested parties were requested to submit factual reports or information that might contribute to the development of a final rule for the vireo or its critical habitat. Appropriate State agencies, county governments, Federal agencies, scientific organizations, and other interested parties were contacted and requested to comment. Newspaper notices were published by June 7, 1985, in the Blade Tribune, Enterprise, Los Angeles Times, News Press, Riverside Press, San Bernardino Sun, San Diego Transcript, San Diego Tribune, and San Diego Union, all of which invited general public comment.

Public hearings were requested by a number of interested parties. Notification of the public hearings and an extension of the comment period to August 30, 1985, was published on July 9, 1985 (50 FR 27992). Public hearings were conducted in San Diego on July 30, 1985; in Oxnard on July 31, 1985; and in Anaheim, California, on August 1, 1985. A total of 370 individuals attended the hearings. An additional notification extending the comment period to December 2, 1985, was published on October 3, 1985 (50 FR 40424). These two additional notifications were also published in the aforementioned nine newspapers in July and October, respectively. On May 2, 1986, the least Bell's vireo was listed as endangered, and the public comment period on proposed critical habitat was reopened for an additional 90 days (51 FR 16483). A further extension of the comment period to January 1, 1987, was published on July 31, 1986 (51 FR 27429).

Approximately 128 interested parties were notified regarding the last extension of the comment period.

The total comment period encompassed approximately 14 months. Of the 397 comments on proposed critical habitat received, 256 (64.5 percent) supported the designation of critical habitat, 55 (13.9 percent) opposed the designation, 31 (7.8 percent) recommended that the Service change the boundaries or delay the designation, and 55 (13.9 percent) were non-committal.

Two elected officials, the California Department of Fish and Game, several local government entities, 26 conservation organizations (or branches thereof), and 207 other interested parties expressed support for the critical habitat proposal. A number of developers, landowners, local agencies, several State agencies (including the California Department of Transportation), and several local governments submitted comments regarding the possible effects that designation of critical habitat might have on planned activities and development.

Multiple comments whether written or oral from the same interested party are regarded as one comment. Written comments and oral statements questioning or opposing critical habitat as originally proposed are grouped into issues and discussed below.

Issue 1: Critical habitat designation may result in the delay of several important projects, or may force agencies to change the operation of existing projects. For example, to minimize the adverse effects of inundation on vireo habitat, the Corps of Engineers may release water from the Prado Basin of the Santa Ana River critical habitat area so quickly that the local water district could not divert it into percolation ponds. Projects important to public health and safety may be delayed or disapproved. Several other commenters expressed concern related to the section 7 requirements of the Act.

Service Response: Critical habitat only affects the activities of Federal agencies. Under section 7 of the Act, Federal agencies are required to consult with the Service if activities they authorize, fund, or carry out would affect a federally listed species or its critical habitat. After receipt of a request from an agency for formal consultation pursuant to section 7 of the Act, the Service issues a biological opinion that states whether or not the proposed action is likely to jeopardize the continued existence of the listed species or adversely modify its critical habitat. When the Service issues a jeopardy or adverse modification opinion, in nearly all cases, the Service also issues reasonable and prudent alternatives that would still allow the project's intended purpose to go forward, but would not jeopardize the continued existence of the species or result in adverse modification of its critical habitat. Federal agencies are required to ensure that their actions do not jeopardize the continued existence of federally listed species or adversely modify or destroy their critical habitat. In practice, the Service and action agency often work together to develop mutually acceptable reasonable and prudent alternatives.

In the case involving the Corps of Engineers cited above, the Corps did request formal consultation pursuant to section 7 of the Act on the operation and maintenance of Prado Dam and its effect on the vireo. The Service reviewed the situation and made recommendations in a biological opinion that the Corps undertake certain actions to conserve the species. Through this process the Corps has developed a program to avoid or minimize the potential adverse consequences of an extensive short-term water release.

In the rare cases where the Service issues jeopardy opinions without acceptable reasonable and prudent alternatives, the action agency may take the project to an exemption committee and ask that their project be excluded from the requirements of the Act. The Service anticipates that few, if any, opinions would not contain acceptable reasonable and prudent alternatives.

Issue 2: Critical habitat should not be designated because of institutional delays associated with the section 7 consultation process.

Service Response: The review requirements of section 7 do not require excessive time. Section 7 regulations require that the Service form an opinion within 90 days and issue it within an additional 45 days. By policy and in practice, the Service usually completes formal consultation (including issuance of the opinion) within 90 days.

Issue 3: Critical habitat should not be designated because of the time delays associated with providing habitat replacement in advance of the existing habitat's destruction. The requirement to replace habitat prior to its destruction subjects applicants to costs that may not be recoverable if the habitat creation effort is unsuccessful and the project is not approved. The burden of these added costs is too great and the Service should exclude certain areas such as Gibraltar Reservoir from critical habitat because of these economic costs.

Service Response: The National Environmental Policy Act and the Endangered Species Act state that costs associated with mitigation or compensation are part of the project costs. The least Bell's vireo is a wetland obligate species. A high level of protection is afforded to wetlands by the Clean Water Act and Federal wetland policy. Costs to avoid, minimize, or compensate for impacts to wetlands in general and vireo habitat in particular would be incurred even if critical habitat was not designated.

Wetland creation has met with varying degrees of success and often requires years to attain comparable habitat quality relative to the habitat impacted. This is particularly true for vireo habitat which includes an older, tree canopy component. When a project would result in the destruction of vireo quality habitat, the Service has required an action agency to create up to 5 acres for every 1 acre destroyed based on these considerations. Creation of 1 acre of riparian woodland generally costs about $25,000 and may require many years to reach maturity. Thus, in most cases an applicant could expect that mitigation efforts would cost on the order of up to $125,000 for every acre destroyed. This figure does not include the cost for the land—the purchase price for 5 acres for every 1 acre destroyed. In some cases where the habitat is occupied by the least Bell's vireo, the Service has required action agencies to create fully functional habitat prior to the destruction of existing habitat. When an applicant or action agency cannot afford to wait several years for the created habitat to mature, added costs are incurred. In a few cases, riparian habitat has been created relatively quickly. However, the cost for such efforts is about $200,000 per acre. When agencies must create habitat before existing habitat is destroyed, the required replacement ratio is 1 acre created for every 1 acre destroyed. Thus, the additional cost per acre to create habitat prior to destruction of existing habitat is $75,000. In some parts of southern California land values are very high, and in some cases it may be less expensive to create 1 acre quickly rather than 5 acres over a longer period of time.

In some cases, the designation of critical habitat would bring the requirement for prior replacement of habitat to projects that would result in the destruction of suitable, but unoccupied vireo habitat. The Service has completed an economic analysis for the listing of critical habitat for the least Bell's vireo and predicts that the

maximum additional cost incurred by a project proponent in such situations would be $75,000 per acre. This figure assumes no cost for land.

Wetland mitigation is a costly, time-consuming, and difficult endeavor with an uncertain probability of success. The requirement to create habitat before existing habitat is destroyed, ensures that the federally listed species would not sustain a loss of habitat, even temporarily. Given the uncertainty of wetland creation or restoration, it is unlikely that the Service would support a project proposal that would result in the destruction of large areas of riparian habitat without first providing adequate replacement habitat for the least Bell's vireos in the area.

In the 6 years since the vireo was listed, two agencies have constructed projects in areas that support least Bell's vireos that have been subject to this prior replacement requirement and both have produced habitat that now supports vireos. Designation of critical habitat could bring this requirement to applicants of projects in areas that contain suitable, unoccupied habitat, depending on the proposed action. As restoration techniques are refined, it is likely that revegetation projects will become more successful in shorter time frames.

For projects where unavoidable impacts to occupied or unoccupied vireo habitat would occur, compensatory habitat creation may have to be completed prior to the destruction of existing habitat so that the vireo will not sustain a net loss of available nesting or foraging habitat. The amount of time for successful revegetation will vary depending upon the method employed and may take several years. The action agency or permit applicant would need to initiate the restoration activities early enough to allow sufficient time for vireo habitat to develop. Most major projects are in the planning stages long enough to provide adequate time for habitat restoration if the compensation efforts are done expeditiously. That would reduce the likelihood of a delay.

Under section 4(b)(2) of the Act, the Secretary has the authority to exclude an area from critical habitat designation based on economic considerations, " " " 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 and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned." The Gibraltar Reservoir population of the vireo represents the northern edge of its range, and therefore is most likely to be the source of recolonization to the north or to the Central Valley. Because of this geographical significance, the designation of this area as critical habitat is appropriate. In addition, the proposed project to raise the height of Gibraltar Dam is not currently being considered. Therefore, the Service believes that the economic costs of designating critical habitat in Gibraltar Reservoir do not outweigh the benefits of this designation.

Issue 4: The establishment of a Memorandum of Understanding between the Service and the Marine Corps in July 1986 for management of the vireo on Camp Pendleton precludes the need for designating critical habitat on the base.

Service Response: The Santa Margarita River contains approximately 40 percent of the breeding vireos in the United States. This area is, therefore, essential to the conservation of the species, and is appropriately included within the proposed critical habitat designation. Management actions undertaken pursuant to the Memorandum of Understanding conceptually preserve the constitutent elements of vireo habitat and provide special management considerations that are consistent with the spirit and intent of the Act. Actions taken under this agreement to date have successfully supplemented existing programs to control cowbirds and have greatly benefitted the vireo. However, three recent events strongly suggest that the Memorandum of Understanding may not be a completely effective mechanism for protecting vireo habitat. These events, which occurred between 1988 and 1990, involved military training activities that inadvertently started wildfires which caused the loss or degradation of large areas of vireo habitat within proposed critical habitat. The Service is working with the Marine Corps to resolve this matter. If future actions demonstrate that the Memorandum of Understanding can provide an equivalent level of protection, the Service will consider withdrawal of critical habitat for this locality.

Issue 5: Critical habitat is not necessary for areas in which activities are planned that would require National Environmental Policy Act (NEPA) review and compliance or are subject to the provisions of section 1601 or 1603 of the California Fish and Game Code.

Service Response: NEPA requires a full disclosure of impacts and feasible alternatives so that the decision regarding the proposed Federal action is based upon adequate information. It does not require alteration of project plans and does not necessarily facilitate resource protection.

Compliance with the California Fish and Game Code is manifested by an agreement (not a permit) that does not necessarily address the conservation of the vireo and its habitat and does not provide for denial of a project application, and hence is not an adequate substitute for designation of critical habitat.

Issue 6: Critical habitat should not be designated on the Santa Ynez River because this area is under the jurisdiction of the Forest Service, and therefore, already is protected and does not require special management considerations or protection in accordance with section 3(5)(A)(i)(II) of the Act.

Service Response: Even though proposed critical habitat on the Santa Ynez River is under Federal jurisdiction, this area contains physical and biological features essential to the conservation of the species and because of on-going water and fire management practices within the watershed may require special management considerations or protection. Therefore, inclusion of this locality as critical habitat is consistent with the definition cited under section 3(5)(A)(i)(II) of the Act.

Issue 7: Critical habitat is unnecessary because local city and county governments can manage the habitat.

Service Response: Under existing regulatory mechanisms, local governments have not prevented habitat loss for the least Bell's vireo. Most activities that may take place within critical habitat will require some sort of Federal approval, and therefore would be subject to the requirements of section 7 discussed above under Issues 1 and 2. Thus designation of critical habitat will provide added protection to these areas.

Issue 8: Critical habitat should not be designated because the vireo populations are so depleted that recovery is unlikely. The Santa Ynez population is stable and therefore can rebound from environmental disturbances. Critical habitat therefore should not be designated on this drainage.

Service Response: The stability or instability of populations is not one of the criteria used to determine the appropriateness of designating critical habitat. The Act requires the Service to designate critical habitat for a listed species in areas that are essential to the conservation of the species, unless it is not prudent to do so. The Service can, however, delay designation of critical habitat for 1 year at the time a species is

listed if the critical habitat is not determinable. The designation of critical habitat for the vireo is both prudent and determinable. In addition, the Act would require the designation of critical habitat even if little could be done to minimize the threats facing the species. Fortunately, the vireo has responded favorably to management in a number of locations throughout its range, and the United States population has increased from about 300 pairs to 500 pairs since this species was listed in 1986. Thus, it seems reasonable to conclude that the designation of critical habitat will provide added protection to the vireo and increase the likelihood of the recovery of the species.

Issue 9: Designation of critical habitat is unnecessary because nest parasitism by cowbirds is responsible for the decline of the vireo.

Service Response: Two major factors have been identified as being responsible for the relatively recent, dramatic decline of the least Bell's vireo: widespread habitat destruction and high rates of nest parasitism by cowbirds (Goldwasser *et al.* 1980). The synergistic effects of these two factors may have further exacerbated the situation. Although cowbird removal programs have effectively solved the problem of excessive parasitism in a number of locales, habitat preservation and creation programs have not achieved the same level of success. These programs eventually must be successful if the preservation and recovery of the vireo is to be achieved. To that end, the designation of critical habitat affords a higher level of protection to riparian woodland habitats that currently (or potentially could) support nesting pairs of vireos. The Service considers this action particularly appropriate in light of the inability of existing regulatory mechanisms (e.g., the Clean Water Act, local regulations) to adequately protect vireo habitat.

Issue 10: Critical habitat will discourage or complicate activities beneficial to listed species because of time delays associated with completing section 7 consultation procedures or obtaining scientific permits to carry out recovery activities. For example, agencies may be reluctant to implement cowbird control or giant reed removal programs because the approval processes may be too time-consuming.

Service Response: As discussed under Issue 2 above, the time required to complete formal consultation under section 7 is not excessive. If a proposed action is determined to be beneficial to the listed species, the consultation process is terminated. In addition, scientific permits authorizing recovery actions are generally issued by the Service within 30 to 60 days of receipt of a valid permit application.

Issue 11: The Service should expand critical habitat boundaries to include more habitat. Several sites contain vireo populations of 10 or more pairs or are important to the species for other reasons that are not included within proposed critical habitat boundaries. These areas include: The San Luis Rey River upstream from the proposed critical habitat boundary; many desert riparian areas (Whitewater Canyon, Chino Canyon, Andreas Canyon, Palm Canyon/Hermit's Bench, Willow Hole Oasis, and Big Morongo Wildlife Preserve); Temescal Canyon; Fairmont Park; Upper San Dieguito River; lower Santa Ysabel Creek; Pamo Valley; and the upper end of El Capitan Reservoir where the San Diego River enters the pool. Alternatively, critical habitat boundaries could be expanded to include all areas within the vireo's historical range that still contain riparian habitat capable of supporting the species, or all areas where cowbird trapping could increase vireo populations.

Service Response: Although the least Bell's vireo historically nested in the Central Valley and other low elevation riverine areas of California, nesting within the U.S. is now restricted to approximately 40 localities in southern California. In proposing critical habitat the Service selected sites that supported relatively large numbers of nesting pairs and all of these sites were in southern California.

The Service retains the option of proposing additional critical habitat areas if vireos expand their range north of Santa Barbara or into the Central Valley. The Service also retains the option of proposing to designate critical habitat for some of the additional populations listed above. Should the Service decide to propose any of these additional areas as critical habitat, this action would be the subject of a new **Federal Register** proposed rule that solicited public comments and provided for a public hearing, if so requested. The Service would evaluate the public comments before making a final decision regarding a new proposal.

Issue 12: Designation of critical habitat requires an Environmental Impact Statement (EIS) to assess the impact of such designation in accordance with the National Environmental Policy Act.

Service Response: The decision in *Pacific Legal Foundation* v. *Andrus*, 657 F. 2d 829 (6th Cir. 1981) held that as a matter of law an EIS is not required for listings under the Act. The decision noted that preparing EIS's on listing actions does not further the goals of NEPA or the Act. Although the decision cited above specifically addressed the listing of species, the Service believes that the *Pacific Legal Foundation* case may be used on the question of the applicability of NEPA to critical habitat designations. Further, the statutory limits on the Secretary's discretion (e.g., the standards for critical habitat in section 3(5) of the Act), make the preparation of an EIS unnecessary.

In addition, the Service prepares for each critical habitat rule a Determination of Effects of Rules in compliance with Executive Order 12291, the Regulatory Flexibility Act, and the Paperwork Reduction Act, as well as an economic analysis as required by section 4(b)(2) of the Act. These documents include an analvsis of the economic impacts of the designation of critical habitat. Alternate critical habitat boundaries are considered as part of the economic analysis.

Issue 13: The Service should delay designation of critical habitat until further studies are completed, and we know exactly why the vireo has declined. The Service should wait for the results of further ecological studies or wait for the results of conservation efforts and cowbird control programs before designating critical habitat.

Service Response: The Service is required to use the best available biological information in determining critical habitat boundaries. Numerous researchers within the scientific community have concluded that least Bell's vireos have declined because of loss and modification of habitat and the effects of nest parasitism by brown-headed cowbirds. Further, it would not be prudent to wait for the results of additional predator reduction programs. The loss of vireo habitat has continued since the listing of the species, and although cowbird control programs have had beneficial effects on some populations, the recovery of the species is still dependent upon protection of its habitat.

As new information becomes available, however, the Service may consider proposing additional areas for critical habitat status or refining its existing boundaries.

Issue 14: The Service should not designate critical habitat in the areas that are within the boundaries of proposed Habitat Conservation Plans.

Service Response: Section 9 of the Act prohibits the take of federally listed species. Take is defined to include harm, harassment, wounding, shooting, killing, capturing, or attempting to engage in

any such conduct. Under some circumstances habitat destruction can constitute harm or harassment. Most biological opinions include an incidental take section that authorizes the Federal agency a limited amount of take.

Section 10(a) of the Act describes the process by which a private party may obtain a permit to take a federally listed species incidental to other legal activities. To obtain such a permit, an applicant must, among other requirements, submit a conservation plan that specifies the possible impacts of such taking on the listed species and the actions the applicant will undertake to minimize and mitigate these impacts. The Service may then issue a section 10(a) permit if it finds, among other considerations, that implementation of the conservation plan will insure the long-term conservation of the species and that the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild. Issuance of such a permit is subject to the requirements of section 7(a)(2) of the Act as well as section 102(2)(C) of NEPA. Thus section 10(a) of the Act allows private parties an opportunity to take a federally listed species incidental to legal activities such as housing or road construction.

An interagency task force was established in November of 1985, under the auspices of the San Diego Association of Governments (SANDAG), to guide the development of separate HCP's for the Sweetwater, San Luis Rey, San Diego, and Santa Ana Rivers. A comprehensive species management plan was developed that includes general conservation recommendations based on available scientific data on habitat requirements of the least Bell's vireo as well as measures to minimize cowbird nest parasitism. An integral part of implementing this management is associated with the development of the HCP's listed above. The HCP's for the Santa Ana and San Luis Rey Rivers have since been abandoned. Although implementation of the remaining HCP's may benefit the vireo, the Service does not know if they will be completed or approved. Before the Service can approve the request for a section 10(a) permit, an EIS must be prepared. In November 1991, the Service received two permit applications from SANDAG for the incidental take of vireos on the San Diego and Sweetwater Rivers. A draft EIS is currently under preparation.

In any case, the section 10(a) permit process serves a separate purpose (it can authorize private parties a limited level of incidental take) from section 7 of the Act, and therefore, the preparation of HCP's cannot be used to alter critical habitat boundaries, because critical habitat designation only applies to Federal agencies.

Issue 15: The Service should encourage the development of HCP's rather than subjecting private parties to increased costs associated with critical habitat.

Service Response: The development of an HCP is a costly and time-consuming process. In the 6 years since the vireo was listed, two applications for section 10(a) permits have been received by the Service although no permits have been issued. The agencies involved in the efforts discussed above have incurred high costs, not including great amounts of staff time. Implementation costs have not been incurred. In contrast, the section 7 process is relatively straightforward and not particularly time-consuming. Therefore, the preparation and implementation of an HCP may be at least as expensive, if not more than, the costs for Federal agency compliance with regulations protecting critical habitat.

Issue 16: Riparian habitat is dynamic and shrinks during drought and expands with favorable rainfall. Flooding events scour and remove tracts of this habitat. Ground water levels also influence the extent of habitat. The expansion of riparian woodland habitat during the favorable climatic conditions of the early 1980's is atypical. These areas will not support vireos in the long-term. For these reasons, critical habitat should not be designated.

Service Response: The Service views the dynamic nature of riparian habitat as one of the major reasons why a designation of critical habitat would benefit this species. The critical habitat boundaries encompass floodplains where major populations of vireos exist. Areas that presently support vireo populations may become unsuitable due to climatic conditions. Nearby areas may be suitable, however. Vireos would invade these nearby areas following the natural destruction of previously occupied sites. The designation of critical habitat requires Federal agencies to follow the procedures set forth at section 7 of the Act in areas that are not currently occupied, but contain habitat that could be occupied by vireos. This aspect of critical habitat designation provides an important tool for the conservation of this species.

Some climatologists believe that the weather has been unusually benign for the past 30 to 40 years and that the climate is returning to its normal pattern of instability. Dry periods will be drier and wet periods will be wetter. Ground water levels would fluctuate less severely than weather patterns because of the ability of river basins to absorb and store surface flows. If surface conditions do not change, ground water basins should continue to recharge and support willows as they have in the past. Two recent years of relatively severe drought have not produced evidence to the contrary. The availability of ground water is essential to maintaining least Bell's vireo habitat, particularly in areas of ephemeral stream flows. Strategies to stabilize and enhance vireo population size will continue to be examined as part of the recovery effort for the least Bell's vireo. These strategies will take into account the fact that vireo habitat is influenced by and dependent upon changing hydrologic conditions.

Issue 17: The Service should develop interim critical habitat to be deleted upon completion of acceptable HCP's.

Service Response: As explained above under Issue 14, HCP's and critical habitat serve separate purposes, and one cannot substitute for the other. However, following the issuance of a section 10(a) permit, the Service would reevaluate the need for critical habitat in the area covered by the HCP.

Issue 18: Critical habitat would impinge on the rights (including water rights) of private landowners and developers to use their property or public land for various purposes (e.g., farming, recreation, water supply, etc.).

Service Response: Designation of critical habitat is not synonymous with condemnation of land. Water rights cannot be negated because of the critical habitat designation. This designation only affects Federal activities, and results in greater section 7 requirements. Future activities on private land designated as critical habitat would only be affected where Federal funding, approval, permitting, or licensing were involved.

Issue 19: Proposed highway corridors should be excluded from critical habitat designation.

Service Response: The construction of highways across riparian areas would be subject to the requirements of section 7 of the Act if there was Federal involvement in these projects. Through this process, the applicant would compensate for impacts resulting from loss and fragmentation of habitat. The Service could consider excluding these corridors due to economic considerations; however, as discussed above under Issue 3, the economic costs

associated with critical habitat are not expected to be high.

Issue 20: The Service should not designate critical habitat in areas where the riparian woodland is the result of human activities. The Prado Flood Control Basin was largely agricultural 16 years ago, and the presence of the dam and cessation of farming has resulted in the presence of riparian habitat.

Service Response: The Act does not require critical habitat to be natural or pristine. An examination of aerial photographs taken of the Prado Basin reveals that the Santa Ana River Basin contained extensive riparian habitat before much of it was converted to agriculture. The Dam is situated at the confluence of Mill Creek, Chino Creek, and the Santa Ana River, where a natural restriction is formed by the Santa Ana Canyon. Under natural conditions, the confluence of the creeks at this restriction would probably facilitate the development of vast tracts of riparian habitat.

Issue 21: Proposed critical habitat boundaries should be changed to more accurately reflect the location of nesting and foraging habitat. Urban developments, agricultural lands, industrial operations, recreational facilities, highways, railroads, etc. are included within the boundaries of critical habitat. Many of the boundaries selected such as elevation contours, roads, section lines, etc. seem inappropriate (e.g., the 543-foot elevation contour at the Prado Basin, Highway 126 along the Santa Clara River). The need for extensive renegotiations should be avoided by refining the boundaries. One commenter offered to build a barrier or other permanent structure so that the legal description of critical habitat on the Sweetwater River could be revised.

Service Response: The Service is required to use existing, easily recognizable boundaries in the development of legal descriptions for critical habitat. The Service cannot use ephemeral features such as vegetational boundaries (50 CFR 424.12(C)). Consequently, when the Service selected recognizable boundaries, the amount of acreage encompassed within the boundaries, exceeded the precise lands needed. However, only those areas containing nesting (almost always riparian woodland) or foraging habitat (usually riparian, but also some adjacent uplands such as chaparral or coastal sage scrub) would be treated as critical habitat and subject to the requirements of section 7. Existing developments (e.g., housing projects, commercial and recreational facilities, and plowed fields) do not contain essential elements of critical habitat.

The Service considers the 543-foot elevation contour within the Prado Basin to be a well-defined legal boundary. Selection of the 543-foot elevation contour (the height of the spillway) was based on the distribution of actual and potential vireo habitat, and the estimated extent of historical riparian habitat.

The Service has retained the broader boundary at the Sweetwater River because vireo foraging data for this and at least two other localities indicate that vireos forage beyond the borders of strictly riparian parcels and into adjacent upland habitats. Thus, a critical habitat area that contains chaparral or coastal sage scrub is consistent with the Service's obligation to include the known primary constituent elements (foraging substrates and food resources) in critical habitat.

Issue 22: Critical habitat should not be designated in areas where adjacent land uses adversely affect vireo habitat or where cowbirds are exceptionally numerous. For example, the Prado Basin should be excluded because of high cowbird abundance and its location adjacent to an agricultural area.

Service Response: Cowbirds are present throughout much of southern California and occur commonly in most least Bell's vireo breeding areas. The judicious trapping of cowbirds and monitoring of vireo nests has significantly reduced the detrimental effects of cowbird parasitism. The act specifies that certain management considerations may be necessary in critical habitat areas. Nearby "incompatible" land uses are not considered as long as the designated habitat contains elements essential to the conservation of the listed species.

Issue 23: The Service should clearly define the phrase "constituent elements" in the definition of critical habitat. The Service should state specifically where these essential elements are.

Service Response: The Service is primarily concerned with the "known primary constituent elements" within designated critical habitat boundaries. These elements include habitat used for nesting, foraging, predator avoidance, and juvenile dispersal. The least Bell's vireo nests almost exclusively in willow-dominated, riparian woodlands containing a shrubby understory, although other habitat types may be used. In addition, vireos primarily forage in these same areas, but also use adjacent uplands such as chaparral and coastal sage scrub. Therefore, upland areas contain constituent elements in some cases.

As stated above under Issue 16, riparian habitat is dynamic and occupied habitat may change and become unsuitable through time. Younger areas will mature and form suitable habitat. For this reason, it would not serve the conservation of the species to precisely identify currently occupied stands.

Issue 24: Site specific regulations should be promulgated for the critical habitat areas before their official designation under the Act.

Service Response: The Act does not require the Service to prepare such regulations. As discussed above under Issue 1, proposed activities would be addressed by following the procedures described in section 7 of the Act. The Service will set specific goals for separate areas as part of the recovery planning process.

Public Comments Solicited

The Service intends that any final action resulting from this proposal will be as accurate and effective as possible. Consequently, the Service used the most current data available to evaluate habitat for consideration as critical habitat. The Service recognizes, however, that relevant information, especially on private lands, may not be readily available in published scientific literature and government documents. Therefore, comments or suggestions from the public, governmental agencies, Indian Nations, the scientific community, industry, or any other interested party concerning this proposed rule are hereby solicited. Comments particularly are sought concerning:

(1) The reasons why any habitat (either existing or additional areas) should or should not be determined to be critical habitat as provided by section 4 of the Act;

(2) Information regarding actions that should be considered necessary to achieve recovery of the least Bell's vireo and conditions that might allow it to be removed from the list of endangered and threatened wildlife and plants;

(3) Specific information on the amount and distribution of suitable vireo habitat and numbers and distribution of vireos by landowner and land designation (land managing agencies or affected parties should include updated information and maps);

(4) Specific information on the ability or values of proposed areas to support other listed, proposed, or candidate species and the relationship of this

proposal to maintaining biodiversity and ecosystem integrity;

(5) Current or planned activities and their possible impacts on proposed critical habitat areas;

(6) Any foreseeable economic or other impacts resulting from the proposed designation of critical habitat;

(7) Economic values associated with benefits of designating critical habitat for the least Bell's vireo. Such benefits include those derived from non-consumptive uses (e.g., hiking, camping, bird watching, etc.) watershed protection, air quality, soil retention, etc.; and

(8) The methodology the Service might use, under section 4(b)(2) of the Act, in determining whether the benefits of excluding an area from critical habitat outweigh the benefits of specifying the area as critical habitat.

National Environmental Policy Act

The Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244). See also Issue 12 under "Summary of Comments and Recommendations" above.

Regulatory Flexibility Act and Executive Order 12291

The Department of the Interior has determined that designation of critical habitat for this species will not constitute a major action under Executive Order 12291 and certifies that this proposed designation will not have a significant economic effect on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Based on the information discussed in this rule concerning public projects and private activities within the proposed critical habitat areas, it is not expected that significant economic impacts will result from the critical habitat designation. In addition, there are a limited number of actions on private land that have Federal involvement through funds or permits that would affect or be affected by a critical habitat designation; the potential economic impact of a critical habitat designation on these actions will be minor. Also, no direct costs, enforcement costs, or information collection or recordkeeping requirements are imposed on small entities by this proposed designation. Further, the revised proposed rule contains no recordkeeping requirements as defined by the Paperwork Reduction Act of 1980.

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Authors

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List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and record-keeping requirements, and Transportation.

Regulation Promulgation

PART 17—[AMENDED]

Accordingly, part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, is amended as set forth below:

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1631–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

§ 17.111 [Amended]

2. It is proposed to amend § 17.11(h) by revising the "Critical habitat" entry for "Vireo, least Bell's", under BIRDS, to read "17.95(b)".

3. It is proposed to amend § 17.95(b) by adding critical habitat of the least Bell's vireo, in the same alphabetical order as the species occurs in § 17.11(h).

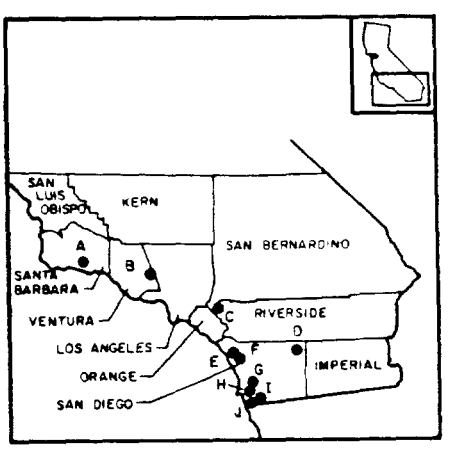
§ 17.95 Critical habitat—fish and wildlife.

(b) * * *

* * * * * *

Least Bell's Vireo *(Vireo bellii pusillus)*

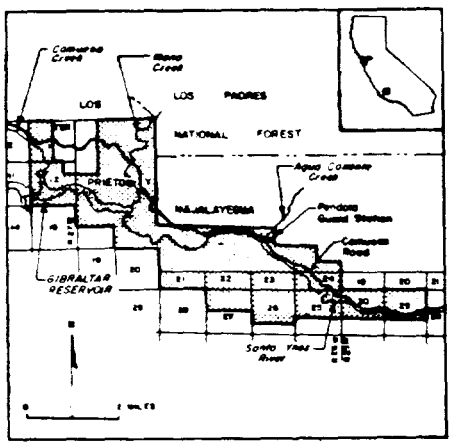
California: Areas of land and water as follows:



1. Santa Ynez River, Santa Barbara County (Index map location A).

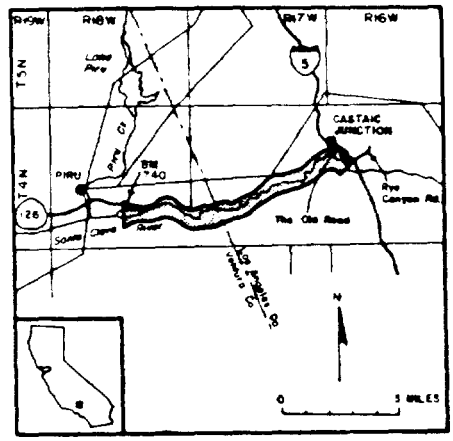
T. 5 N., R. 27 W.: secs. 1, W½, and 12, all except NE¼. In addition, all adjacent lands within the following circumscribed area: beginning at a point 0.25 mi south of the northeast corner of sec. 12, T. 5 N., R. 27 W.;

thence east about 0.5 mi; thence north about 1.25 mi; thence east approximately 1.3 mi to the intersection of Mono Creek and the Los Prietos Y Najalayegua land grant boundary; thence south about 2.5 mi; thence east approximately 2.6 mi to Agua Caliente Creek (at a point about 0.4 mi north and 0.1 mi east of the Pendola Guard Station); thence south about 0.5 mi; thence east about 1.0 mi; thence south about 0.25 mi; thence east about 0.5 mi; thence south about 0.75 mi to the southwest corner of T. 5 N., R. 25 W., sec. 19; thence east to the southeast corner of T. 5 N., R. 25 W., sec 20; thence south about 0.63 mi; thence west to western boundary of T. 5 N., R. 28 W., sec. 25; thence south about 0.16 mi; thence west to eastern boundary of T. 5 N., R. 28 W., sec. 27; thence north about 0.25 mi; thence west to western boundary of T. 5 N., R. 28 W., sec. 27; thence north to the northeastern corner of T. 5 N., R. 28 W., sec. 27; thence north to the northeastern corner of T. 5 N., R. 28 W., sec. 28; thence west to the northwest corner of T. 5 N., R. 28 W., sec. 28; thence north to the northeast corner of T. 5 N., R. 28 W., partially unsurveyed sec. 20; thence west to the northeast corner of T. 5 N., R. 28 W., unsurveyed sec. 19; thence north about 0.5 mi; thence west to the southeast corner of T. 5 N., R. 27 W., sec. 13, NE¼; and thence north to the southeast corner of T. 5 N., R. 27 W., sec. 12.



2. Santa Clara River, Los Angeles and Ventura Counties (Index map location B).

T. 4 N., Rs. 17 and 18 W.: all land within 3,500 feet perpendicularly and generally southward or westward of a line commencing at a point 100 yards west of BM 740 (a point about 2.3 mi east of the intersection of Main Street and State Highway 126 in Piru); thence east along State Highway 126 to its intersection with The Old Road at Castaic Junction; and thence eastward and southward along The Old Road to its intersection with Rye Canyon Road.



3. Santa Ana River, Riverside and San Bernardino Counties (Index map location C).

All lands below the 543-foot contour in partially surveyed T. 3.S., R. 7 W., within the Prado Flood Control Basin (upstream from Prado Dam). In addition, the following adjacent lands above the 543-foot contour in the Santa Ana River bottom and within the following boundaries: commencing at a point 0.1 mi east and 0.2 mi north of the southwest corner of sec. 2, T. 3 S., R. 7 W.; thence north about 0.4 mi; thence to a point 0.25 mi east and 0.4 mi north of southwest corner of sec. 31, T. 2 S., R. 6 W.; thence to the northeast corner of sec. 31, T. 2 S., R. 6 W.; thence east 0.35 mi; thence to midpoint of southern section line of sec. 21, T. 2 S., R. 6 W.; thence to a point 0.6 mi south of the northwest corner of sec. 25, T. 2 S., R. 6 W.; thence east about 0.6 mi; thence to a point 0.2 mi north of the center of sec. 30, T. 2 S., R. 5 W.; thence east about 0.7 mi; thence to a point 0.6 mi east of the southwest corner of sec. 20, T. 2 S., R. 5 W.; thence east about 0.8 mi; thence 0.6 mi south; thence to a point 0.3 mi north of the southwest corner of sec. 28, T. 2 S., R. 5 W.; thence to a point 0.45 mi north of the southwest corner of sec. 29, T. 2 S., R. 5 W.; thence generally westward and southward along the Riverside Corporation Boundary (as shown on USGS Riverside Quadrangle 1980) to its intersection with Van Buren Blvd.; thence to a point 0.2 mi east and 0.75 mi south of the northwest corner of sec. 27, T. 2 S., R. 6 W.; thence 0.25 mi north; thence 0.7 mi west; thence to a point 0.85 mi north of the southwest corner of sec. 32, T. 2 S., R. 6 W.; thence to a point 0.75 mi west and 0.1 mi south of the northeast corner of sec. 6, T. 3 S., R. 6 W.; thence 0.5 mi west; and thence to the 543-foot contour at a point 0.3 mi west of the southeast corner of sec. 2, T. 3 S., R. 7 W.

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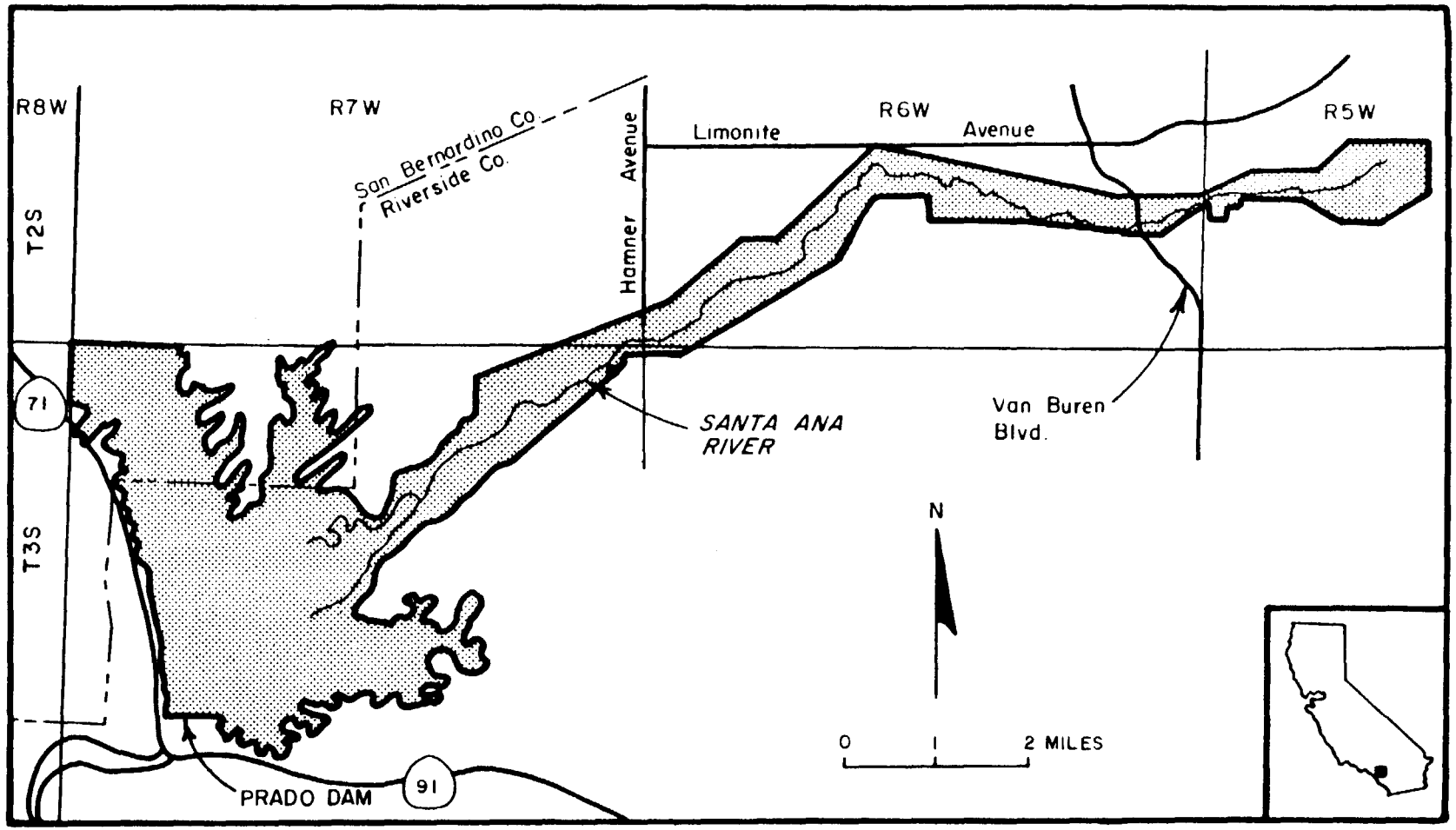

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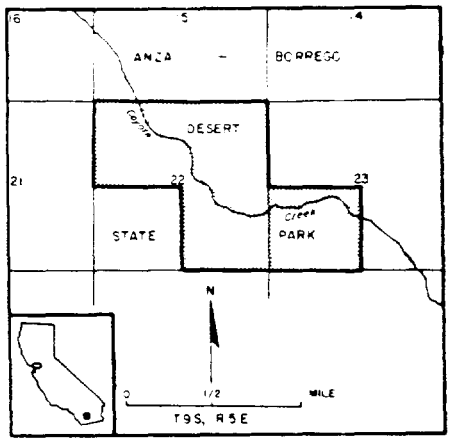
4. Coyote Creek, San Diego County (Index map location D).

T. 9 S., R. 5 E.: secs. 22, N½, SE¼; and 23, SW¼.



5. Santa Margarita River, San Diego County (Index map location E).

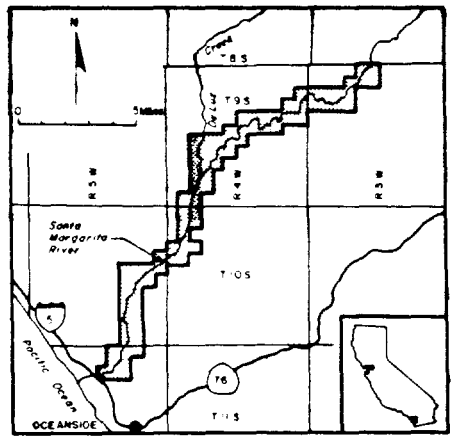
T. 9 S., R. 3 W.: secs. 4; 5 SE¼; 7; and 8.

In T. 9 S., R. 4 W., Sec. 12 S½, NE¼; 13 N½; 14; 15; 16 SE¼; 20; 21; 22 NW¼; 28 NW¼; 29; 31 SE¼; 32 W½, NE¼.

T. 10S, R. 4W: Sec. 5 W½; 6 E½; 7 E½, SW¼; 18 N½.

T. 10S, R. 5W: Sec. 13 S½, NE¼; 14 S½; 23; 24 NW¼, 26; 35.

T. 11S, R. 5W: Sec. 2N½, SW¼; 3 E½, 10 N½; 11 NW¼.



6. San Luis Rey River, San Diego County (Index map location F).

T. 11S., R. 5 W.: secs. 13, S½NE¼, SE¼NW¼, SW¼; 14, SE¼SW¼, S12SE¼; and 23, NW¼.

T. 11 S., R. 4 W.: secs. 3, all land north of Murray Road; 4, E½NE¼, E½SE¼SW¼, W½NE¼SE¼, E½NW¼SE¼, SW¼SE¼; 7, N½NE¼NE¼, NW¼NE¼, E½W½, SW¼SW¼; 8, N½NE¼, N½N½NW¼; 9, N½NW¼; and 18, NW¼.

T. 10 S., R. 4 W.: sec. 34, S½SW¼.

Surveyed and unsurveyed portions according to the following metes and bounds: bordered on the north by a line commencing at the intersection of North River Road and the surveyed eastern section line of sec. 3, T. 11 S., R. 4 W.; thence east along said road to its junction with Via Puerta Del Sol; thence east approximately 0.5 mi to State Highway 76 nearest the midpoint of sec. 31, T. 10 S., R. 3 W.; thence northward and eastward along said highway to its intersection with the eastern section line of sec. 27, T. 9 S., R. 2 W.; and bordered on the south by a line commencing at the intersection of Murray Road and the surveyed eastern section line of sec. 3, T. 11 S., R. 4 W.; thence southward and eastward along said road to its junction with State Highway 76; thence eastward and northward along said highway to its junction with Santa Fe Avenue; thence southeastward 3,000 feet along said avenue; thence northward along a straight line to Guajome Lake Road at a point 800 feet from the junction of said road and State Highway 76; thence northwestward along Guajome Lake Road to its junction with said highway; thence eastward along said highway to its junction with River Road in sec. 31, T. 10 S., R. 3 W.; thence northward along said road to its intersection with the surveyed eastern section line of sec. 20, T. 10 S., R. 3 W.; thence north to and northeasterly along the 250-foot contour in sec. 21 through partially surveyed sec. 15, T. 10 S., R. 3 W.; thence north to a point about 0.2 mi south of the northwest corner of sec. 14 and continuing along the 300-foot contour from the western section line of sec. 14 eastward through unsurveyed sec. 11, surveyed secs. 13 and 12, T. 10 S., R. 3 W.; and surveyed sec. 18, T. 10 S., R. 2 W.; thence east to and along the 325-foot contour through sec. 1, T. 10 S., R. 3 W.; thence south to and along the 350-foot contour in secs. 6 and 5, T. 10 S., R. 2 W., and secs. 32 and 33, T. 9 S., R. 2 W., to the northern section line of sec. 33; thence east approximately 1.5 mi to the southeastern corner of sec. 27, T. 9 S., R. 2 W.; and thence north about 0.4 mi to State Highway 76 in Pala.

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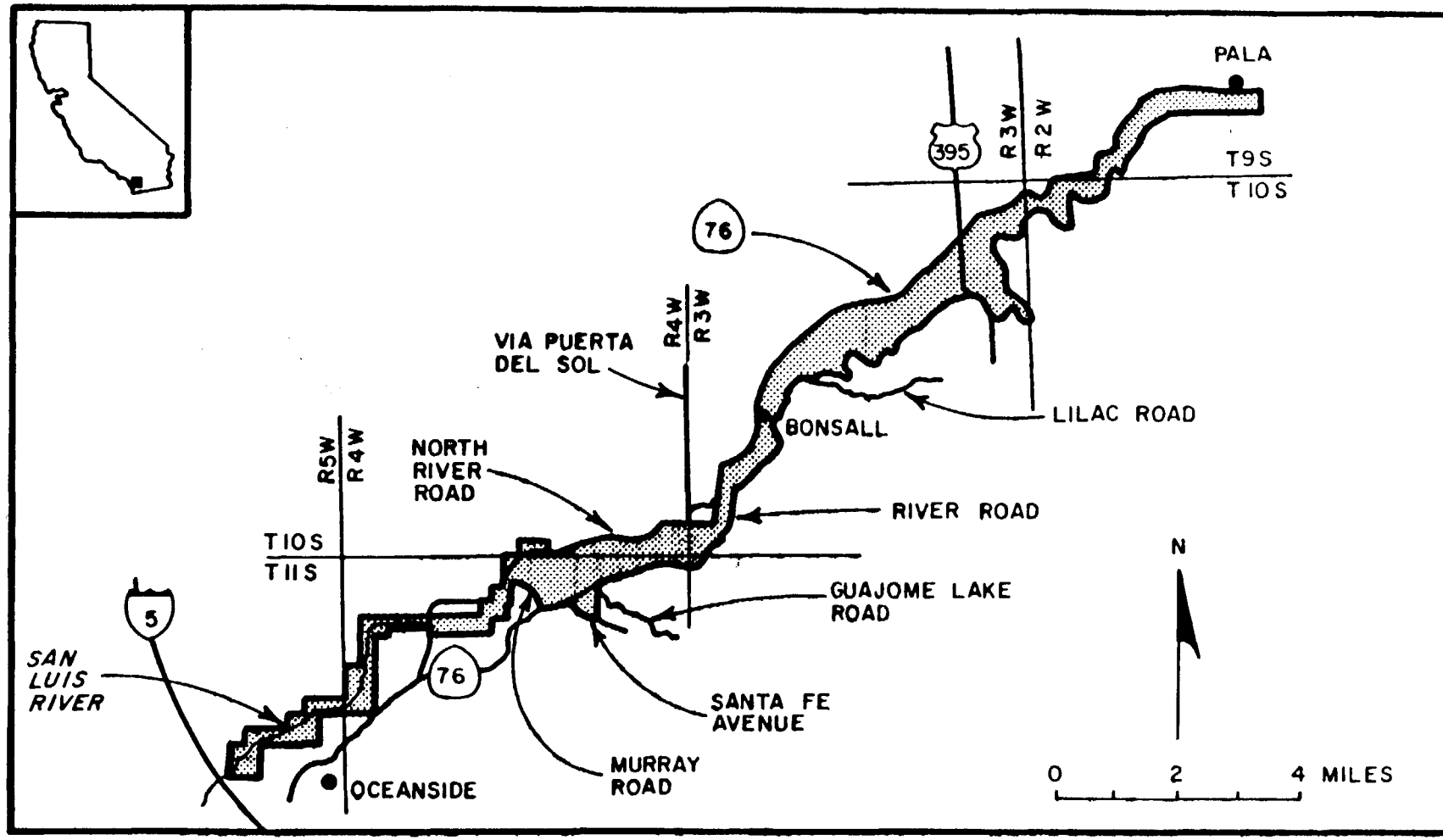

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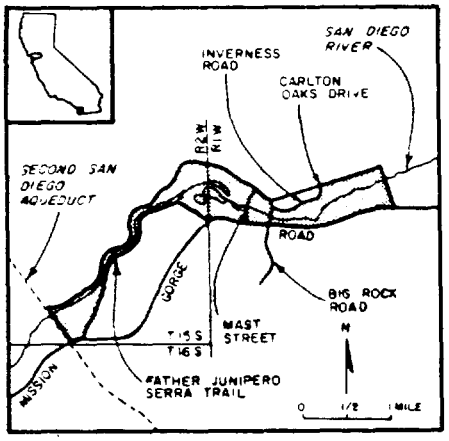
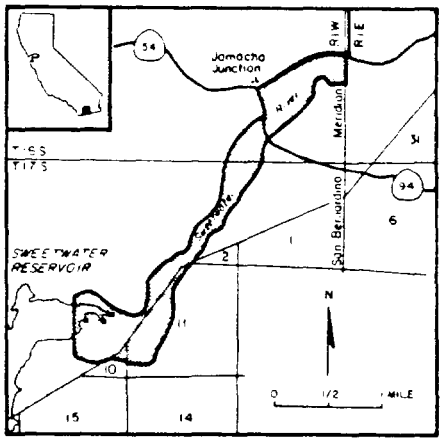
7. San Diego River, San Diego County (Index map location G).

T. 15 S., Rs. 1 and 2 W.: commencing at the intersection of the Second San Diego Aqueduct and Mission Gorge Road; thence eastward along said road to the western-most intersection with Father Junipero Serra Trail; thence northward and eastward along said trail to the eastern-most intersection of said trail and said road; thence eastward along Mission Gorge Road to its intersection with Carlton Hills Blvd.; thence northward to its intersection with Carlton Oaks Drive; thence westward along said drive to its eastern-most intersection with Inverness Road; thence westward along said road to its intersection with Carlton Oaks Drive; thence westward along said drive to its intersection with Mast Street; thence westward and southward along the 320-foot contour to its intersection with the Second San Diego Aqueduct on the north side of the San Diego River; thence southeastward along said adqueduct to its intersection with Mission Gorge Road.



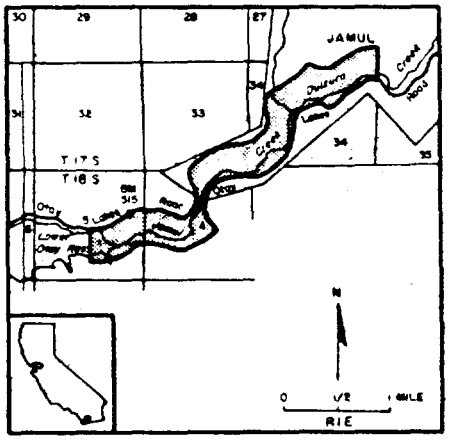
8. Sweetwater River, San Diego County (Index map location H).

Ts. 16 and 17 S., R. 1 W.: commencing at the intersection of the 320-foot contour and 116°58'14" W longitude immediately north of the confluence of Sweetwater River and Sweetwater Reservoir; thence eastward along the contour to the intersection of said contour with State Highway 94; thence northward along said highway to its intersection with State Highway 54; thence northeastward along said highway to the San Bernardino Meridian; thence south approximately 1,500 feet to the intersection with the 340-foot contour; thence westward and southward along said contour to the south end of the Steele Canyon Bridge on State Highway 94; thence south approximately 900 feet to the 340-foot contour; thence southwesterly along said contour to its intersection with 116°58'14" W longitude; thence north to starting point.



9. Jamul-Duzural Creeks, San Diego County (Index map location I).

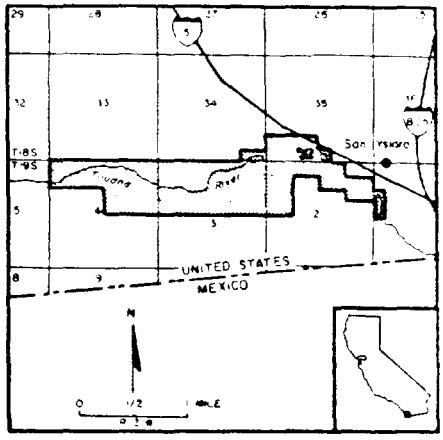
Ts. 17 and 18 S., R. 1 E.: commencing from a point approximately 2,200 feet west of BM 515 along Otay Lakes Road, in sec. 5, T. 18 S., R. 1 E.; thence east approximately one mile to the crossing of said road at a bridge over Jamul Creek, including all land within 1,500 feet southward of Otay Lakes Road as measured perpendicularly from the road; thence eastward for about 4.8 mi along said road to its intersection with State Route 94 and including all lands within 1,500 feet northward of said road as measured perpendicularly from the road, and including all lands within 500 feet of said bridge not otherwise included above.



10. Tijuana River, San Diego County (Index map location J).

T. 18 S., R. 2 W.: secs. 34, S1/2SE1/4SE1/4, and 35, S1/2SW1/4, SW1/4SW1/4SE1/4.

T. 19 S., R. 2 W.: secs. 1, W1/2SW1/4NW1/4; 2, S1/2NE1/4NE1/4, NW1/4NE1/4, N1/2SE1/4NE1/4, N1/2NE1/4NW1/4, W1/2NW1/4; 3, N1/2; and 4, NE1/4, N1/2NW1/4



Primary constituent elements: riverine and floodplain habitats (particularly willow-dominated riparian woodland with dense understory vegetation maintained, in part, in a non-climax stage by periodic floods or other agents) and adjacent coastal sage scrub, chaparral, or other upland plant communities.

Dated: July 14, 1992.

Richard N. Smith,

Acting Director, U.S. Fish and Wildlife Service.

[FR Doc. 92-18630 Filed 8-6-92; 8:45 am]

BILLING CODE 4310-55-M