# **Introduction**

This biological opinion addresses both operations and maintenance of the Central Valley Project (CVP) and implementation of the Central Valley Project Improvement Act of 1992 (CVPIA). The **Project Description** (starting on page 2-1) was developed collaboratively by the Bureau of Reclamation (Reclamation) and the Fish and Wildlife Service (Service) and includes, in part, the description of proposed actions found in the Programmatic Environmental Impact Statement for the CVPIA (PEIS).

The CVPIA is being jointly implemented by both Reclamation and the Service. Our intent is to show the collaborative and cooperative processes that have been, and will continue to be, established by both agencies. The **Agency Commitments for New and Continuing Project Actions** (page 2-2) and **Conservation Measures** (page 2-33) elucidate the strength of commitments from both agencies. These actions, combined with the specific guidance and measures that address **Water Service Contracts** (page 2-8), form a positive basis for dovetailing CVPIA and the Endangered Species Act of 1973, as amended (ESA).

The PEIS is a tiered National Environmental Policy Act (NEPA) document that allows for future sitespecific NEPA analysis on CVPIA actions. This biological opinion is similarly tiered. To better assist Reclamation and the Service in planning and project implementation, we have provided guidance on implementation of the ESA as an integral part of this opinion. Each section, or specific action, is accompanied by guidance on compliance with ESA.

Reclamation and the Service have several new and ongoing programs designed to further the purposes of ESA. These programs, and new accountability procedures, are incorporated into the **Project Description**. Commitments to uphold the ESA by both agencies, combined with implementation of these programs and meeting the assumptions of the effects analysis (page 4-1) contributed to the Service's decision-making process leading to a **Conclusion** of no jeopardy (page 4-31). The no-jeopardy conclusion at this programmatic scale is not intended to, and does not, preclude the Service from making a future jeopardy determination based on the effects analysis for a site-specific action. However, the (1) collection of data and monitoring, (2) communication, cooperation, and outreach, (3) conservation, restoration, compensation, and commitments to work together to recovery listed species, and (4) site specific consultation all diminish the likelihood of future jeopardy opinions tiered under this programmatic biological opinion.

To streamline consultations on one tier of this opinion, we have provided Reclamation with a programmatic incidental take statement for those aspects of CVP operations and maintenance that have not been addressed in previous opinions. Future operations and maintenance actions that are consistent with this opinion may be appended to this opinion in the future.

The Service and Reclamation have consulted on several large-scale projects and plans that impact species protected under the ESA. The results of these consultations have been biological opinions that stand on their own merits, that establish thresholds to ensure survival and recovery of listed species, and that establish a baseline for the effects considered by the consultations. Of particular note are: the Service's October 15, 1991, biological opinion on the Friant Water Contract Renewals (Friant, Service file #1-1-91-F-22); the Service's December 27, 1994, biological opinion on Interim Water Contract Renewal (Interim, Service file #1-1-94-F-69); the Service's March 6, 1995, biological opinion on Reclamations's Long-term Operations Criteria and Plan (OCAP, Service file #1-1-94-F-70); and the Service's opinions on the Los Vaqueros Project—in particular the September 9, 1993, opinion (Los Vaqueros, Service file #1-1-93-F-35). An annotated list of major consultations is provided on page 1-4. This biological opinion is based on the understanding that the thresholds identified in those earlier opinions are a part of the baseline for this consultation. Actions that are not consistent with the project description in this document have not been analyzed for their impacts on the survival and recovery of proposed and listed species.

To implement long-range planning and to assure efficient and effective implementation of CVPIA and ESA, Reclamation and the Service will continue coordination with the National Marine Fisheries Service (NMFS), California Department of Fish and Game (DFG), and California Department of Water Resources (DWR) on: (1) conservation actions needed to minimize the impact of the CVP on listed species and (2) developing a comprehensive evaluation of actions that require further formal or informal consultation tiered from this opinion.

Although this document is intended to dovetail with the NEPA process, it should be noted that Categorical Exclusions from NEPA are not exempted from ESA. The ESA guidance in this opinion is intended to be followed based on effects to listed species. Any ancillary or exclusionary language from laws other than ESA should not be used to bear upon any effects determinations that are made relative to listed species.

Numerous acronyms are used for actions and projects within the CVP and CVPIA. In this document use of acronyms has been limited to those entities, acts, and descriptors that are referred to frequently. A list of these acronyms is provided on the following page in Table 1.A.

#### **Table 1.A.** Acronyms used in this opinion

CVP Central Valley Project
CVPIA Central Valley Project Improvement Act
DFG California Department of Fish and Game
DWR California Department of Water Resources
ESA Endangered Species Act
HCP Habitat Conservation Plan
M&I Municipal and Industrial
NEPA National Environmental Policy Act
NMFS National Marine Fisheries Service
O&M Operation and Maintenance
PEIS Programmatic Environmental Impact Statement for the CVPIA
SWRCB State Water Resources Control Board

## **Study Area**

The area addressed in this biological opinion (Appendix A) is a subset of the Study Area described in the Programmatic Environmental Impact Statement (PEIS) for the Central Valley Project Improvement Act (CVPIA). It represents an area where direct and indirect service-area effects are expected to occur, and covers ten, specific, geographic areas used in the CVPIA PEIS: East and West Sacramento Valley; East and West San Joaquin Valley; East and West Tulare Basin; Delta; San Francisco Bay Area; San Benito/Santa Cruz/Santa Clara; and Trinity. The area corresponds to the Conservation Program Focus Area (Appendix A) combined with the Trinity geographic area (including northern Trinity and Humboldt Counties). The eastern boundary of the Study Area and Conservation Program Focus Area is limited to the areas within the watersheds that could be affected by provisions of the CVPIA—defined as extending from the valley floor to the western boundaries of national forests in the Sierra Nevada Mountains. The Study Area includes Shasta, Tehama, Glenn, Butte, Yuba, Colusa, Sutter, Yolo, Sacramento, San Joaquin, Stanislaus, Merced, Kings, Napa, Solano, Contra Costa, Alameda, Santa Clara, Santa Cruz, San Mateo, San Francisco, and San Benito Counties in their entirety. Portions of Trinity, Humboldt, Nevada, Placer, El Dorado, Amador, Calaveras, Tuolumne, Mariposa, Madera, Fresno, Tulare, and Kern Counties are also included in the Study Area. Del Norte, Siskiyou, Modoc, Lassen, Marin, Sonoma, Lake, Mendocino, Monterey, San Luis Obispo, Santa Barbara, Ventura, and Los Angeles Counties are excluded from the area addressed by this opinion. A total of 119 listed, proposed, and candidate species occur or potentially occur in the addressed area (Appendix B).

## **Consultation History**

The consultation history on CVP-related actions is long and varied. Records of these consultations are on file at the Sacramento Fish and Wildlife Office. To assist in understanding the scope of this opinion, we have provided the following time line of some recent Service-issued biological opinions (with the Service file number in parentheses) noting the species addressed in each:

- *October 15, 1991*—<u>Friant Water Contract Renewals</u> (1-1-91-F-22), San Joaquin kit fox, bluntnosed leopard lizard, Fresno kangaroo rat, and other species (amended May 14, 1992, appended to 1-1-95-F-39 on February 27, 1998)
- *February 12, 1993*—<u>Long-Term Operations Criteria and Plan for CVP Reservoirs</u> (1-1-93-F-10), bald eagle, salt marsh harvest mouse, California clapper rail.

*May 23, 1993*—<u>Operations Criteria and Plan (1-1-92-F-18)</u>, bald eagle, salt marsh harvest mouse, California clapper rail.

May 26, 1993—<u>1993</u> Operations Criteria and Plan-Delta smelt (1-1-93-F-32) delta smelt.

September 2, 1993—Los Vaqueros vernal pool shrimp conference opinion (1-1-93-C-68), vernal pool fairy shrimp, longhorn fairy shrimp, California linderiella.

September 3, 1993—Los Vaqueros Terrestrial (1-1-92-F-48), San Joaquin kit fox, bald eagle.

- September 9, 1993—Los Vaqueros Project (1-1-93-F-35), delta smelt.
- February 4, 1994—1994 Operations Criteria and Plan (1-1-94-F-2), delta smelt.
- December 27, 1994—Interim Water Contract Renewal (1-1-94-F-69), San Joaquin kit fox, large-flowered fiddleneck, giant garter snake, vernal pool fairy shrimp, other species.

*February 23, 1995*—<u>Amendment of December 27, 1994, Interim Water Contract Renewal</u> <u>opinion</u> to include critical needs planning (1-1-95-F-39).

- *March 6, 1995*—<u>Long-term Operations Criteria and Plan</u> (1-1-94-F-70) delta smelt, delta smelt critical habitat, Sacramento splittail [amended April 26, 1995 (1-1-95-I-804)].
- April 9, 1995—Striped Bass Management (1-1-95-F-58), delta smelt (amended on May 30, 1996).
- August 7, 1995—Los Vaqueros Project adoption of September 2, 1993, conference opinion (1-1-95-F-117), vernal pool fairy shrimp and longhorn fairy shrimp.
- June 6, 1996—Los Vaqueros Project (1-1-95-F-134), formal conference California red-legged frog and Alameda Whipsnake (amended November 1, 1995).
- August 14, 1996—<u>Interim Operation of Kern Water Bank</u> (1-1-95-F-63), San Joaquin kit fox and many others. [Action converted to a Habitat Conservation Plan (1-1-97-F-108)].
- *November 8, 1996*—<u>Los Vaqueros Project amendment</u> and adoption of June 6, 1996, conference opinion for California red-legged frog and issuance of conference opinion for Alameda whipsnake (1-1-96-F-151).
- April 26, 1996—<u>Temporary Barriers</u> (1-1-96-F-53), delta smelt and delta smelt critical habitat.
- Janurary 20, 1998—Interim Water Contract Renewal Opinion amendment (1-1-98-I-383), San Joaquin kit fox, large-flowered fiddleneck, giant garter snake, vernal pool fairy shrimp, other species.
- March 19, 1998—<u>Refuge Water Supply Program</u> (1-1-98-F-61) giant garter snake.
- May 4, 1998—<u>Draft Jeopardy on Interim South Delta Project</u> (1-1-97-F-184), delta smelt and delta smelt critical habitat.
- *December 7, 1998*—<u>Conveyance of Refuge Water Supply</u> East and West Sacramento Valley (1-1-99-F-15) giant garter snake.
- March 11, 1999—Water Service Contracts with Sacramento County Water Agency, San Juan Water District, and City of Folsom (1-1-97-F-161), several species.

March 19, 1999—Solano Project Contract Renewal (1-1-99-F-54), several species.

*June 28, 1999*—<u>Refuge Water Conveyance</u> Mendota Wildlife Management Area, Kern and Pixley National Wildlife Refuges (1-1-99-F-36) several species.

- *July 26, 1999*—<u>Amendment to 1-1-99-F-15 Refuge Water Conveyance</u>, West and East Sacramento Valley (1-1-99-128) giant garter snake and valley elderberry longhorn beetle.
- September 21, 1999—<u>CVPIA Land Retirement Program Demonstration Project</u>, Fresno, Kings and Tulare Counties (1-1-99-F-125) several species.