

# RECLAMATION

*Managing Water in the West*

**Draft Environmental Assessment**

**2013 American River Division Interim Water  
Service Contract Renewal for SMUD and  
SCWA**

**Central California Area Office, Folsom, California**



U.S. Department of the Interior  
Bureau of Reclamation  
Mid-Pacific Region

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## **Mission Statements**

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitment to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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# List of Acronyms and Abbreviations

AFY	Acre feet per year
CEQ	Council on Environmental Quality
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
EA	Environmental Assessment
EIS	Environmental Impact Statement
IRC	Interim Renewal Contract
ITA	Indian Trust Assets
M&I	Municipal and Industrial
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
PEIS	Programmatic Environmental Impact Statement
RPAs	Reasonable and Prudent Alternatives
SCWA	Sacramento County Water Agency
SMUD	Sacramento Municipal Utility District
SWP	State Water Project
USFWS	U.S. Fish and Wildlife Service

# Chapter 1 Introduction

In conformance with the National Environmental Policy Act of 1969 (NEPA), as amended, the Bureau of Reclamation (Reclamation) has prepared this Draft Environmental Assessment (EA) to evaluate and disclose any potential environmental impacts associated with implementation of two separate 26 month (January 1, 2012 through February 28, 2015) interim renewal CVP water service contract with Sacramento Municipal Utility District (SMUD) and Sacramento County Water Agency (SCWA).

## 1.1 Background

On October 30, 1992, the President signed into law the Reclamation Projects Authorization and Adjustment Act of 1992 (Public Law 102-575) that included Title 34, the Central Valley Project Improvement Act (CVPIA). In accordance with Section 3404(c) of the CVPIA, the Bureau of Reclamation (Reclamation) proposes to execute two interim water service contracts. Interim renewal contracts (IRC) are undertaken under the authority of the CVPIA to provide a bridge between the expiration of the original long-term water service contract and the execution of a new long-term water service contract. The water service contracts proposed for interim renewal are with the Sacramento County Water Agency (SCWA) and Sacramento Municipal Utility District (SMUD). SCWA and SMUD are two of seven contractors within the American River Division of the Central Valley Project (CVP).

Section 3409 of the CVPIA required that Reclamation prepare a programmatic environmental impact statement (PEIS) before renewing long-term Central Valley Project (CVP) water service contracts. The PEIS, completed in October 1999 and hereby incorporated by reference, analyzed the implementation of all aspects of CVPIA, contract renewal being one of many programs addressed by this Act. CVPIA Section 3404(c) mandated that upon request all CVP existing contracts be renewed. Implementation of other sections of CVPIA mandated actions and programs that require modification of previous contract articles or new contract articles to be inserted into renewed contracts. These programs include water measurement requirements (Section 3405(b)), water pricing actions (Section 3405(d)), and water conservation (Section 3405(e)). The PEIS evaluated CVP-wide impacts of long-term contract renewal at a programmatic level. Upon completion of contract renewal negotiations, the local effects of long-term contract renewals at the division level were evaluated in environmental documents that tiered from the PEIS.

Environmental documentation covering long-term renewal of American River Division water service contractors was completed in June 2005 (USBR, 2005) and is hereby incorporated by reference. This documentation evaluated the effects of renewing long-term contracts for SCWA, SMUD, San Juan Water District, Placer County Water

Agency, City of Roseville, El Dorado Irrigation District, and East Bay Municipal Utility District. The Record of Decision for the American River Division long-term renewals was signed on February 28, 2006. Three of the seven American River Division contractors, San Juan Water District, El Dorado Irrigation District, and East Bay Municipal Utility District were able to execute the long-term contracts prior to the beginning of the new contract year. The remaining Division contractors all had existing contracts in place that allowed for the continued delivery of water and for various reasons chose not to execute their long term contract at that time.

**Sacramento Municipal Utility District:** SMUD entered into a contract with Reclamation in February 1970 for the delivery of up to 60,000 acre-feet/year of CVP water for Municipal and Industrial (M&I) uses and for the delivery of up to 15,000 acre-feet of water rights water made available to SMUD by the City of Sacramento, as a result of a previous assignment of water by SMUD to the City of Sacramento. The CVP water under the contract was to be used by SMUD in its power generation operations, and was used for more than 15 years for the Rancho Seco nuclear power plant operations. In the 1980s, the nuclear power plant operations ceased. Since that time, water has been used for continued operation of the site including temperature controls for the nuclear fuels stored at the site. SMUD has received California Energy Commission approval for two gas-powered generators at the Rancho Seco site known as the Cosumnes Power Plant. The Cosumnes Power Plant (CPP) consists of a nominal 1000-megawatt combined-cycle natural gas fired plant. The plant was constructed in two phases, each consisting of 500 megawatts. SMUD has a yearly need of 2650 acre feet of water for the exclusive use of the CPP. This SMUD CVP water use is consistent since CPP went on line in 2006 and is also consistent with the Schedule provided to the Central California Area Office.

Currently, SMUDs CVP water is diverted from the American River at Nimbus Reservoir and delivered to the Ranch Seco site through the Folsom South Canal. The existing contract specifically requires SMUD to be responsible for conveyance, handling, disposal, and/or distribution of water beyond the point of facilities operated by the United States.

**Sacramento County Water Agency:** The CVP water service contract under Public Law 101-514 (PL 101-514) provides for the delivery of up to 15,000 acre-feet for M&I purposes within Zone 40. The Freeport Regional Water Plant (FRWP) dated January 3, 2005, EIS/EIR evaluated the assignment of 30,000 acre-feet of CVP water from SMUD to SCWA for use within Zone 40. CVP water assigned to SCWA is delivered through the FRWP intake on the Sacramento River near Freeport, under this renewal interim contract.

## 1.2 Project Description

The Proposed Action is to enter into two separate 26 month interim renewal water service contracts with the American River contractors, Sacramento Municipal Utility District (SMUD) and Sacramento County Water Agency (SCWA) to facilitate the delivery of up

to 60,000 acre-feet (AF) of Central Valley Project (CVP) water for municipal and industrial (M&I) uses in Sacramento County's Zone 40 (Zone 40) and SMUD's Rancho Seco service area (Maps 1 and 2). Reclamation would enter into a CVP contract with SMUD for 30,000 AF (Rancho Seco service area) and a CVP contract with SCWA for 30,000 AF (as per a SMUD assignment) for delivery to Zone 40.

The initial interim contract for SMUD and SCWA would be renewed for a 26 month period in order to move from a calendar year to a water year. Subsequent Interim contracts will be for a 24 month period. The term of both contracts would extend from January 1, 2013 through February 28, 2015 and contains the same water contract amounts and terms and conditions.. In the event a new long-term water service contract is executed, the interim water service contract then-in-effect would be superseded by the long-term water service contract and analyzed under a separate process.

No changes to any contractor's CVP service area and no construction is required as part of the Proposed Action. Any request by an interim contractor to change its existing service area would be a separate federal action. Separate appropriate environmental compliance and documentation would be completed before Reclamation approves a land inclusion or exclusion to any CVP contractor's service area.

### **1.3 Purpose and Need**

The purpose of the Proposed Action is to execute two interim renewal contracts to continue delivery of CVP water to SCWA and SMUD until their new long-term contracts can be executed. The term of both the SCWA and SMUD interim contract would be from January 1, 2013 through February 28, 2015.

Execution of these interim renewal contracts is needed to provide the mechanism for the continued beneficial use of the water developed and managed by the CVP and for the continued reimbursement to the federal government for costs related to the construction and operation of the CVP. Additionally, CVP water is essential to continue municipal and industrial water service for these contractors.

Use of contract water for M&I use under the proposed IRC would not change from the M&I purpose of use specified in the existing contract

# Chapter 2 Alternatives Including Proposed Action

## 2.1 No Action

Under the No Action alternative the 1970 contract between SMUD and Reclamation would expire on December 31, 2012 and there would be no contractual mechanism for Reclamation to deliver CVP water to SMUD or SCWA through the Folsom South Canal and the existing needs of SMUD and SCWA facilities would not be met.

## 2.2 Proposed Action

The Proposed Action is to enter into 2 separate interim water service renewal contracts one with SCWA and the other with SMUD to facilitate the continued delivery of up to 60,000 AF of water as follows:

Reclamation would enter into a CVP contract with SMUD for 30,000 AF (Rancho Seco service area) and a CVP contract with SCWA for 30,000 AF (as per a SMUD assignment) for delivery to Zone 40.

Water associated with these actions would be delivered at two points of diversions: (1) the point of delivery for SMUD's CVP water (30,000 AF) is milepost 24.681 (left side) on the Folsom South Canal located at a point 700 feet upstream from the inlet transition of the Laguna Creek siphon; (2) the two points of diversions for SCWA's CVP water (30,000 AF) are a) the intake for the Sacramento River Water Treatment Plant owned by the City of Sacramento and 2) the intake for the Freeport Regional Water Project on the Sacramento River. All points of diversion are approved CVP points of diversion.

Contract service areas for the proposed renewal contracts have not changed from current use or from that considered in the evaluation of long-term contract renewals conducted in 2005 (USBR, 2005) and the P.L. 101 514 water service contract EIS/EIR on SCWA of 1999. The proposed contract quantities remain the same as the respective contractors' existing water service contracts. Water can be delivered under the interim contracts in quantities up to the contract total, although reduced quantities may be made available consistent with contract water shortage provisions in years when water supplies are limited. The terms and conditions of the 2013 IRCs are incorporated by reference into the Proposed Action.

In the event a new long-term water service contract is executed under either of the proposed interim contracts, the interim water service contract then-in-effect would be superseded by the long-term water service contract and analyzed under a separate process.

For purposes of this EA, the following requirements are assumed under the Proposed Action:

- Execution of each interim renewal contract would be implemented as separate action;
- A 26 month interim renewal period is considered in the analysis;
- The contracts would be renewed with existing contract quantities;
- Reclamation would continue to comply with commitments made or requirements imposed by applicable environmental documents, such as existing biological opinions (BOs) including any obligations imposed on Reclamation resulting from re-consultations; and
- Reclamation would implement its obligations resulting from Court Orders issued in actions challenging applicable BOs that take effect during the interim renewal period.

## Chapter 3 Affected Environment & Environmental Consequences

Both SCWA and SMUD are contained within the American River Division of the CVP along with five other water purveyors. The service area boundaries within Sacramento County where CVP water is served is identified in Maps 1 and 2.

Consistent with the environmental analysis for the long-term contract renewals in the American River Division (USBR 2005), this EA considers the potential effects of the interim Water Service renewal contracts on the resources listed below. The analysis contained in the EIS (USBR 2005) is incorporated by reference into this document as well as the December 15, 2008 and June 4, 2009 Biological Opinions from Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS) respectively on the Continued Long-term Operations of the CVP and State Water Project (SWP).

This EA does not analyze resources for which it would be reasonable to assume that no impacts would occur from the implementation of the Proposed Action. Specifically, potential impacts to air quality, soils, land use, visual resources, recreation, transportation, noise, hazards and hazardous material, public services, utilities, and service systems are not analyzed because they were not identified as significant issues during scoping and it would not be reasonable to assume that 26 month interim renewals of water service contracts would result in impacts to these resources or services. In addition to the resources stated above, Reclamation considered and determined that the Proposed Action would not impact the following resources:

- Indian Trust Assets (ITA): There are no known ITA's or treaty rights exercised by tribes, nor are there any reservations or trust lands located within or adjacent to the Proposed Action that would be affected.
- Indian Sacred Sites: No Indian sacred sites have been identified within the footprint of the Proposed Action.
- Environmental Justice: Environmental Justice issues in the American River Division counties under the Proposed Action would be identical to conditions under the No Action Alternative.
- Global Climate: Impacts to climate change in the American River Division counties under the Proposed Action would be identical to conditions under the No Action Alternative.
- Cultural Resources: Impacts to cultural resources in the American River Division counties within the Proposed Action's area of potential effect is defined in the Long-term Contract Renewals in the American River Division EIS (USBR, 2005).

The Proposed Action would have no affect to cultural resources or historic properties because no land use changes or new development would occur in the renewal water service contract areas.

This EA will analyze the affected environment of the Proposed Action and No Action Alternatives in order to determine the potential impacts and cumulative effects to the following environmental resources.

### **3.1 Water Supply and Hydrology**

#### **3.1.1 No Action**

Implementation of the No Action alternative would mean that the interim contract would expire in December 2012 and 60 TAF of CVP-Project water would not continue to be delivered through Folsom South Canal to flow to SMUD facilities at Rancho Seco in the south eastern portion of Sacramento County or to SCWAs Zone 40 site. Both SMUD and SCWA would not have a contract mechanism for delivery of their CVP- Project water.

#### **3.1.2 Proposed Action**

Implementation of the Proposed Action which is continuing the existing conditions, does not change current hydrology for the water sources included in the Proposed Action. Reclamation is currently operating the overall CVP system to meet all regulatory requirements, downstream water needs, and environmental requirements. Water delivery quantities and patterns will be the same as in the No Action Alternative. Therefore, there will be no impacts to water resources.

The contracted water would be put to beneficial use within the authorized place of use for CVP water use within the contractors' water service areas. These contract quantities were included in the impact analyses presented in the December 15, 2008 and June 4, 2009, BOs from the USFWS and the NMFS, respectively on the Continued Long- term Operations of the CVP and the SWP. In addition, this action is also in accordance with Section 3404(c) of the CVPIA; in which the Final PEIS and Programmatic CVPIA BO were released in October 1999 and November 2000, respectively. The PEIS addressed the implementation of the CVPIA and the continued operation and maintenance of the CVP (incremental and cumulative effects). The CVPIA PEIS and the 2008/2009 BOs, included the full contract deliveries in the assumptions regarding future use. By including full deliveries, these impact assessments were able to adequately address the hydrologic, operational, and system-wide cumulative conditions expected under the future conditions.

Water delivered under the Proposed Action would be delivered to the service areas of SCWA and SMUD only. The interim contracts would provide for the continued delivery of the same quantities of CVP water to the same lands for the same M&I uses that are

provided for under existing contracts. Water deliveries would be made through existing CVP facilities. The Proposed Action does not require the construction of any new facilities, the installation of any new structures, or the modification of existing facilities.

With implementation of the Proposed Action, CVP reservoir storage and operations, surface water elevations, and release patterns would not change. The Proposed Action would not result in impacts to water resources.

## **3.2 Biological Resources**

### **3.2.1 No Action**

Implementation of the No Action Alternative would result in the expiration of the current contract in December 2012 and 60,000 AFY of CVP-Project water would not continue to be delivered through Folsom South Canal to SMUD facilities at Rancho Seco in the south eastern portion of Sacramento County or to SCWAs Zone 40 site. Both SMUD and SCWA would not have a contract mechanism for delivery of their CVP- Project water. The current contracts provide CVP water to SCWA and SMUD for M&I purposes. There would be no impact to biological resources under the No Action Alternative.

### **3.2.2 Proposed Action**

Biological Resources under the Proposed Action would be identical to conditions under the No Action Alternative. The interim contracts would provide for the continued delivery of the same quantities of CVP water to the same lands for the same M&I uses that are provided for under existing contracts. Water deliveries would be made through existing CVP facilities. The action does not require the construction of any new facilities, the installation of any new structures, or the modification of existing facilities. The water would be placed to beneficial use within the authorized place of use for CVP water from the Sacramento River. Implementation of the Proposed Action would not change biological resources within the action area and, therefore; the biological resources analysis contained in the Long-term Contract Renewals in the American River Division EIS (USBR, 2005), is incorporated by reference into this document as well as the 2008/2009 BOs from the USFWS and the NMFS, respectively on the Continued Long-term Operations of the CVP and SWP. Reclamation is currently operating the overall CVP system to meet all regulatory requirements, downstream water needs, and environmental requirements. Under the Proposed Action, Reclamation would continue to implement all current regulatory requirements. There would be no impacts to biological resources from the implementation of the Proposed Action.

### **3.3 Aquatic Resources**

#### **3.3.1 No Action**

The No Action alternative includes the operations of the CVP consistent with all requirements as described in the 2008/2009 BOs from the USFWS and the NMFS, respectively on the Continued Long-term Operations of the CVP and SWP. This includes the Reasonable and Prudent Alternatives (RPAs) contained in the 2008/2009 BOs from the USFWS and the NMFS, respectively on the Effects of the Coordinated Operations of the CVP and SWP to federally listed fish species. Actions taken to protect sensitive species in the American River include an annual water temperature management plan for steelhead, use of CVPIA section 3406 (b)(2) water supplies to supplement flows in the lower American River, flow and temperature requirements, and examinations of potential improvements to fish passage and structural temperature control options. The current contracts provide CVP water to SCWA and SMUD for M&I purposes. There would be no impact to aquatic resources under the No Action Alternative.

#### **3.3.2 Proposed Action**

Aquatic resources under the Proposed Action would be identical to conditions under the No Action Alternative. The interim contracts would provide for the continued delivery of the same quantities of CVP water to the same lands for the same M&I uses that are provided for under existing contracts. Water deliveries would be made through existing CVP facilities. The action does not require the construction of any new facilities, the installation of any new structures, or the modification of existing facilities. These contract quantities are included in the analyses and consistent with those presented in the 2008/2009 BOs from the USFWS and the NMFS, respectively on the Continued Long-term Operations of the CVP and SWP. This action is also in accordance with Section 3404(c) of the CVPIA; in which the Final PEIS and Programmatic CVPIA BO were released in October 1999 and November 2000, respectively. The PEIS addressed the implementation of the CVPIA and the continued operation and maintenance of the CVP (incremental and cumulative effects).

In addition, as part of the essential fish habitat conservation consultation, NMFS analyzed the effects of the Proposed Action on fall-run Chinook salmon in the lower American River. In general, NMFS identified the primary factors potentially limiting fall-run production within the lower American River as high water temperatures, reduced flow magnitude, and flow fluctuations. NMFS identified RPAs to alleviate the effects of Folsom Reservoir operations on fall-run Chinook salmon in the lower American River. The Proposed Action was addressed in the consultation and is subject to the NMFS BO.

Reclamation is currently operating the overall CVP system to meet all regulatory requirements, downstream water needs, and environmental requirements. Under the Proposed Action, Reclamation would continue to implement all current regulatory actions. The Proposed Action would not alter CVP operations, water storage or release

patterns from CVP facilities, or the maximum volume of water to be delivered to the American River Division. There would be no impacts to aquatic resources from the implementation of the Proposed Action.

### **3.4 Facility Operations**

#### **3.4.1 No Action**

Implementation of the No Action alternative would mean that the interim contract would expire in December 2012 and 60 TAF of CVP-Project water would not continue to be delivered through Folsom South Canal to flow to SMUD facilities at Rancho Seco in the south eastern portion of Sacramento County or to SCWAs Zone 40 site. Both SMUD and SCWA would not have a contract mechanism for delivery of their CVP- Project water.

#### **3.4.2 Proposed Action**

The Final EIS for the June 2005 Central Valley Project Long Term Service Contract Renewals American River Division included analysis to evaluate potential impacts to Folsom Reservoir operations and Reclamation's management of the cold water pool with implementation of SMUDs project water. This analysis indicates that no changes in cold water pool volume would result in any change to Folsom Reservoir operations and therefore would not have any additional affect on Reclamation's ability to meet downstream fisheries requirements. Because the implementation of these water service contracts was found to not affect Folsom Reservoir operations, it is reasonable to conclude that implementation of the Proposed Action, two temporary 26 month contracts, would also not result in additional affects to Reclamation's operation of Folsom Reservoir or management of the cold water pool, as this is a renewal for ongoing operations within the CVP.

### **3.5 Wildlife Resources**

The following section describes the terrestrial habitats and wildlife associated with the principal waterways: Folsom Lake, lower American River, and lower Sacramento River.

#### **Folsom Lake**

Habitats associated with Folsom Reservoir include oak woodland and annual grassland. The oak woodland habitat, located on the upland banks and slopes of the reservoir, is dominated by live oak, blue oak, and foothill pine with several species of understory shrubs and forbs including poison oak, manzanita, California wild rose, and lupine. Annual grasslands occur around the reservoir, primarily at the southern end and consist of wild oats, soft chess brome, ryegrass, mustard, and foxtail.

The reservoir rim is surrounded by a barren band (the drawdown zone) as a result of historic fluctuations in water elevations. The majority of this zone is devoid of vegetation, although arroyo willows and narrow-leaved willows have established in some areas (USFWS, 1991). The only contiguous riparian vegetation occurs along Sweetwater Creek at the southern end of the reservoir (USFWS, 1991). Because the drawdown zone is virtually devoid of vegetation and the sparse willows that have established in some areas do not form a contiguous riparian community, the drawdown zone does not possess substantial habitat value.

Oak woodlands and annual grasslands in the reservoir area support a variety of birds, including acorn woodpecker, Nuttall's woodpecker, western wood pewee, scrub jay, Bewick's wren, plain titmouse, hermit thrush, loggerhead shrike, black-headed grosbeak, dark-eyed junco, and Bullock's oriole. A number of raptors also will use oak woodlands for nesting, foraging, and roosting. These include red-tailed hawk, American kestrel, sharp-shinned hawk, Cooper's hawk, red-shouldered hawk, great horned owl, and long-eared owl. Mammal species likely to occur in the woodland habitat include mule deer, coyote, bobcat, gray fox, Virginia opossum, raccoon, striped skunk, black-tailed jackrabbit, California ground squirrel, and a variety of rodents. Amphibians and reptiles that may be found in oak woodlands include California newt, Pacific tree frog, western fence lizard, gopher snake, common kingsnake, and western rattlesnake.

The annual grassland surrounding Folsom Reservoir represents habitat for a variety of rodents, which, in turn, serve as a prey base for carnivores such as hawks and owls, coyote, bobcat, gray fox, and some snakes. Although very few birds will nest in the grassland areas, a number of species will forage in this habitat, including white-crowned sparrow, lesser goldfinch, western meadowlark, and several raptor species. Migratory waterfowl are known to feed and rest in the grasslands associated with the north fork of Folsom Reservoir (USFWS, 1991). Several of the reptiles and amphibians that inhabit the oak woodlands also will occur in the adjacent non-native grasslands.

### **Lower American River**

The lower American River provides a diverse assemblage of vegetation communities, including freshwater emergent wetland, riparian forest and scrub, and in the upper, drier areas further away from the river, oak woodland and annual grassland. The current distribution and structure of riparian communities along the river has been determined by human-induced changes such as gravel extraction, dam construction and operations, and levee construction and maintenance, as well as by both historic and ongoing streamflow and sediment regimes and channel dynamics (Sands et al., 1985; Watson, 1985). As a result of these factors, several riparian vegetation zones exist along the banks of the lower American River. The composition and vegetative structure of these zones at any particular location along the river depends on the geomorphology and other physical characteristics of the riverbank.

In general, willow and alders tend to occupy areas within the active channel of the river, which are repeatedly disturbed by river flows, thus prohibiting successional stages in advancement of plant communities leading to full development of the plant community. Plant species in this zone typically include various species of willow. Cottonwood-willow thickets and cottonwood forests occupy the narrow belts along the active river channel where repeated disturbance by occasional large flows keep the communities at earlier stages. Fremont cottonwood dominates these riparian forest zones but willow, poison oak, wild grape, blackberry, northern California black walnut, and white alder also are present.

Cottonwood forest is typical of the steep, moist banks along much of the river corridor. Valley oak woodland occurs on upper terraces composed of fine sediment where soil moisture provides a long growing season. Valley oak is the dominant tree species in these areas, although some of the sites also have a cottonwood component as a result of infrequent flood inundation. Live oak woodland occurs in the more arid and gravelly terraces that are isolated from the fluvial dynamics and moisture of the river. Annual grassland commonly occurs in areas that have been disturbed by human activity and can be found on many of the sites within the river corridor.

Backwater areas and off-river ponds that are recharged during high flows support emergent wetland vegetation. These habitat areas are located throughout the length of the river, but occur more regularly downstream of the Watt Avenue bridge. Plant species that dominate this habitat type include various species of willow, sedge, cattail, bulrush, rush, barnyard grass, slough grass, and lycopodium.

Previous studies have determined that the cottonwood-dominated riparian forest and areas associated with the backwater and off-river ponds are highest in wildlife diversity and species richness relative to other river corridor habitats (Sands et. al., 1985; Watson, 1985; USFWS, 1991). More than 220 species of birds have been recorded along the lower American River and more than 60 species are known to nest in the riparian habitats (USFWS, 1991). Common species that can be found along the river include great blue heron, mallard, red-tailed hawk, red-shouldered hawk, American kestrel, California quail, killdeer, belted kingfisher, western scrub jay, ash-throated flycatcher, tree swallow, and American robin. Additionally, more than 30 species of mammals reside along the river, including striped skunk, Virginia opossum, brush rabbit, raccoon, western gray squirrel, California ground squirrel, meadow vole, muskrat, black-tailed deer, gray fox, and coyote. The most common reptiles and amphibians that depend on the riparian habitats along the river include western toad, Pacific tree frog, bullfrog, western pond turtle, western fence lizard, common garter snake, and gopher snake.

### **Lower Sacramento River**

Much of the Sacramento River is confined by levees that reduce the natural diversity of riparian vegetation. Agricultural land (rice, dry grains, pastures, orchards, vineyards, and row and truck crops) is common along the lower reaches of the Sacramento River, but is

less common in the upper portions. Riparian vegetation along the lower Sacramento River is largely confined to narrow bands between the river and the river side of the levee. The riparian communities consist of valley oak, cottonwood, wild grape, box elder, elderberry, and willow. The largest and most significant tract of riparian forest remaining on the Sacramento River is a stretch between Chico Landing and Red Bluff. Freshwater emergent wetlands occur in the slow moving backwaters and are primarily dominated by tules, cattails, rushes, and sedges (SAFCA and Reclamation, 1994). Although riparian vegetation occurs along the Sacramento River, these areas are confined to narrow bands between the river and the river side of the levee.

The wildlife species inhabiting the riparian habitats along the lower Sacramento River are essentially the same as those found along the lower American River. These include, but are not limited to, wood duck, great blue heron, great egret, green heron, black phoebe, ash-throated flycatcher, sora, great horned owl, Swainson's hawk, California ground squirrel, and coyote. Agricultural areas adjacent to the river also represent foraging habitat for many raptor species.

### **3.5.1 No Action**

Wildlife resources under the No Action would not alter CVP operations, water storage or release patterns from CVP facilities, or the maximum volume of water to delivered to be the American River Division.

### **3.5.2 Proposed Action**

Wildlife resources under the Proposed Action would not alter CVP operations, water storage or release patterns from CVP facilities, or the maximum volume of water to be delivered to the American River Division.

## **3.6 Cumulative Impacts**

According to the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA, a cumulative impact is defined as *the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions*. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The SCWA and SMUD interim contract renewals would not result in cumulative adverse impacts to environmental resources when considered in combination with other past, present, and reasonably foreseeable future actions. This action is a continuation of current project water conveyance and implementation of this action would be the continuation of current events. The CVPIA PEIS included the full contract deliveries in the assumptions

regarding future use. By including full deliveries, these impact assessments were able to adequately address the hydrologic, operational, and system-wide cumulative conditions expected under the future conditions. The analyses also indicated that future projects, including future water transfer projects, may improve CVP water supply reliability. These types of programs would modify water supply reliability but not change long-term CVP contract amounts or deliveries from within the historical ranges.

## Chapter 4 Consultation and Coordination

This section presents the agencies and parties that were coordinated or consulted with during development of the document, the applicable Federal, State, and local requirements the project will comply with, and the distribution list.

Agencies and parties that were contacted during the development of this document:

- National Marine Fisheries Service
- Fish and Wildlife Service

It is reasonable to assume that the 2008 and 2009 BOs, and proceeding BOs have properly identified and analyzed the impacts associated with the movement of this water through Folsom South Canal. Furthermore, the 2008/2009 BOs provided additional analyses for the movement of this water and the Reasonable and Prudent Alternatives (RPAs) developed by NMFS and FWS allowed for continued and ongoing operation of the CVP. Therefore, the renewal of these contracts is seen as an administrative action and not a new action that will hinder current operations in managing Folsom Reservoir, Lower American River, or the Folsom South Canal.

The 2008FWS Biological Opinion and 2009 NMFS Biological Opinion for the continued operations of the CVP and State Water Project (SWP) indicates Reasonable and Prudent Alternatives (RPAs) to ensure that project related effects on protected species and their critical habitats are ameliorated to the extent possible. Reclamation has submitted an Environmental Assessment for two 26 month interim renewal water service contracts under Section 7(a)(2) of the Endangered Species Act. The action area is defined as the water and streams within SCWA (Zone 40 and Folsom) and SMUD's (Rancho Seco) CVP service areas as derived from the Sacramento and American River watersheds.

- Sacramento Municipal Utility District
- Sacramento County Water District

## Chapter 5 References

National Marine Fisheries Service, Biological Opinion on the Continued Long-term Operations of the Central Valley Project and the State Water Project, June 4, 2009.

U.S. Department of the Interior. Bureau of Reclamation. U.S. Fish and Wildlife Service, Sacramento, California. Central Valley Project Improvement Act Programmatic Environmental Impact Statement, October 1999

U.S. Bureau of Reclamation and Freeport Regional Water Authority. Freeport Regional Water Project, Final Environmental Impact Statement, September 2004.

U.S. Bureau of Reclamation, Long-term renewal of the American River Division water service contract, June 2005.

U.S. Fish and Wildlife Service, Biological Opinion on the Continued Long-term Operations of the Central Valley Project and the State Water Project, December 15, 2008.

Reclamation Projects Authorization and Adjustment Act of 1992 (Public Law 102-575), Title 34, the Central Valley Project Improvement Act (CVPIA), October 30, 1992.