



# **FINDING OF NO SIGNIFICANT IMPACT AND ENVIRONMENTAL ASSESSMENT**

**Two-Year Agreement for the Acquisition of  
Water from Santa Clara Valley Water District  
In support of the Environmental Water Account  
Under the CALFED Bay-Delta Program**



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

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WATER FROM SANTA CLARA VALLEY WATER DISTRICT  
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UNDER THE CALFED BAY-DELTA PROGRAM

United States Department of the Interior  
Bureau of Reclamation  
Mid-Pacific Region  
Sacramento, California

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FONSI Number: 06-04-MP

## **FINDING OF NO SIGNIFICANT IMPACT**

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**Bureau of Reclamation  
Mid-Pacific Region  
Sacramento, California**

#### **BACKGROUND**

The Environmental Water Account (EWA) is a cooperative water management program being implemented by the U.S. Bureau of Reclamation, California Department of Water Resources, California Department of Fish and Game, United States Fish and Wildlife Service and National Marine Fisheries Service. The EWA is a mechanism for purchasing, allocating and delivering Central Valley Project /State Water Project water and other water for environmental purposes. The proposed action would facilitate acquisition of water supply for EWA purposes.

The purpose of the proposed acquisition and transfer is to obtain water from the Santa Clara Valley Water District (SCVWD) for the EWA over the next 2 years. The proposed action reflects similar water acquisitions that were analyzed in greater detail in the Draft EWA Environmental Impact Statement /Environmental Impact Report, July 2003. EWA needs to secure water sources on a willing buyer, willing seller basis. The proposed action would allow flexibility for both the EWA and SCVWD in the management of their water resources. The no action alternative would not allow for the acquisition of SCVWD water supplies.

#### **FINDINGS**

An environmental assessment (EA) was prepared to evaluate the potential environmental impacts associated with the proposed action and the no action alternative. The EA is attached for reference.

In accordance with the National Environmental Policy Act of 1969, as amended, the Mid-Pacific Regional Office of the U.S. Bureau of Reclamation (Reclamation) has found that the 2 year agreement for the acquisition of up to 50,000 acre-feet of water per year from SCVWD in support of the EWA is not a major Federal action that would significantly affect the human environment. Therefore, an environmental impact statement is not required.

This finding of no significant impact is based on the following:

- The proposed action would not adversely affect surface water resources in SCVWD, Semitropic Water Storage District or in the conveyance facilities and structures that would be utilized. Water acquired and transferred from SCVWD is considered to be temporarily in excess by SCVWD due to adequate water supplies; therefore, surface water resources would not be overburdened to accomplish the proposed action. There would not be any changes in Delta pumping operations with the implementation of the proposed action.
- Water transfers would be conveyed through existing facilities. Construction of additional facilities to transport water would not be necessary.
- The proposed action would not adversely affect ground water resources in SCVWD or Semitropic. Transfer water from SCVWD would not be made available from ground water within the district, as the district does not own any pumps. Furthermore, any pumping by individuals in SCVWD, would not overburden ground water resources within SCVWD to meet their needs. Ground water resource impacts resulting from Semitropic operations have been analyzed in the *Semitropic Groundwater Banking Project, Final Environmental Impact Report, Findings and Mitigation Monitoring Plan*; July, 1994.
- No changes in land use would occur as a result of the proposed action. The proposed action is temporary and would not facilitate any land conversions. In addition, no land fallowing or habitat restoration would be deferred, and no lands would be annexed into any service area to specifically use transfer or exchange water made available by the proposed action. No native, untilled, or similar habitats would be disturbed by the proposed action.
- The proposed action would not affect any Federal listed or special status species. No construction would be necessary to facilitate the proposed action. All transfer water would be conveyed through existing facilities and therefore no disturbances to federally listed, special status species and critical habitats would occur. There would be no increases in water deliveries from the Delta.
- Cultural resources would not be affected due to the proposed action because no new land use changes or new construction would occur.
- The absence of Indian Trust Assets in areas affected by the water acquisition and transfer precludes any impact.
- Minority or disadvantaged populations or communities would not be adversely affected by the proposed action. The proposed action would not cause dislocation, changes in employment, or increase flood, drought, or disease to

minority or disadvantaged populations or communities within SCVWD or Semitropic.

- The proposed action would not contribute to a cumulatively significant adverse impact when added to other past, present and reasonably foreseeable future actions, given the relatively small amount of water involved and the short-term and temporary nature of the water acquisition and transfer.

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## Definitions

**AF:** Acre-feet

**Approved Table A water:** The amount of State Water Project (SWP) water designated in Table A of Santa Clara Valley Water District's (SCVWD) Water Supply Contract and Semitropic Water Storage District (Semitropic) Water Supply Contract with the Department of Water Resources (DWR). The amount annually allocated to each contractor is dependent on current year hydrology and a determination by DWR indicating available water as a percentage (per each contract).

**Article 21 Water:** Water made available for State contractors at reduced price when capacity exists at Banks Pumping Plant. Article 21 water is excess water from the Delta that DWR can pump under its own water right permits with the State Water Resources Control Board (SWRCB). Usually, this water is provided when the SWP side of San Luis Reservoir is full and is over and above what is being pumped to meet current SWP Contractor's Table A demand at the time the Article 21 water is being made available.

**CA:** California Aqueduct, the State Water Project's main distribution facility from the Harvey O. Banks Pumping Plant in the southern Delta to customers in the southern San Joaquin Valley, Central Coast, and southern California.

**CVP:** The United States Central Valley Project.

**DMC:** Delta Mendota Canal, the Central Valley Project's main distribution canal from the Tracy Pumping Plant in the southern Delta to customers in central and western San Joaquin Valley, and southern Bay Area counties.

**DWR:** State of California, Department of Water Resources

**EWA:** The Environmental Water Account established by the August 28, 2000, CALFED Bay-Delta Program Programmatic Record of Decision, as amended. The EWA is a mechanism for purchasing, allocating and delivering Central Valley Project (CVP)/SWP water and other water for environmental purposes.

**EWA Assets:** Alternative sources of water supply which will be used to augment stream flows, Delta outflows, and to replace regular CVP and SWP project water supplies interrupted by pumping curtailments made at CVP/SWP export facilities in the Delta to protect at-risk fish species.

**EWA CVP Water:** Water Reclamation purchases from SCVWD's current year's CVP water for the EWA.

**EWA Operating Principles Agreement:** The Environmental Water Account Operating Principles Agreement, which is Attachment No. 2 to the CALFED ROD dated August 28, 2000, as amended. This agreement sets forth the key policy principles under which the

EWA operates and identifies water acquisition and management tools available for the EWA's implementation.

**EWA Management Agencies:** USFWS, NOAA Fisheries, and the California Department of Fish and Game (CDFG).

**EWA SWP Exchange Water:** SCVWD's current year's SWP Approved Table A Water that would be exchanged for EWA CVP water purchased by Reclamation from SCVWD for EWA.

**Export Service Area:** The combined service areas of the Central Valley Project and State Water Project that receive water pumped from the Delta. These areas include the southern Bay Area; central, western, and southern San Joaquin Valley; Central Coast; and southern California.

**Groundwater Bank:** Semitropic Water Storage District's Groundwater Banking Program

**Parties:** Reclamation and SCVWD.

**EWA Project Agencies:** DWR and Reclamation

**POU:** "Place of Use;" Reclamation's and DWR's respective water service delivery areas as designated under their individual SWRCB water rights permits.

**Purchased Water:** Water that SCVWD proposed to provide to Reclamation for the EWA either from its SWP Approved Table A or Article 21 water previously stored in Semitropic's ground water basin (which remains in storage as of the date of this agreement); or by transferring a portion of its current year's CVP water, or as a EWA SWP Exchange Water, or as a combination of these actions.

**SCVWD:** Santa Clara Valley Water District

**Semitropic:** Semitropic Water Storage District

**Semitropic Exchange Water:** Semitropic's SWP Approved Table A that would be provided to SCVWD in exchange for SCVWD's previously stored SWP Approved Table A and/or Article 21 water in Semitropic's Groundwater Bank.

**SWP:** California State Water Project

**SWRCB:** California State Water Resources Control Board

**Transfer Water:** CVP/previously stored SWP Approved Table A or Article 21 water sold by SCVWD to Reclamation for the EWA on a willing buyer, willing seller basis.

**Water Service Contract:** SCVWD's contract with the United States for water service that was entered into on June 7, 1977, as amended or renewed.

**Water Supply Contract:** SCVWD's contract with DWR for water supply that was entered into on November 20, 1961 and the SCST Banking Program Agreement.

# **ENVIRONMENTAL ASSESSMENT**

## **Two-Year Agreement for the Acquisition of Water from Santa Clara Valley Water District In support of the Environmental Water Account Under the CALFED Bay-Delta Program**

### **INTRODUCTION**

The United States Department of the Interior Bureau of Reclamation (Reclamation) proposes to annually acquire up to 50,000 acre-feet (AF) of water from the Santa Clara Valley Water District (SCVWD) in years 2006 and 2007. Reclamation would be acting on behalf of the Environmental Water Account (EWA) under the California Bay-Delta Authority's CALFED Program. The EWA is a mechanism for purchasing, allocating and delivering Central Valley Project (CVP)/ previously stored State Water Project (SWP) Approved Table A or Article 21 water and other water for environmental purposes. The EWA anticipates a need for up to 50,000 AF per year of transfer water from SCVWD. SCVWD would sell to Reclamation a maximum of 50,000 AF annually from the following sources:

- Yearly CVP allocation,
- SWP Approved Table A Water via exchange only,
- previously banked SWP Table A or Article 21 water, or
- combination of these CVP and SWP water supplies.

The transfer water would offset impacts of pumping reductions implemented at SWP Banks and CVP Tracy Delta pumping plants to protect at-risk native fish species of the San Francisco Bay/Sacramento and San Joaquin Delta (Bay-Delta). Prior to Reclamation's contracting officer approving the transfer of SCVWD's yearly CVP water to EWA, verification that the proposed transfer meets the necessary Central Valley Project Improvement Act's (CVPIA) Water Transfer Provisions would be needed.

In accordance with the National Environmental Policy Act (NEPA) this environmental Assessment (EA) presents the analysis performed regarding the proposed action's potential impacts on the human environment.

## **BACKGROUND**

### **Central Valley Project**

Reclamation owns and operates the CVP, which provides water for agriculture, municipal and industrial, environmental, flood control, and recreational purposes in 35 of California's 58 counties. The CVP consists of 20 reservoirs with a combined storage capacity of approximately 11 million AF, 8 power plants, 2 pumping plants, and approximately 500 miles of major canals and aqueducts. On an average annual basis, the CVP delivers approximately 7 million AF of water to 250 water contractors in the Central Valley, the Santa Clara Valley and the San Francisco Bay Area.

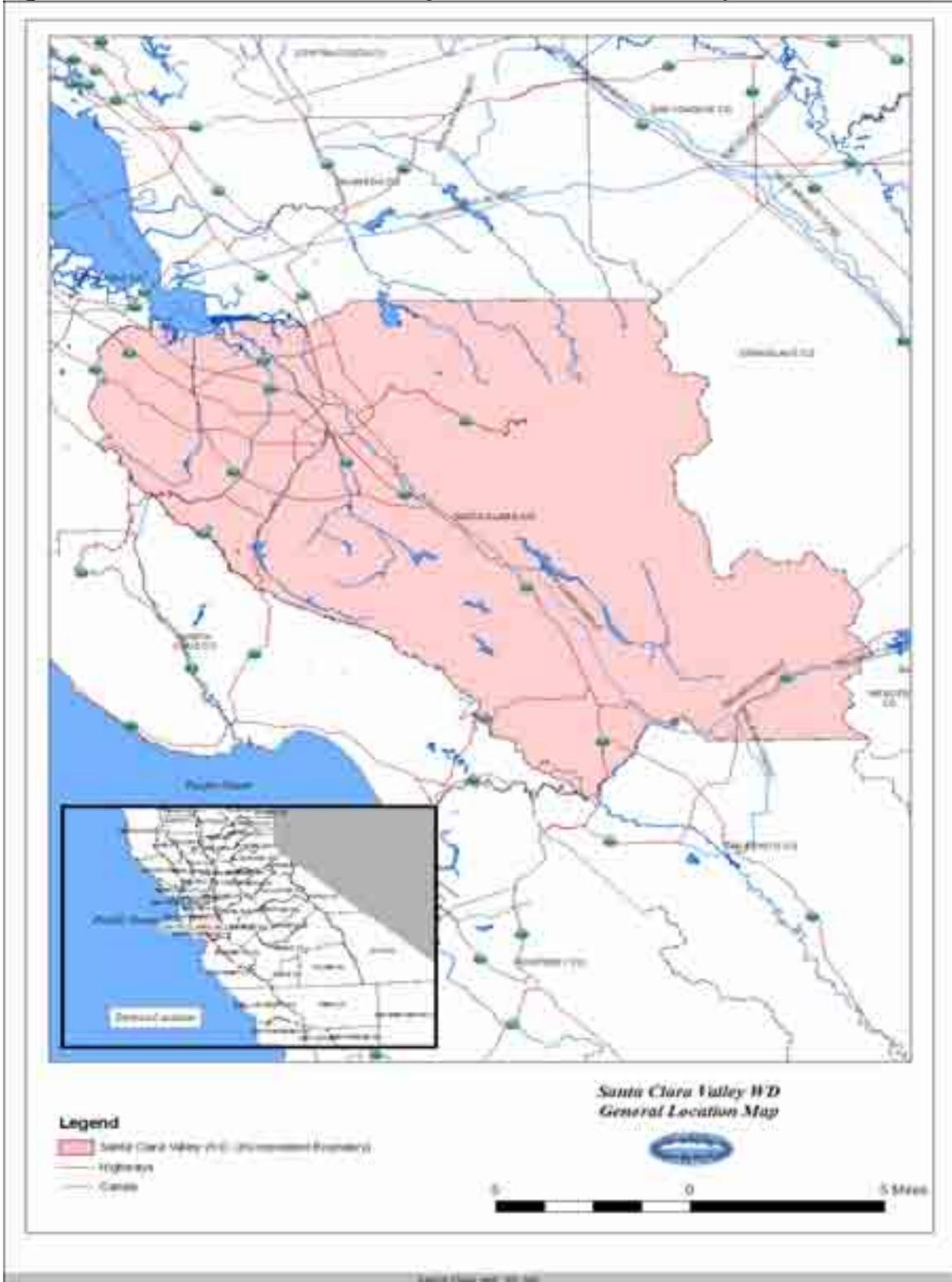
### **State Water Project**

DWR manages the SWP, which was designed and built to deliver water for municipal, agricultural, flood control, power generation, recreational, and environmental purposes. The SWP includes 28 reservoirs, 26 pumping and generating plants, and approximately 660 miles of aqueducts. The SWP delivers an average annual volume of approximately 3.5 million AF of water to 29 agencies in the San Francisco Bay Area, San Joaquin Valley, and Southern California.

### **Santa Clara Valley Water District**

The SCVWD is a special district established by the State of California Legislature. SCVWD receives annual allocations of water from the CVP and the SWP pursuant to its contracts with Reclamation and DWR, respectively. During 2006-2007, the combination of CVP/SWP contract deliveries and other sources of non-CVP/SWP water will be delivered by SCVWD to its three water treatment plants, its groundwater recharge facilities, or to storage in local reservoirs (primarily Anderson Reservoir) or in Semitropic Water Storage District's (Semitropic) Groundwater Bank. SCVWD's maximum total water supply allocations from the CVP and SWP equal 252,000 AF per year, although only a fraction of this quantity is delivered in most years. SCVWD is shown in Figure 1.

Figure 1.. Location of Santa Clara Valley WD General Location Map



Reclamation 2006, EA 05-126

## **Semitropic Water Storage District**

Semitropic is located in north central Kern County in the San Joaquin Valley, about 20 miles northwest of the City of Bakersfield as shown in Figure 2. The predominant land use is agriculture. The total area of Semitropic is approximately 221,000 acres (345 square miles), with about 136,000 acres (213 square miles) irrigated. There are no incorporated cities within Semitropic.

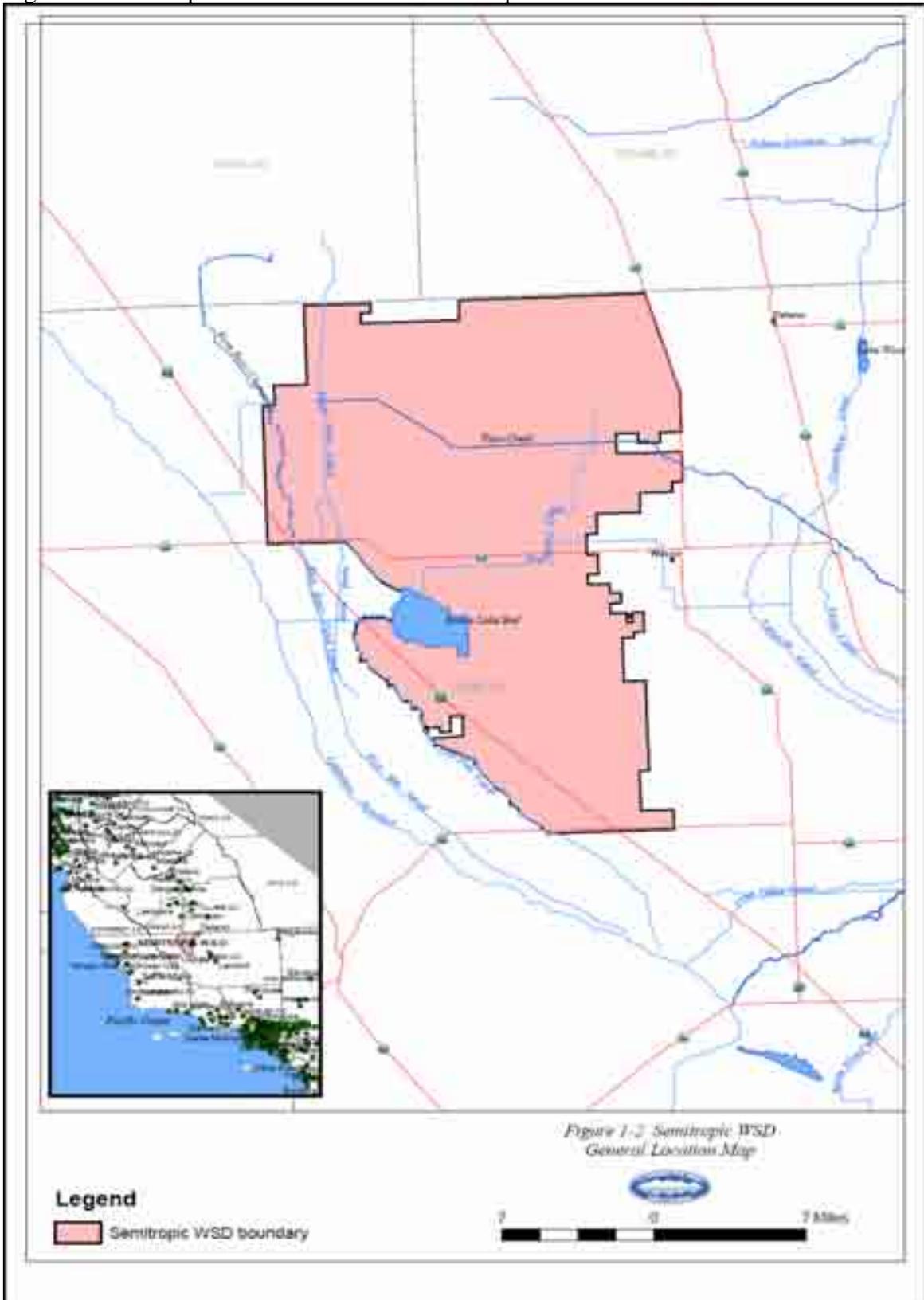
Semitropic was organized in 1958 for the purpose of supplying supplemental water within its service area boundaries. During the 1960's, Semitropic developed and implemented plans for conveyance and distribution facilities extending from the California Aqueduct to agricultural delivery locations in its service area. Prior to these deliveries, the irrigated agriculture within Semitropic was totally dependent on pumping underlying groundwater.

## **Semitropic Groundwater Banking Program**

In 1995, Semitropic began implementation of the Semitropic Groundwater Banking Program (Groundwater Bank). Semitropic's Groundwater Bank is a long-term water storage program designed to recharge groundwater and reduce overdraft, increase operational reliability and flexibility, and to optimize the distribution and use of available water resources between Semitropic and potential banking partners. Under the program, the banking partner delivers a portion of its unused SWP, CVP, or other surface water supplies to the Groundwater Bank. Semitropic could use this water in lieu of pumping groundwater for irrigation, or could directly recharge the underlying groundwater basin. Upon request, Semitropic returns the banking partner's previously stored water by pumping the water from its groundwater basin through pump-in facilities into the California Aqueduct and then providing the banking partner with an equivalent portion of its SWP Approved Table A water supply at Bethany Reservoir or O'Neill Forebay which is then delivered by DWR.

The potential environmental impacts that could result from the construction and operation of Groundwater Bank were addressed in the Program's Final Environmental Impact Report (EIR) which was approved and certified by Semitropic's Board of Directors on July 13, 1994. At the time the Groundwater Bank Final EIR was prepared, the only committed banking partner was the Metropolitan Water district of Southern California (MWD). SCVWD's participation in Semitropic's Groundwater Bank, was covered in the Negative Declaration/Initial Study for Santa Clara Valley Water District Semitropic Water Banking and Exchange Program adopted on June 17, 1997. The SCVWD-Semitropic Initial Study provides for SCVWD to store up to 350,000 acre-feet of SCVWD's SWP and/or CVP entitlement water in the Groundwater Bank through 2035. Semitropic would hold the water banked by SCVWD in trust until SCVWD requests its return.

Figure 2. Semitropic WSD General Location Map



Reclamation 2006 EA 05-126

Semitropic's defined total groundwater banking program capacity is 1,000,000 AF of which SCVWD has contracted for 350,000 AF (35 percent). As of January 2006, SCVWD had 230,000 AF of both CVP and SWP water in the Groundwater Bank. The size of the pump-in facility, contemporaneously scheduled SWP deliveries to Semitropic, and the proportion of the total program capacity that has been contracted to other banking partners restrict total program annual withdrawal amounts. The annual withdrawal capacity of SCVWD's stored water currently ranges from a minimum of 31,500 AF per year up to a maximum of 78,050 AF per year.

### **Semitropic Groundwater Monitoring Program**

A groundwater monitoring program was established in 1994 to develop information so that any adverse groundwater impacts of the water banking project could be mitigated. The monitoring program is overseen by a committee made up of Semitropic's adjoining districts, and banking participants. The Kern County Water Agency (KCWA) and DWR are interested parties and participate in committee activities. Monitoring has included water level measurements in monitoring wells and groundwater quality (including salinity and nitrate) evaluations. The monitoring program includes the following (Semitropic Biennial Groundwater Monitoring Report, 1999):

- Semi-annual water level measurements in numerous water supply and monitoring
- Continuous water level measurement in selected monitoring wells and monthly water level measurement in other wells.
- Annual water quality sampling of selected actively used water supply wells, and more frequent sampling of some monitoring wells.
- Preparation of semi-annual (spring and fall) water-level elevation maps with the direction of groundwater flow indicated on the maps.
- Preparation of water-level hydrographs for many wells.
- Preparation of a water-level change map for spring 1995-Spring 1999 for use in evaluating the 1995-98 water banking activities.
- Mapping of total dissolved solids in the shallow and deep groundwater and TDS hydrographs.
- Mapping nitrate.

In addition, activities of Semitropic and the adjoining activities affecting groundwater have been obtained and compiled. Included are diversions of surface water into each District, crop surveys, and estimates of crop consumptive use and groundwater pump age.

Knowledge of this information is essential in order to determine changes in groundwater conditions due to the water banking projects.

### **Environmental Water Account**

The EWA is a cooperative management program implemented by five federal and state agencies. The purpose of EWA is to promote flexible water project management through environmentally beneficial operational changes in the SWP and CVP to provide additional protection and recovery of fisheries of the Bay-Delta, and to better ensure reliable water deliveries to CVP and SWP water users. Reclamation and DWR, also known as the EWA Project Agencies, are responsible for administering the EWA in cooperation with the EWA Management Agencies (U.S. Fish and Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Game).

The EWA was established by the August 2000 CALFED Bay Delta Program Programmatic Environmental Impact Statement/Environmental Impact Report Record of Decision (CALFED ROD) and EWA Operating Principles Agreement. Currently, the EWA is operated in accordance with the “Flexible Purchase Alternative: as described in the Final EWA Environmental Impact Statement/Environmental Impact Report (EWA EIS/EIR) dated January 2004. The EWA EIS/EIR Record of Decision was signed in March 2004. The Final EWA EIS/EIR provides environmental coverage for most EWA operations through 2007. The CALFED Bay-Delta Program is a partnership of federal and state agencies and other stakeholders involved in implementing a plan for enhancing the ecological integrity of the San Francisco-San Joaquin Bay and Delta. The CALFED ROD guides the effort.

### **PURPOSE AND NEED**

When cutbacks at pumping facilities in the Delta occur because fish protective actions, which are recommended by the EWA Management Agencies, are implemented by the EWA Project Agencies, federal and state water contractors south of the Delta typically experience shortages in their yearly water supply allocations. Impacts of EWA operational changes to the SWP and CVP must be made up from alternative water supplies acquired by the EWA Project Agencies. The purpose of the proposed acquisition and transfer is to obtain water from SCVWD for the EWA over the next 2 years. The EWA Project Agencies anticipate a need for up to 50,000 AF per year over the next 2 years of transfer water to fulfill obligations to State and Federal water contractors. The function of EWA is to make environmentally beneficial changes in the operations of the SWP and CVP, at no uncompensated water loss to Project water users (EWA, 2003). The proposed acquisition and transfer of SCVWD water would enable EWA greater flexibility to efficiently manage water supplies, thus, meeting operational and financial objectives. Furthermore, SCVWD would also benefit from greater flexibility to efficiently manage their water supplies and meet their own operational and financial objects.

## **NO ACTION AND PROPOSED ACTION ALTERNATIVES**

### **No Action**

Under the no action alternative, Reclamation, acting on behalf of the EWA, would not acquire up to 50,000 AF of water from SCVWD in 2006 and 2007 annually. Instead, SCVWD would use the water for internal district purposes, store it in Semitropic's Groundwater Bank, or sell it to other willing buyers.

### **Proposed Action**

Reclamation proposes a 2-year agreement to acquire up to 50,000 AF of water per year from the SCVWD. SCVWD would transfer the purchased water to Reclamation for the EWA. The actual quantity and source (CVP or SWP) of water sold to Reclamation for the EWA would be determined based on an assessment of conditions existing at the time of the proposed water purchase and transfer. The transfer water would be water that would have been consumptively used or stored absent the purchase and transfer. The total amount of water supplies would never exceed 50,000 AF per year. The EWA Project Agencies would use the CVP/SWP purchased water for compensating the projects' water users due to cutbacks made at Banks and Tracy pumping facilities to protect at-risk fish of the Bay-Delta.

Reclamation proposes to enter into a 2-year agreement with SCVWD for acquisition of water in 2006 and 2007 from one, or a combination, of the following: (A) current year's CVP Water, (B) SWP Approved Table A Water via exchange, and (C) previously stored SWP Approved Table A/Article 21 Water in the Semitropic Groundwater Bank. Depending on whether the purchased water would be used in the CVP Place of Use (POU) or the SWP POU, a series of exchanges between Semitropic, SCVWD, and Reclamation may be made in the following sections, as applicable. The exchanges, if required, would allow EWA assets to be put to the best possible use and remain in the CVP or SWP designated POU.

### **Purchase of CVP Water**

Reclamation, acting on behalf of the EWA, would purchase up to 50,000 AF per year for 2 years of SCVWD's CVP Water. The water purchased from SCVWD would require a formal transfer to Reclamation for the EWA. All SCVWD transfer requests would be subject to CVPIA water transfer provisions and subsequent approval by Reclamation's contracting officer pursuant to SCVWD water service contract with Reclamation. Transfer water would likely be made available by reducing the amount of water that would otherwise be banked in SCVWD's portion of the Semitropic Groundwater Bank, or stored in SCVWD's local groundwater basin or local surface water reservoirs (primarily Anderson Reservoir). Water management strategies would also include SCVWD using substitute supply from state and/or local sources to meet current year district needs in accordance with the CVPIA transfer provisions. SCVWD's CVP Water would be transferred to Reclamation at San Luis Reservoir's O'Neill Forebay for the

EWA at which point, SCVWD's CVP Water would become EWA CVP Water. The EWA Project Agencies would release the EWA CVP Water for beneficial use within the CVP export service area and in accordance with Reclamation's water rights permits issued by the SWRCB. The CVP export service area includes portions of central and western San Joaquin Valley and the southern Bay Area.

If for any reason Reclamation's contracting officer does not approve the transfer proposal from SCVWD, the transfer will not take place, but SCVWD would still be obligated to transfer a portion (up to 50,000 AF) of its SWP supplies previously stored in Semitropic's Groundwater Bank to the EWA.

**Exchange of EWA CVP Water for SCVWD's SWP Approved Table A Water**

After purchasing SCVWD's CVP Water, which would become EWA CVP Water at O'Neill Forebay, the EWA Project Agencies may determine that SCVWD's SWP Approved Table A Water, instead of the EWA CVP Water, would be more effectively used for fishery protection and restoration/recovery actions taken at the SWP Banks Pumping Plant. In the event this occurs, Reclamation would request that SCVWD exchange all or a portion of the purchased EWA CVP Water for a like amount of SCVWD's SWP Approved Table A Water. To accomplish this exchange, Reclamation would take delivery of all or a portion of the purchased EWA CVP Water at O'Neill Forebay, but then immediately return the EWA CVP Water to SCVWD at O'Neill Forebay in exchange for a like amount of SCVWD's SWP Approved Table A water, which SCVWD would make available to DWR, on behalf of Reclamation for the EWA, in Bethany Reservoir. Bethany Reservoir is where the SWP's South Bay Aqueduct (SBA) and California Aqueduct (CA) start. (SCVWD's SWP Approved Table A Water, after being pumped at the SWP Banks pumping plant, is delivered to SCVWD through the SBA.) SCVWD's SWP Approved Table A Water, exchanged for EWA CVP Water, would be released to DWR at Bethany Reservoir on behalf of Reclamation and used within the SWP export service area and in accordance with the DWR's water rights permits issued by the SWRCB. The SWP export service area includes the southern Bay Area, south San Joaquin Valley, Central Coast, and southern California.

**Purchase of SCVWD's Previously Stored Water in Semitropic's Groundwater Bank**

Reclamation may purchase SCVWD's previously stored SWP Approved Table A and/or Article 21 Water in Semitropic's Groundwater Bank. The purchase of SCVWD's previously stored water would make use of an existing agreement between SCVWD and Semitropic for groundwater banking in Semitropic. (*Agreement between Santa Clara Valley Water District and Semitropic and its Improvement districts for a Santa Clara-Semitropic Water Banking and Exchange Program, Dated June 1, 1997.* [SC/ST Banking Program Agreement]) In addition, environmental documentation covering the analysis of potential environmental effects from banking water in Semitropic includes the Semitropic Groundwater Banking Project Environmental Impact Report (July 1994) and the SCVWD Semitropic Negative Declaration/Initial Study (June 1997) specifying SCVWD's participation in the Semitropic Banking Program.

Reclamation's purchase of SCVWD's previously stored SWP Approved Table A/Article 21 Water would be used to benefit SWP contractors via either direct pump-in into the CA or by exchange. SCVWD's previously stored SWP Approved Table A/Article 21 Water could be pumped directly into the CA from Semitropic at turnout 10A in accordance with the May 2, 1995 Agreement Among Department of Water Resources, State of California, Kern County Water Agency and Semitropic Water Storage District for Introduction of Local Water into the California Aqueduct. Pumping SCVWD's previously stored SWP Table A/Article 21 Water directly into the CA would be subject to DWR's water quality standards for pumping non-project water into the CA. The pump-in water would be delivered to DWR for project purposes, and in exchange, SCVWD's SWP Approved Table A Water would be delivered to SCVWD, who would in turn provide this water to DWR on behalf of Reclamation at Bethany Reservoir for the EWA.

An alternate method for delivery of SCVWD's previously stored SWP Approved Table A/Article 21 Water purchased by Reclamation for the EWA would be via an exchange for Semitropic's current year's SWP Approved Table A Water supplies. In this instance, in-lieu of Semitropic directly pumping SCVWD's previously stored SWP Approved Table A/Article 21 Water purchased by Reclamation into the CA, the previously stored water would be used within Semitropic's service area in the year of the transfer. Semitropic would then make available to SCVWD at O'Neill Forebay a like amount of their current year's SWP Approved Table A Water, which is also referred to as "Semitropic Exchange Water". Both of these actions would be performed in accordance with the SC/ST Banking Program Agreement and the applicable Point of Delivery agreement, and as described in the Semitropic EIR and Semitropic Initial Study.

Once Semitropic makes the Semitropic Exchange Water available to SCVWD at O'Neill Forebay, SCVWD would immediately transfer such water to Reclamation for the EWA to benefit SWP users in accordance with DWR's SWRCB water rights permits.

## **AFFECTED ENVIRONMENT**

This section discusses the affected environment of the proposed action.

### **Surface Water Resources**

Described below are the current environmental conditions of surface water resources that could be potentially affected by the proposed action. These surface water conditions include certain CVP/SWP facilities and operations, and SCVWD and Semitropic facilities.

#### **CVP/SWP Project Storage and Conveyance Facilities**

CVP/SWP Project facilities that are potentially affected by this EWA acquisition include Bethany Reservoir, San Luis Reservoir, from which the EWA could borrow water or use for storage and SWP and CVP pumping and conveyance facilities, which would be used for transporting EWA acquisitions (Reclamation, 2003).

## Bethany Reservoir

Bethany Reservoir is located in Alameda County and has a storage capacity is 5,250 AF and is operated by the CA Department of Water Resources. In the southern Delta, the SWP diverts water from Clifton Court Forebay for delivery south of the Delta. Banks Pumping Plant lifts water from Clifton Court Forebay into Bethany Reservoir. The water delivered to Bethany Reservoir flows into the CA, the main conveyance facility of the SWP. The balance of the water is pumped from Bethany Reservoir into the SBA for delivery to urban contractors, including SCVWD, in the South Bay Area. Along the western San Joaquin Valley, the CA transports water through the Gianelli Pumping-Generating Plant for storage in San Luis Reservoir until it is needed for later use.

## San Luis Reservoir

San Luis Reservoir is an off stream storage reservoir within the Export Service Area jointly operated by the CVP and SWP. It is near Los Banos, has a capacity of 2,041,000-AF, and stores exports from the Delta to be used when the water is needed in the Export Service Area. Drawdown occurs each year; depending on hydrologic conditions and EWA actions, a low point of approximately 300,000 AF could be reach in August and September. Both the CVP and SWP systems use San Luis Reservoir to increase water allocations. San Luis Reservoir water supplements other CVP or SWP water during periods of constrained operations in the Delta and when demands exceed maximum capacity at the pumps. CVP water is released from San Luis Reservoir into the CVP's San Felipe Unit for delivery to SCVWD.

## California Aqueduct

The CA is the main conveyance facility of the SWP. It conveys water from the Harvey O. Banks Pumping Plant at Clifton Court Forebay in the southern portion of the Delta to SWP contractors located in the San Joaquin Valley, central coast of California and Southern California.

## Delta-Mendota Canal

The Delta Mendota Canal (DMC) is the main conveyance facility of the CVP. It conveys water from the Tracy Pumping Plant in the southern Delta to agricultural lands in the central and western San Joaquin Valley. Water not delivered directly from the DMC to CVP customers is diverted from the DMC at the O'Neil Pumping Plant into O'Neil Forebay. The water then flows through the San Luis Canal (a jointly owned and operated facility of the CVP and SWP) to CVP contractors in the San Joaquin Valley or is lifted into San Luis Reservoir through the Gianelli Pumping/Generating Plant for later use. The majority of water remaining in the DMC continues to central San Joaquin Valley users with some water being diverted to Santa Clara County.

## SCVWD

SCVWD has a diverse water supply including local, recycled, and imported sources. SCVWD prepared an Integrated Water Resources Plan in 1996 (updated in 1999) to address water supply reliability through 2020. The primary components of the preferred strategy to meet future demands include water banking, water transfers, water recycling, and water conservation. SCVWD's water supply system provides significant flexibility in managing SWP, CVP and local supplies.

SCVWD supplies water to local water retail agencies that provide water to customers in Santa Clara County. Local runoff, groundwater, and imported water comprise SCVWD's supplies. In order to maintain maximum efficiency and flexibility, the water supply comes from a variety of sources. More than half of SCVWD supply is imported from the Sacramento-San Joaquin Delta.

Imported water is delivered to the County through three main pipelines: The SWP's SBA, the CVP's San Felipe Division, and the San Francisco Water Department's Hetch Hetchy system. The district does not control or administer Hetch-Hetchy deliveries to the six cities in the County that receive this supply; however, this supply reduces the demands on District-supplied water. The District has a contract for 100,000 AF per year from the SWP, and for 152,500 AF per year from the CVP (130,000 AF for M&I needs and 22,500 AF for agricultural needs). Imported water is a primary source of supply for the District's three treatment plants, and is released for in-stream or off-stream groundwater recharge.

Local runoff is captured in ten reservoirs, with a combined capacity of 170,000 AF. Water captured in the reservoirs recharges into the groundwater basin or is conveyed to one of the District's three water treatment plants for drinking water. There are a total of 18 recharge ponds and three connected groundwater sub basins that collect and store water for use during dry years (Reclamation, 2005). Both the CVP and SWP supply SCVWD with surface water

## Semitropic

Semitropic is located in North Central Kern County, approximately 20 miles northwest of the city of Bakersfield and covers an area of 221,000 acres with about 159,000 acres irrigated. There are no incorporated cities within Semitropic. Semitropic was organized in 1958 for the purpose of supplying supplemental water within its service area boundaries.

Surface water in Semitropic consists of local surface water supplies and water provided under its contract with the KCWA for 133,000 AF of SWP water per year. The SWP water is pumped from the Delta and conveyed through the CA. The SWP water can be stored in San Luis Reservoir for subsequent conveyance in the CA to Semitropic (Reclamation 2006).

## Groundwater Resources

Provided below is discussion of current groundwater resources for SCVWD and Semitropic's Groundwater Bank.

### SCVWD

There are a total of 18 recharge ponds and three connected groundwater sub-basins that collect and store water for use during dry years (Reclamation, 2005). Groundwater resource discussions are addressed in the *Santa Clara Valley water District Urban Water Management Plan 2005-Draft*; December, 2005 and *Central Valley Project EA-05-126 Santa Clara Valley Water District Long-term Groundwater Banking Project Storage and Exchange of Central Valley Project Water With Semitropic Water Storage District*, April 2006. The documents contain detailed information for SCVWD, are herein incorporated by reference and not repeated here.

### Semitropic's Groundwater Bank

During the 1960's, Semitropic developed plans for main conveyance and distribution system facilities to extend from the California Aqueduct to farm delivery locations. Prior to these deliveries, the irrigated agriculture within Semitropic was totally dependent of pumping the underlying groundwater.

In 1995, Semitropic began implementation of the Semitropic Groundwater Banking and Exchange Program. The Program is a long-term water storage program designed to recharge groundwater and reduce overdraft, increase operational reliability and flexibility, and optimize the distribution and use of available water resources between Semitropic and potential banking partners. Under the program, the banking partner would deliver a portion of its unused SWP, CVP or other surface water supplies to Semitropic during periods when such water is available. Semitropic may use this water in lieu of pumping groundwater for irrigation or to directly recharge the underlying groundwater basin. Upon request, Semitropic would return the banking partner's previously stored water by exchange. The banking partner's stored water may be pumped from Semitropic's groundwater basin through pump back facilities into the California Aqueduct and provided to DWR in exchange for SWP water delivered to the partners from the Delta; or Semitropic would retain the stored water for its own use in exchange for an equivalent portion of its SWP water supply. Under the first method (delivery of recovered banked water to the CA), the water is delivered to the SWP water supply pool from which deliveries would made to the banking partners (Reclamation 2005).

Semitropic's Groundwater Banking Program's capacity is 1,000,000 AF. Total program annual withdrawal amounts are restricted by the size of a pump-back facility, contemporaneous scheduled SWP deliveries to the Groundwater Bank, and the proportion of the total program capacity that has been contracted to other banking

partners. The annual withdrawal capacity includes up to 133,000 AF of SWP water that could be exchanged within the CA, and/or and additional 90,000 AF per year of groundwater extraction to the California Aqueduct. Thus, the return capacity of the original program was a minimum of 90,000 AF per year, and a maximum of 223,000 AF per year.

### Semitropic Groundwater Management

The Tulare Lake Hydrologic Region Comprises the drainage area of the San Joaquin Valley south of the San Joaquin River. The Tulare Lake Hydrologic Region is essentially a closed basin since surface water drains north into the San Joaquin River only in years of extreme rainfall. San Joaquin Valley Groundwater Basin is the largest basin in the Tulare Lake Hydrologic Region. It is divided into six groundwater sub-basins: Kern County, Tulare Lake, Tule, Kaweah, Kinds and Westside sub-basin (DWR, 2005).

Extensive groundwater recharge programs, or water banks, are in place in the south valley where water districts have recharged several million AF of surplus water for future use and transfer through water banking programs. For more than 100 years, water supply and irrigation districts throughout the region have used conjunctive use to maximize water supply and maintain the groundwater system. Other conjunctive use activities throughout the valley include water exchange and transfer programs. If groundwater extraction continues to be used to offset anticipated but unmet surface water imports, it would have negative consequences. One such effect of long-term groundwater overdraft is land subsidence, which also results in a loss of aquifer storage space. This has already caused some damage to canals, utilities, pipelines, and roads in the region. In an effort to slow this condition, many water agencies have adopted groundwater replenishment programs and have taken advantage of excess water supplies available in wet years, incidental deep percolation, and seepage from unlined canals.

### Land Use

The current land use conditions within SCVWD and Semitropic are presented below.

#### SCVWD

Most development and water use occurs on the 350-square –mile valley floor. The northern part of the valley, north of the Coyote Narrows, is extensively urbanized and houses over 90 percent of the County’s 1.7 million residents and 13 of the County’s 15 cities. The southern part of the valley remains predominately rural with some low-density residential development, with the exception of the cities of Morgan Hill and Gilroy (Reclamation 2006)

#### Semitropic

Kern County is the fourth most productive agricultural county in the nation. As a semiarid region, it must rely on adequate imported water supply for its farming. It is

estimated that 75% of the water applied to local crops goes to satisfying actual crop requirements. Significant improvement in efficient irrigation has been made through the utilization of drip and low volume application methods, as well as careful management of row and border systems. Laser leveling helps achieve uniform distribution. Demand for Kern County's agricultural products is expected to increase in the future.

Land use in Semitropic is primarily agricultural, with alfalfa, cotton, and vegetable comprising the largest acreage under cultivation. Semitropic WSD provides water to customers for agricultural use only.

### **Biological Resources/Critical Habitats**

Described below are the current biological resources and critical habitats that could be potentially affected by the proposed action. Biological resources and critical habitats within the SCVWD and Semitropic are discussed.

#### **SCVWD**

There are four broad groupings of habitat/vegetation types in Santa Clara County: (1) Baylands habitats (including estuaries, mudflats, salt marshes, salt ponds, and levees); (2) Freshwater habitats (including flowing streams, riparian zones, freshwater marshes, and lentic zones); (3) Grassland/Savannah habitats; (4) Chaparral/Forest habitat (including chaparral, mixed evergreen forest, redwood forest, foothill woodland, and closed-cone pine forest (Reclamation 2003).

Most urban development and water use occurs on the 350 square mile floor. Permanent and seasonal populations of wildlife species are found in the diverse habitat types and relatively undeveloped upper watersheds and Baylands. In addition, local streams provide habitat to native freshwater fish, and some species of anadromous marine fish (Reclamation 2003).

#### **Critical Habitats within SCVWD**

Critical habitat is defined in section 3(5)(A) of the Federal Endangered Species Act as:

*(5)(A) The term "critical habitat" for a threatened or endangered species means- (i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of this Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and(ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of this Act, upon a determination by the Secretary that such areas are essential for the conservation of the species (<http://www.fws.gov/Endangered/esa.html#Lnk03>).*

Critical habitat occurs within Santa Clara County. Designated and proposed critical habitats were queried from the U.S. Fish and Wildlife Service's website:

<http://www.fws.gov/pacific/sacramento/es/spp/list/htm>. Critical habitats and proposed critical habitats potentially affected by the proposed action include the following:

**Invertebrates**

*Euphydryas editha bayensis* - Critical habitat, bay checkerspot butterfly (X)

**Fish**

*Oncorhynchus mykiss* - Critical habitat, Central California coastal steelhead (X)

*Oncorhynchus mykiss* - Critical habitat, South Central California steelhead (X)

**Amphibians**

*Ambystoma californiense* - Critical habitat, CA tiger salamander, central population (X)

*Rana aurora draytonii* - Critical habitat, California red-legged frog (X)

**Reptiles**

*Masticophis lateralis euryxanthus* - Critical habitat, Alameda whipsnake (PX)

**Potentially affected listed and proposed species in SCVWD**

Listed Species

**Invertebrates**

*Branchinecta lynchi* - vernal pool fairy shrimp (T)

*Euphydryas editha bayensis* - bay checkerspot butterfly (T)

**Fish**

*Eucyclogobius newberryi* - tidewater goby (E)

*Oncorhynchus kisutch* - coho salmon - central CA coast (E)

*Oncorhynchus mykiss* - Central California Coastal steelhead (T)

*Oncorhynchus tshawytscha* - winter-run chinook salmon, Sacramento River (E)

*Oncorhynchus mykiss* - South Central California steelhead (T)

*Oncorhynchus tshawytscha* - Central Valley spring-run chinook salmon (T)

*Acipenser medirostros* - green sturgeon (T)

**Amphibians**

*Ambystoma californiense* - California tiger salamander, central population (T)

*Rana aurora draytonii* - California red-legged frog (T)

**Reptiles**

*Masticophis lateralis euryxanthus* - Alameda whipsnake [=striped racer] (T)

*Thamnophis sirtalis tetrataenia* - San Francisco garter snake (E)

**Birds**

*Brachyramphus marmoratus* - marbled murrelet (T)

*Charadrius alexandrinus nivosus* - western snowy plover (T)

*Haliaeetus leucocephalus* - bald eagle (T)

*Pelecanus occidentalis californicus* - California brown pelican (E)  
*Rallus longirostris obsoletus* - California clapper rail (E)  
*Sterna antillarum* (=albifrons) *browni* - California least tern (E)  
*Vireo bellii pusillus* - Least Bell's vireo (E)

### **Mammals**

*Reithrodontomys raviventris* - salt marsh harvest mouse (E)  
*Vulpes macrotis mutica* - San Joaquin kit fox (E)

### **Plants**

*Castilleja affinis ssp. neglecta* - Tiburon paintbrush (E)  
*Ceanothus ferrisiae* - Coyote ceanothus (E)  
*Dudleya setchellii* - Santa Clara Valley dudleya (E)  
*Streptanthus albidus ssp. albidus* - Metcalf Canyon jewelflower (E)

### Proposed Species

### **Reptiles**

*Masticophis lateralis euryxanthus* - Critical habitat, Alameda whipsnake (PX)

### Candidate Species

### **Fish**

*Oncorhynchus tshawytscha* - Central Valley fall/late fall-run chinook salmon (C)  
*Oncorhynchus tshawytscha* - Critical habitat, Central Valley fall/late fall-run chinook (C)

## Semitropic

Biotic habitats in the Semitropic include commercial/mixed urban, residential, industrial/transportation, field crops, vineyards/orchards, confined feeding, idle or retired farmland, ruderal or vacant, annual grassland, scrub, chaparral, oak woodland, lacustrine/openwater.wetlands and valley foothill/riparian (Reclamation, 2006).

The irrigated lands in Semitropic are dominated by agricultural habitat that includes field crops, orchards, and pasture. Vegetation is primarily crops and frequently includes weedy non-native annual and biennial plants. The non-irrigated lands in Semitropic include valley mesquite, saltbrush habitat, and riparian-freshwater habitat. Occurrences of the latter are not common or extensive because of the lack of freshwater to sustain the habitat throughout the year. The low lying shrubs and scattered mesquite host a variety of birds, mammals, and insects including doves, quail, coyotes, rabbits and lizards. The limited marshlands support some waterfowl and waterfowl nesting and wintering habitat. (Reclamation, 2006)

The conveyance facilities to be used in the proposed action are not managed for fisheries. Some non-native warm-water fish may inhabit the canals. No sensitive or special status fish species occur in the conveyance facilities that would be used in the proposed action.

(Reclamation, 2006).

### **Critical Habitat in Kern County**

Critical habitat occurs within Semitropic WSD. Designated and proposed critical habitats were queried from the U.S. Fish and Wildlife Service's website:

<http://www.fws.gov/pacific/sacramento/es/spp/list/htm>. Critical habitats and proposed critical habitats potentially affected by the proposed action include the following:

#### **Invertebrates**

*Branchinecta longiantenna* - Critical habitat, longhorn fairy shrimp (X)

*Branchinecta lynchi* - Critical habitat, vernal pool fairy shrimp (X)

#### **Amphibians**

*Ambystoma californiense* - Critical habitat, CA tiger salamander, central population (X)

*Rana aurora draytonii* - Critical habitat, California red-legged frog (X)

#### **Birds**

*Empidonax traillii extimus* - Critical habitat, southwestern willow flycatcher (X)

*Gymnogyps californianus* - Critical habitat, California condor (X)

#### **Mammals**

*Sorex ornatus relictus* - Critical habitat, Buena Vista Lake shrew (X)

#### **Plants**

*Sidalcea keckii* - Critical habitat, Keck's checker-mallow (X)

### **Potentially affected listed and proposed species in Semitropic WSD (Kern County)**

#### Listed Species

#### **Invertebrates**

*Branchinecta conservatio* - Conservancy fairy shrimp (E)

*Branchinecta longiantenna* - longhorn fairy shrimp (E)

*Branchinecta lynchi* - vernal pool fairy shrimp (T)

*Desmocerus californicus dimorphus* - valley elderberry longhorn beetle (T)

*Euproserpinus euterpe* - Kern primrose sphinx moth (T)

#### **Amphibians**

California tiger salamander, central population (T)

*Rana aurora draytonii* - California red-legged frog (T)

#### **Reptiles**

*Gambelia* (= *Crotaphytus*) *sila* - blunt-nosed leopard lizard (E)

*Thamnophis gigas* - giant garter snake (T)

## **Birds**

*Empidonax traillii extimus* - southwestern willow flycatcher (E)

*Gymnogyps californianus* - California condor (E)

*Haliaeetus leucocephalus* - bald eagle (T)

*Vireo bellii pusillus* - Least Bell's vireo (E)

## **Mammals**

*Dipodomys ingens* - giant kangaroo rat (E)

*Dipodomys nitratooides nitratooides* - Tipton kangaroo rat (E)

*Ovis canadensis californiana* - Sierra Nevada (=California) bighorn sheep (E)

*Sorex ornatus relictus* - Buena Vista Lake shrew (E)

*Vulpes macrotis mutica* - San Joaquin kit fox (E)

## **Plants**

*Caulanthus californicus* - California jewelflower (E)

*Eremalche kernensis* - Kern mallow (E)

*Monolopia congdonii* (= *Lembertia congdonii*) - San Joaquin woolly-threads (E)

*Opuntia treleasei* - Bakersfield cactus (E)

*Pseudobahia peirsonii* - San Joaquin adobe sunburst (T)

*Sidalcea keckii* - Keck's checker-mallow (=checkerbloom) (E)

## Proposed Species

### **Amphibians**

*Rana aurora draytonii* - Critical habitat, California red-legged frog (PX)

### **Candidate Species**

#### **Amphibians**

*Rana muscosa* - mountain yellow-legged frog (C)

#### **Birds**

*Coccyzus americanus occidentalis* - Western yellow-billed cuckoo (C)

#### **Mammals**

*Martes pennanti* - fisher (C)

## **Cultural Resources**

Cultural Resources is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. Cultural Resources as they are currently known in SCVWD and Semitropic are discussed below.

### SCVWD

The Santa Clara Valley is rich in historical and pre-historic cultural resources. Cultural

resources in this area are generally prehistoric in nature and include remnants of native human populations that existed before European settlement. Prior to the 18<sup>th</sup> century, many Native American tribes inhabited the Central Valley. It is possible that many cultural resources lie undiscovered across the valley.(Reclamation 2006)

### Semitropic

Comprehensive surveys have not been performed in many parts of the district; however, due to the regions rich history of occupation by Native Americans it is very likely that such resources are present. However, the lands have historically been cultivated for agricultural purposes and have been routinely tilled and irrigated. Any archaeological resources that may be present have likely been impacted by these agricultural practices.(Reclamation 2006)

### **Indian Trust Assets (ITAs)**

Indian trust assets (ITAs) are legal interests in assets that are held in trust by the U.S. Government for federally recognized Indian tribes or individuals. The trust relationship usually stems from a treaty, executive order, or act of Congress. The Secretary of the Interior is the trustee for the United States on behalf of federally recognized Indian tribes. ITAs can not be sold, leased or otherwise alienated without United States' approval. Trust assets may include lands, minerals, and natural resources, as well as hunting, fishing and water rights. Indian reservations, rancherias, and public domain allotments are examples of lands that are often considered trust assets. In some cases, Indian trust assets may be located off trust land.

Reclamation shares the Indian trust responsibility with all other agencies of the Executive Branch to protect and maintain ITAs reserved by or granted to Indian tribes, or Indian individuals by treaty, statute, or Executive Order. There are no ITAs in Santa Clara County or Kern County.

### **Environmental Justice**

Executive Order 12898, dated February 11, 1994, requires Federal agencies to ensure that their actions do not disproportionately impact minority and disadvantaged populations. As of 2000, approximately 54% of the population was White, 26% Asian, 3% Black, 0.3% Native Hawaiian or Pacific Islander, and 17% of the population of Santa Clara County was of some other race or two or more races. The Hispanic or Latino population consists of 24% of the total population<sup>1</sup>. The population of some small communities typically increases during late summer harvest. The market for seasonal workers on local farms draws thousands of migrant workers, commonly of Mexican and Central American descent.

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<sup>1</sup> Website: <http://www.sccgov.org/portal/site/planning/>

## ENVIRONMENTAL CONSEQUENCES

### Surface water Resources

#### No Action

Water supply and conveyance from the SWP and CVP would remain the same as existing conditions within SCVWD. The EWA would not acquire up to 50,000 AF per year of SCVWD water supply. Acquisitions, transfers and exchanges with Semitropic would not occur and therefore would have no impact to surface water resources. The no action alternative would be the same as existing conditions.

#### Proposed Action

The proposed water purchase and transfer is not anticipated to cause or facilitate any adverse environmental changes over existing conditions in SCVWD or any other part of the CVP/SWP service areas. Furthermore, the action would not impact any SWP or CVP conveyance and/or storage facilities. The total volume of transfer (CVP) or exchange (SWP) water (50,000 AF) is 13 percent of SCVWD's annual demand of approximately 400,000 AF. Likewise the water purchase and transfer amount is approximately 1 percent of the total CVP/SWP supply (over 5.5 million AF) that is pumped and used within the CVP and SWP Export Service Area. The actual amount of water transferred would depend upon current year demand and reductions in banked water or locally stored water.

SCVWD, Semitropic, or any other CVP/SWP water users are not changing historic water management practices as result of the proposed acquisition. SCVWD, Semitropic, CVP, and SWP project operations and facilities would not vary substantially under the proposed action.

Effects on agencies that would transfer water to the EWA are evaluated by comparing the agency's reduction in supply because of the transfer, and the demand after the transfer. SCVWD would have to evaluate annually the exact quantity and the source of the water that it can provide to EWA. A more detailed effects analysis, including cumulative effects on SCVWD and Semitropic WSD have been evaluated in the *Environmental Water Account Draft EIS/EIR (pages 4-19 to 4-51) July 2003*, and are hereby incorporated by reference.

SCVWD would not make management decisions that overburden their surface water resources in order to sell supplies to the EWA, therefore there are no cumulative effects because of this action.

## **Groundwater Resources**

### No Action

The condition of groundwater resources under the no action alternative would be the same as it would be under existing operational conditions. SCVWD and Semitropic operate extensive groundwater management programs including on-stream and off stream recharge facilities, groundwater level and water quality monitoring networks. Both agencies would continue to operate according to their groundwater management procedures and policies.

### Proposed Action

The proposed action would not impact groundwater resources in Santa Clara County or Semitropic. Given the strategies for transfer and exchange, SCVWD would select the most beneficial water supply for sale to EWA. This includes evaluating groundwater levels, quality and amounts to assure no substantial impacts result from management decision making.

The proposed action would not change Semitropic's operations of the water bank. The 1994 Semitropic EIR showed no significant negative effect on groundwater levels due to groundwater bank operations. However, as discussed in the EIR, a 15-foot, three-year rule is in effect. The rule calls for withdrawals to be stopped or modified at specific locations if they cause the average groundwater levels over a three-year period to be 15 feet less than what the average would have been without the groundwater banking project. Semitropic has not caused any significant environmental impacts during its operations, but monitoring will continue and the rule will be enforced if the proposed action threatens to cause the impacts described above (DWR, 2003).

The proposed sale of up to 50,000 AF stored water is well within the operating capabilities of the Semitropic Groundwater Banking Program. Groundwater levels may fluctuate slightly, but this possible groundwater level change would not be significant. The proposed action would not contribute to cumulative groundwater effects.

## **Land Use Resources**

### No Action

Land use under the no action alternative would remain the same as the existing land conditions. There would be no impacts to land use in SCVWD or Semitropic Water Storage district.

### Proposed Action

The proposed action is limited to 2 years and the exact quantity of water will be based on

the water supply SCVWD has available to provide to EWA on an annual basis. Therefore no land conversions will occur, no land fallowing or habitat restoration will be deferred, no lands would be annexed into any service area to specifically use transfer or exchange water made available by the proposed action. No native, untilled, or similar habitats would be disturbed by the proposed action

Most CVP water used in the Delta export area is for agricultural purposes. SWP water primarily serves municipalities. With or without the proposed 2-year acquisition of SCVWD's water supply, SCVWD would continue to manage its available supply conservatively, maintain existing land uses, and land use trends would continue unaltered by this action. Purchasing previously stored SWP Approved Table A Water in Semitropic would not change land use within Semitropic. The previously stored SWP Approved Table A Water purchased would be used for purposes identified in the July 2003 Draft EWA EIS/EIR. The proposed action would not contribute to cumulative land use effects, as there are no incremental effects caused by the proposed action.

### **Biological Resources**

#### No Action

Under the no action alternative, conditions would remain the same as existing conditions. There would be no impacts to wildlife, including threatened and endangered species, their critical habitat or general habitat types.

#### Proposed Action

The proposed action would not directly, indirectly or cumulatively adversely affect migratory birds, imperiled terrestrial species, unique habitats, or species protected by federal or state law, nor would it have the potential to adversely affect any critical habitats or proposed critical habitats in SCVWD or Semitropic WSD

No new disturbances of aquatic ecosystems, including wetlands, freshwater, open water or lacustrine habitat, riparian habitat, or floodplains would occur. The proposed action would allow EWA to acquire water supply and effectively manage the assets. Likewise, SCVWD would be able to better manage their existing water supplies. No native, untilled, or similar habitats would be disturbed. The proposed action would not involve construction of new facilities or increases in water deliveries from the Delta.

Reclamation received a Programmatic Biological Opinion for the Proposed EWA Program in January 2004. The BO covered the export service area identified in the July 2003 Draft EWA EIS/EIR. The biological opinion concurred that EWA actions would not likely affect Delta Smelt. This proposed action will be in compliance with conservation measures in the BO. National Marine Fisheries Services concurred that EWA would not likely adversely affect Winter-run Chinook salmon or its critical habitat, Spring-run Chinook salmon and Central valley steelhead.

## **Cultural Resources**

### No Action

Under the no action alternative there are no impacts to cultural resources, as no new facilities would be constructed and existing storage and conveyance operations would continue to operate as has historically occurred.

### Proposed Action

Cultural resources may occur in SCVWD or other parts of the CVP/SWP service area. However, the proposed action would not disturb previously undisturbed sties. The transfer and exchanges associated with the proposed action would be conveyed through existing facilities to CVP/SWP places of use. There would not be any new excavation, construction, tillage or other new land disturbance that would occur. Therefore no effects, including cumulative effects, to cultural resources would result from proposed action.

## **Indian Trust Assets**

### No Action

Under the no action alternative there are no impacts to Indian Trust Assets, as no new facilities would be constructed and existing operations would continue to operate as has historically occurred.

### Proposed Action

There are no tribal trust assets in Santa Clara County (the location of SCVWD). Or Kern County (the location of Semitropic Water Bank), and therefore the action proposed in this EA would have no direct, indirect or cumulative impact on such trust assets.

## **Environmental Justice**

### No Action

The no action alternative would have no impacts on environmental justice. EWA would not receive SCVWD water supply over the next 2 years. SCVWD would continue to engage in sales and exchanges with other willing buyers and sellers and bank portions of their CVP/SWP supplies in Semitropic to maximize management of their water supply. Conditions would remain the same as existing conditions, therefore, no minority or disadvantaged populations would sustain disproportionate impacts associated with this alternative.

## Proposed Action

Implementation of the proposed action would not result in any disproportionate impact to economically disadvantaged or minority populations. The acquisition of SCVWD is a 2-year project that ensures a more reliable water supply for Federal and State water contractors by the EWA. The proposed action would not cause dislocation, changes in employment, or increase flood, drought, or disease. Therefore, the proposed action would not contribute to cumulative impacts.

## **CONSULTATION AND COORDINATION**

This document was prepared in coordination with the SCVWD. A copy of this environmental assessment will be made available to DWR for their reference.

### **Section 106 of the National Historic Preservation Act Compliance**

Reclamation has determined that the proposed action is not an undertaking therefore, no coordination was required with State Historic Preservation Office.

### **Section 7 Consultation**

Reclamation has evaluated the effects of the proposed action on listed species and critical habitats in Santa Clara County and Kern County and determined that the action will not affect those species or habitats. No consultation, therefore, is required with the United States Fish and Wildlife Service or National Marine Fisheries Service

### **Public Review**

The Draft EA and Draft FONSI were released for a 15 day public review period beginning June 22, 2006 and ending July 12, 2006. The documents were posted at [http://www.usbr.gov/mp/nepa/nepa\\_projdetails.cfm?Project\\_ID=2266](http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=2266). A press release was issued on June 26, 2006 by the Bureau of Reclamation's Mid-Pacific Regional Public Affairs Office.

During the 15-day public review and comment period, we did not receive any substantive comments other than editorial changes. The minor editorial changes were made to the EA and FONSI before finalizing the document.

### **List of Preparers**

Tamara LaFramboise, Environmental Specialist  
Tim Rust, EWA Program Manager

## **REFERENCES**

Fish and Wildlife Service, 2004. Programmatic Biological Opinion on the Proposed Environmental Water Account Program, Mid-Pacific Regional Office

Department of Water Resources, 2003. Water Purchase agreement with Santa Clara Valley Water District for the 2003 Environmental Water Account Initial Study and Negative Declaration.

Reclamation 2003. One-time transfer of up to 30,000 acre-feet of Central Valley Project Water from Santa Clara Valley Water District to the Department of Water Resources Environmental Assessment.

Reclamation et. al. 2003. Environmental Water Account Action Specific Implementation Plan.

Reclamation et. al., 2003. Environmental Water Account, Draft Environmental Impact Statement/Environmental Impact Report.

Reclamation 2006. Santa Clara Valley Water District Long-Term Groundwater Banking Project Storage And Exchange Of Central Valley Project Water With Semitropic Water Storage District Environmental Assessment.

Semitropic Water Storage District and Metropolitan Water District of Southern California. Semitropic Groundwater Banking Project Final Environmental Impact Report. July 1994.

**APPENDIX A**  
**FISH AND WILDLIFE SERVICE SPECIES**  
**LIST AND CORRESPONDENCE**



United States Department of the Interior  
FISH AND WILDLIFE SERVICE  
Sacramento Fish and Wildlife Office  
2800 Cottage Way, Room W-2605  
Sacramento, California 95825



June 12, 2006

Document Number: 060612032052

Tamara LaFramboise  
Bureau of Reclamation  
2800 Cottage Way  
MP-420 Special Projects Branch  
Sacramento, CA 95825

Subject: Species List for Two-Year Agreement for the Acquisition of Water from the Santa Clara Valley Water District in support of the Environmental Water Account under the California Bay Delta Authority Program

Dear: Ms. LaFramboise

We are sending this official species list in response to your June 12, 2006 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7½ minute quad or quads you requested.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area*. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be September 10, 2006.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found at [www.fws.gov/sacramento/es/branches.htm](http://www.fws.gov/sacramento/es/branches.htm).

Endangered Species Division

Federal Endangered and Threatened Species that Occur in  
or may be Affected by Projects in the Counties and/or  
U.S.G.S. 7 1/2 Minute Quads you requested

Database Last Updated: May 5, 2006

Species of Concern - The Sacramento Fish & Wildlife Office no longer maintain a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. See [www.fws.gov/sacramento/es/spp\\_concern.htm](http://www.fws.gov/sacramento/es/spp_concern.htm) for more information and links to these sensitive species lists.

Red-Legged Frog Critical Habitat - The Service has designated final critical habitat for the California red-legged frog. The designation becomes final on May 15, 2006. See our [map index](#).

**No quad species lists requested.**

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## County Lists

### Kern County

#### Listed Species

##### Invertebrates

*Branchinecta conservation* Conservancy fairy shrimp (E)

*Branchinecta longiantenna* Critical habitat, longhorn fairy shrimp (X), longhorn fairy shrimp (E)

*Branchinecta lynchi* Critical habitat, vernal pool fairy shrimp (X), vernal pool fairy shrimp (T)

*Desmocerus californicus dimorphus* valley elderberry longhorn beetle (T)

*Euproserpinus euterpe* Kern primrose sphinx moth (T)

##### Amphibians

*Ambystoma californiense* California tiger salamander, central population (T)

Critical habitat, CA tiger salamander, central population (X)

*Rana aurora draytoni*

California red-legged frog (T)

Critical habitat, California red-legged frog (X)

##### Reptiles

*Gambelia* (= *Crotaphytus*) *sila* blunt-nosed leopard lizard (E)

*Thamnophis gigas* giant garter snake (T)

##### Birds

*Empidonax traillii extimus* Critical habitat, southwestern willow flycatcher (X)

southwestern willow flycatcher (E)

*Gymnogyps californianus* California condor (E), Critical habitat, California condor (X)  
*Haliaeetus leucocephalus* bald eagle (T)

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

#### Mammals

*Dipodomys ingens* giant kangaroo rat (E)

*Dipodomys nitratooides nitratooides* Tipton kangaroo rat (E)

*Ovis canadensis californiana* Sierra Nevada (=California) bighorn sheep (E)

*Sorex ornatus relictus* Buena Vista Lake shrew (E)

Critical habitat, Buena Vista Lake shrew (X)

*Vulpes macrotis mutica* San Joaquin kit fox (E)

#### Plants

*Caulanthus californicus* California jewelflower (E)

*Eremalche kernensis* Kern mallow (E)

*Monolopia congdonii* (= *Lembertia congdonii*) San Joaquin woolly-threads (E)

*Opuntia treleasei* Bakersfield cactus (E)

*Pseudobahia peirsonii* San Joaquin adobe sunburst (T)

*Sidalcea keckii* Critical habitat, Keck's checker-mallow (X)

Keck's checker-mallow (=checkerbloom) (E)

#### Proposed Species

##### Amphibians

*Rana aurora draytonii* Critical habitat, California red-legged frog (PX)

#### Candidate Species

##### Amphibians

*Rana muscosa* mountain yellow-legged frog (C)

#### Birds

*Coccyzus americanus occidentalis* Western yellow-billed cuckoo (C)

#### Mammals

*Martes pennanti* fisher (C)

## **Santa Clara County**

#### Listed Species

##### Invertebrates

*Branchinecta lynchi* vernal pool fairy shrimp (T)

*Euphydryas editha bayensis* bay checkerspot butterfly (T)

Critical habitat, bay checkerspot butterfly (X)

#### Fish

*Eucyclogobius newberryi* tidewater goby (E)  
*Oncorhynchus kisutch* coho salmon - central CA coast (E) (NMFS)  
*Oncorhynchus mykiss* Central California Coastal steelhead (T) (NMFS)  
Critical habitat, Central California coastal steelhead (X) (NMFS)  
South Central California steelhead (T) (NMFS)  
*Oncorhynchus tshawytscha* Central Valley spring-run chinook salmon (T) (NMFS)  
winter-run chinook salmon, Sacramento River (E) (NMFS)  
*Acipenser medirostris*-green sturgeon (T)(NMFS)

#### Amphibians

*Ambystoma californiense* California tiger salamander, central population (T)  
Critical habitat, CA tiger salamander, central population (X)  
*Rana aurora draytonii* California red-legged frog (T)  
Critical habitat, California red-legged frog (X)

#### Reptiles

*Masticophis lateralis euryxanthus* Alameda whipsnake [=striped racer] (T)  
*Thamnophis sirtalis tetrataenia* San Francisco garter snake (E)

#### Birds

*Brachyramphus marmoratus* marbled murrelet (T)  
*Charadrius alexandrinus nivosus* western snowy plover (T)  
*Haliaeetus leucocephalus* bald eagle (T)  
*Pelecanus occidentalis californicus* California brown pelican (E)  
*Rallus longirostris obsoletus* California clapper rail (E)  
*Sterna antillarum (=albifrons) browni* California least tern (E)  
*Vireo bellii pusillus* Least Bell's vireo (E)

#### Mammals

*Reithrodontomys raviventris* salt marsh harvest mouse (E)  
*Vulpes macrotis mutica* San Joaquin kit fox (E)

#### Plants

*Castilleja affinis ssp. Neglecta* Tiburon paintbrush (E)  
*Ceanothus ferrisae* Coyote ceanothus (E)  
*Dudleya setchellii* Santa Clara Valley dudleya (E)  
*Streptanthus albidus ssp. Albidus* Metcalf Canyon jewelflower (E)

#### Proposed Species

##### Fish

*Oncorhynchus mykiss* Critical habitat, South Central California steelhead (PX) (NMFS)

##### Amphibians

*Rana aurora draytonii* Critical habitat, California red-legged frog (PX)

##### Reptiles

*Masticophis lateralis euryxanthus* Critical habitat, Alameda whipsnake (PX)

#### Candidate Species

##### Fish

*Oncorhynchus tshawytscha* Central Valley fall/late fall-run chinook salmon (C) (NMFS)  
Critical habitat, Central Valley fall/late fall-run chinook (C) (NMFS)

#### Key:

- (E) Endangered - Listed as being in danger of extinction.
- (T) Threatened - Listed as likely to become endangered within the foreseeable future.
- (P) Proposed - Officially proposed in the Federal Register for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the [National Oceanic & Atmospheric Administration Fisheries Service](#). Consult with them directly about these species.
- Critical Habitat - Area essential to the conservation of a species.
- (PX) Proposed Critical Habitat - The species is already listed. Critical habitat is being proposed for it.
- (C) Candidate - Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) Critical Habitat designated for this species

## Important Information About Your Species List

### *How We Make Species Lists*

We store information about endangered and threatened species lists by U.S. Geological Survey [7½ minute quads](#). The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, or may be affected by projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

### *Plants*

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the nine surrounding

quads through the California Native Plant Society's online [Inventory of Rare and Endangered Plants](#).

### ***Surveying***

Some of the species on your list may not be affected by your project. A trained biologist or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list.

For plant surveys, we recommend using the [Guidelines for Conducting and Reporting Botanical Inventories](#). The results of your surveys should be published in any environmental documents prepared for your project.

### ***Your Responsibilities Under the Endangered Species Act***

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

### ***Take incidental to an otherwise lawful activity may be authorized by one of two procedures:***

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal [consultation](#) with the Service.
- During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.
- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.
- Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

### **Critical Habitat**

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management

considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our [critical habitat page](#) for maps.

### ***Candidate Species***

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

### ***Wetlands***

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

### ***Updates***

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be September 10, 2006.