



Linda S. Adams  
Acting Secretary for  
Environmental Protection

# State Water Resources Control Board

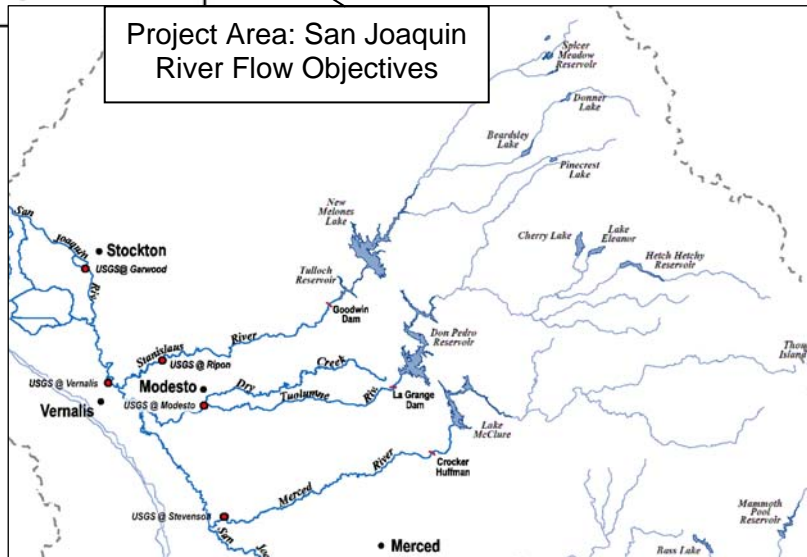
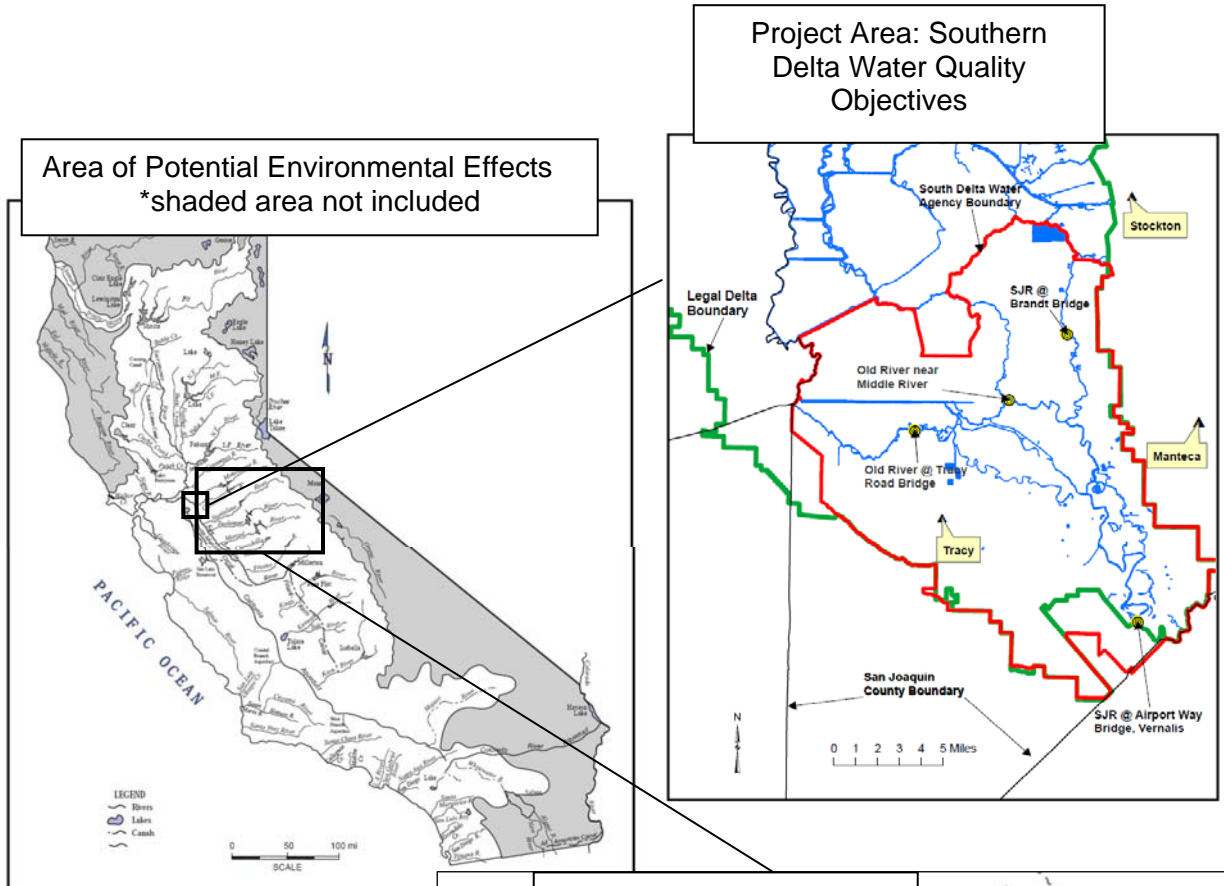
## Executive Office

Charles R. Hoppin, Chairman  
1001 I Street • Sacramento, California 95814 • (916) 341-5603  
Mailing Address: P.O. Box 100 • Sacramento, California • 95812-0100  
Fax (916) 341-5621 • <http://www.waterboards.ca.gov>



Edmund G. Brown Jr.  
Governor

### REVISED NOTICE OF PREPARATION AND NOTICE OF ADDITIONAL SCOPING MEETING



## **Revised Notice of Preparation**

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**To:** State Clearinghouse, Governor's Office of Planning and Research  
P.O. Box 3044  
Sacramento, CA 95812-3044

**Subject:** **Notice of Preparation of Environmental Documentation**

**Lead Agency:**

Agency Name: State Water Resources Control Board  
Street Address: P.O. Box 2000  
City/State/Zip: Sacramento, CA 95812-2000  
Contact: Chris Carr  
Phone: (916) 341-5305  
Email: [ccarr@waterboards.ca.gov](mailto:ccarr@waterboards.ca.gov)

### **PURPOSE OF REVISED NOTICE OF PREPARATION AND ADDITIONAL SCOPING MEETING**

The purpose of this revised notice of preparation and additional scoping meeting is to provide additional information regarding the State Water Resources Control Board's (State Water Board) current review of the 2006 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta) (2006 Bay-Delta Plan). In addition, as lead agency, the State Water Board is requesting additional comments from responsible and trustee agencies and interested persons concerning the scope and content of the environmental information to be included in the State Water Board's substitute environmental document (SED) relating to the State Water Board's current review of the Bay-Delta Plan. For responsible and trustee agencies, the State Water Board requests the views of your agency as to the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed Project.

On February 13, 2009, the State Water Board issued a notice of preparation and of scoping meeting for environmental documentation for the update and implementation of the 2006 Bay Delta Plan focused on the southern Delta salinity and San Joaquin River flow objectives and the program of implementation for those objectives (posted at [http://www.waterboards.ca.gov/waterrights/water\\_issues/programs/bay\\_delta/bay\\_delta\\_plan/environmental\\_review/docs/nop2009feb13.pdf](http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/bay_delta_plan/environmental_review/docs/nop2009feb13.pdf)).

Except as revised by this notice, the February 13, 2009 notice, remains in effect.

In the February 13, 2009 notice, the State Water Board indicated that it will prepare environmental documentation for the potential update and changes to implementation of the Bay-Delta Plan. The notice indicates that the proposed Project includes both: 1) the review and update of water quality objectives, including flow objectives, and the program of implementation in the Bay-Delta Plan; and 2) changes to water rights and water quality regulation consistent with the program of implementation. However, at that time the State Water Board only requested comments from responsible and trustee agencies and interested persons concerning the scope and content of the environmental information to be included in the environmental documentation relating to the southern Delta salinity and San Joaquin River flow objectives and their implementation. The State Water Board indicated that it would provide supplemental notice for other portions of its review of the Bay-Delta Plan and its implementation.

The purpose of this notice and the additional scoping meeting is to: 1) clarify the scope of the State Water Board's current review of the southern Delta salinity and San Joaquin River flow objectives and the program of implementation for those objectives included in the Bay-Delta Plan and the scope of the environmental documentation in support of that review; and 2) provide opportunity to comment on the clarified scope. The State Water Board is currently preparing a SED in support of potential additions and changes to: water quality objectives for the protection of southern Delta agricultural beneficial uses; San Joaquin River flow objectives for the protection of fish and wildlife beneficial uses; and the program of implementation for those objectives. In addition, the State Water Board is also considering potential changes to the monitoring and special studies program included in the 2006 Bay-Delta Plan. As explained in the 2009 notice, the State Water Board is not currently considering any other changes to the Bay-Delta Plan or any specific changes to water rights and other requirements implementing the Bay-Delta Plan. The State Water Board will provide additional notice regarding review of other aspects of the Bay-Delta Plan and its implementation in the future.

Attached to this notice are potential draft modifications to: water quality objectives for the protection of southern Delta agricultural beneficial uses; San Joaquin River flow objectives for the protection of fish and wildlife beneficial uses; and the program of implementation for those objectives. The draft objectives and program of implementation are being provided to clarify the geographic and project scope of the State Water Board's current review of the Bay-Delta Plan. The exact language of alternative changes to the objectives and program of implementation may change and will be provided in the draft SED prepared for this project. Potential changes to the monitoring and special studies program included in the 2006 Bay-Delta Plan may also be considered in the SED. For additional information concerning the State Water Board's review of the Bay-Delta Plan, please visit the State Water Board's website at [http://www.waterboards.ca.gov/waterrights/water\\_issues/programs/bay\\_delta/bay\\_delta\\_plan/water\\_quality\\_control\\_planning/index.shtml](http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/bay_delta_plan/water_quality_control_planning/index.shtml).

**Project Title:** Update to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary: Water Quality Objectives for the Protection of Southern Delta Agricultural Beneficial Uses; San Joaquin River Flow Objectives for the Protection of Fish and Wildlife Beneficial Uses; and the Program of Implementation for Those Objectives

**Project Location:** The project area for the water quality objectives to protect southern Delta agricultural beneficial uses encompasses the lands and channels from Vernalis north to Stockton, the bulk of which are included in the boundary of the South Delta Water Agency including: the San Joaquin River from Vernalis to Brandt Bridge, Middle River from Old River to Victoria Canal, and Old River/Grant Line Canal from the Head of Old River to West Canal. The project area includes the existing four southern Delta salinity compliance monitoring stations including: Old River at Tracy Road Bridge, Old River near Middle River, the San Joaquin River at Brandt Bridge, and the San Joaquin River at Airport Way Bridge near Vernalis. The project area for the San Joaquin River flow objectives for the protection of fish and wildlife beneficial uses includes the watersheds of the three salmon bearing tributaries to the San Joaquin River: the Stanislaus, Tuolumne, and Merced Rivers down to the San Joaquin River near Vernalis. The area of potential environmental effects encompasses most of the State, including: 1) the watershed of the Bay-Delta, 2) the Trinity River watershed from which water is diverted into the watershed of the Bay-Delta, and 3) areas receiving water exported from the Bay-Delta.

A map of the Project area and the area of potential environmental effects is provided at the beginning of this notice.

**Project Description:** The proposed Project includes review of and potential amendments to water quality objectives for the protection of southern Delta agricultural beneficial uses; San Joaquin River flow objectives for the protection of fish and wildlife beneficial uses; and the program of implementation for those objectives included in the 2006 Bay-Delta Plan. The proposed project also includes potential changes to the monitoring and special studies program included in the 2006 Bay-Delta Plan.

### SCOPING MEETING

A scoping meeting will be held at the following location and time:  Joe Serna Jr. Cal/EPA Headquarters Building Byron Sher Hearing Room 1001 I Street, 2 <sup>nd</sup> Floor Sacramento, CA 95814	June 6, 2011 9:00 a.m. to 3:00 p.m.
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A quorum of State Water Board members may be present at the scoping meeting. The meeting is an opportunity for staff and interested persons to provide oral comments to the State Water Board Members. The Board Members may provide direction to staff, but no final action will be taken until a subsequent, noticed Board meeting. In order to allow adequate time for all presenters, time limits may be imposed on presentations. The meeting will be webcast live on the California Environmental Protection Agency's website at [www.calepa.ca.gov/broadcast/](http://www.calepa.ca.gov/broadcast/). The meeting will be documented with audio and video recording.

### WRITTEN COMMENTS

Interested persons are encouraged to submit their written comments, evidence, and other material electronically. Comment letters should be submitted by email to [commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov) (if less than 15 megabytes in total size) with the subject "**Comment Letter – Southern Delta Ag and SJR Flow Revised NOP.**" In order to be fully considered, comments must be received by **12:00 noon on Monday, May 23, 2011. Ten hard copies of all written submittals must also be submitted to the State Water Board.** Written comments may be delivered via-mail or hand-delivered to the following address:

Jeanine Townsend, Clerk to the Board  
State Water Resources Control Board  
1001 I Street, 24th Floor  
Sacramento, CA 95814

Each participant is requested to bring additional copies of any written submittals to the workshop for the use of the other participants.

### QUESTIONS AND ADDITIONAL INFORMATION


General questions concerning this notice may be directed to Chris Carr at (916) 341-5305 or [ccarr@waterboards.ca.gov](mailto:ccarr@waterboards.ca.gov) or Diane Riddle at (916) 341-5297 or [driddle@waterboards.ca.gov](mailto:driddle@waterboards.ca.gov). Questions regarding legal issues should be directed to Erin Mahaney at (916) 341-5187 or [emahaney@waterboards.ca.gov](mailto:emahaney@waterboards.ca.gov).

**PARKING ACCESSIBILITY AND SECURITY**

The attached maps show the location and parking for the Joe Serna Jr. Cal/EPA Headquarters Building in Sacramento. The Cal/EPA Building is accessible to people with disabilities. Individuals who require special accommodations at the Joe Serna Jr. Cal/EPA Building are requested to contact Catherine Foreman, Office of Employee Assistance, at (916) 341-5881.

Due to enhanced security precautions at the Cal/EPA Building, all visitors are required to register with security staff prior to attending any meeting. To sign in and receive a visitor's badge, visitors must go to the Visitor and Environmental Services Center, located just inside and to the left of the building's public entrance. Depending on their destination and the building's security level, visitors may be asked to show valid picture identification. Valid picture identification can take the form of a current driver's license, military identification card, or state or federal identification card. Depending on the size and number of meetings scheduled on any given day, the security check-in could take up to fifteen minutes. Please allow adequate time to sign in before being directed to the hearing.

April 1, 2011  
Date

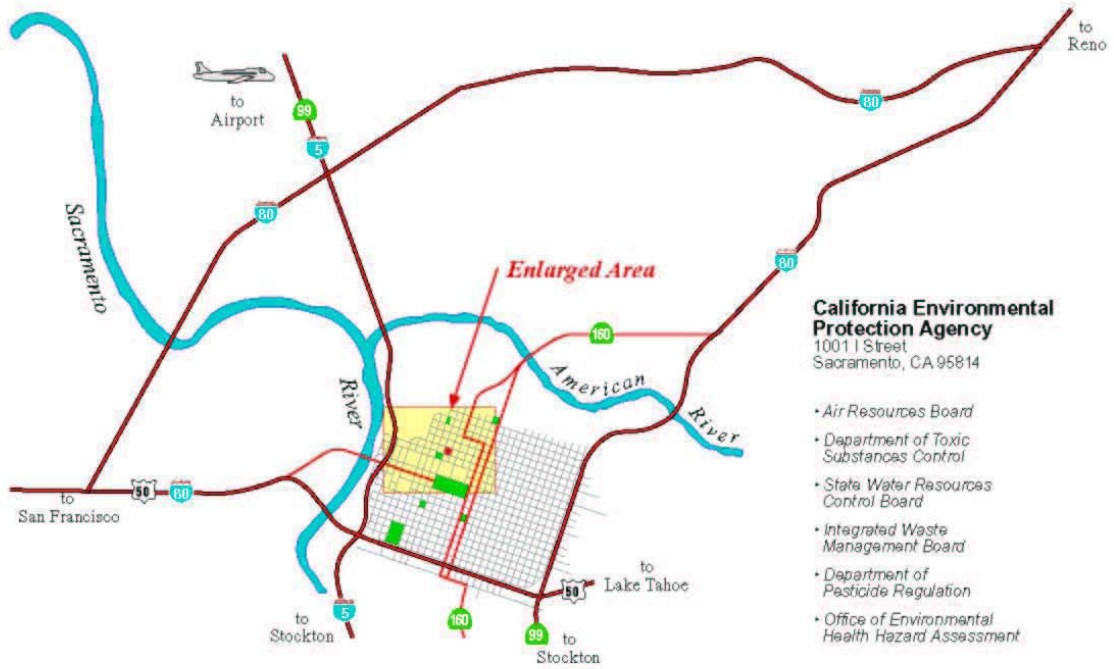
  
Jeanine Townsend  
Clerk to the Board

Attachments:

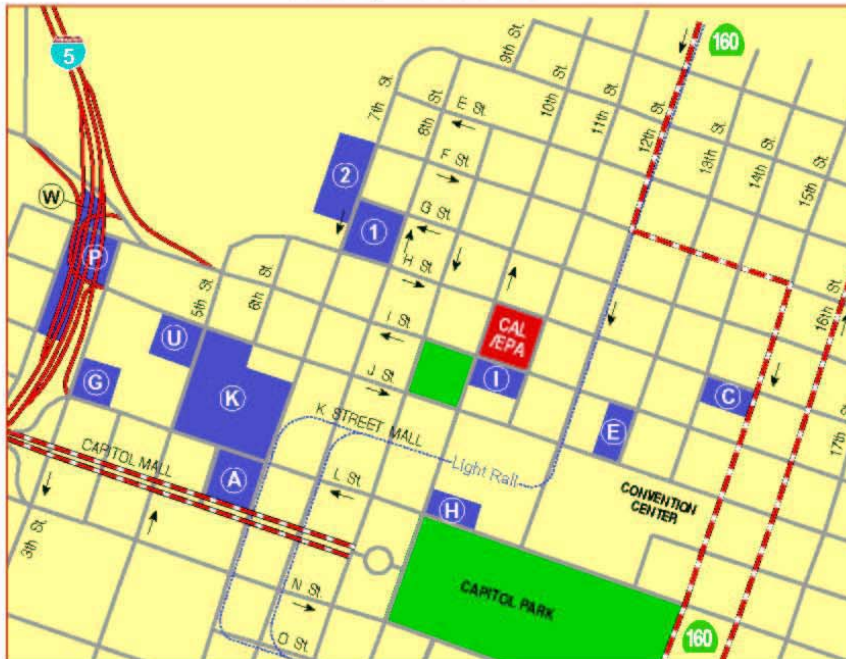
- Attachment 1: Map to Joe Serna Jr. Cal/EPA Headquarters Building
- Attachment 2: Draft San Joaquin River Fish and Wildlife Flow Objectives and Program of Implementation
- Attachment 3: Draft Southern Delta Agricultural Water Quality Objectives and Program of Implementation



Attachment 1



**Parking Lot Locations**



**Parking Lot Locations**

- Lot 1 (7th & G St.)
- Lot 2 (7th & G St.)
- Lot A (7th & Capitol)
- Lot C (14th & H St.)
- Lot G (3rd & L)
- Lot H (10th & L)
- Lot I (10th & I, 11th & I)
- Lot K (6th & J/L, 7th & K)
- Lot P (2nd & I)
- Lot U (5th & J)
- Lot W (2nd & I St.)

**Draft San Joaquin River Fish and Wildlife Flow Objectives**

**TABLE 3  
WATER QUALITY OBJECTIVES FOR FISH AND WILDLIFE BENEFICIAL USES**

<b>TABLE 3 WATER QUALITY OBJECTIVES FOR FISH AND WILDLIFE BENEFICIAL USES</b>						
<b>RIVER FLOWS</b>						
<b>COMPLIANCE LOCATION</b>	<b>STATION</b>	<b>PARAMETER</b>	<b>DESCRIPTION</b>	<b>WATER YEAR</b>	<b>TIME</b>	<b>VALUE</b>
<i>SJR at Airport Way Bridge, Vernalis</i>	<i>C-10</i>	<i>Flow Rate</i>	<i>Narrative</i>	<i>All</i>	<i>February through June</i>	<i>Maintain flow conditions from the San Joaquin River Watershed to the Delta at Vernalis, together with other reasonably controllable measures in the San Joaquin River Watershed sufficient to support and maintain the natural production of viable native San Joaquin River watershed fish populations migrating through the Delta. Specifically, flow conditions shall be maintained, together with other reasonably controllable measures in the San Joaquin River watershed, sufficient to support a doubling of natural production of Chinook salmon from the average production of 1967-1991, consistent with the provisions of State and federal law. Flow conditions that reasonably contribute toward maintaining viable native migratory San Joaquin River fish populations include, but may not be limited to, flows that mimic the natural hydrographic conditions to which native fish species are adapted, including the relative magnitude, duration, timing, and spatial extent of flows as they would naturally occur. Indicators of viability include abundance, spatial extent or distribution, genetic and life history diversity, migratory pathways, and productivity.</i>
<i>Confluence of Tuolumne River with the SJR</i>	<i>TBD</i>					
<i>Confluence of Merced River with the SJR</i>	<i>TBD</i>					
<i>Confluence of the Stanislaus River with the SJR</i>	<i>TBD</i>					
<i>SJR at Airport Way Bridge, Vernalis</i>	<i>C-10</i>	<i>Flow Rate</i>	<i>Minimum Average Monthly Flow Rate (cfs)</i>	<i>All</i>	<i>Oct</i>	<i>1,000<sup>1</sup></i>

<sup>1</sup> Plus up to an additional 28 thousand acre-feet (TAF) pulse/attraction flow shall be provided during all water year types. The amount of additional water will be limited to that amount necessary to provide a monthly average flow of 2,000 cfs. The additional 28 TAF is not required in a critical year following a critical year. The pulse flow will be scheduled in consultation with USFWS, NOAA Fisheries, and DFG.

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## **Draft San Joaquin River Fish and Wildlife Flow Objectives Program of Implementation**

*Delete existing text in Chapter IV. Program of Implementation, A. Implementation Measures within State Water Board Authority, 3. River Flows: San Joaquin River at Airport Way Bridge, Vernalis, and add the following new text to Section B. Measures Requiring a Combination of State Water Board Authorities and Actions by Other Agencies:*

### **River Flows: San Joaquin River at Airport Way Bridge, Vernalis**

The narrative San Joaquin River flow objective is to be implemented through water right actions, water quality actions, and actions by other agencies in an adaptive management framework informed by required monitoring, special studies, and reporting. The purpose of the implementation framework is to achieve the narrative San Joaquin River flow objective by providing more natural flow conditions, including more flow of a more natural spatial and temporal pattern; providing for adaptive management in order to respond to changing information on flow needs and to minimize water supply costs; and allowing for and encouraging coordination and integration of existing and future regulatory processes.

#### Implementation of Flows from February through June

The State Water Board has determined that more flow of a more natural pattern is needed from February through June from the San Joaquin River watershed to Vernalis to achieve the narrative San Joaquin River flow objective. Specifically, more flow is needed from the existing salmon and steelhead bearing tributaries in the San Joaquin River watershed down to Vernalis in order to provide for connectivity with the Delta and more closely mimic the natural hydrographic conditions to which native migratory fish are adapted. Salmon bearing tributaries to the San Joaquin River currently include the Merced, Tuolumne, and Stanislaus Rivers.<sup>1</sup>

Thus, the State Water Board has determined that approximately X percent (e.g. 20-60 percent)<sup>2</sup> of unimpaired flow is required from February through June from the Merced, Tuolumne, and Stanislaus Rivers on a X-day average (e.g. 14-day)<sup>2</sup> to a maximum of X cubic-feet per second (cfs) (e.g. 20,000 cfs)<sup>2</sup> at Vernalis, unless otherwise approved by the State Water Board as described below. This flow is in addition to flows in the San Joaquin River from sources other than the Merced, Tuolumne, and Stanislaus Rivers. In addition, the State Water Board has determined that base flows of X cfs (e.g. 1,000 cfs)<sup>2</sup> on a X-day average (e.g. 14-day)<sup>2</sup> is required at Vernalis at all times during the February through June period. Water needed to achieve the base flows at Vernalis should be provided on a generally proportional basis from the Merced, Tuolumne, and Stanislaus Rivers. The actions necessary to meet the above requirements are described below.

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<sup>1</sup> Currently, the San Joaquin River does not support salmon runs upstream of the Merced River confluence (upper San Joaquin River). However, pursuant to the San Joaquin River Restoration Program (SJRRP), spring-run Chinook salmon are planned to be reintroduced to the upper San Joaquin River no later than December 31, 2012. Flows needed to support this reintroduction are being determined and provided through the SJRRP. During the next review of the Bay-Delta Plan, the State Water Board will consider information made available through the SJRRP process, and any other pertinent sources of information, in evaluating the need for any additional flows from the upper San Joaquin River Basin to contribute to the narrative San Joaquin River flow objective.

<sup>2</sup> A placeholder "X" value with examples are shown for several parameters in this draft. The final program of implementation will have a fixed value based on subsequent analyses.

## Attachment 2

### Assignment of Responsibility for Actions to Achieve the Objective

The State Water Board will require implementation of the narrative objective through water rights actions, Federal Energy Regulatory Commission (FERC) hydropower licensing processes, or other processes. In order to assure that the water rights and FERC processes are fully coordinated, implementation of the narrative flow objective may be phased in order to achieve full compliance with the narrative objective by the completion of the FERC proceedings on the Merced and Tuolumne Rivers, or no later than 2020, whichever occurs first.

To inform the implementation process for the narrative flow objective, the State Water Board will establish a workgroup consisting of State, federal, and local agency staff, stakeholders, and other interested persons with expertise in fisheries management, unimpaired flows, and operations on the Merced, Tuolumne, and Stanislaus Rivers to develop recommendations for establishing water right, FERC, and other related requirements to implement the narrative flow objective in a manner that best achieves the narrative flow objective while minimizing water supply costs. Any recommendation developed by the workgroup shall be submitted to the State Water Board within six months (placeholder date pending additional review) from the date of the State Water Board's approval of this amendment to the Bay-Delta Plan in order to be considered in future State Water Board water right and FERC licensing proceedings.

Although the most downstream compliance location for the San Joaquin River flow objective is at Vernalis, the objective is intended to protect migratory fish in a larger area, including areas within the Delta where fish that migrate to or from the San Joaquin River watershed depend on adequate flows from the San Joaquin River and its tributaries. To assure that flows required to meet the San Joaquin River narrative flow objective are not diverted downstream for other purposes, the State Water Board may take water right and other actions to assure that those flows are used for their intended purpose. In addition, the State Water Board may take actions to assure that provision of flows to meet the narrative San Joaquin River flow objective do not result in redirected impacts to groundwater resources, potentially including requiring groundwater management plans, conducting a reasonable use proceeding, or other appropriate actions.

### Adaptive Management of Flows during the February through June Period

Implementation of the narrative San Joaquin River flow objective will include the adaptive management of flows during the February through June period in order to achieve the narrative flow objective and minimize water supply impacts. Any adaptive management of flows must not result in flows of less than approximately X percent (e.g. 10 percent)<sup>2</sup> of unimpaired flow from each of the Merced, Tuolumne, and Stanislaus Rivers over the entire February through June period, up to a maximum of X cfs (e.g. 20,000 cfs)<sup>2</sup> at Vernalis. This flow is in addition to flows in the San Joaquin River from sources other than the Merced, Tuolumne, and Stanislaus Rivers.

The State Water Board or other responsible entity will establish a coordinated operations group, or COG, which will be comprised of the Department of Fish and Game; National Marine Fisheries Service; representatives of water users on the Merced, Tuolumne, and Stanislaus Rivers, and any other representatives deemed appropriate by the State Water Board. The COG must agree to any adaptive management of flows, subject to final approval by the Executive Director of the State Water Board. Other interested persons may provide information to inform the COG process and the Executive Director's approval of any adaptive management. In order to inform implementation actions, State Water Board staff will work with the COG and other interested persons to develop recommendations for an adaptive management process, to be submitted for approval by the Executive Director of the State Water Board within 12 months (placeholder date pending additional review) following the board's approval of this amendment

## Attachment 2

to the Bay-Delta Plan. By January 1 of each year, the COG also must prepare an adaptive management plan for the coming February through June season of that year for approval by the Executive Director.

In addition, based on future monitoring and evaluation to determine flow needs to achieve the narrative San Joaquin River flow objective, the State Water Board may approve modifications to the required percentage of unimpaired flows, base flows, and upper end of flows at which a percentage of unimpaired flows are no longer required. Specifically, FERC licensing proceedings on the Merced and Tuolumne Rivers are expected to yield specific information on in-stream flow needs for those tributaries. The State Water Board expects this information to inform specific measures needed to implement the narrative San Joaquin River flow objective. To obtain similar information for the Stanislaus River, the State Water Board will require the development of any additional information needed to inform specific instream flow needs on the Stanislaus River. The State Water Board will use the specific in-stream flow information developed for each of the tributaries to determine how to adaptively manage flows on the San Joaquin River to meet the narrative San Joaquin River flow objective and integrate Bay-Delta Plan flow requirements with FERC licensing requirements.

Any modifications to the required percentage of unimpaired flows, base flows, and upper end of flows at which a percentage of unimpaired flows are no longer required shall not result in a change of more than: X percent (e.g. 10 percent)<sup>2</sup> of unimpaired flow from any one tributary over the entire February through June period; more than plus or minus X cfs (e.g. 200 cfs)<sup>2</sup> at Vernalis for the base flow requirement; and plus or minus X cfs (e.g. 5,000 cfs)<sup>2</sup> for the upper end of the flow requirement at Vernalis without modification to this program of implementation in accordance with applicable water quality control planning processes. Additional specific exceptions for drought considerations or unforeseen disaster circumstances may also be approved by the State Water Board.

### Implementation of Flows during October

The State Water Board will reevaluate the assignment of responsibility for meeting the October pulse flow requirement during the water right proceeding or FERC licensing proceeding following adoption of this plan amendment in order to optimize protection for fish and wildlife beneficial uses and minimize impacts to water supplies.

The State Water Board will require persons responsible for meeting the October pulse flow requirement to conduct monitoring and special studies (discussed below) to determine what, if any, changes should be made to the October pulse flow requirement and its implementation to achieve the narrative San Joaquin River flow objective. Based on this information, the State Water Board will evaluate the need to modify the October pulse flow requirement during the next review of the Bay-Delta Plan.

### Implementation at Other Times of Year (July through September and November through January)

The State Water Board has not established flow requirements for the July through September and November through January time frames that are necessary to implement the narrative San Joaquin River flow objective. The State Water Board will require monitoring and special studies (discussed below) during the water rights and FERC processes to be conducted to determine what, if any, flow requirements should be established for this time period to achieve the narrative San Joaquin River flow objective. Results from the monitoring and special studies program shall be used to inform the FERC proceedings on the Merced and Tuolumne Rivers and to inform the next review of the San Joaquin River flow objectives in the Bay-Delta Plan.

## Attachment 2

### Actions by Other Agencies

To be developed. Should include actions such as: habitat restoration actions (floodplain restoration, gravel enhancement, riparian vegetation management, passage etc.), hatchery management, predator control, water quality measures, ocean/riverine harvest measures, recommendations for changes to flood control curves, barrier operations, others.

## **New Special Studies, Monitoring, and Reporting Requirements**

*Add new section with the text below to the end of Chapter IV. Program of Implementation, Section D. Monitoring and Special Studies Program:*

### **San Joaquin River Fish and Wildlife Flow Objectives**

In order to inform real time adaptive management and long-term management of flows on the San Joaquin River for the protection of fish and wildlife beneficial uses, the State Water Board will require the development of a comprehensive monitoring, special studies, evaluation, and reporting program, referred to as the San Joaquin River Monitoring and Evaluation Program (SJRMEP). During the water right and FERC proceedings to implement the narrative San Joaquin River flow objective, the State Water Board will establish responsibility for development and implementation of the SJRMEP. The SJRMEP shall be developed with input from the COG and shall be subject to approval by the Executive Director of the State Water Board. The SJRMEP shall at a minimum include monitoring, special studies, and evaluations of flow related factors on the viability of native San Joaquin River watershed fish populations, including abundance, spatial extent (or distribution), diversity (both genetic and life history), and productivity. The SJRMEP shall include regular reporting and evaluation of monitoring and special studies data. Evaluations of monitoring and special studies data shall be subject to regular outside scientific review. The Executive Director of the State Water Board may direct or approve changes to the SJRMEP based on monitoring and evaluation needs. The SJRMEP shall be integrated and coordinated with existing monitoring and special studies programs on the San Joaquin River, including monitoring and special studies being conducted pursuant to federal biological opinion requirements and as part of the FERC licensing proceedings for the Merced and Tuolumne Rivers.

Specifically, the SJRMEP shall evaluate the effect of flow conditions at various times of year, including spring (February through June), fall (including October), summer, and winter months on the abundance, spatial extent, diversity, and productivity of native San Joaquin River Basin fish species in order to inform adaptive management and future changes to the San Joaquin River flow objectives and their implementation.

**Draft Southern Delta Agricultural Water Quality Objectives**

**TABLE 2  
WATER QUALITY OBJECTIVES FOR AGRICULTURAL BENEFICIAL USES**

COMPLIANCE LOCATIONS	STATION	PARAMETER	DESCRIPTION	WATER YEAR	TIME	VALUE
<b>SOUTHERN DELTA SALINITY</b>						
San Joaquin River at Airport Way Bridge, Vernalis	C-10 (RSAN112)	Electrical Conductivity (EC)	Maximum 30-day running average of mean daily EC (mmhos/cm)	All	Apr-Aug Sep-Mar	0.7 1.0
San Joaquin River from Vernalis to Brandt Bridge - and - Middle River from Old River to Victoria Canal - and - Old River/Grant Line Canal from head of Old River to West Canal	C-6 [5] (RSAN073) C-8 [5] (ROLD69) P-12 [5] (ROLD59)	Electrical Conductivity (EC)	Maximum 30-day running average of mean daily EC (mmhos/cm)	All	Apr-Aug (Sep-Mar)*	1.0 (1.0 to 1.4)*
<b>SOUTHERN DELTA WATER LEVELS AND CIRCULATION</b>						
San Joaquin River from Vernalis to Brandt Bridge - and - Middle River from Old River to Victoria Canal - and - Old River/Grant Line Canal from head of Old River to West Canal	[6] [6] [6]	Water Level & Circulation	Narrative			Water level and circulation conditions shall be maintained sufficient to provide reasonable protection of agricultural beneficial uses.

### **Attachment 3**

[5] *Compliance monitoring will be re-evaluated and possibly modified as part of the Monitoring and Reporting Protocol described in the implementation plan. Unless modified, compliance with these salinity objectives will be determined at the indicated locations.*

[6] *Monitoring requirements to assess compliance with this narrative objective will be established as part of the Monitoring and Reporting Protocol described in the implementation plan.*

*\* Note: The salinity objective “Value” parameter for September through March above is stated as a range of values that will be evaluated in the SED. Additional breakdown of applicable months for the “Time” parameter may also be evaluated in the SED.*

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## Draft Southern Delta Agricultural Water Quality Objectives Program of Implementation

Replace entirely Chapter IV. Program of Implementation, B. Measures Requiring a Combination of State Water Board Authorities and Actions by Other Agencies, 1. Southern Delta Agricultural Salinity Objectives with the following:

### 1. Southern Delta Agricultural Water Quality Objectives

Elevated salinity in the southern Delta is caused by various factors, including low flows; salts imported to the San Joaquin Basin in irrigation water; municipal discharges; subsurface accretions from groundwater; tidal actions; diversions of water by the SWP, CVP, and local water users; channel capacity; and discharges from land-derived salts, primarily from agricultural drainage. Salinity in the southern Delta is also affected by evapo-concentration of salts due to local agricultural operations and to a lesser extent by local municipal wastewater treatment plant discharges. Poor flow/circulation patterns in the southern Delta waterways also cause localized increases in salinity concentrations.

The numeric salinity objectives and narrative water level and circulation objectives for the southern Delta listed in Table 2 of the Bay-Delta Plan address salinity, water levels, and circulation to provide reasonable protection of the agricultural beneficial use in the southern Delta.

#### State Water Board Regulatory Actions

The southern Delta water quality objectives for protection of agricultural beneficial uses listed in Table 2 will be implemented as follows:

- i. Numeric salinity objectives for the San Joaquin River at Vernalis will continue to be implemented by conditioning the water rights of USBR on compliance with this objective.
- ii. Narrative water level and circulation objectives for the southern Delta will be implemented by conditioning the water rights of the USBR and DWR on compliance with this objective through the following measures:
  - a) Continued operation of the agricultural barriers at Grant Line Canal, Middle River, and Old River at Tracy, or other reasonable measures, for the purpose of improving surface water levels and circulation in the southern Delta that would otherwise be impacted by operations of the CVP and SWP. This shall include modified design and/or operations as determined by the Comprehensive Operations Plan described below.
  - b) Completion of the Monitoring Special Study, Modeling Improvement Plan, and Monitoring and Reporting Protocol described in Section D of the Program of Implementation: *'Monitoring and Special Studies Program'* under a new part 2: *'Southern Delta Water Quality'*.
  - c) Development and implementation of a Comprehensive Operations Plan to maximize circulation (i.e. minimize null zones) in order to avoid localized concentration of salts associated with agricultural water use and municipal discharges. The plan shall also address water level issues, and once approved, will supersede the water level and quality response plans required under D-1641. This plan shall include detailed information regarding the configuration and operations of any facilities relied upon in the plan, and shall identify specific water level and circulation performance goals. The plan shall also identify a method to conduct ongoing assessment of the performance and potential improvements to the facilities or their operation. The

### Attachment 3

criteria for assessing compliance with the performance goals should be coordinated with the Monitoring and Reporting Protocol. DWR and USBR shall work together with the South Delta Water Agency (SDWA), State Water Board staff, other state and federal resource agencies, and local stakeholders as appropriate to develop this plan, and hold periodic coordination meetings throughout implementation of the plan.

The State Water Board will request DWR and USBR to submit the Comprehensive Operations Plan to the Executive Director for approval within six months from the date of State Water Board approval of this amendment to the Bay-Delta Plan. Notwithstanding voluntary compliance with this measure, at a minimum, the State Water Board will require DWR and USBR to submit the plan within six months after the water rights are amended to require compliance with this measure. Once approved, the plan shall be reviewed annually, and updated as needed, with a corresponding report to the Executive Director.

- iii. Numeric salinity objectives for the three interior southern Delta waterways will be implemented through:
  - a) Provision of assimilative capacity by maintaining salinity objectives upstream at Vernalis.
  - b) Increased inflow of low salinity water into the southern Delta at Vernalis by implementing the SJR flow objectives during February through June.
  - c) Benefits to local salinity conditions accrued from USBR and DWR implementation of the narrative water level and circulation objectives as described above.

Compliance with the salinity objectives for the interior southern Delta waterways will be measured at stations C-6, C-8, and P-12. The monitoring requirements at these stations will be re-evaluated and possibly modified as part of the Monitoring and Reporting Protocol. Compliance with the salinity objectives for the San Joaquin River at Vernalis will be determined at station C-10. Monitoring requirements to assess compliance with the narrative water level and circulation objective will be established as part of the Monitoring and Reporting Protocol.

The interior southern Delta salinity objectives will be implemented no later than December 2020 in coordination with implementation of San Joaquin River flow objectives. The narrative water level and circulation objectives will be implemented by completion and ongoing execution of the Comprehensive Operations Plan. The salinity objectives at Vernalis will continue to be implemented by conditioning USBR water rights on compliance with this objective. To the extent necessary, the State Water Board may take other water right actions and water quality actions, in concert with actions by other agencies, to implement the objectives.

#### Central Valley Regional Water Quality Control Board (CVRWQCB) Regulatory Actions

Implementation of the Vernalis and interior southern Delta salinity objectives will also benefit from the following CVRWQCB regulatory actions:

- i. Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS): CV-SALTS is a stakeholder-led effort initiated by the State Water Board and the CVRWQCB in 2006 to develop a basin plan amendment and implementation actions to address salinity and nitrate problems in California's Central Valley.
- ii. Discharge Regulation: Using its NPDES and other permitting authorities, the CVRWQCB regulates salt discharges upstream and within the southern Delta in coordination with the ongoing CV-SALTS process. The CVRWQCB, in coordination with

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various Central Valley stakeholders, is also exploring a region-wide variance policy and interim program to provide variances from water quality standards for salt while CV-SALTS is in progress. This variance policy and interim program is anticipated to be considered by the CVRWQCB before the fall of 2011.

- iii. Upstream of Vernalis San Joaquin River Salinity Objectives: CV-SALTS has established a committee to develop a Basin Plan amendment containing numerical salinity objectives and the associated control program for the lower San Joaquin River.
- iv. San Joaquin River at Vernalis Salt and Boron TMDL: The CVRWQCB is implementing the salinity and boron TMDL at Vernalis. This effort includes a Management Agency Agreement with the US Bureau of Reclamation addressing salt imported into the San Joaquin River basin via the Delta-Mendota Canal.

### Actions by Other Agencies

Implementation of the Vernalis and interior southern Delta salinity objectives will also benefit from the following actions being taken by other agencies:

- i. Grasslands Bypass Project: Implementation of the Grasslands Bypass Project and the associated West Side Regional Drainage Plan will continue to reduce salt loads to the San Joaquin River upstream of Vernalis.
- ii. San Luis Unit Feature Re-evaluation Project: The purpose of this project is to provide agricultural drainage service to the Central Valley Project San Luis Unit with the goal of long-term sustainable salt and water balance for the associated irrigated lands.
- iii. Central Valley Project Improvement Act (CVPIA) Land Retirement Program: The goal of this program is to reduce agricultural drainage by retiring drainage impaired farmland and changing the land use from irrigated agriculture to restored upland habitat.

### State Funding of Programs

- i. Implementation of the Vernalis and interior southern Delta salinity objectives will also benefit from State Water Board funding assistance for salinity related projects through the State Revolving Fund Loan Program, the Agricultural Drainage Loan Program, the Agricultural Drainage Management Loan Program, Proposition 13, 40, 50, and grant funding through the Non-point Source Pollution Control Programs and Watershed Protection Programs.

## **New Special Studies, Monitoring, and Reporting Requirements**

*Add new section with the text below to the end of Chapter IV. Program of Implementation, Section D. Monitoring and Special Studies Program:*

### **2. Southern Delta Agricultural Water Quality Objectives**

Implementation of the numeric salinity and narrative water level and circulation objectives in the southern Delta will require information collected through the following monitoring and special studies programs:

- i. Monitoring Special Study: As a condition of its water rights, DWR and USBR shall work with State Water Board staff, and solicit other stakeholder input to develop and implement a special study to characterize the spatial and temporal distribution and associated dynamics of water level, circulation, and salinity conditions in the southern Delta waterways. The extent of low/null flow conditions and any associated concentration of local salt discharges should be documented. The State Water Board

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will solicit participation from local agricultural water users and municipal dischargers to provide more detailed data regarding local diversions and return flows or discharges.

The State Water Board will request DWR and USBR to submit the plan for this special study to the Executive Director for approval within six months from the date of State Water Board approval of this amendment to the Bay-Delta Plan. Notwithstanding voluntary compliance with this measure, at a minimum, the State Water Board will require DWR and USBR to submit the plan within six months after the water rights are amended to require compliance with this measure. Once approved, the monitoring contained in this plan shall continue to be implemented until the Monitoring and Reporting Protocol (described below) is approved and being implemented.

- ii. Modeling Improvement Plan: State Water Board Order WR 2010-0002, paragraph A.3 requires DWR and USBR to provide modeling and other technical assistance to State Water Board staff in association with reviewing and implementing the SJR flow and southern Delta salinity objectives. Plans to assess and improve hydrodynamic and water quality modeling of the southern Delta should be completed. Specific scope and deliverables are being managed as part of this ongoing process.
- iii. Monitoring and Reporting Protocol: As a condition of its water rights, DWR and USBR shall work with State Water Board staff and solicit other stakeholder input to develop specific monitoring requirements to measure compliance with the narrative water level and circulation objectives, including monitoring requirements needed to assess compliance with the performance goals of the Comprehensive Operations Plan. DWR and USBR shall also use results of the monitoring special study and improved modeling capabilities described above to evaluate potential improvements to the compliance monitoring for the salinity objectives in the interior southern Delta. The State Water Board will request DWR and USBR to submit the plan to the Executive Director for approval within 18 months from the date of State Water Board approval of this amendment to the Bay-Delta Plan. Notwithstanding voluntary compliance with this measure, at a minimum, the State Water Board will require DWR and USBR to submit the plan within 18 months after the water rights are amended to require compliance with this measure.