

Site Specific Salinity and Boron Objectives/TMDLs for the Lower San Joaquin River

Basin Plan Amendment Scoping Meeting

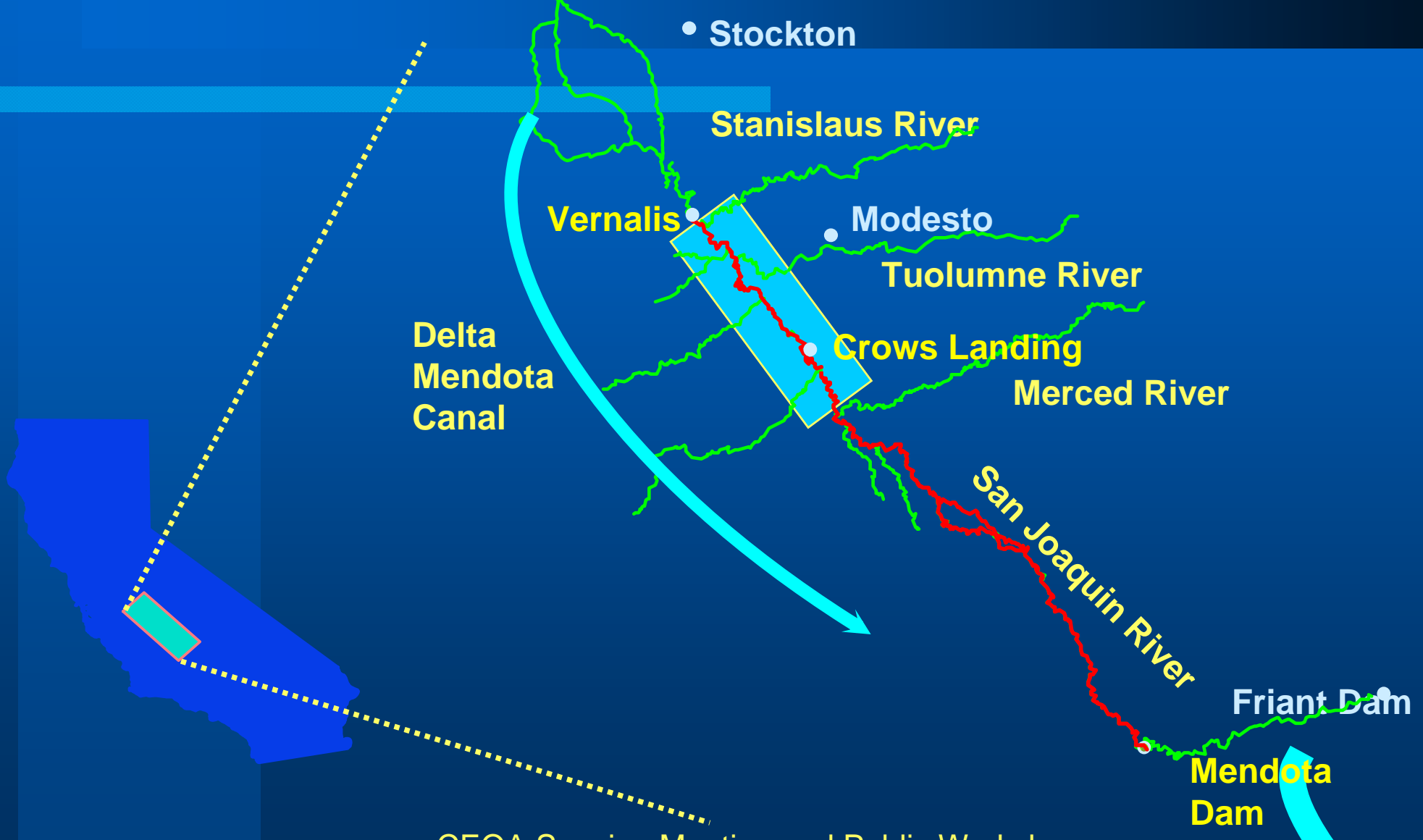
30 March 2009



Overview

- Basin Plan Amendment Elements
 - Water Quality Objectives
 - Program of Implementation
- Background
- Coordination/Stakeholder Involvement
- Discussion

Lower San Joaquin River Basin



30 March 2009

CEQA Scoping Meeting and Public Workshop
Lower San Joaquin River Salt & Boron Objectives
and TMDL

Slide 3

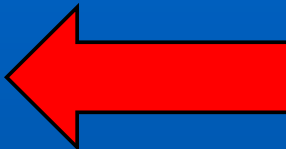
What's a Basin Plan?

- **Basin Plans are the key regulatory planning documents used by the Regional Water Quality Control Boards**
- **Basin Plans identify beneficial uses & define water quality objectives**
- **Basin Plans identify how a Board deals with water quality problems in a specific geographic area.**

What is Basin Planning?

- Amending a Basin Plan is a CEQA substitute process
- Scoping: Identify alternatives
- Public Process: public input is solicited at key stages
- Outcome: Basin Plan is changed

Basin Planning Steps

- **Scoping**
 - **Draft Report**
 - **Staff response to comments**
 - **Final Report**
 - **Public hearing**
 - **Adoption**
 - **SWRCB, OAL & USEPA approval**
- 

Why are we here today?

- Solicit feedback on project scope and project elements
- Initial CEQA scoping workshop in 2005
- Revised geographic scope
- Increased cooperation between State and Regional Boards
- Coordination with CV-SALTS

Why a Basin Plan Amendment?

- SJR water quality degradation recognized in 1975 Basin Plan
- 303(d) listing in 1998 for both salt and boron
- Water Rights Decision 1641
- Second phase of SJR Salt and Boron TMDL

Project Background

30 March 2009

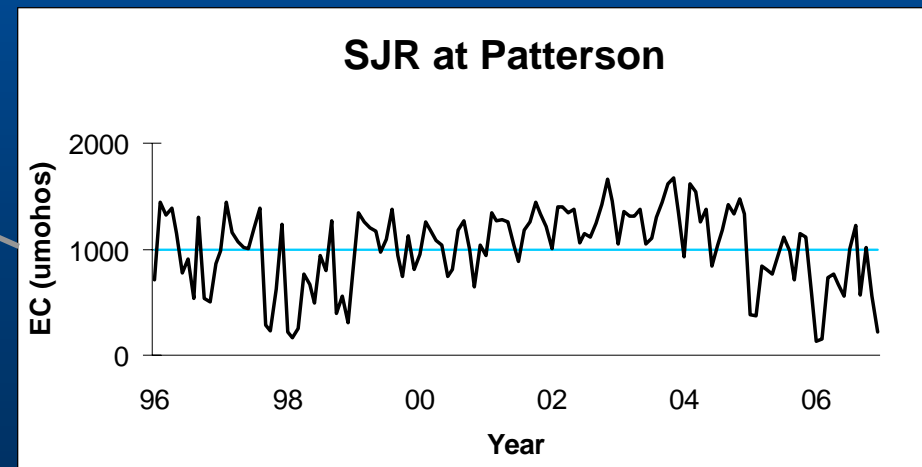
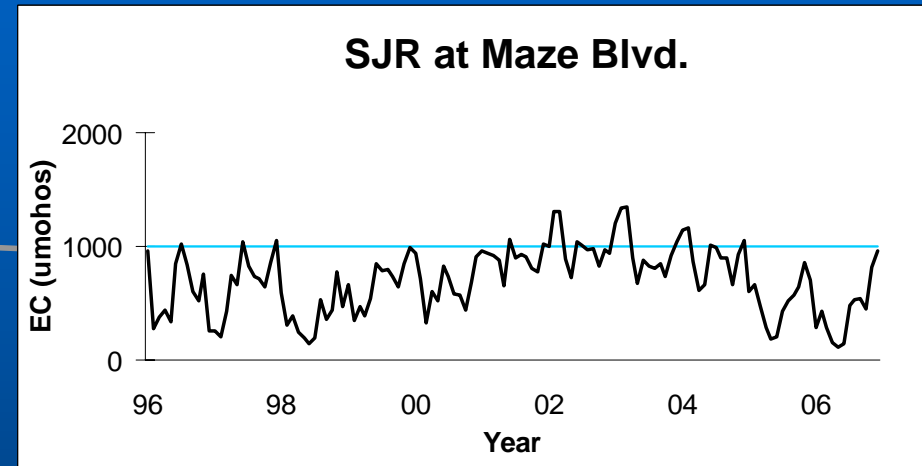
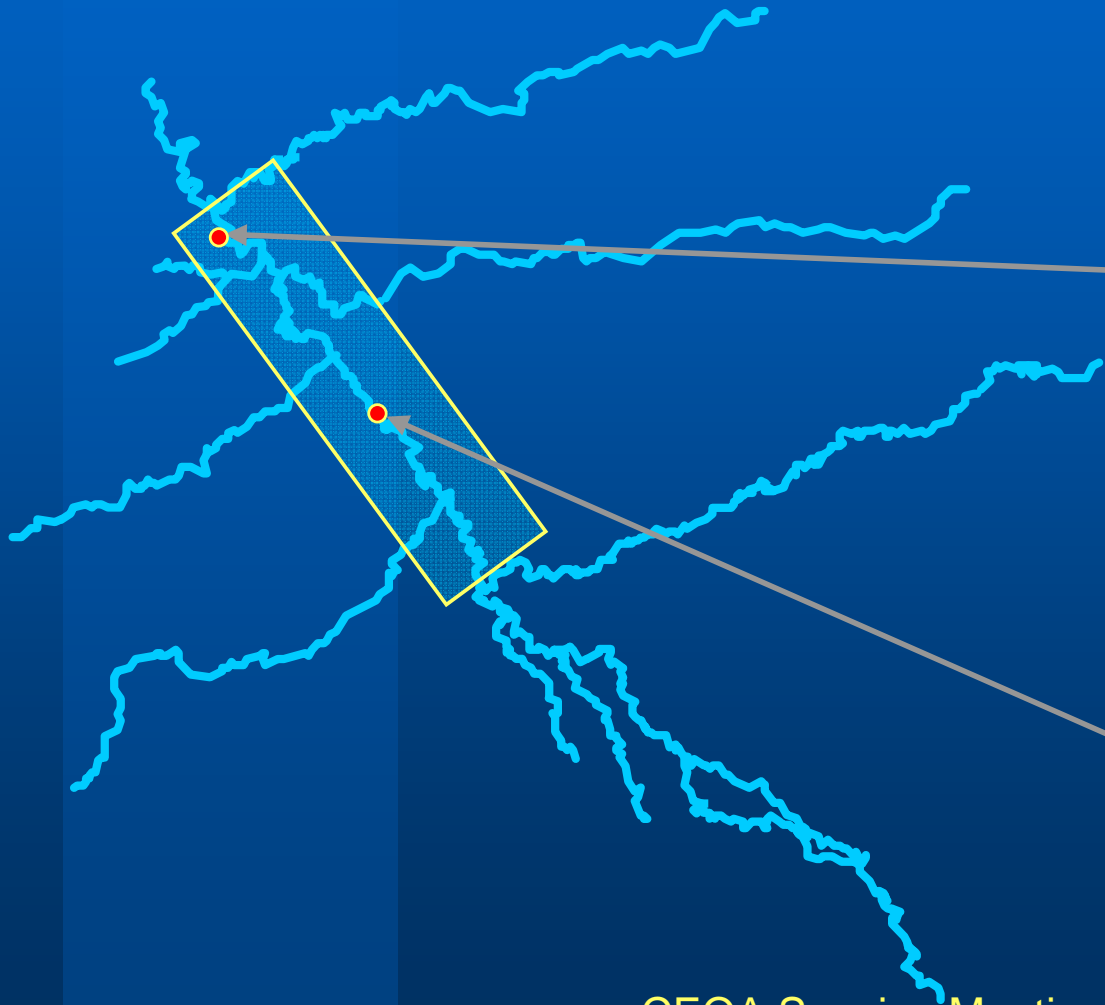
CEQA Scoping Meeting and Public Workshop
Lower San Joaquin River Salt & Boron Objectives
and TMDL

Slide 9

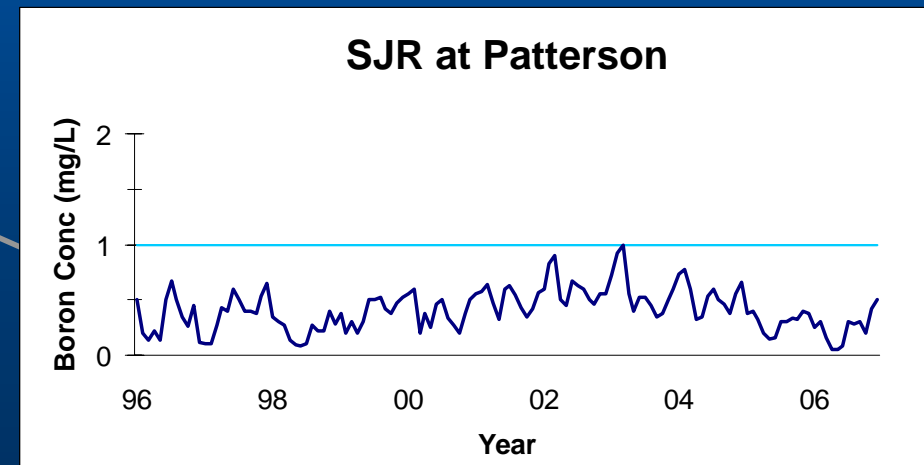
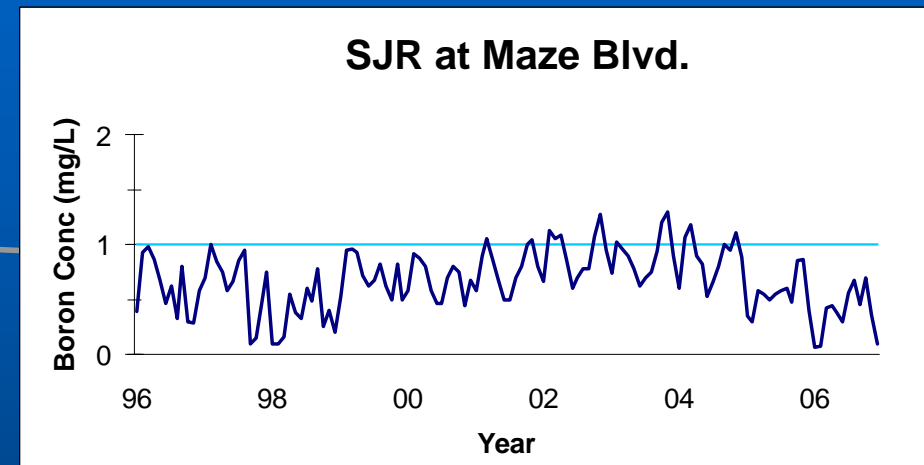
Sources of Salt and Boron

- Agricultural surface return flows
- Agricultural subsurface return flows
- Sierra Nevada tributaries and lower SJR upstream of Merced River
- Groundwater accretion
- Wetlands
- Municipal and Industrial Sources

San Joaquin River Electrical Conductivity



San Joaquin River Boron Concentration



Basin Plan Amendment Elements

30 March 2009

CEQA Scoping Meeting and Public Workshop
Lower San Joaquin River Salt & Boron Objectives
and TMDL

Slide 13

Development of Objectives

- Water Quality Standards
 - Beneficial Uses
 - **Water Quality Objectives**
- Program of Implementation
 - Compliance Program
 - May include TMDLs

Beneficial Uses

	MUN	AGR		PROC	REC 1		REC 2	WARM	COLD	MIGR		SPWN	WILD	
	Municipal and Domestic Supply	Irrigation	Stock Watering	Industrial Process Supply	Contact	Canoeing and Rafting	Other Noncontact	Freshwater Habitat-Warm	Freshwater Habitat-Cold	Warm	Cold	Warm	Cold	Wildlife Habitat
Lower SJR Merced River to Vernalis	P	E	E	E	E	E	E	E		E	E	E		E

P = Potential E = Existing

CEQA Scoping Meeting and Public Workshop
 Lower San Joaquin River Salt & Boron Objectives
 and TMDL

Objective Development Considerations

- Past, present and probable future beneficial uses
- Environmental characteristics of the hydrographic unit under consideration
- WQ conditions that could reasonably be achieved
- Economic considerations
- The need to develop and use recycled water
- The need for developing housing in the region

Possible Salinity Water Quality Objectives

- Drinking water – Secondary MCLs
- Export Limit – DMC Intake
- Agricultural Protection – Crop tolerance modeling
- Your Suggestions

Possible Salinity Water Quality

Objectives

Agricultural Protection

- Agriculture is a sensitive beneficial use
- Based upon crop tolerance models, using site specific cropping, soils and other information.
- Will develop site-specific alternative(s)
- Steady-state and transient models
- Looking for stakeholder input on selection of appropriate models.
- Will coordinate with Bay-Delta efforts.

Possible Boron Water Quality Objectives

Basin Plan Boron Standards*

Maximum (mg/L)

2.0 **1 April – 31 August**

2.6 **1 September – 31 March**

Mean Monthly (mg/L)

0.8 **1 April – 31 August**

1.0 **1 September – 31 March**

1.3 **Year Round – Critical Water Year**

* Not approved by EPA

Achievability Analysis

- Use of flow/water quality models to determine if potential objectives are achievable
- Models not yet selected – your input encouraged
- Will consider other factors related to achievability

State and Regional Board Policies

- Controllable Factors
- Antidegradation
- Application of Water Quality Objectives
- Water Quality Control
- Nonpoint Sources Management Plan

Legal Requirements

- Federal Clean Water Act requires TMDLs for impaired waters [303(d) listed]
- State Water Quality Act (Porter-Cologne) requires implementation program for TMDLs; implementation program is contained in the Basin Plan Amendment
- This TMDL and Basin Plan Amendment will meet these legal obligations, and will be designed to restore the affected beneficial uses

What is a TMDL?

- A total maximum daily load (TMDL) is the amount of a specific pollutant that a water body can receive and still maintain a water quality standard
- TMDLs allocate pollutant loads to point and nonpoint sources

Components of TMDLs

- TMDL Description
- Numeric Targets
- Source Analysis
- Allocations to point and non-point sources
- Linkage Analysis
- TMDL Report

Regulatory Options

- Prohibition of Discharge (Conditional)
- Waste Discharge Requirements (WDRs)
- Conditional Waiver of WDRs
- NPDES Permit

Coordination and Stakeholder Process

30 March 2009

CEQA Scoping Meeting and Public Workshop
Lower San Joaquin River Salt & Boron Objectives
and TMDL

Slide 26

Related Projects – State Board

Bay Delta Plan – Comprehensive Review

- South Delta salinity objectives
- San Joaquin River flow objectives

State and Regional Board Coordination

- Environmental documentation
- Crop tolerance modeling
- Flow achievability modeling

Stakeholder Involvement

- CV-SALTS Overview
 - Central Valley Salinity Coalition
 - State Water Board
 - Regional Water Board
- Role of the Technical Advisory Committee
- How you can get involved

CV

Central Valley



SALTS

Salinity Alternatives for Long-term Sustainability

- Central Valley Salinity Coalition
www.cvsalinity.org
- CV-SALTS on the Regional Board website
http://www.swrcb.ca.gov/centralvalley/water_issues/salinity/
- Regional Board CV-SALTS lyris list sign-up
http://www.waterboards.ca.gov/resources/email_subscriptions/reg5_subscribe.shtml
- Regional Board CV-SALTS contacts
Gail Cismowski, gcismowski@waterboards.ca.gov
Jim Martin, jmartin@waterboards.ca.gov

Stay Informed

www.waterboards.ca.gov/centralvalley

Home About Us Public Notices Board Info Board Decisions Water Issues Publications/Forms Press Room

Welcome to the California Regional Water Quality Control Board, Central Valley Region |

GOVERNOR SCHWARZENEGGER
Visit his Website

Secretary for Environmental Protection
Linda S. Adams

California
Central Valley Region
Preserve, enhance, and restore the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.

- Cal/EPA
- State & Regional Water Boards
- Laws & Regulations
- Plans & Policies
- Programs
- Decisions Pending and Opportunities for Public Participation

RESOURCES

- Email Subscriptions
- Data & Databases
- Business Help
- Public Records Center

- Executive Officer's Report
- Need Help?
- Do I Need a Permit?
- Dairy Program
- Enforcement
- Irrigated Lands Regulatory Program
- Salinity (CV-SALTS)
- Statewide Water Event
- Storm Water Toolbox
- Surface Water Ambient Monitoring
- TMDLs and Impaired Water Bodies
- Watershed Management Initiative
- Water Education
- Water Quality Goals
- More...

ANNOUNCEMENTS

- Welcome to Our New Website!
- Next Regional Board Meeting – 14 March 2008 in Rancho Cordova
- New Monitoring and Reporting Program for Irrigated Lands Coalition Groups
- Growers Assessed Penalties – Enforcement Stepped Up In Irrigated Lands Program
- California Water Plan Update – Get Involved!
- The State of the Central Valley Region – Executive Officer's Board Presentation

Salt and Boron Project Timeline

Coordinate with CV-SALTS Technical Advisory Committee	Ongoing
Contracting	Ongoing
Draft BPA and TMDL Released	January 2011
Regional Board Hearing	March 2011
State Board Review	May 2011
Office of Administrative Law	July 2011
U.S. EPA	August 2011

Comments on this Project

Please submit comments to:

Jay Simi

CVRWQCB

11020 Sun Center Drive, #200

Rancho Cordova, CA 95670

jsimi@waterboards.ca.gov

**Comments must be received by 12:00 noon, 15
April 2009**

ANY QUESTIONS
YET?

Discussion Topics

- Range of actions
- Possible alternatives
- Mitigation measures
- Possible methods of compliance and their impacts
- Environmental effects of the proposed project

Comments on this Project

Please submit comments to:

Jay Simi

CVRWQCB

11020 Sun Center Drive, #200

Rancho Cordova, CA 95670

jsimi@waterboards.ca.gov

**Comments must be received by 12:00 noon, 15
April 2009**