

**Recommendations and Status Report
of the
San Joaquin Water Quality
Management Group**

**Plan for Achieving Salinity/Boron and DO
Objectives**

Presentation to SWRCB 1/31/06

Byron Buck

Plan for Achieving Salinity/Boron and DO Objectives

Overview

- **Review Group and Objectives**
- **Recommendations and Expected Outcomes**
- **Current Status**

Plan for Achieving Salinity/Boron and DO Objectives

List of Participants

- U.S. Bureau of Reclamation
- Department of Water Resources
- USFWS
- California Dept. Fish and Game
- Central California Irrigation District
- Friant Water Users Authority
- Grassland Water District
- James Irrigation District
- Merced Irrigation District
- Modesto Irrigation District
- Oakdale Irrigation District
- San Luis Canal Company
- San Joaquin County and Delta Water Quality Coalition
- San Joaquin County RCD
- San Joaquin River Exchange Contractors Water Authority
- San Joaquin Valley Drainage Authority
- San Joaquin River Group
- San Luis and Delta Mendota Water Authority
- South San Joaquin Irrigation District
- State Water Contractors
- South Delta Water Agency
- Stockton East Water District
- Tranquility Irrigation District
- Turlock Irrigation District
- Venice Island RD 2023
- California Farm Bureau
- Western Growers

Plan for Achieving Salinity/Boron and DO Objectives

- Group Objective: *Prepare and implement a plan to meet the water quality objectives for Salt and Boron at Vernalis and Dissolved Oxygen at the Stockton Deep Water Ship Channel in coordination with CALFED Stage I objectives*

SJRWQMG Recommendations

Salinity

1. Fully implement the Westside Regional Drainage Plan.

status: Prop 50, Consolidated Grants and Federal funding pursued to supplement local funding

2. Further evaluate and pursue managed wetland drainage management action to mitigate impacts of February through April drainage releases.

*status : **three** - yr. pilot project underway to assess water quality and biological effects of modified refuge draw-down operations to reduced saline discharges. Budget of \$1.2 million from CALFED and the participating agencies.*

Summary Recommendations cont.

Salinity

3. Develop a real-time water quality management coordination group involving LSJR tributaries, LSJR drainers and the DWR to coordinate reservoir release and SWP/CVP Project operations (head of Old River barrier and New Melones operations) to realize opportunities to improve water quality and increase the utility of stored water releases.

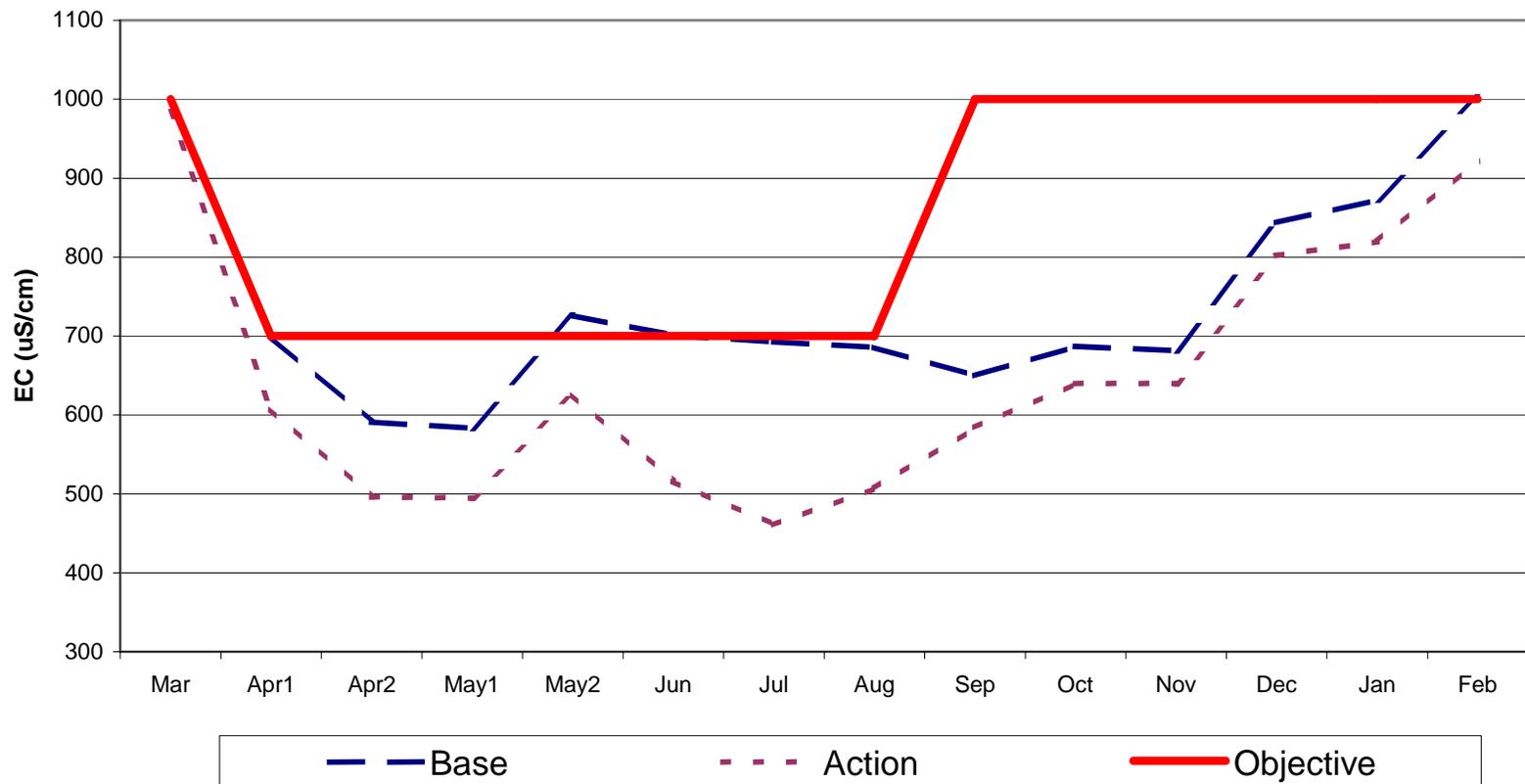
status: initial meeting held and agreement reached to begin with coordinated efforts to utilize new real-time data available and begin more regular reservoir release coordination.

Summary Recommendations cont.

5. Establish a forum to evaluate ongoing changes in the water quality baseline and suggest further management actions to continue progress on water quality improvement.

status : *water quality management group to continue*

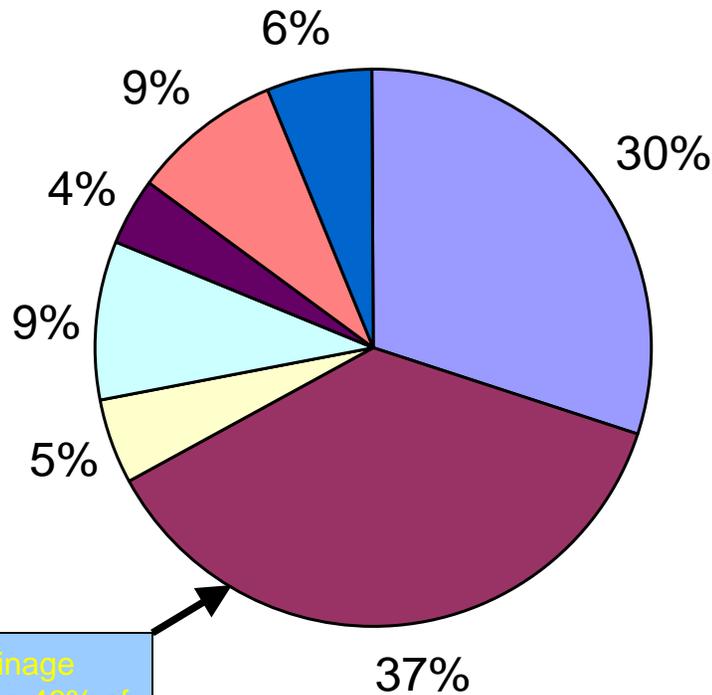
Salinity Improvement at Vernalis from Recommendations – Critical Water Year Average



Gross Salt Reduction

Salt Sources Lower SJR

Total Avg. Load 1.1 m tons/yr



- Northwest Side
- Grasslands Watershed
- East Valley Floor
- SJR Upstream of Lander Ave
- Merced
- Tuolumne
- Stanislaus

Westside Drainage Plan eliminates 46% of this load

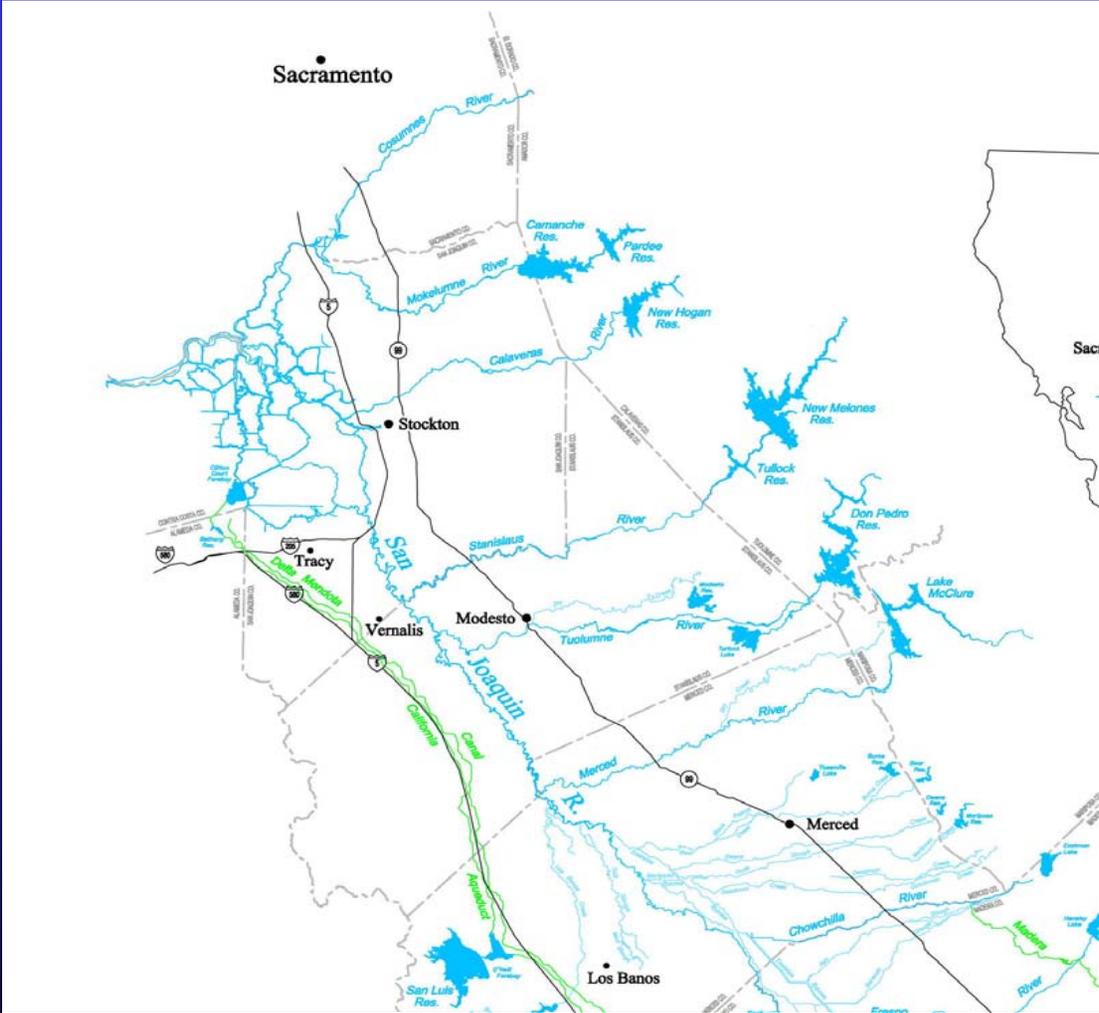
Implementation Roles

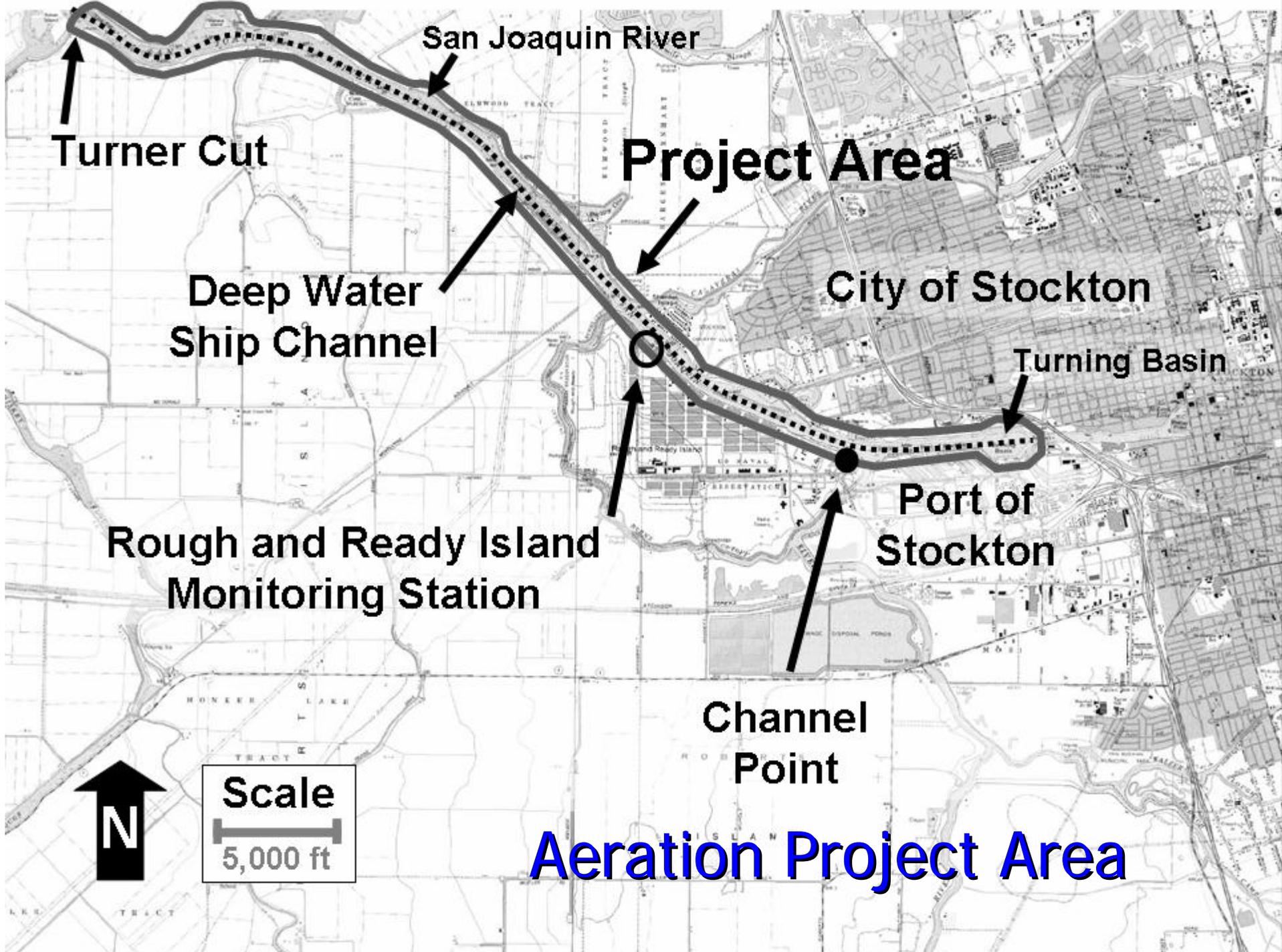
<u>Recommendation</u>	<u>Agency Role/Participant</u>		
	<u>Local</u>	<u>State</u>	<u>Federal</u>
Salinity			
Implement Westside Drainage	Drainage agencies	DWR/SWRCB SRWQCB	USBR
Wetlands Drainage Management	Refuges	DFG/SWRCB SRWQCB	USBR FWS
Real Time SJR Operations Coordination	Various	DWR (barriers)	USBR
Dissolved Oxygen			
HORB Use		DWR DFG	USBR FWS/NMFS
Stockton Treatment Plant Upgrade	Stockton	SRWQCB	
Demonstration Aerator	Port others	DWR; CALFED	
Future Actions Evaluation/Change Forum	Various	DWR SWRCB DFG	USBR FWS/NMFS

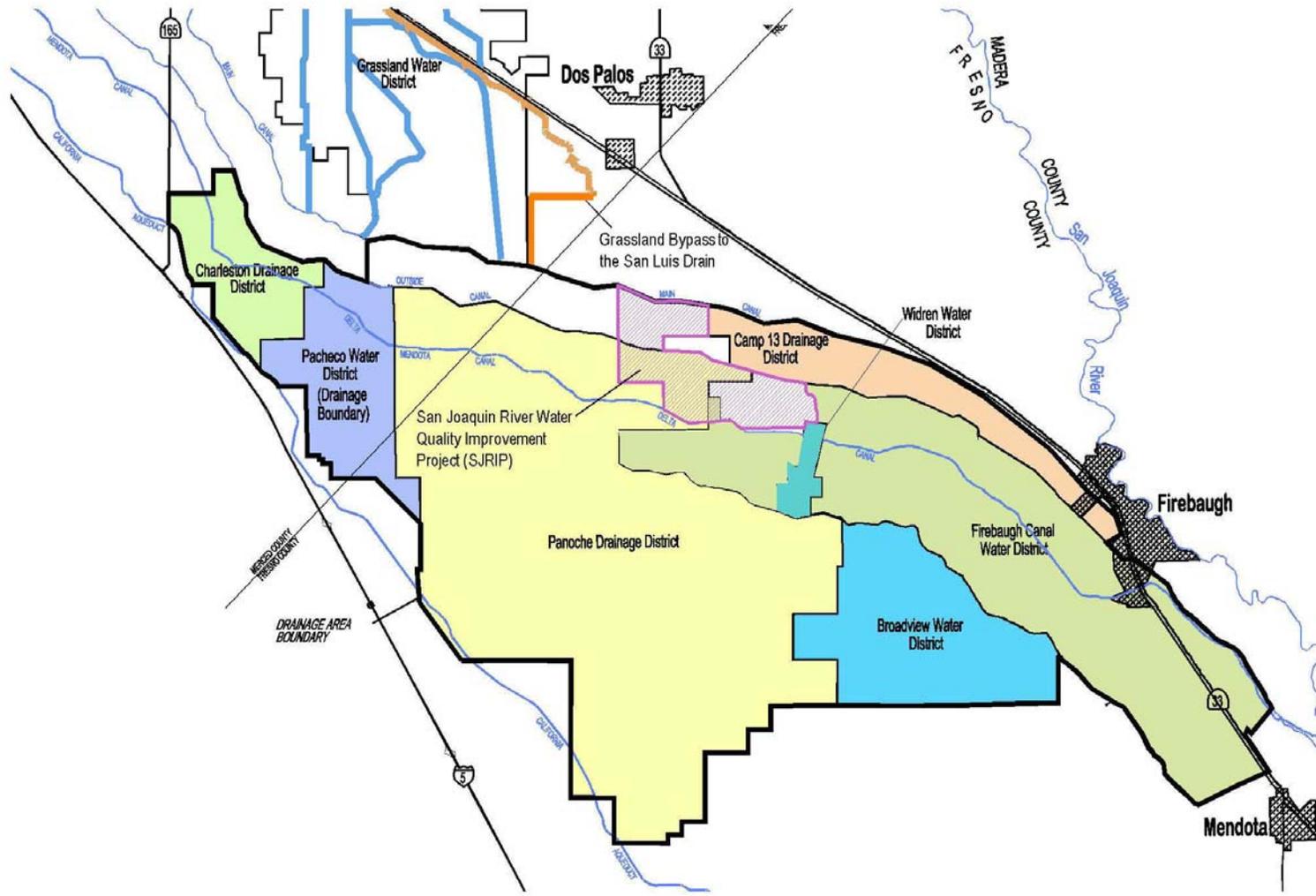
Summary

- SJWQMG solutions have broad consensus for implementation
- SJRWQMG Group needs to continue
 - Pursue solution
 - Adapt to changes
- State and Federal Agency Commitment Necessary to assist in Plan Implementation: DWR Agrees to Lead Joint Agency Task Force

Extra slides







**Grassland Drainage Area
San Joaquin River Water Quality
Improvement Project
Location Map**

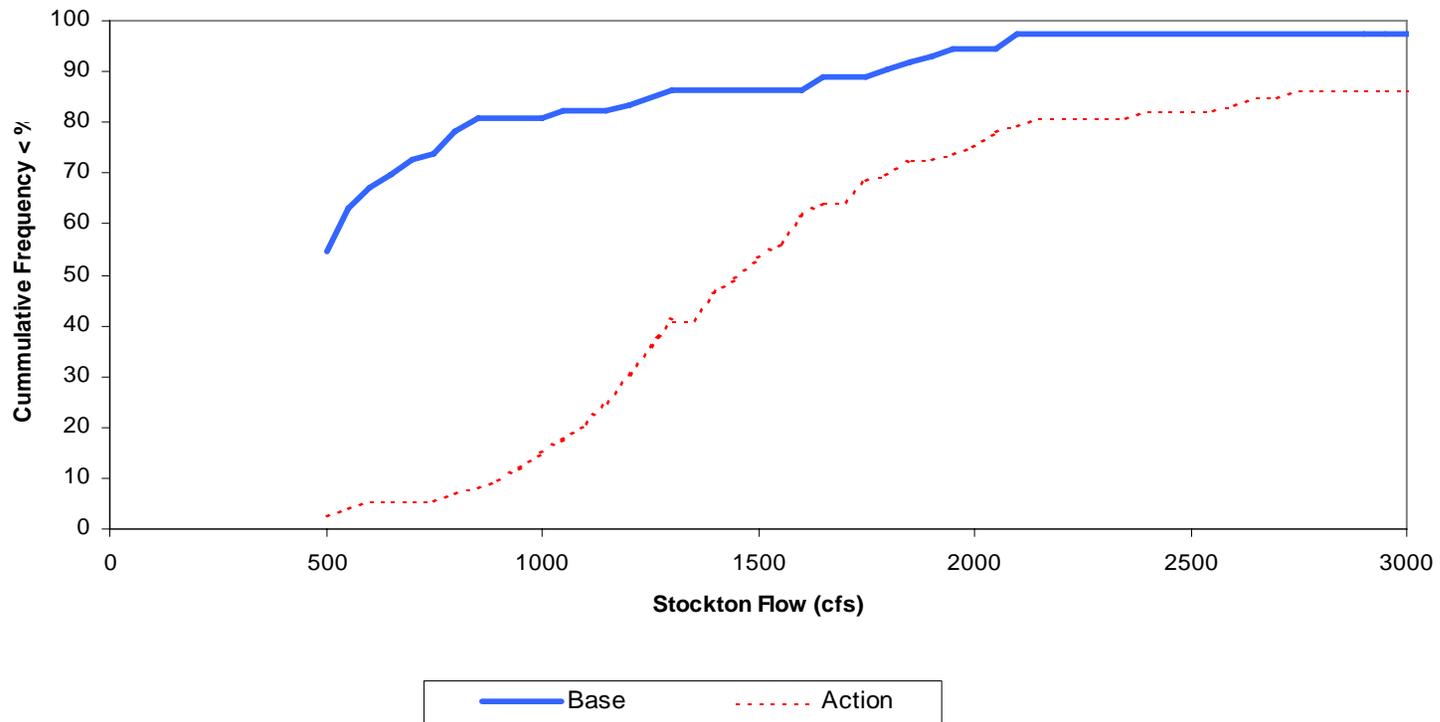
SUMMERS ENGINEERING, INC.
Consulting Engineers
HANFORD CALIFORNIA
SEPTEMBER 2003

Drainage Reduction Process



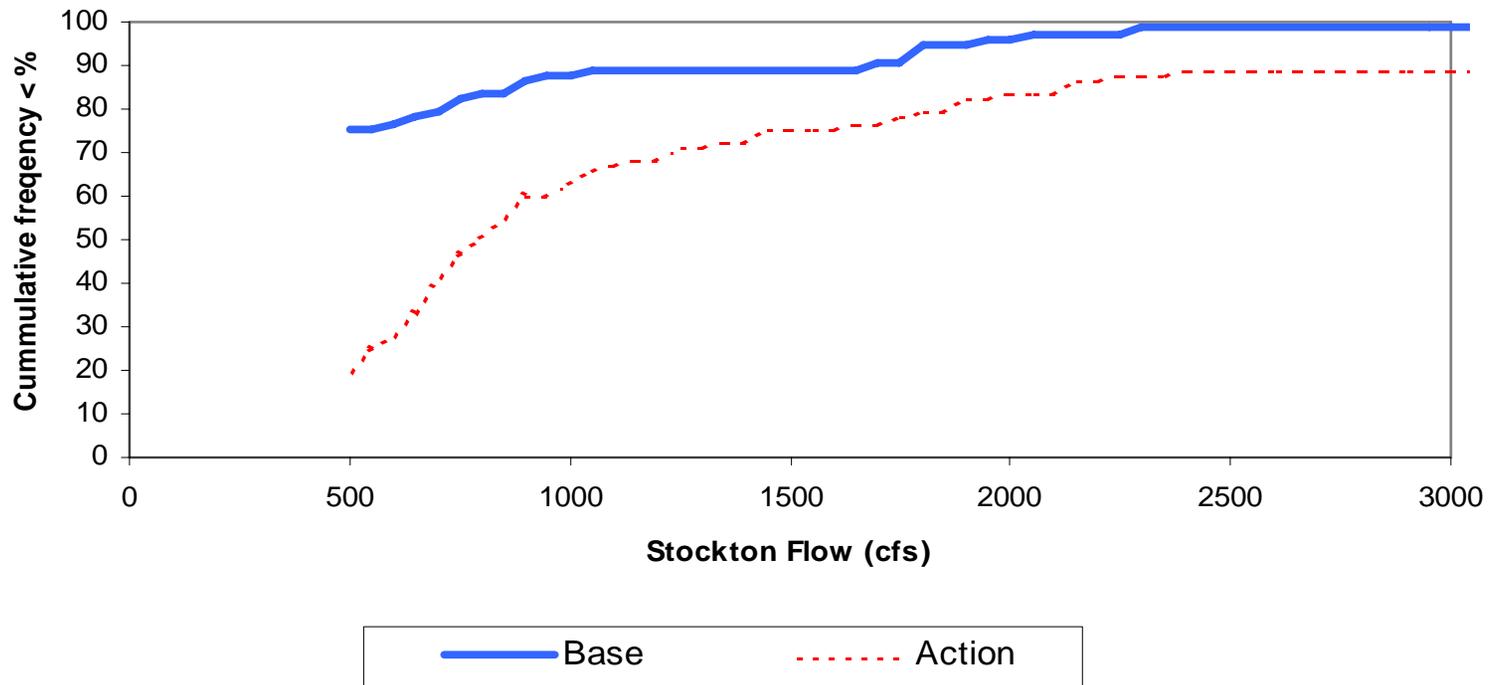
Dissolved Oxygen Improvement from Recommendations – Frequency of Flow at Stockton September

San Joaquin River Salinity Management Analysis:
Stockton Flow Cumulative Frequency Distribution
September



Dissolved Oxygen Improvement from Recommendations – Frequency of Flow at Stockton - August

San Joaquin River Salinity Management Analysis:
Stockton Flow Cumulative Frequency Distribution
August



Dissolved Oxygen Improvement from Recommendations – Frequency of Flow at Stockton - September

