

California  
Central Valley Region  
Protecting California's Water



# HEARING

## **Waste Discharge Requirements for Surface Water Discharges from the Grassland Bypass Project**

*(Grassland Bypass Order)*

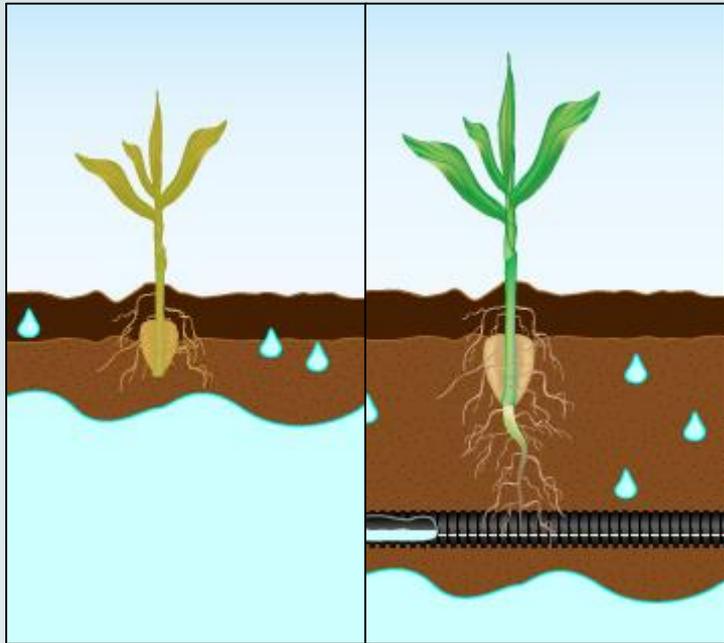
# Grassland Drainage Area

Two Orders:

- Surface water (Grassland Bypass)
- Groundwater (Irrigated Lands)

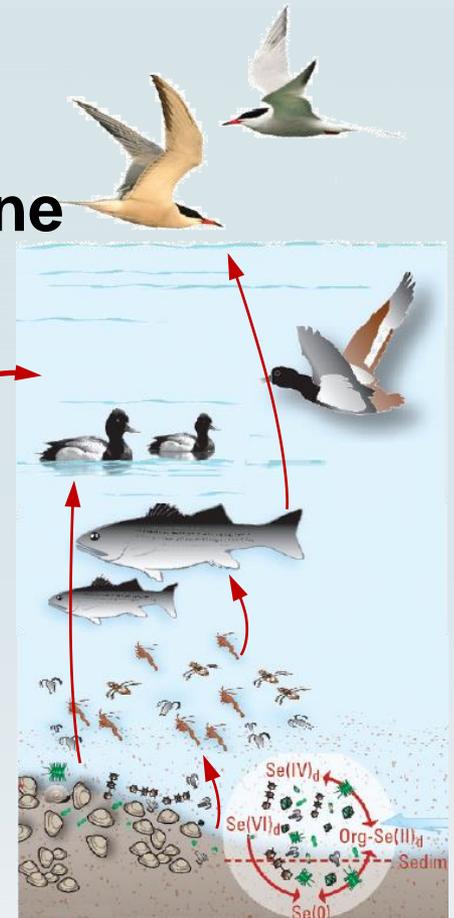
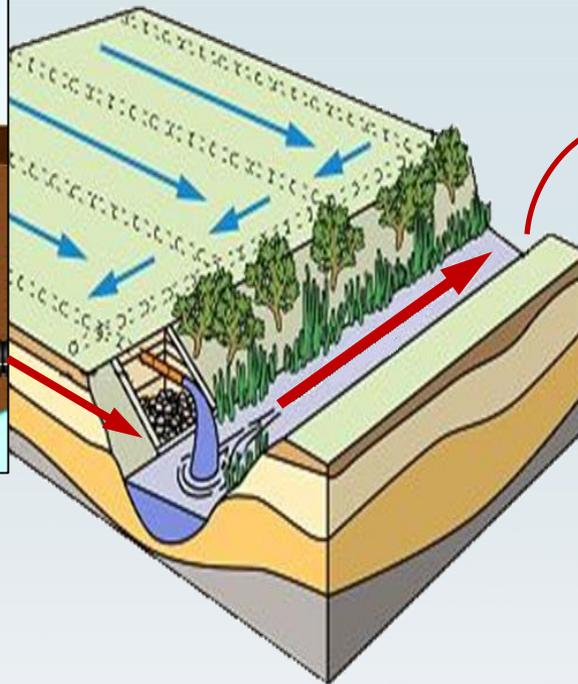


# Subsurface (Tile) Drainage



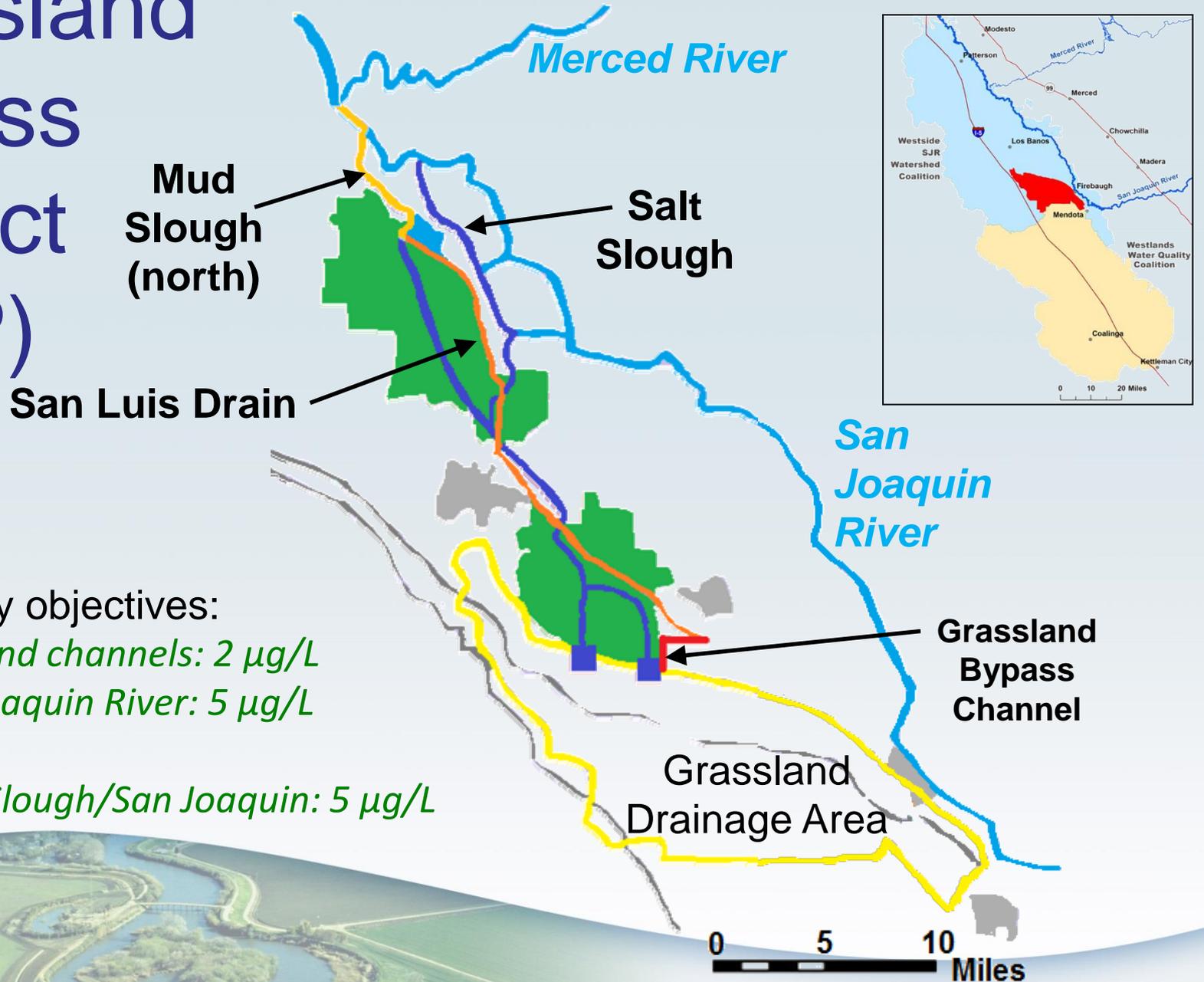
**1. Irrigation necessary for crops**

**2. Tile drains remove water from root zone**



**3. Aquatic food web**

# Grassland Bypass Project (GBP)



## Selenium

Water quality objectives:

- ★ *Wetland channels: 2 µg/L*
  - ★ *San Joaquin River: 5 µg/L*
- 2019:
- ★ *Mud Slough/San Joaquin: 5 µg/L*



# GBP: Organization and Operation

- Dischargers

- U.S. Bureau of Reclamation
- San Luis & Delta-Mendota Water Authority



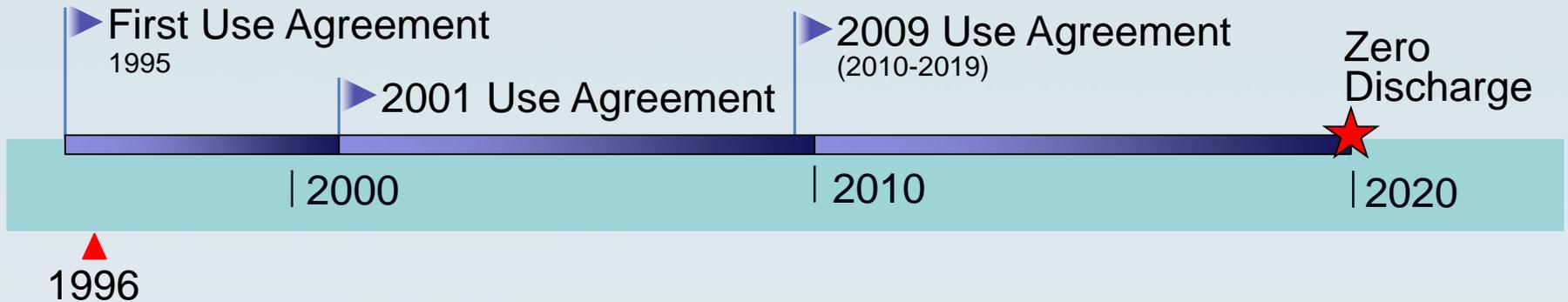
- Project Oversight and Technical Input



- Grassland Basin Drainage Steering Committee

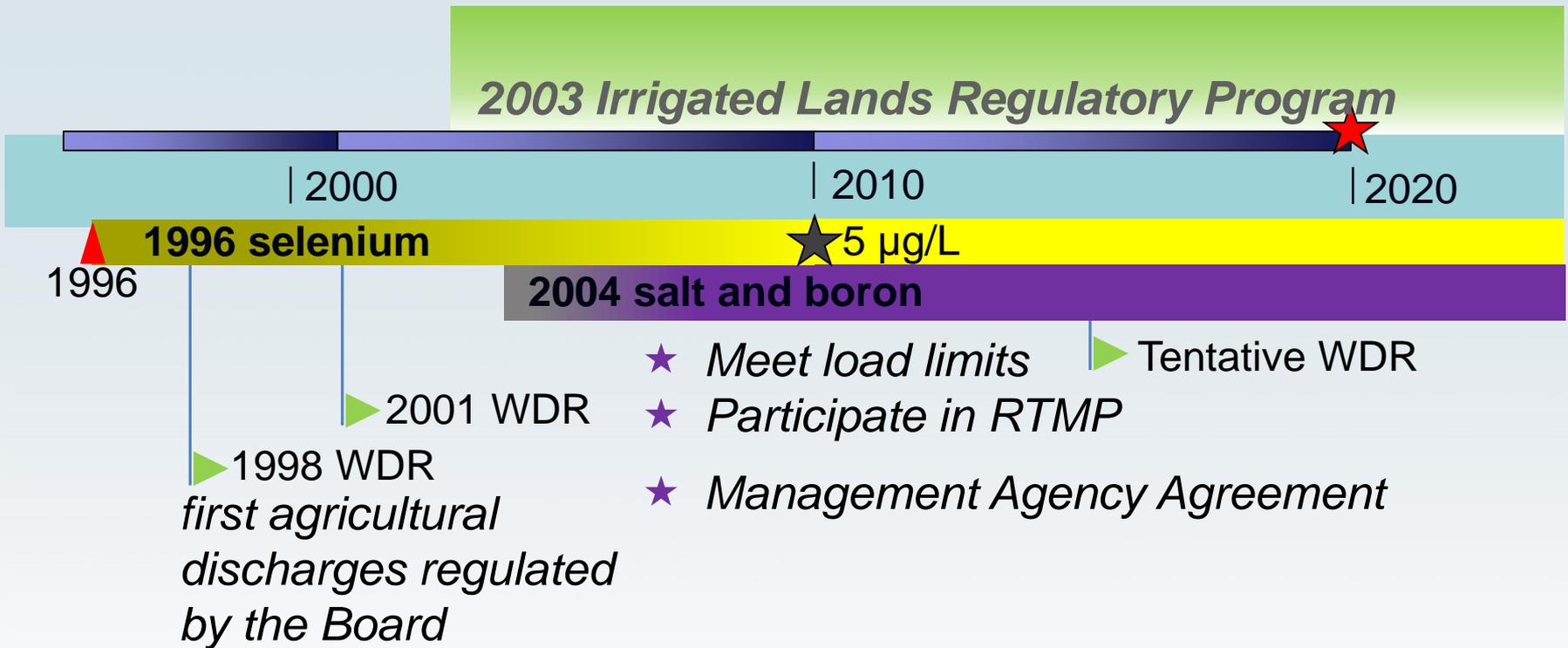
- Operates GBP and implements actions

# GBP: Use Agreement

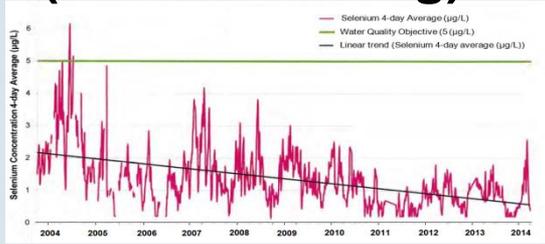


- CEQA compliance
- Performance measures
- Incentives/fees

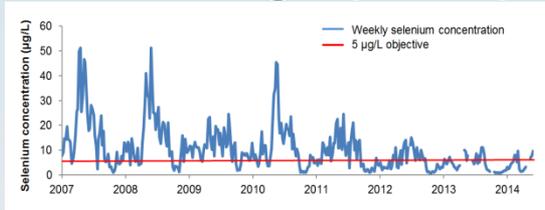
# Broader Regulatory Context



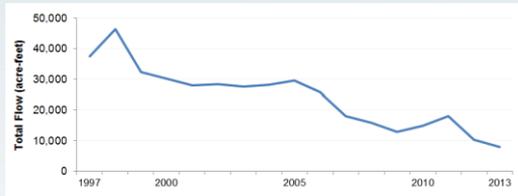
# San Joaquin River (Crows Landing)



# Mud Slough (north)



# San Luis Drain



*Merced River*

*San Joaquin River*

Grassland Drainage Area



# Two Orders for Discharges

	<b>Surface Water (Bypass Project)</b>	<b>Groundwater (Drainage Area)</b>
<b>Order</b>	Waste Discharge Requirements	ILRP General Order
<b>Discharger</b>	Bureau and Water Authority	Individual Growers (Steering Committee)
<b>Location</b>	Mud Slough and San Joaquin River	Groundwater (97,400 acres)
<b>Water Quality Assessment</b>	Compliance points for discharge and receiving water	Trend monitoring/ Management Practices Evaluation Program

# Grassland Bypass Order

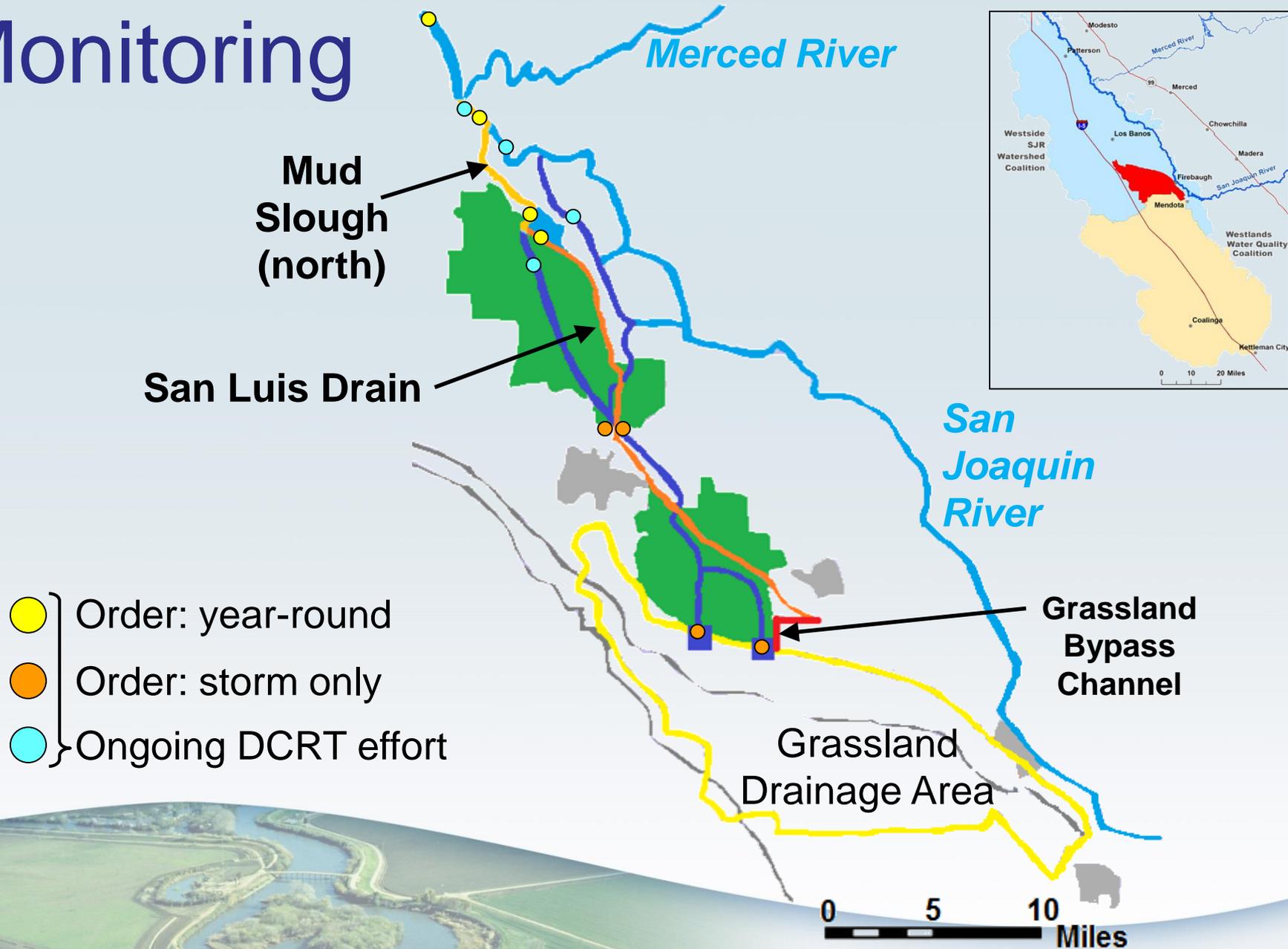
★ *Updates requirements and schedule for compliance*

- May 2014: 30-day public review
- August 2014: Board Workshop
- May 2015: 45-day public review
  
- Overview of key aspects of the Order
- Main changes from May 2014 draft
- Comments received and staff responses
- Late Revisions

# Key Aspects of the Order

- Applies to Grassland Bypass Project discharge to Mud Slough and the San Joaquin River
- Bureau of Reclamation and Water Authority
  - Monitoring and reporting
  - Management Plans: work with growers
  - Selenium load reduction

# Monitoring



# Order Revisions

- Revisions in response to comments
- Corrections and clarifications

# Nine Comment Letters Received

## ★ *Revisions / Staff response*

- Apparent relaxation of selenium load limits / Table 2 / annual load prohibition
  - ★ *Selenium limits are not relaxed*
  - ★ *Carries forward load limits from previous orders*
  - ★ *Implements more stringent objective*

## Summary of comments

# Selenium Limits in Use Agreement

- The Order should require selenium load limit reductions consistent with Use Agreement
  - ★ *Require compliance with selenium load reduction strategy in 2009 Use Agreement*
  - ★ *Order requires compliance with the Basin Plan*

## Summary of comments

# Regulation of Salt Discharges

- Salt load limits should be included
  - ★ *Salt loads incorporated by reference  
(Basin Plan Salt and Boron Control Program)*
  - ★ *Basin Plan allows alternative option:  
**REAL-TIME MANAGEMENT PROGRAM***
  - ★ *Participation while Vernalis objective met*

## Summary of comments

# Discharges beyond 2019

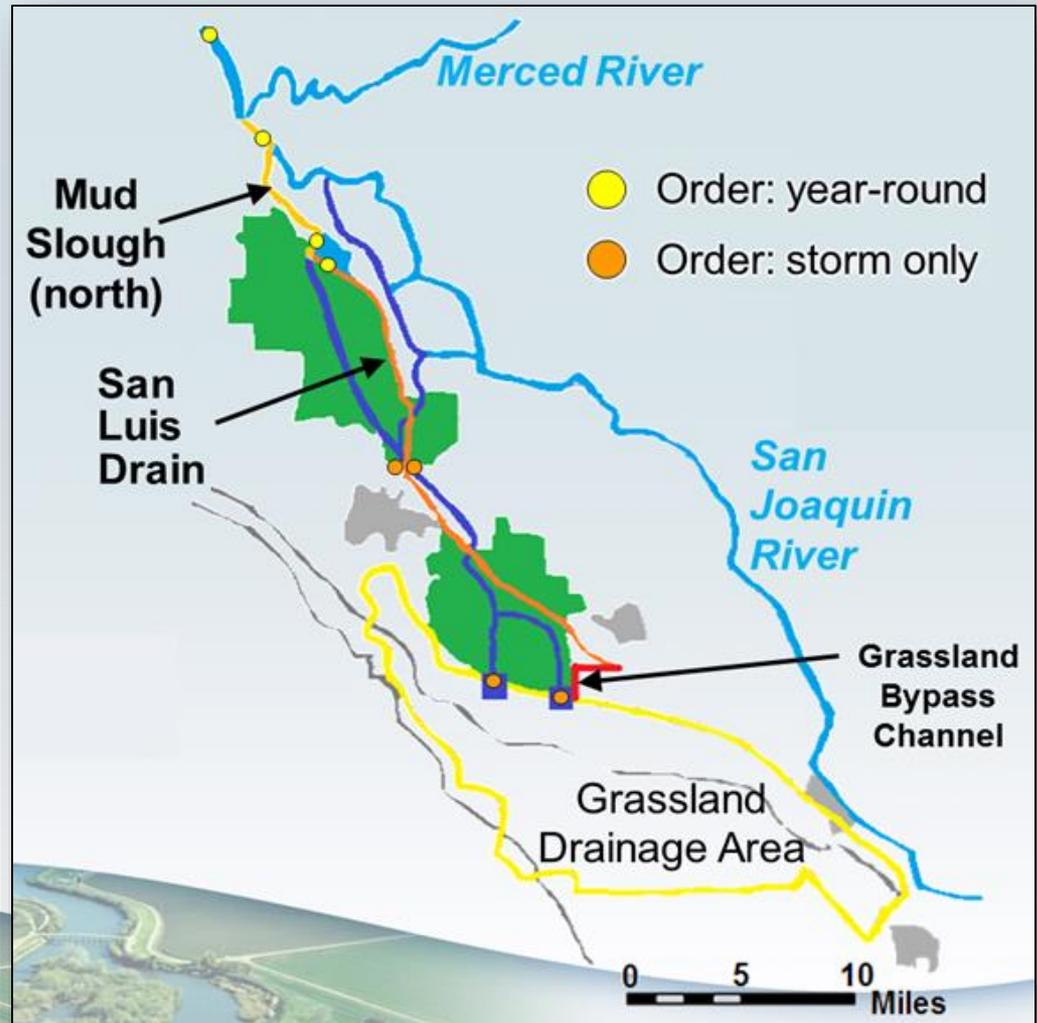
- Prohibit discharge, require new environmental review for any coverage after 2019
  - ★ *Discharges to San Luis Drain beyond 2019 not authorized*
  - ★ *Demonstrated compliance with CEQA and ESA required if continuing discharge proposed*
  - ★ *Basin Plan: discharge prohibited unless objectives for selenium met*

# Summary of comments

## Monitoring Adequacy

- Objections to sites changes

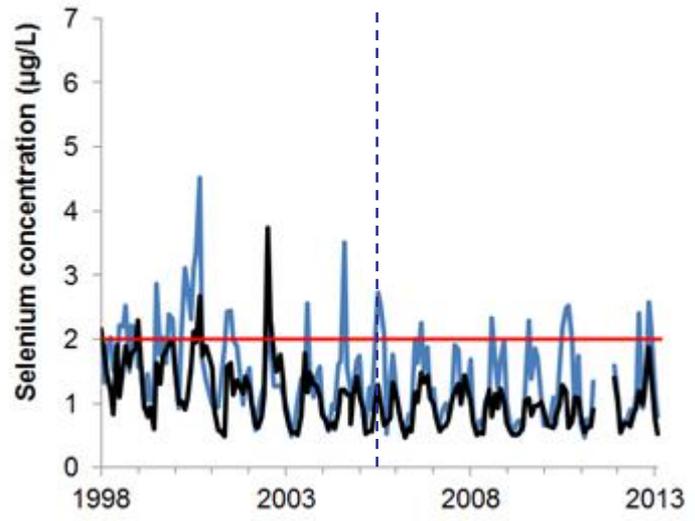
★ *Focus on waterbodies affected by discharge: key locations for compliance*



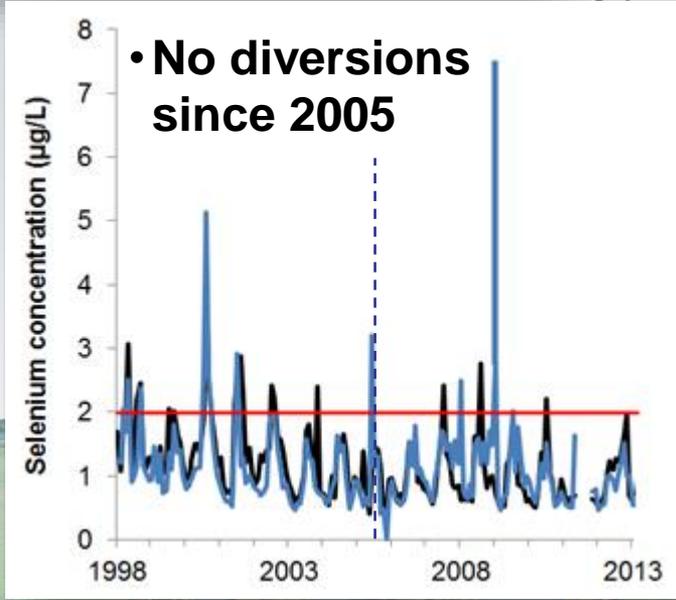
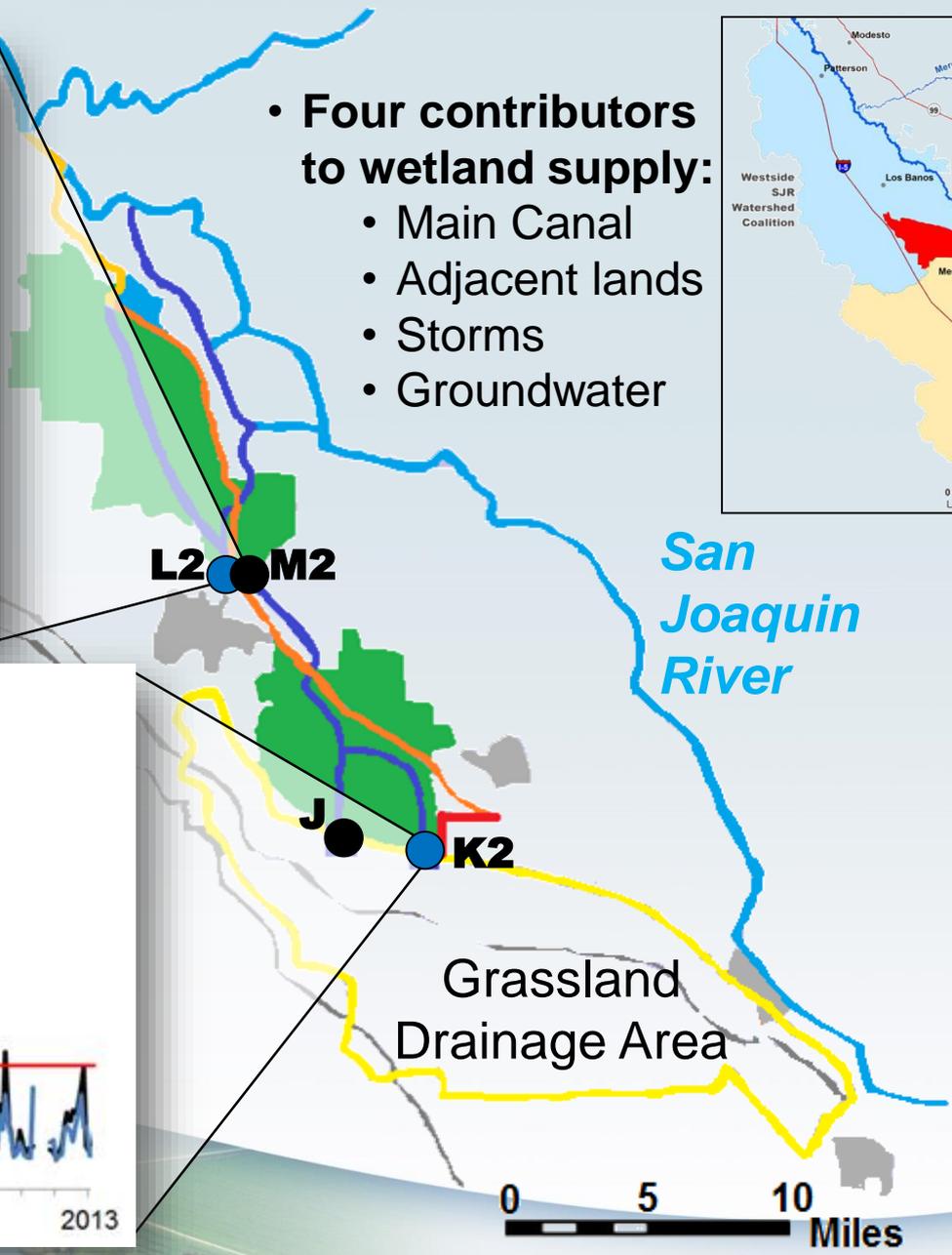
## Summary of comments

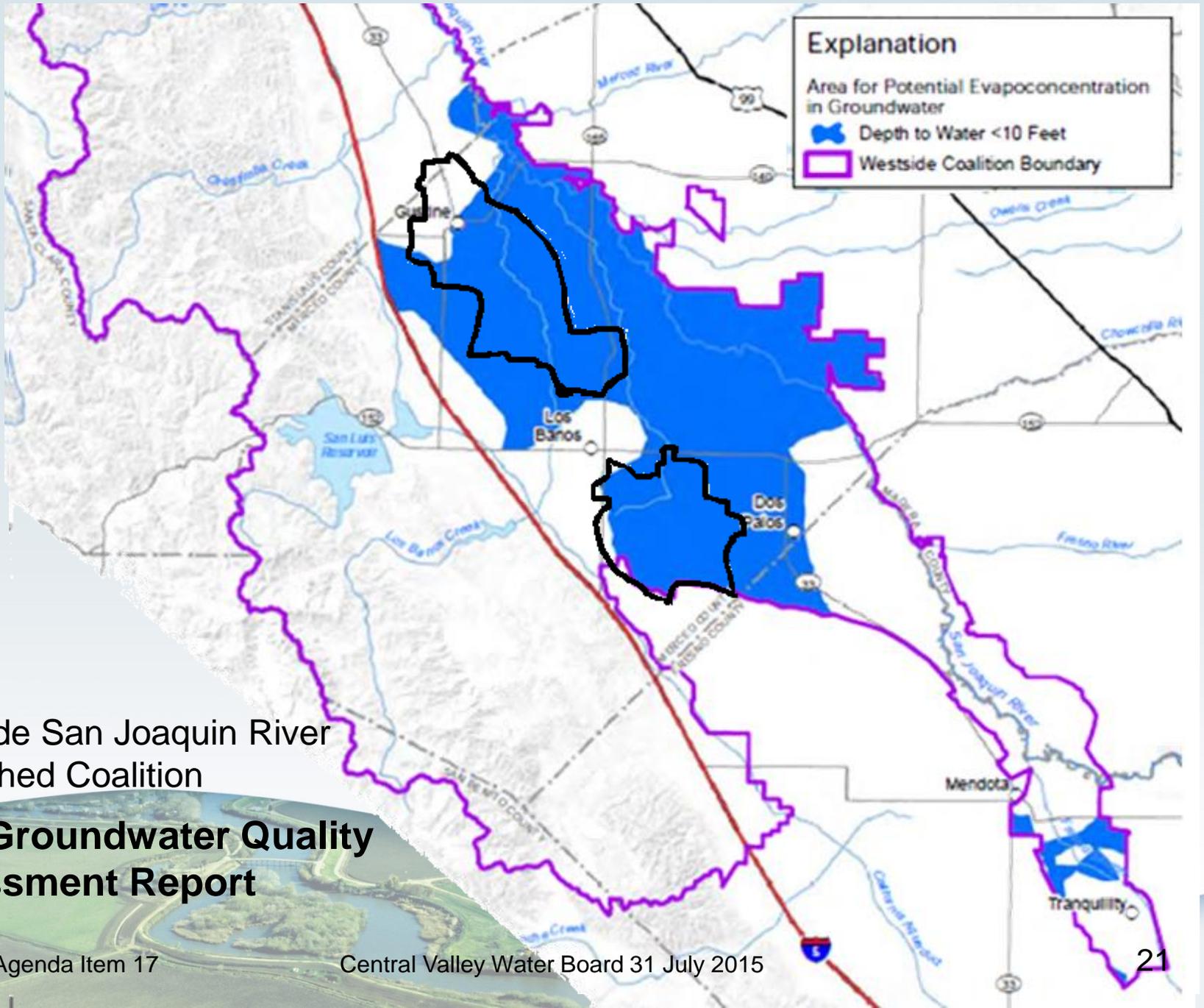
# Wetland Monitoring

- Wetland supply channels should be monitored year-round; weekly sampling
  - ★ *Same as 2001 WDRs*
  - ★ *Daily monitoring during storm events*
  - ★ *Westside San Joaquin River Watershed Coalition*
    - ★ *Require monthly monitoring (non-storm)*
    - ★ *Consistent with monitoring by DCRT*



- **Four contributors to wetland supply:**
  - Main Canal
  - Adjacent lands
  - Storms
  - Groundwater





Westside San Joaquin River  
 Watershed Coalition  
**2015 Groundwater Quality  
 Assessment Report**

## Summary of comments

# Sediment Disposal

- Resolve disposal of sediment enriched in selenium
  - ★ *Sediment monitoring required*
  - ★ *Discharge limits apply*
  - ★ *Operation must not lead to mobilization of sediment*
  - ★ *Sediment removal before chemicals reach hazardous concentrations*
    - ★ *Separate permitting process for removal and disposal*

## Summary of comments

# Water Quality Objectives

- Revise water quality objective for Mud Slough to 2  $\mu\text{g/L}$ 
  - ★ *Revision of water quality objectives requires a Basin Plan amendment. Amending the Basin Plan is beyond the scope of the Order.*
  - ★ *The Order implements Basin Plan*
  - ★ *The current objective for Mud Slough is 5  $\mu\text{g/L}$  in effect 31 December 2019.*

# Summary of comments

## Mitigation Measures

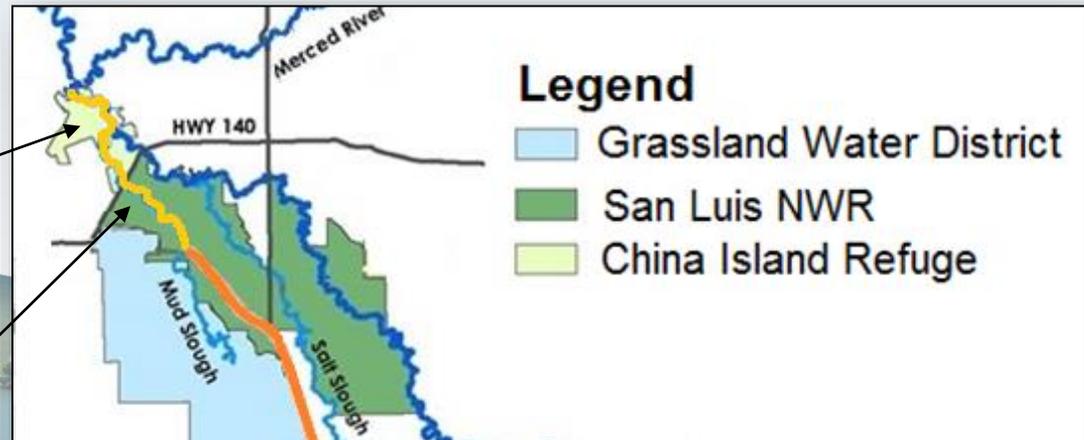
- Require implementation of mitigation measures
  - ★ *The proposed Order requires implementation of all measures within the scope of Board's authority*
  - ★ *Annual reporting requirement added*
  - ★ *Prohibition of discharge if implementation not timely and adequate*



95.3 acres  
1,200 af/year



31.6 acres  
480 af/year



# Late Revisions

- WDR:
  - Language for discharges after 2019
- Information Sheet:
  - Clarifications about selenium load reduction
- Response to Comments:
  - Address additionally identified comment

# Summary

- Order would update requirements and time schedule for compliance
- Provides a balance between need to evaluate compliance and extensive monitoring and reporting to answer other questions
- Meets requirements in Basin Plan

# Staff Recommendation

Adopt proposed Order for the  
Grassland Bypass Project



Questions?