

Agenda Item 5

Public Workshop on Potential Amendment to Establish a Region-wide Process for Evaluating the Municipal and Domestic Supply (MUN) Beneficial Use in Agriculturally Dominated Surface Water Bodies



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Agenda

- Background
- Overview of Region-wide MUN Evaluation Basin Plan Amendment
- Issues for Discussion with Stakeholder Panel
- Next Steps/Timeline
- Comments/Questions

Past Board Meetings

- April 2015 Board Meeting
 - Adoption of Sacramento MUN BPA
 - Overview of Region-wide MUN Evaluation BPA
- July 2015 Board Workshop
 - Focus: Limited MUN (LMUN) Beneficial Use
- Today's Board Workshop
 - Focus: Implementation and Key Issues

Background

- Incorporation of the “*Sources of Drinking Water Policy (Resolution 88-63)*” into Basin Plans
 - All water bodies are designated with Municipal and Domestic Supply (MUN) beneficial use unless they are specifically listed in the Basin Plans as NOT designated with the MUN beneficial use
- Primary and Secondary MCL identified as appropriate water quality objectives for protection



Background

- *Sources of Drinking Water Policy* contains exceptions
 - *Exception 2b - “The water is in systems designed or modified for the primary purpose of conveying or holding agricultural drainage waters”*
- Issues
 - Exceptions require a Basin Plan Amendment
 - Does not address other agriculturally dominated water bodies

Why are we here?

Consistent - Transparent – Streamlined

Process for appropriate application and
level of protection of MUN in Ag
dominated water bodies

Application resulting in overly
conservative restrictions

- POTW discharges
- Agricultural operations

Stakeholder Participation

Project Participants

- ✓ CV Water Board
- ✓ CV-SALTS
- ✓ Four POTWs
- ✓ California DFW
- ✓ CDFA
- ✓ Delta Stewardship Council
- ✓ US EPA
- ✓ State Board Basin Planning
- ✓ Division of Drinking Water
- ✓ Agriculture
- ✓ Water Supply
- ✓ Urban Water Users

Stakeholder Meetings

- ✓ Quarterly 2012 – 2013,
- ✓ Sept. 2014, Jan. 2015, Sept. 2015, Nov. 2015

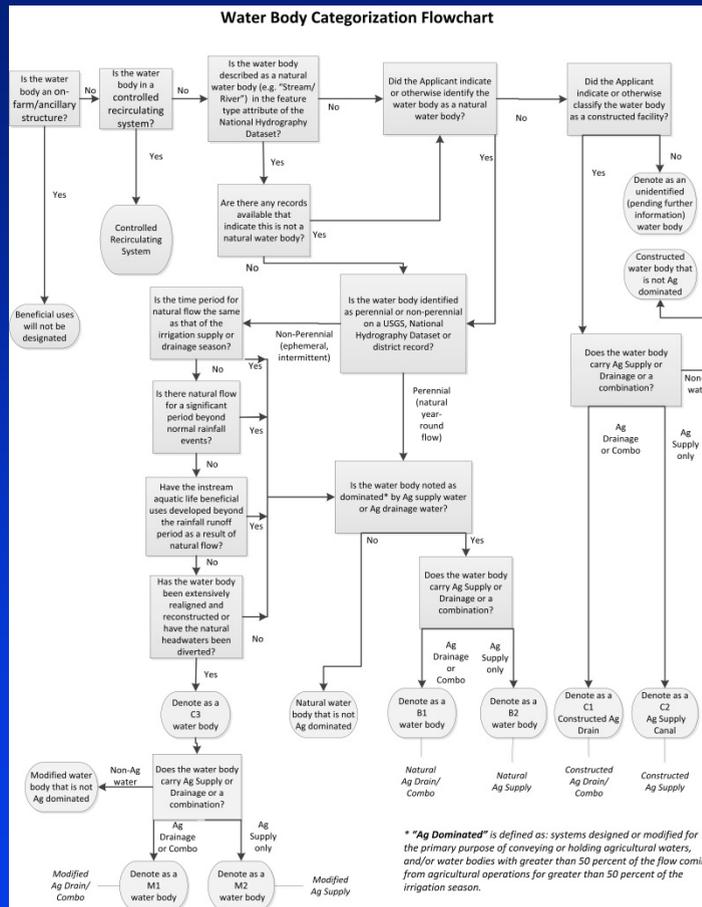
Website/Lyris List (498 subscribers)

http://www.waterboards.ca.gov/centralvalley/water_issues/salinity/mun_beneficial_use/index.shtml

Building Off Historic Efforts

- Review of 1992 Inland Surface Water Plan (ISWP) and 1995 Agricultural Waters Task Force efforts
- General consensus to move forward on key recommendations:
 - Agricultural water bodies are unique
 - Water body categorization
 - Special consideration to ancillary structures and closed recirculating systems

Water Body Categorization



Default MUN Beneficial Use Designation

Water Body Category	Beneficial Use	MUN WQOs
C1 (Constructed Ag Drain/Combo)	No MUN	N/A
M1 (Modified Ag Drain/Combo)	No MUN	N/A
C2 (Constructed Ag Supply)	LMUN	Narrative
M2 (Modified Ag Supply)	LMUN	
B1 (Natural Ag Drain/Combo)	LMUN	
B2 (Natural Ag Supply)	LMUN	
Controlled Recirculating System	No MUN	N/A

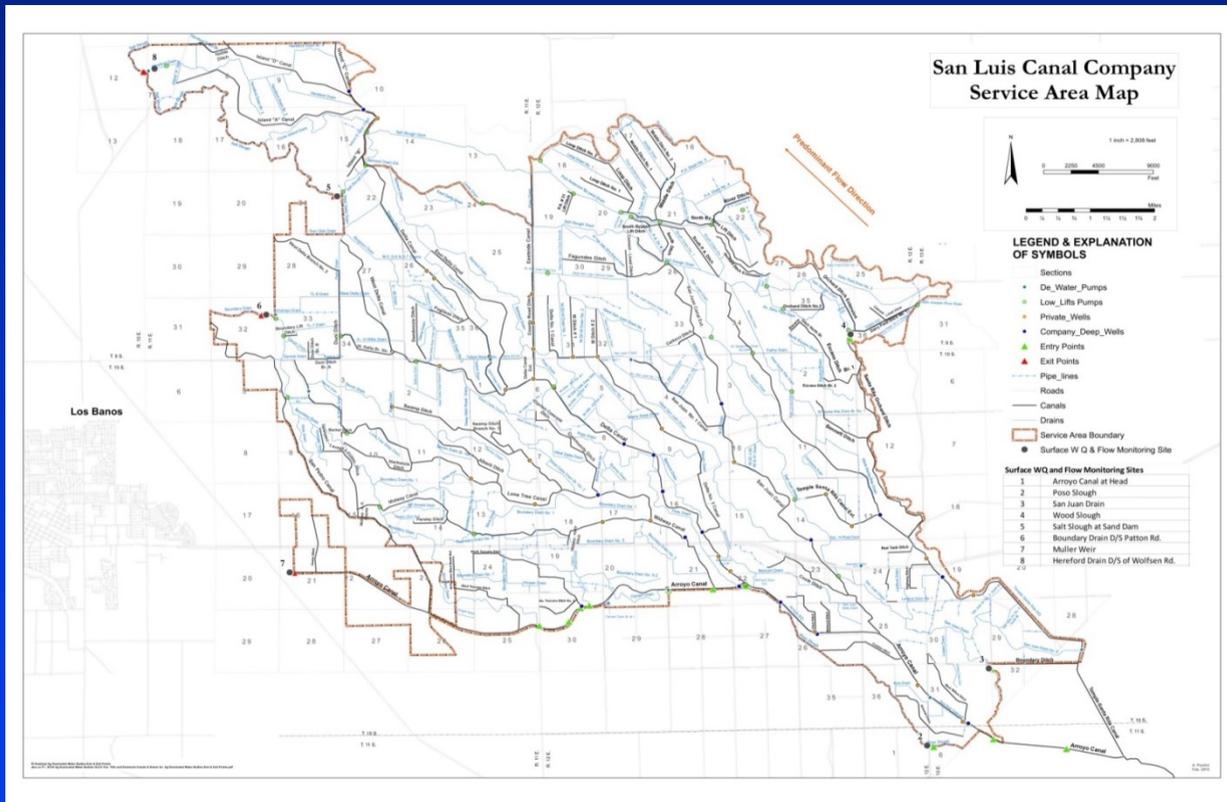
Case Studies/Examples

Use of Water Body Categorization in Sacramento MUN Basin Plan Amendment

- Process successfully utilized in the Sacramento River Basin case study- Sacramento MUN Basin Plan Amendment
- Water Body Categorization Reports used as templates for Region-wide process

San Joaquin River Basin Case Study

San Luis Canal Company (SLCC)

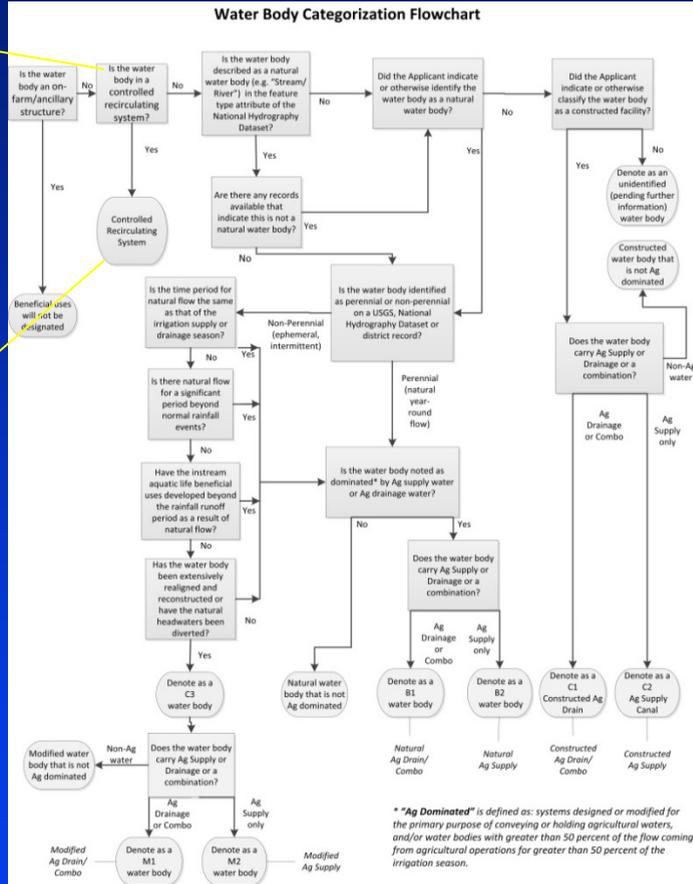
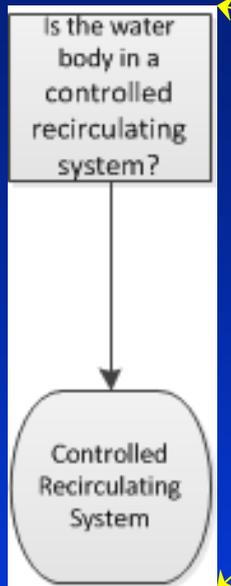


Findings

- Total of 232 water bodies
 - ✓ 230 **C1** water bodies
 - ✓ 2 **M1** water bodies
 - Poso Slough
 - Salt Slough (already in Basin Plan with NO MUN)
- All constructed or modified to convey Ag drainage (no Supply Only channels)
- Irrigated Lands Regulatory Program (ILRP) and district water quality monitoring
- Staff proposal- to remove the MUN use from SLCC water bodies



Controlled Recirculating System



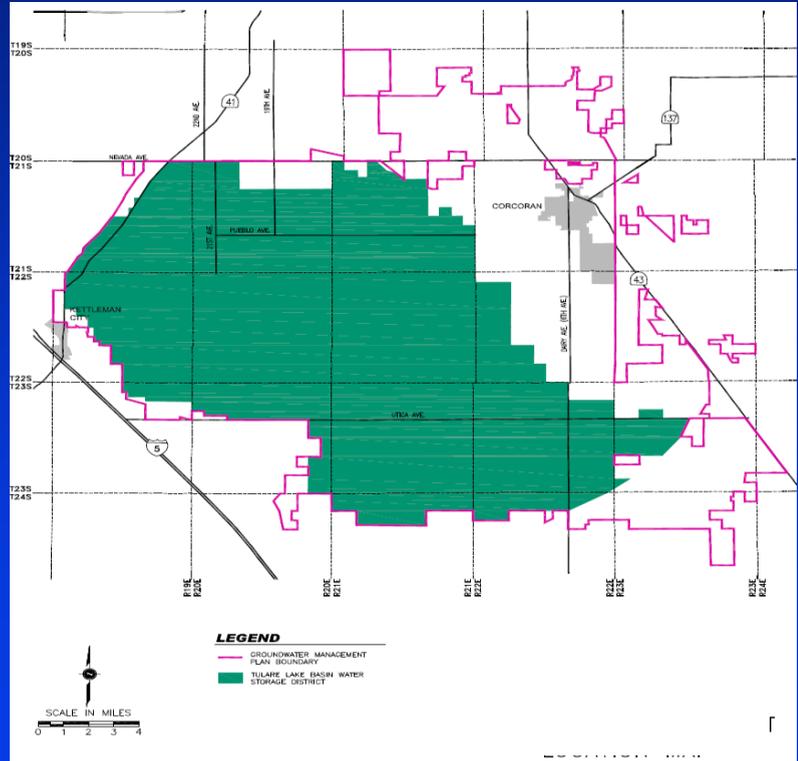
- Unique characteristics
- Year-Round and Seasonal Closed Recirculating Systems

"Ag Dominated" is defined as: systems designed or modified for the primary purpose of conveying or holding agricultural waters, and/or water bodies with greater than 50 percent of the flow coming from agricultural operations for greater than 50 percent of the irrigation season.

Year-Round Closed Recirculating System

Tulare Lake Basin Case Example

- Surface water does not leave the system
- Maximize water reuse, energy savings and/or chemical management



Seasonally-Closed Recirculating System

Historic Rice Operation (Sacramento River Basin) Case Example

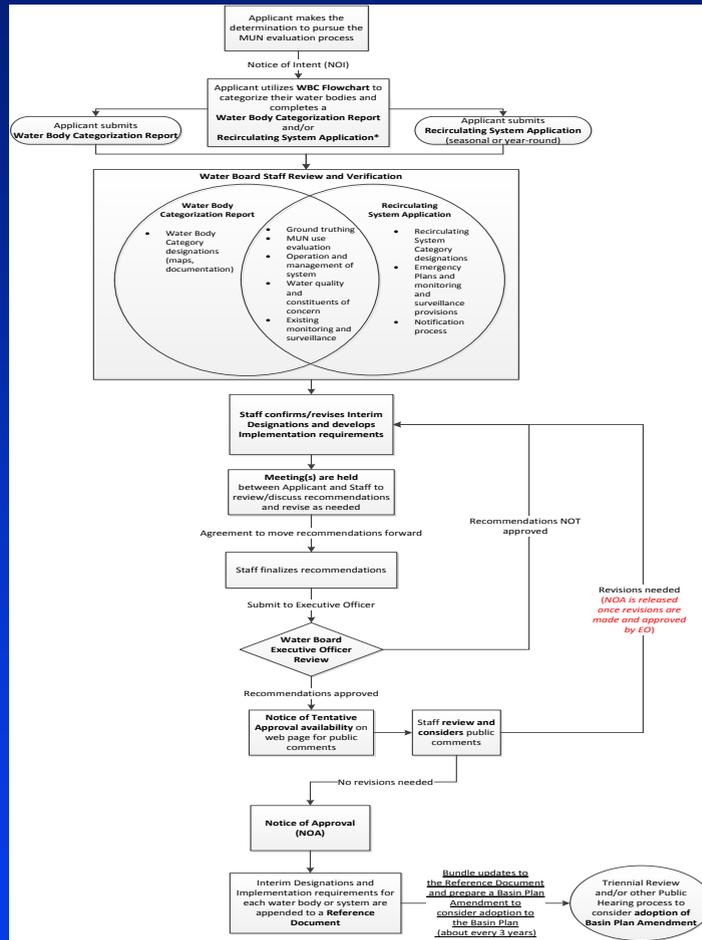


- In the past, shift from conventional flow-through irrigation systems to seasonally-closed recirculating system.
 - Used for managing Pesticide application
- Present day, few seasonally-closed recirculating systems
- Future, growing interest to use seasonally-closed systems to maximize water reuse.

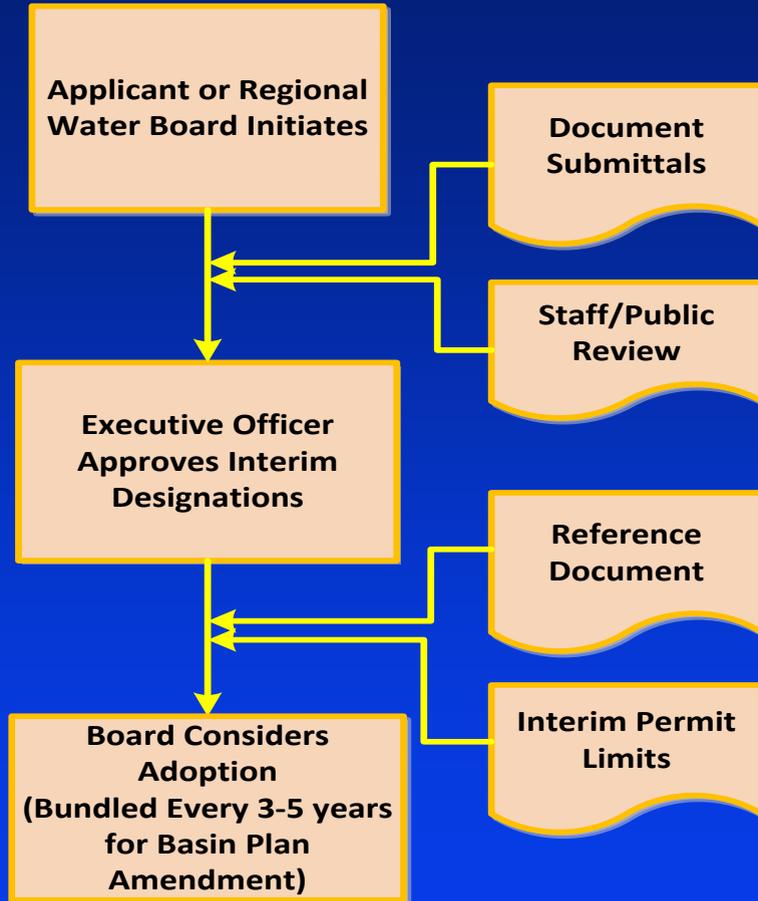
Implementation Program

- Development of a streamlined process
- Options
 - “As Needed Basis”
 - Time Schedule

Implementation Program



Implementation Program



Process Initiation

- Notice of Intent (NOI)
- Water Body Categorization Report and/or Closed Recirculating System Applications (Seasonal, Year-Round)

Staff Review

- ✓ Water body category designations
- ✓ MUN diversions within and downstream of the area
- ✓ Water quality constituents of concern
- ✓ Existing water quality monitoring within and downstream of the area

Staff Review Process

1. Water body category designations
 - Review photos, construction records, maps
 - Cross-check with NHD and 1992 ISWP reports
 - Conduct site surveys to “ground truth”
 - Water bodies that were modified/natural
 - ~10% constructed water bodies
2. MUN diversions within and downstream of the area
3. Water quality constituents of concern

Staff Review Process

4. Existing water quality monitoring within and downstream of the area
 - Sources of Drinking Water Policy requirements
 - State Antidegradation Policy requirements

Monitoring and Surveillance

The assessment will be able to provide adequate information to

- Meet monitoring requirements for de-designated water bodies
- Quickly detect water quality changes
- Determine long-term trends

Comprehensive Monitoring Guides

SITE INFORMATION					FIELD							
Site Name			Site ID	Project Term	Flow (cfs)	EC	DO	pH	Temp	Turbidity	Alkalinity	UV (ABS 254 NM)
Agency	Program	Monitoring Plan										
SJR at Bowman Rd., 8.0 miles S of Discharge Point 001												
City of Stockton Regional WWCF	NPDES	NPDES SMP	RSW-001	Ongoing	BM	WBM	W	WBM	WBM	W		
SJR at Brandt Bridge												
DWR	Continuous Recording Station	Continuous Recording Station	BDT	Ongoing	C	C	C	C	C	C		
SJR at Hwy 4, 0.5 miles S of Discharge Point 001												
City of Stockton Regional WWCF	NPDES	NPDES SMP	RSW-002	Ongoing		W	W	W	W	W		
SJR at Garwood Bridge												
USGS	Delta Flows Network	Delta Flows Network	11304810		C							
DWR	Continuous Recording Station	Continuous Recording Station	SJG	Ongoing	C	C			C	C		
SJR, US of the East Complex retention basin discharge, and S of the Santa Fe Railroad Bridge												
Stockton Port District Facility	NPDES	NPDES SMP	R-1	Ongoing		O	O	O	O	O		
SJR, Flow Monitoring Station location approx. 500 ft. S of Discharge Point 001												
City of Stockton Regional WWCF	NPDES	NPDES SMP	RSW-001A	Ongoing	C							
SJR at Burns Cutoff, 0.5 miles N of Discharge Point 001												
City of Stockton Regional WWCF	NPDES	NPDES SMP	RSW-002A	Ongoing		W	W	W	W	W		
SJR at Deep Water Channel, 1.5 miles N of Discharge Point 001												
City of Stockton Regional WWCF	NPDES	NPDES SMP	RSW-003	Ongoing		W	W	W	W	W		
SJR at Rough and Ready Island												
DWR	IEP	EMP: Real Time Monitoring	P8A	Ongoing	C	C	C	C	C	C		

Additional Information Needs for Closed Recirculating Systems

- ✓ Closed recirculation system category designations
- ✓ Emergency Plans and Notification Process

Staff Review Process

1. Closed recirculation system category designations
 - Review operation/management documentation
 - Conduct site surveys to “ground truth”
 - Natural outlets, drainage, or closure points
2. Emergency Plans and Notification Process
 - Review potential impacts to surface waters outside of system and current monitoring efforts
 - Review the type, entities, and time requirements for the notification process

Staff Recommendations for Interim Designations

- Water body/system category designations
- MUN beneficial use designations
- Implementation/monitoring requirements to protect downstream beneficial uses

Monitoring and Surveillance

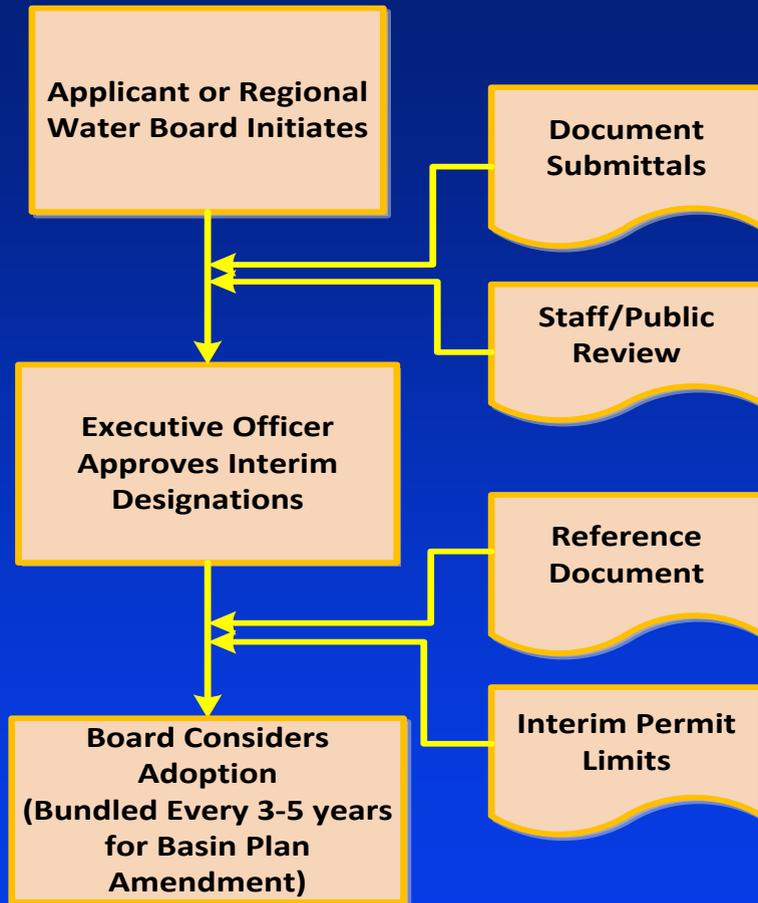
- Use Existing Monitoring Programs
- Require Additional Individual Monitoring
- Develop New Regional Monitoring Program



- ✓ Stations
- ✓ Constituents
- ✓ Frequency

Include regular Title 22 constituent evaluation by the Regional Water Board

Approval and Adoption



Recommendation Approval Process

- Executive Officer approval
- Notice of Tentative Approval (NOTA)
- Public Comments
- Notice of Approval (NOA)

Reference Document and Adoption

- Document outside the Basin Plan
- Stores interim designations
- Finite timeframe
 - 5 years, 3 years extension
- Allows interim permit limits
- Board Consideration
- State Board/OAL/USEPA Approval

Estimated Implementation Timeline

Region-wide Process Basin Plan Amendment	
Submittal of Documents	3 months—1 year
Staff Review/Recommendations	2 months
NOTA for Public Comments	45 days
Staff Review Comments and Revise	45 days
NOA/Reference Document	8 months—1 ½ years
Regional Board Adoption	3 years
State Board/OAL/USEPA Approval	1 year

Individual Basin Plan Amendment	
Regional Board/State Board/OAL/USEPA Approval	3 years—5 years

Key Issues for Discussion with Stakeholder Panel

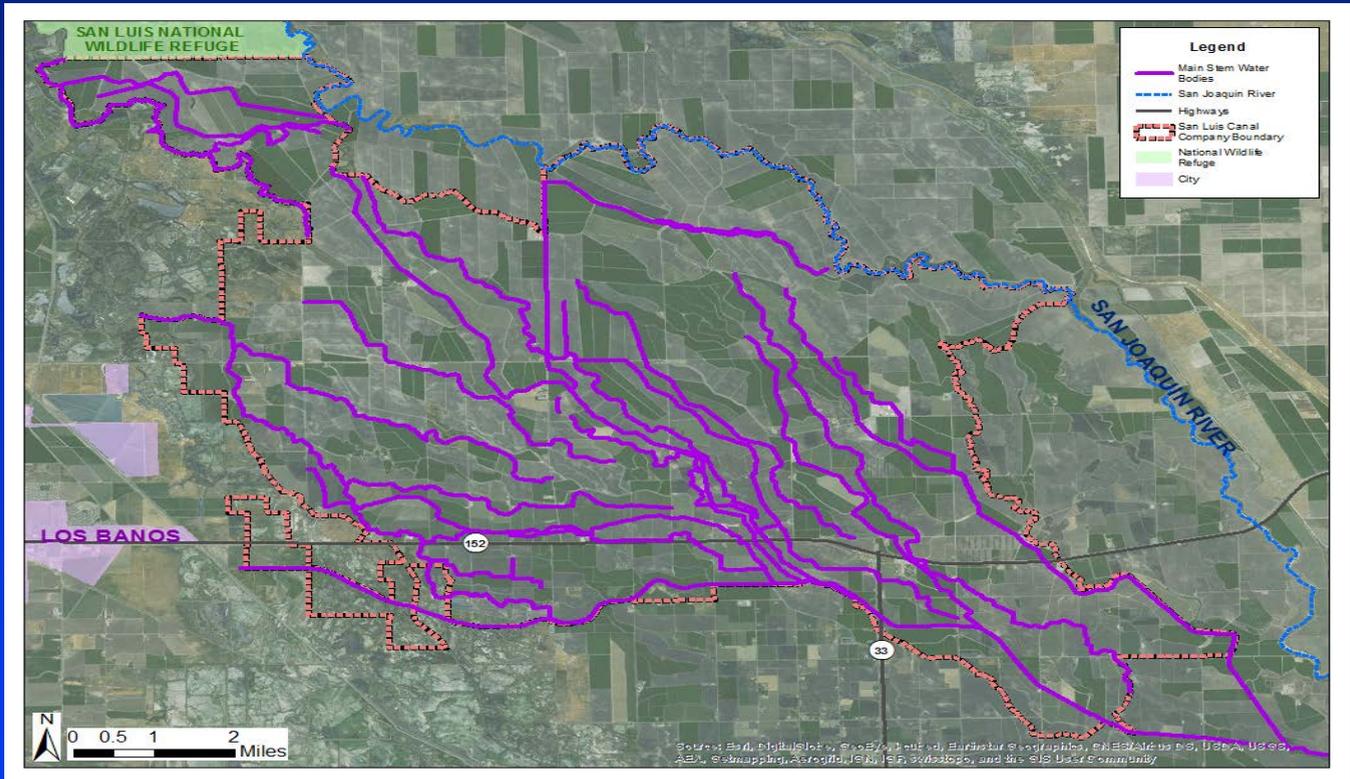
- Water Body Listings
- Monitoring/Surveillance
- Public Involvement in Evaluation Process

Water Body Listings

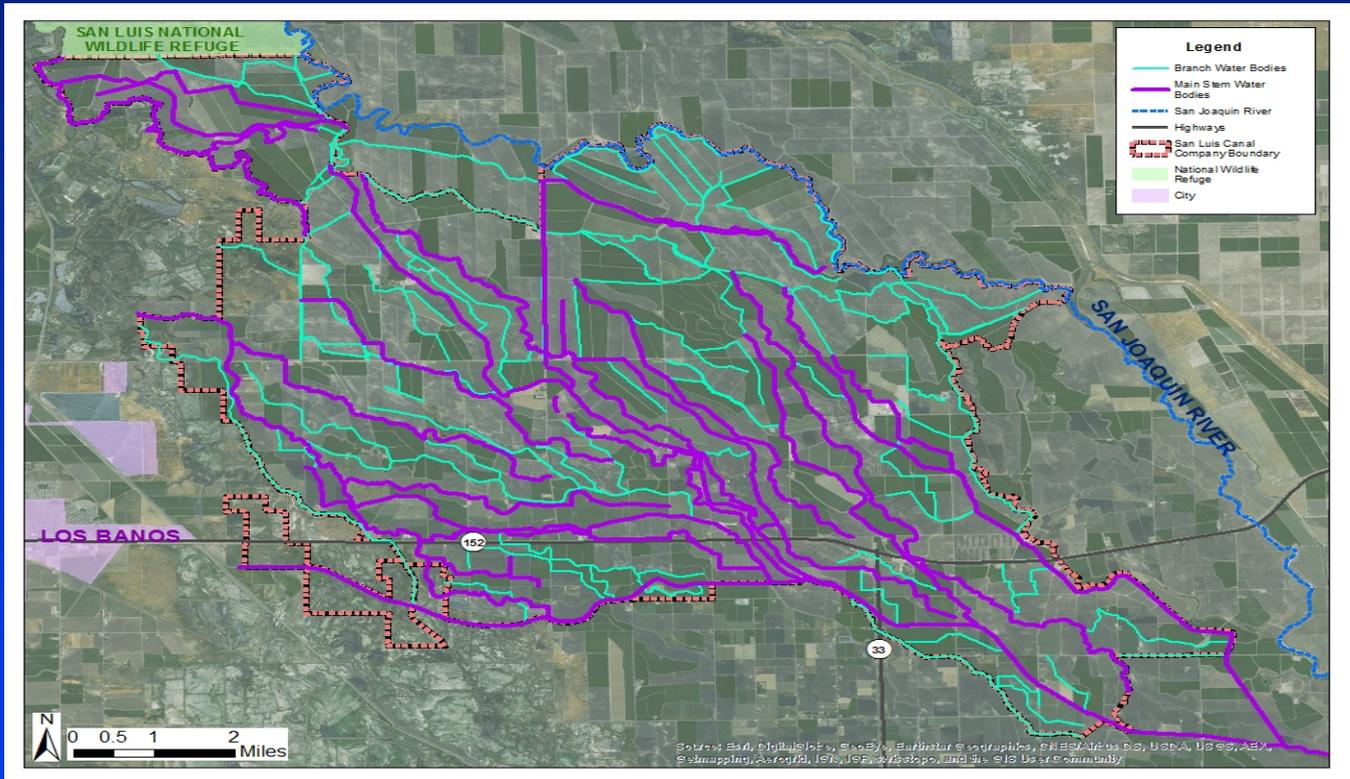
- Level of Detail
 - Name thousands of water bodies in the Basin Plan?
 - How do we plan ahead for new or modified Ag dominated water bodies?

Area	1992 ISWP	Today
SLCC	150	232
Central Valley Region	~6500	>10,000 ??

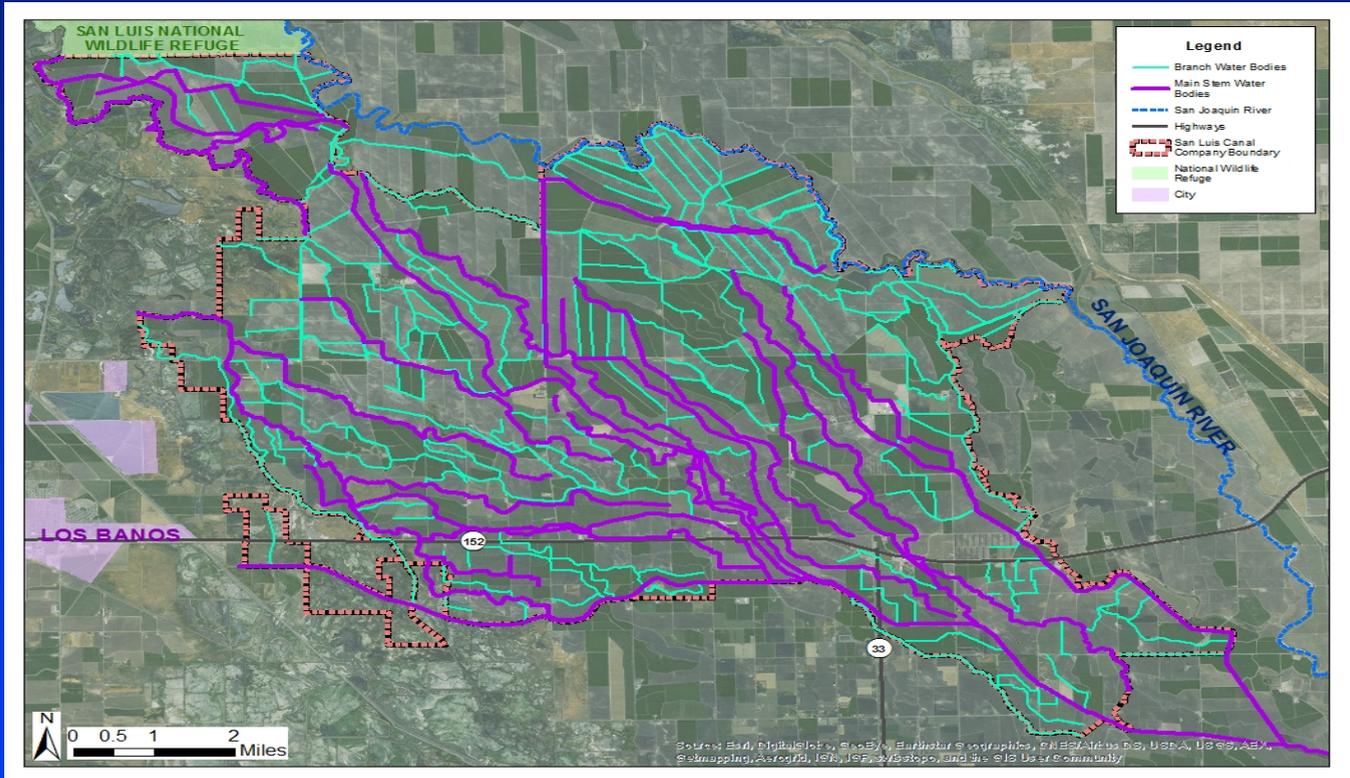
Main Systems (23 Total)



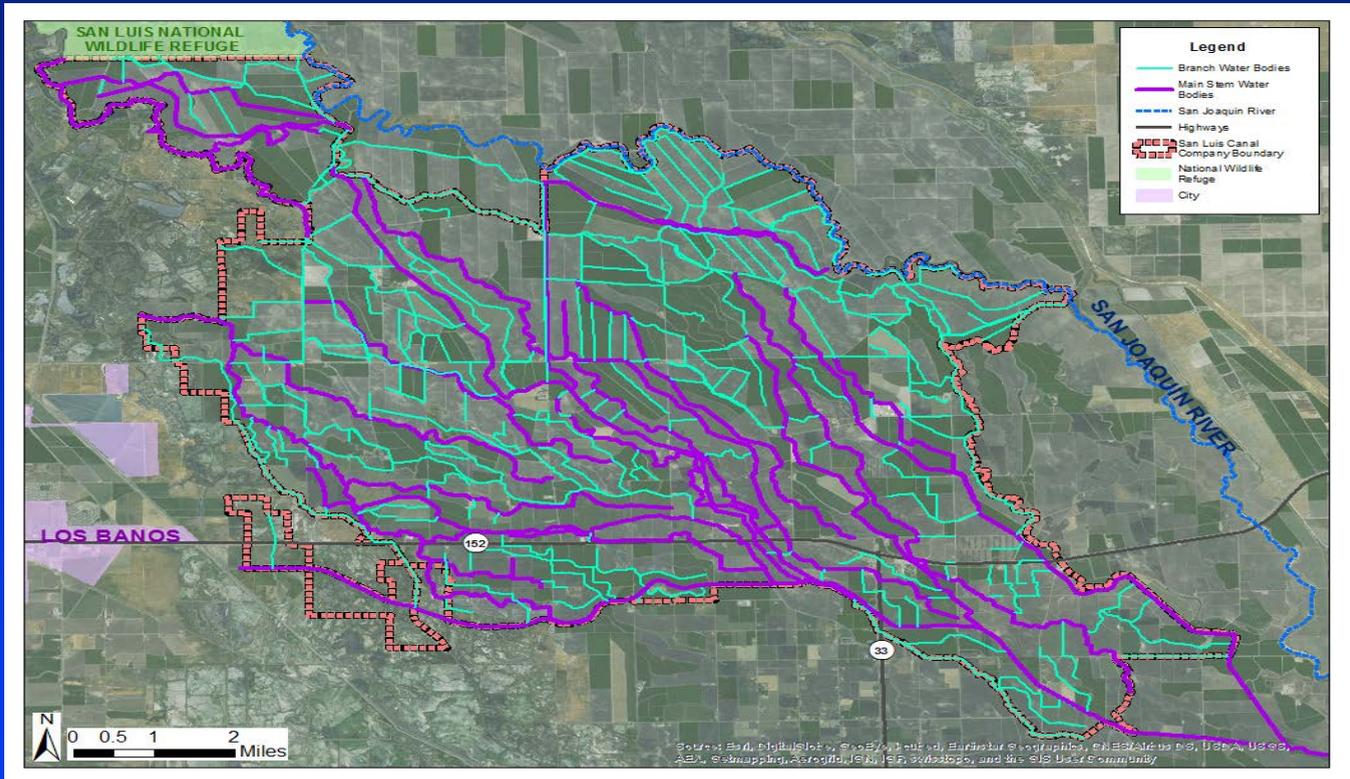
≥ 1.0 mile (104 Total)



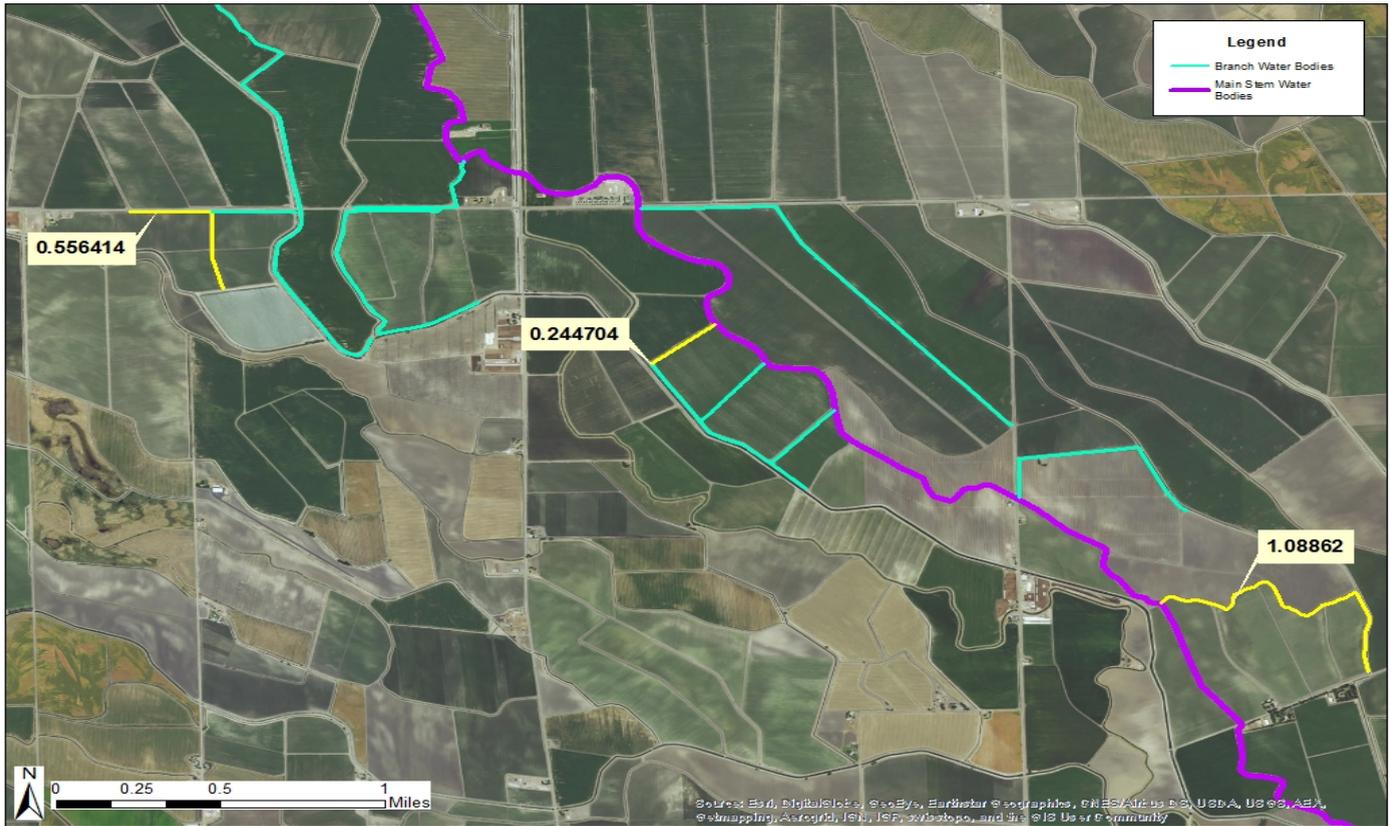
≥ 0.5 mile (180 Total)



≥ 0.25 mile (232 Total)

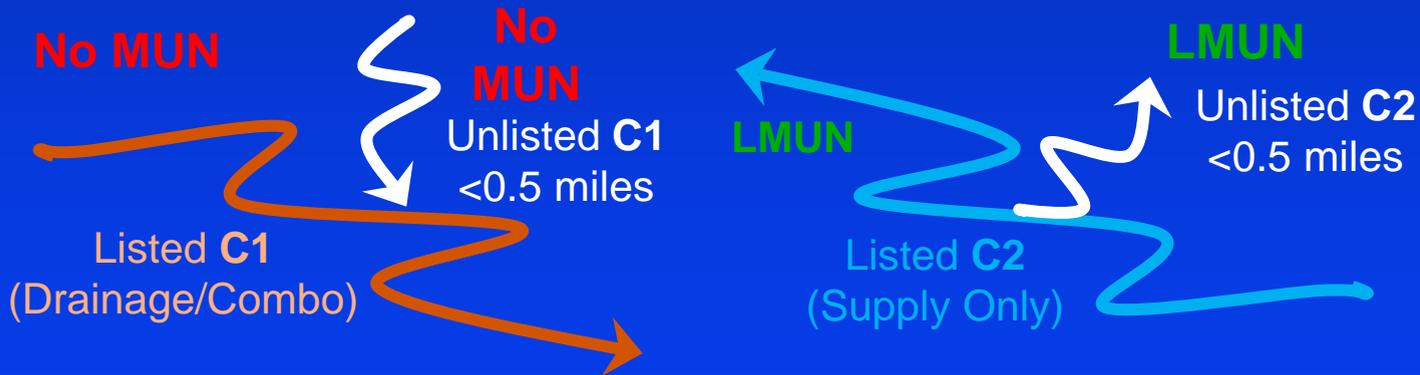


Belmont Drain



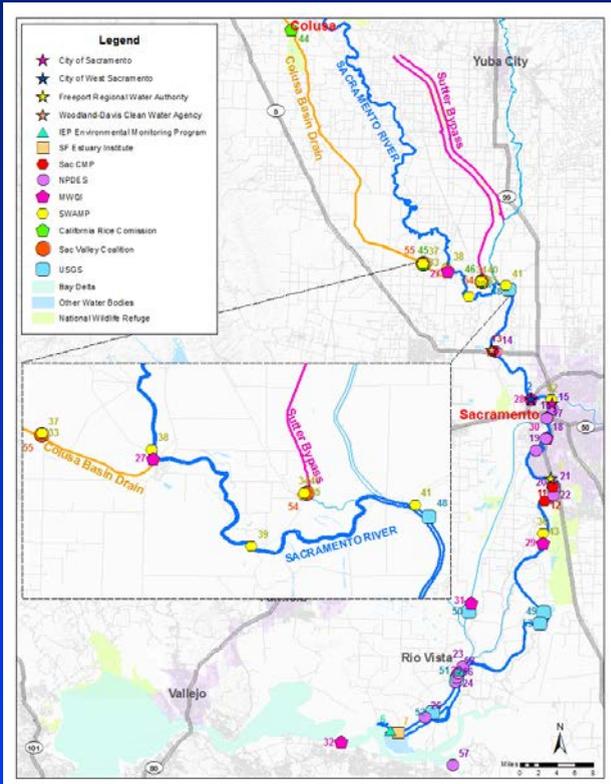
Proposed Rule for Non-listed Water Bodies

Any non-listed constructed (C1 or C2) water body that is **less than 0.5 mile and/or serving less than 640 acres** from a study area that has gone through the MUN Evaluation Process shall have the same MUN beneficial use designation as the listed water body that provides flow to or receives flow from the unlisted water body.



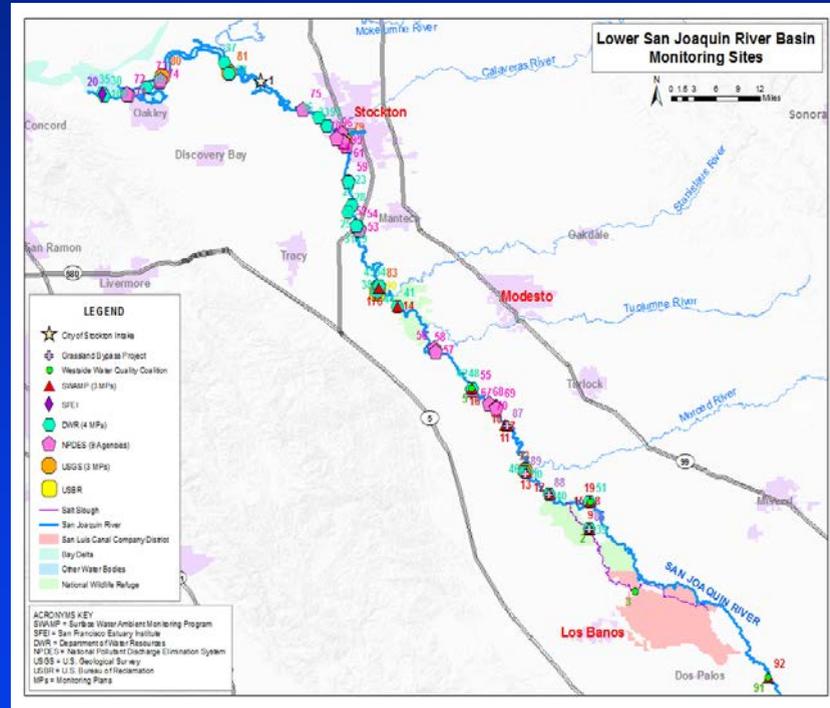
Water Body Listing Panel Discussion

Monitoring and Surveillance

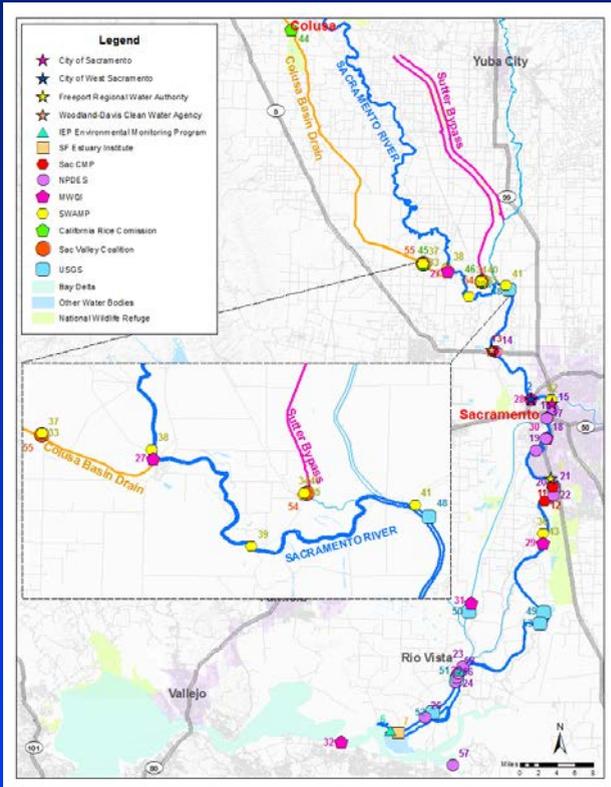


Sacramento River Basin

San Joaquin River Basin



Monitoring and Surveillance



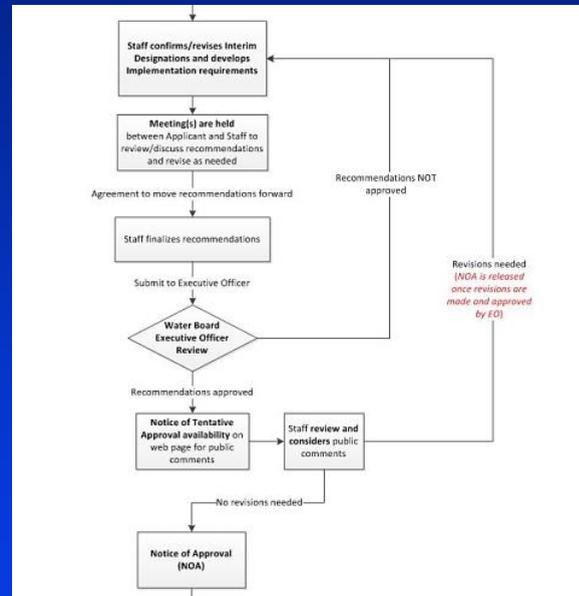
Sacramento River Basin

- Comprehensive Monitoring Guides (updated every 3-5 yrs)
 - ✓ Constituents
 - ✓ Frequency
 - ✓ Locations
- Review of plans and reports
 - ✓ Integrated Report
 - ✓ ILRP Mgmt. Plans
 - ✓ NPDES reports
 - ✓ Watershed Sanitary Surveys
- CVWB Title 22 Monitoring in key MUN waterbodies
 - ✓ Every 3-5 years as resources permit

Monitoring and Surveillance Panel Discussion

Public Involvement

Procedures for public involvement in the review process for interim water body category and MUN beneficial use designations and implementation requirements



Public Involvement Panel Discussion

Next Steps and Timeline

Board Hearing Announcement & Meeting Materials (Draft Staff Report)	October – November 2016
Public Review	November – December 2016
Board Hearing (split)	December 2016
Response to Public Comments	January 2017
Board Hearing to consider Adoption	February 2017

Questions/Comments?