

Development of Water Quality Regulations for Commercial Agriculture in the Scott and Shasta Watersheds

Siskiyou County Board of Supervisors Meeting
Yreka, California



Eli Scott and Brenna Sullivan. January 6, 2026

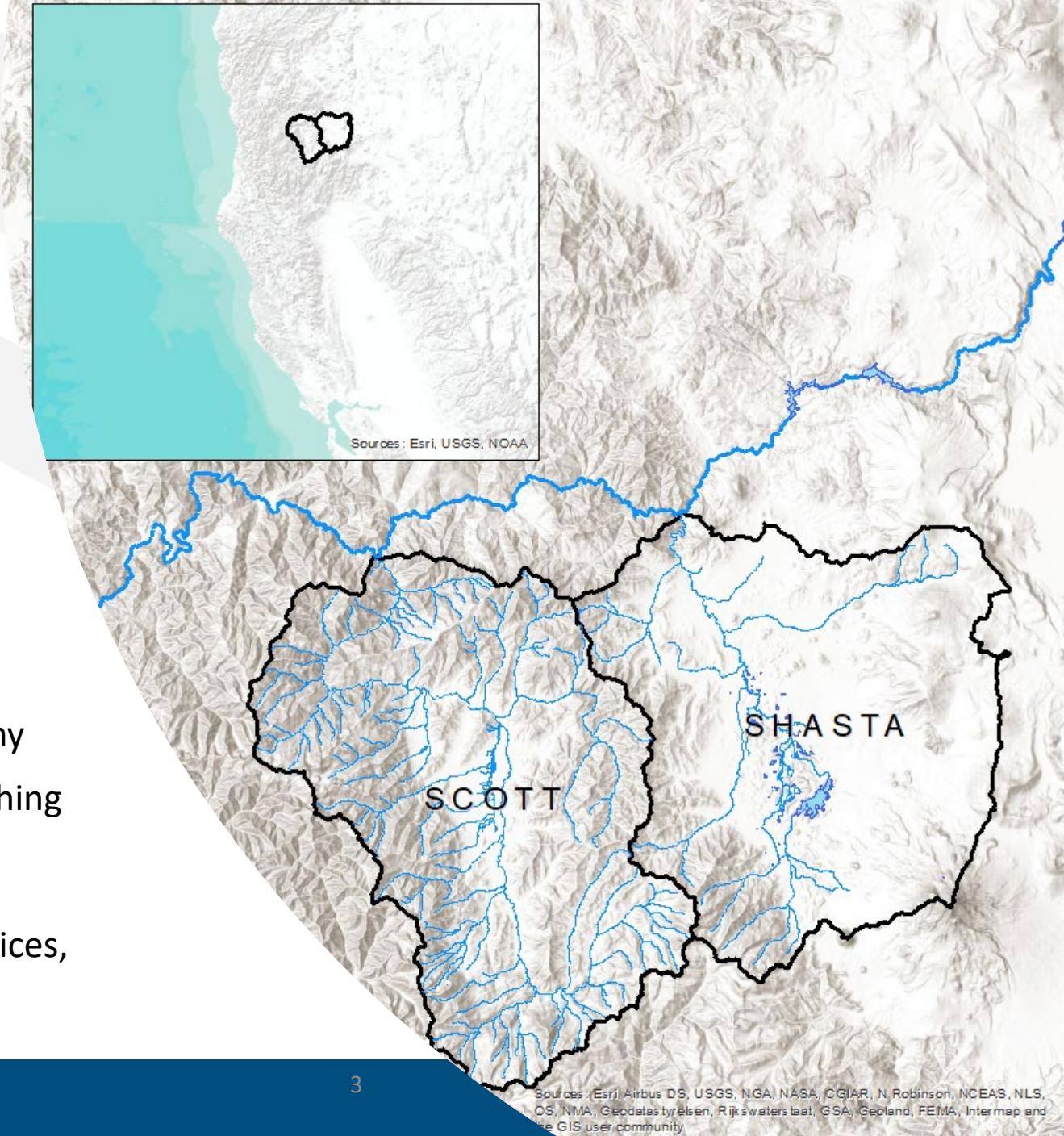
Presentation Topics

- Purpose: Present current thinking on the draft order and seek feedback
- Review Past Program
- Order Development
- Order Concepts
- Timeline



Scott and Shasta Watersheds

- Natal streams for Chinook Salmon and SONCC Coho salmon
- Unique, climate-resilient cold-water resources
- Scott – Snow-melt driven, deep alluvial basin
- Shasta – Spring fed, volcanic, stable base flow
- Rural communities with a largely agricultural economy
- Impacted by legacy mining, timber harvest, and ranching – these legacy impacts continue to contribute to impairments
- Ongoing impacts due to some current ranching practices, rural roads, and timber harvest



Scott and Shasta Watersheds

- Scott – 303(d) listings for Sediment, Temperature, Biostimulatory Conditions
 - Listed as impaired for sediment in 1992
 - Listed as impaired for temperature in 1998
 - Listed as impaired for biostimulatory conditions in 2012
 - TMDLs for sediment and temperature Adopted by the Regional Water Board on December 7, 2005
 - Approved by the EPA on September 8, 2006
- Shasta – 303(d) listings for Temperature, Dissolved Oxygen
 - Listed as impaired for dissolved oxygen in 1992
 - Listed as impaired for temperature in 1994
 - TMDLs for dissolved oxygen and temperature adopted by the Regional Water Board on June 29, 2006
 - Approved by the EPA on January 26, 2007



TMDL Conditional Waivers: 20 years of implementation

- First adopted soon after TMDL adoption
 - Most recent iteration 2018
- Encourages voluntary actions while providing an enforceable backstop for unauthorized discharges
- Active “on the ground” approach
- Staff-driven prioritization
- No enrollment, no fees
- Highly tailored monitoring and reporting approach

California Regional Water Quality Control Board
North Coast Region

Order No. R1-2018-0019

Shasta River TMDL Conditional Waiver
of
Waste Discharge Requirements

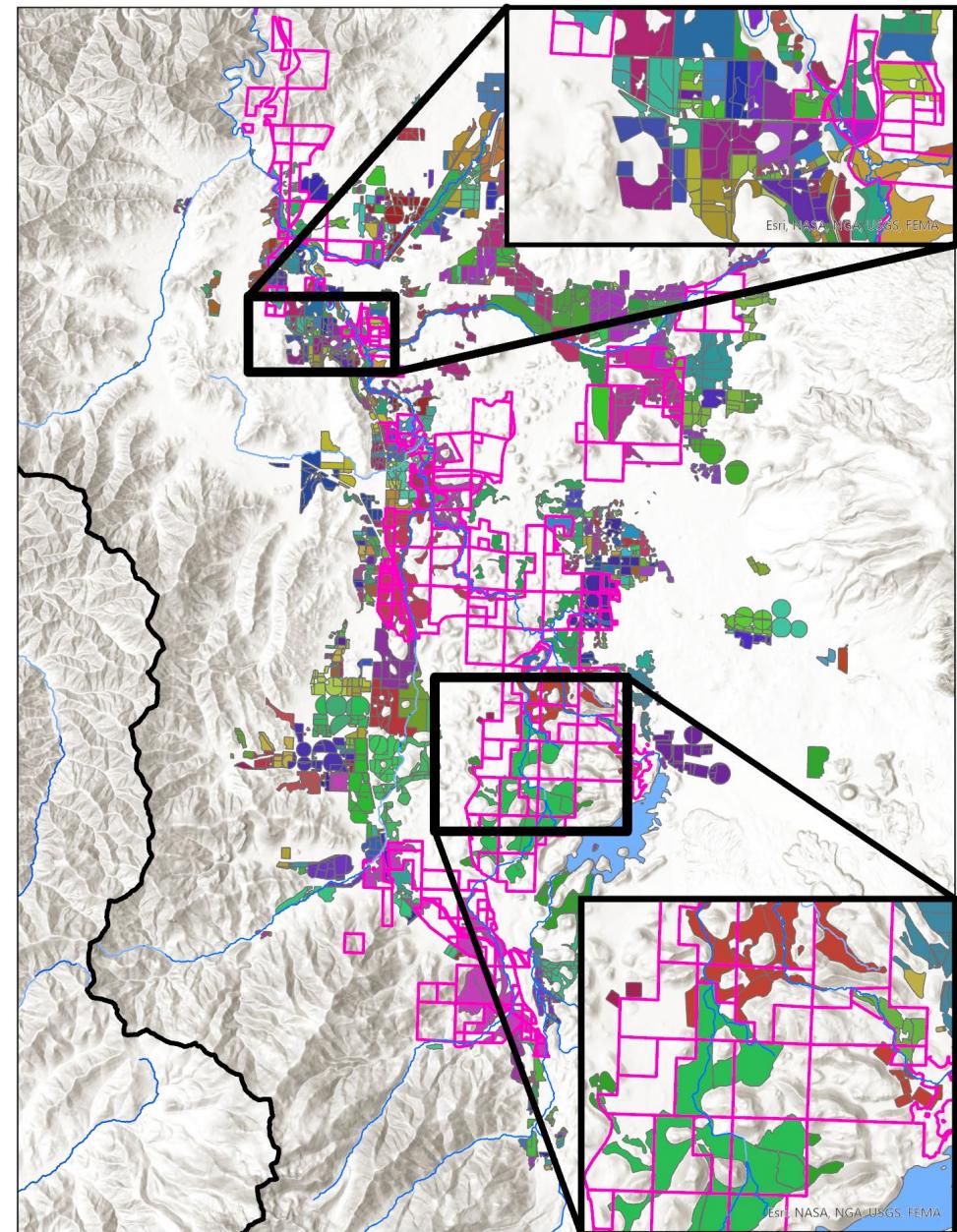
The California Regional Water Quality Control Board, North Coast Region, (hereinafter Regional Water Board) finds that:

1. The *Action Plan for the Shasta River Temperature and Dissolved Oxygen Total Maximum Daily Loads*, hereinafter the Shasta River TMDL Action Plan or Action Plan, was adopted by the California North Coast Regional Water Quality Control Board (Regional Water Board) on June 28, 2006, (Resolution No. R1-2006-0052) and amended into the *Water Quality Control Plan for the North Coast Region* (Basin Plan) on January 26, 2007, following approval by the United States Environmental Protection Agency.¹ The Action Plan describes the implementation actions necessary to achieve the Temperature and Dissolved Oxygen TMDLs and attain water quality standards in the Shasta River watershed. Table 4-14 of the Action Plan (Attachment A of this Order) sets forth specific implementation actions required of the Regional Water Board and Dischargers² to achieve these standards.
2. The Action Plan also contains a provision conditionally waiving the requirement to file a Report of Waste Discharge (ROWD) and obtain Waste Discharge Requirements (WDR), pursuant to Water Code section 13269, for Dischargers that choose to

TMDL Conditional Waivers Progress to Date

Land Ownership Configuration

- Both Scott and Shasta Waivers focused on large landowners (> 500 acres owned)
- Many producers have not been assessed
 - Small ownerships, large **Cumulative Impact**



TMDL Conditional Waivers – Finding 18

- Develop an Order more consistent with approaches in other parts of the State
- Continue to incentivize proactive water quality measures (restoration, collaboration, etc.)
- Continue on-site water quality assessments
- May incorporate a tiered structure based on threat of discharge
- May require active enrollment and fees



TMDL Conditional Waivers – Other Considerations

State-wide Irrigated Lands Regulatory Program precedential requirements

Scott and Shasta Emergency Drought Regulations

Shasta Safe Harbor Agreement

Ongoing Sustainable Groundwater Management Act efforts in both watersheds



Why Are we Now Developing General Waste Discharge Requirements (GWDRs)?

20 Years of Waiver Implementation have provided knowledge while also pointing out programmatic gaps to close

Staff driven prioritization achieved intended outcome

Tailwater continues to pose water quality threats

Controllable water quality factors not well addressed

Riparian buffer guidance vague

Uneven implementation inequitable

Readoption every 5 years requires shift in staff focus

Adaptive management dataset incomplete

New knowledge to apply

Not aligned with Irrigated Lands Regulatory Program

New listings to consider

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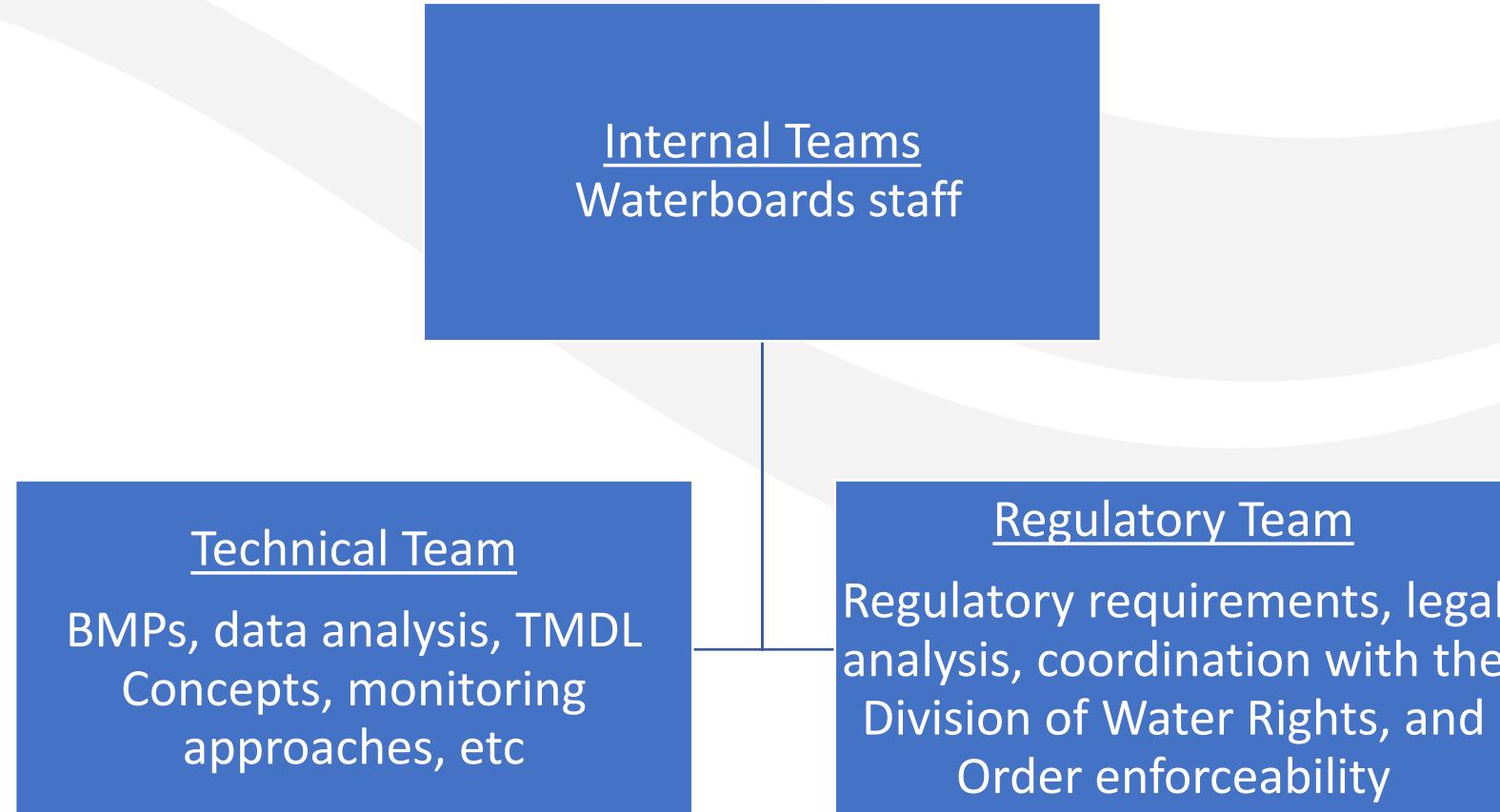
Reason for Revising Waivers to GWDR

- Enrollment ensures equitable application of regulation
- Coalitions drive collective monitoring and reporting
- GWDR does not require updating every 5 years
- MRP can be designed to require data collection to inform adaptive management
- Develop permit to mitigate controllable water quality factors
 - Factors leading to tailwater discharges
 - Factors impacting riparian shade, including water use
 - Factors leading to biostimulatory conditions, including channel geometry and impoundments
- Ensure compliance with Statewide Precedents and Irrigated Lands Regulatory Program
- Ensure **regulatory certainty** for regulated community

Order Development

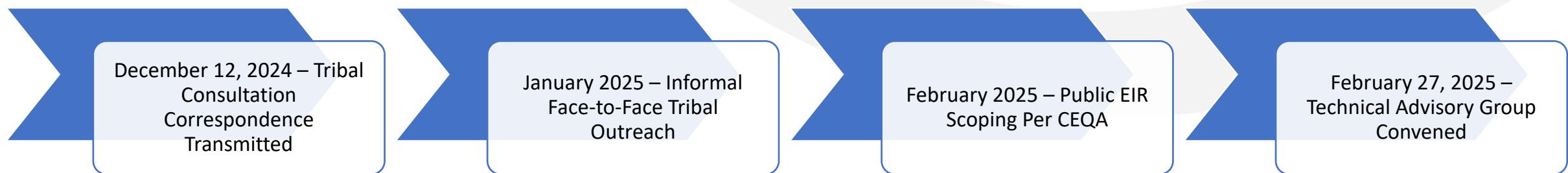


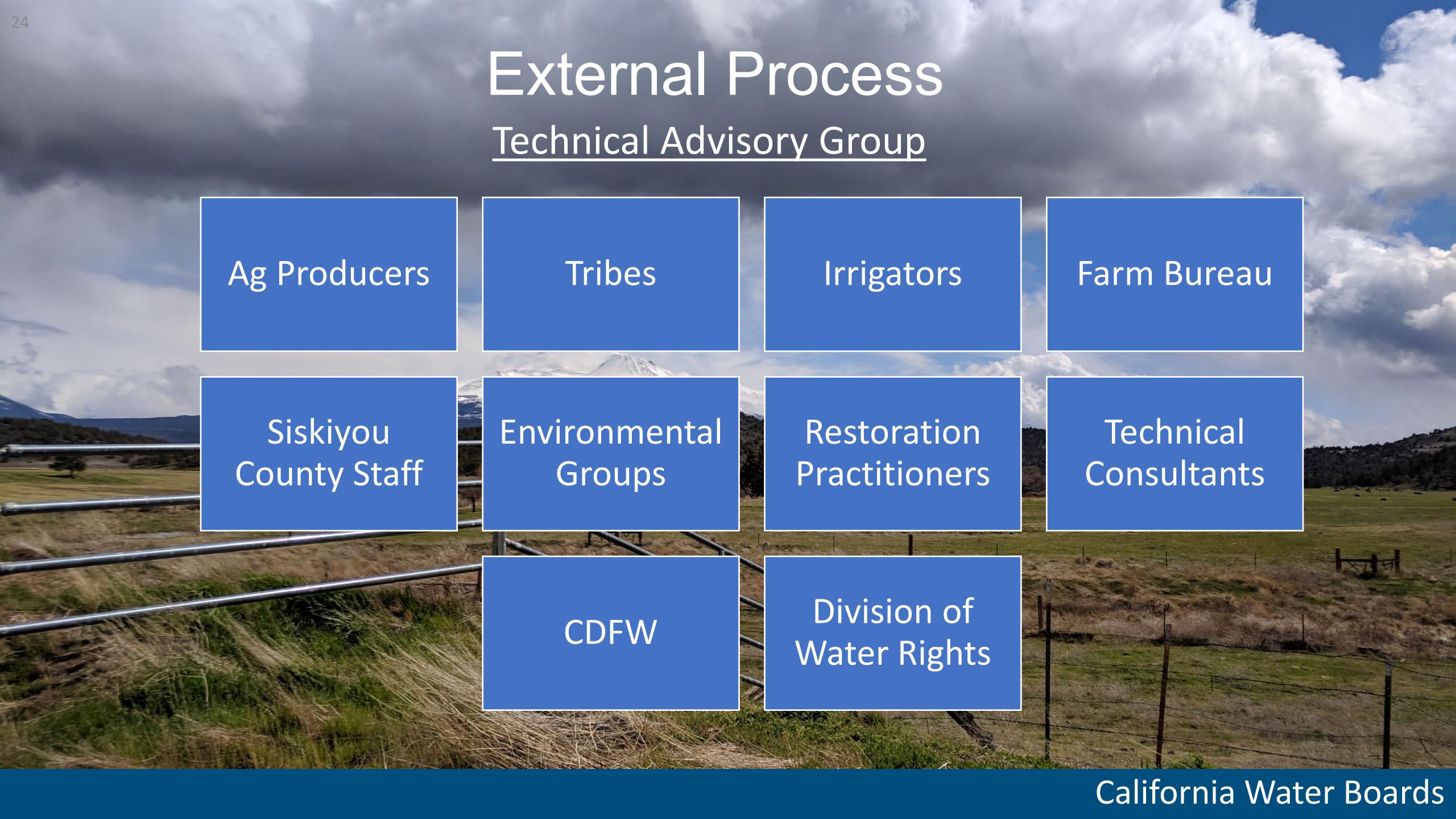
Eli Scott, Senior Environmental Scientist



Met monthly beginning in Fall of 2023 through Spring of 2025 to develop initial core regulatory and technical concepts

External Process





External Process

Technical Advisory Group

Ag Producers

Tribes

Irrigators

Farm Bureau

Siskiyou
County Staff

Environmental
Groups

Restoration
Practitioners

Technical
Consultants

CDFW

Division of
Water Rights

Technical Advisory Group - Topics



Coalition Development

Monitoring and Reporting Requirements

Fees

Alternative Permitting Pathways

Acceptable Best Management Practices

Technical Advisory Group - Concerns

New monitoring and reporting requirements could overlap with existing regulatory obligations such as SGMA and emergency flow regulations.

Requirement to enroll in a new permit increases administrative burden and imposes fees



Working Details and Concepts

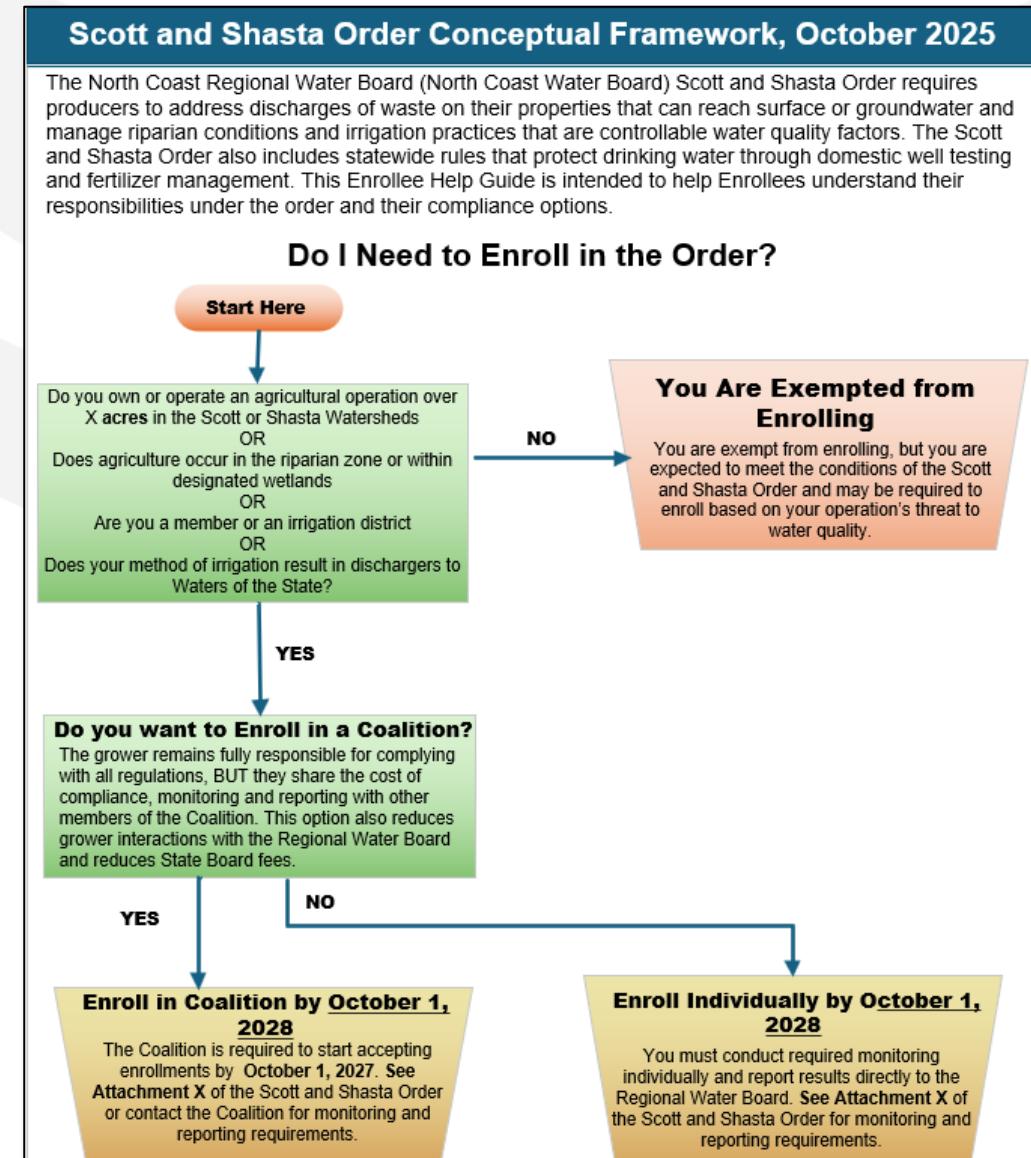


Eli Scott, Senior Environmental Scientist

Conceptual Enrollment Requirements

Enrollment Criteria

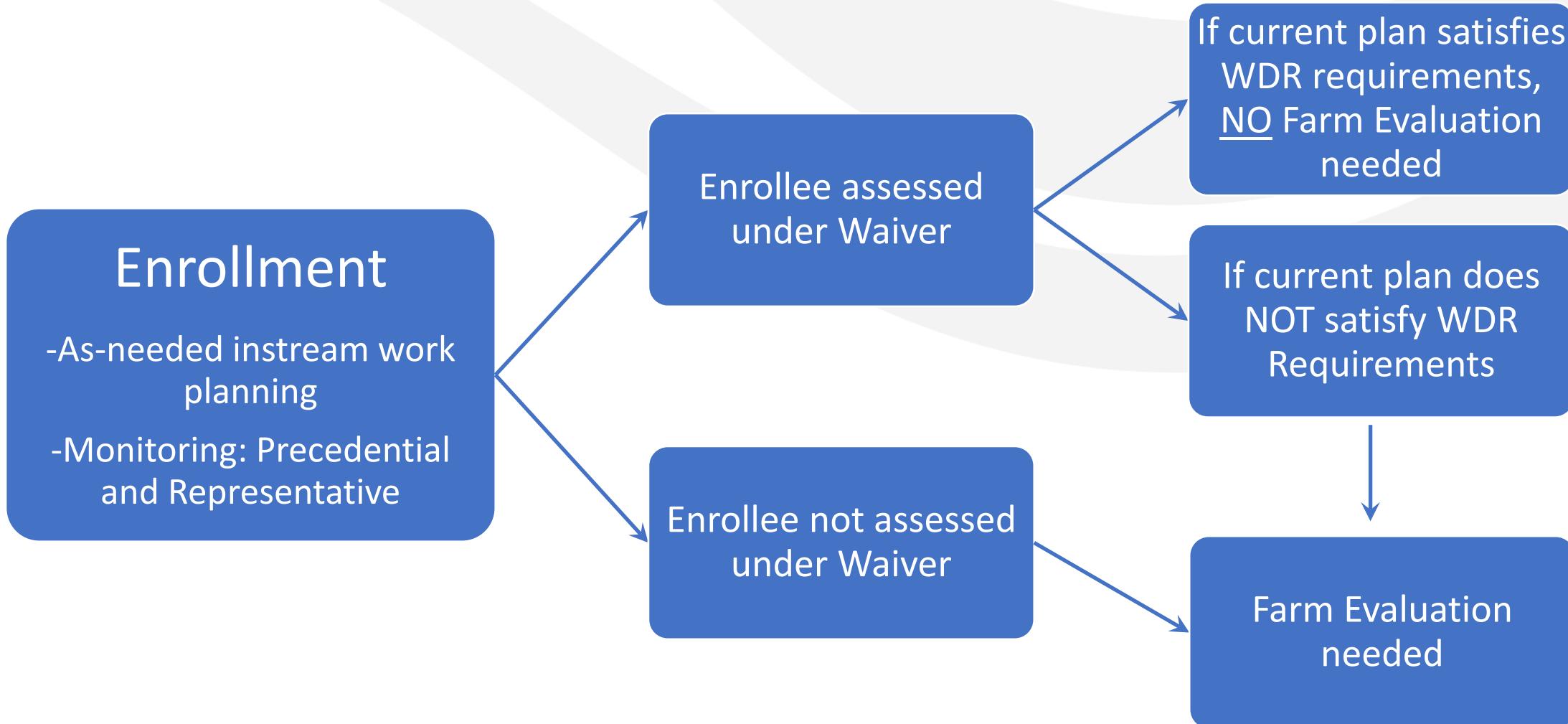
- Commercial agriculture on X or more acres **OR**
- Agricultural activities occur adjacent to or within the riparian zone or designated wetlands **OR**
- Member of an irrigation district **OR**
- Method of irrigation results in discharges to waters of the state



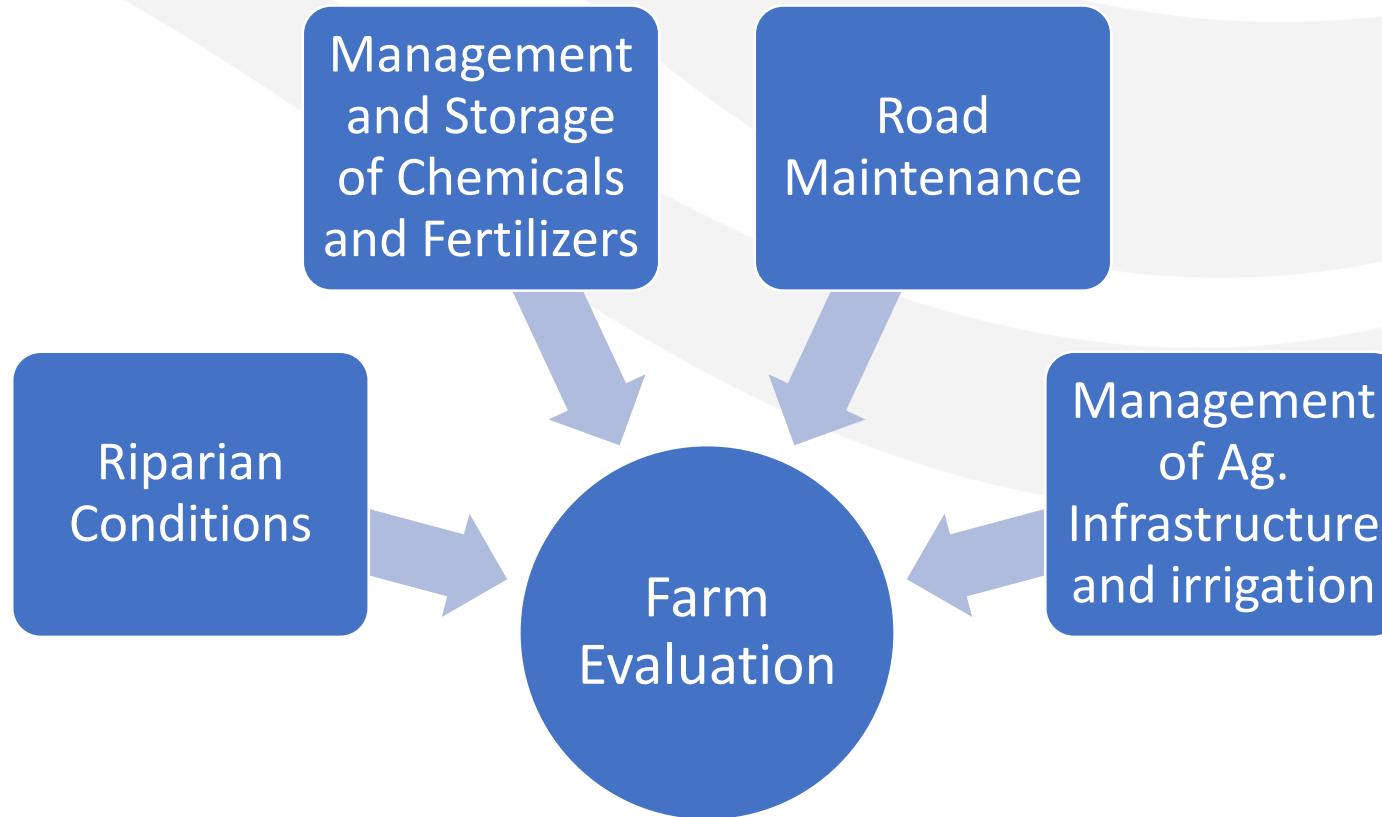
Conceptual Prohibitions

- No discharges of tailwater unless compliant with:
 - Shasta River TMDL Load Allocations or
 - Temperature Policy in the Basin Plan
- No riparian grazing conducted without an approved plan
- No tillage within 35' of the waterside edge of a watercourse

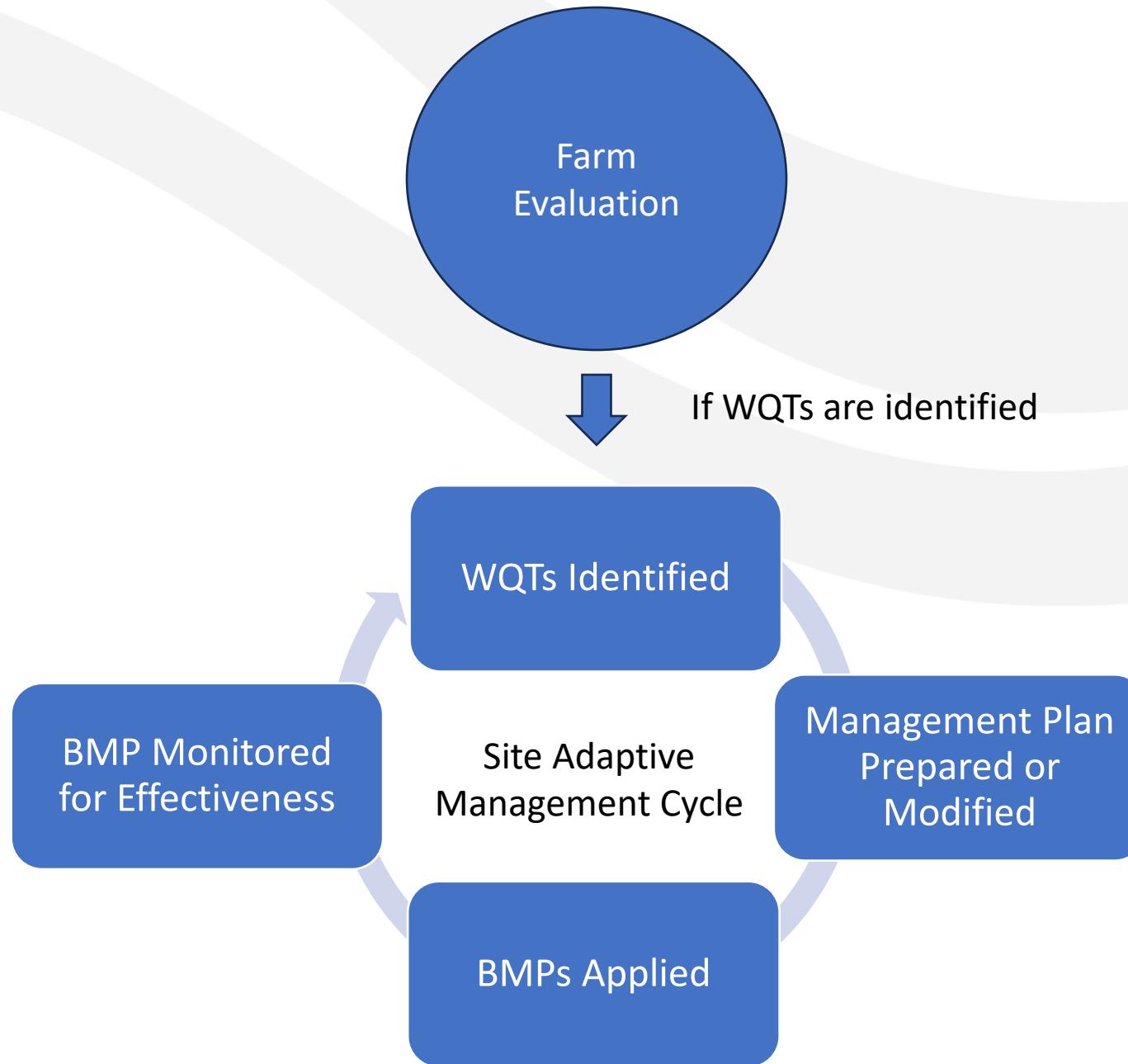
Conceptual Permit Conditions and Farm Evaluation



Conceptual Permit Conditions and Farm Evaluation



When on-site conditions do not comply with permit conditions, Water Quality Threats (WQTs) are identified



Planning and Implementation

Agricultural Water Quality Management Plan

Riparian
Management

Irrigation
Management

Road
Management

Agricultural
Infrastructure
Management

Progressive
Adaptive
Management

Instream
Workplan

Need for each element is based on the WQTs identified
during the Farm Evaluation

On-Farm Monitoring

- Completed by the enrollee on their agricultural operation to assess the effectiveness of their AWQMP or fulfill State Board requirements.

Monitoring Objective	Techniques	Frequency
Drinking water well sampling	Sampling for nitrate and pesticides as required by State Board precedent	As required by State Board Precedent
Management Practice Effectiveness	Varies based on Management Practice	Varies

Representative Monitoring

- Completed by the Coalition or individual enrollees to track the overall progress of the program. All enrollees required to participate.

Monitoring Objective	Techniques	Frequency
Tailwater Discharge Quality	Tailwater quality (Temperature, NBOD, Conductivity) Receiving water quality (Temperature, conductivity)	Continuous during the irrigation season
Riparian Health	CRAM	3 years
Ambient Water Quality	Temperature, Dissolved Oxygen, pH, Conductivity	Continuous during the irrigation season
Pesticide Monitoring	Groundwater sampling for priority pesticides	Annual
Groundwater Trend Monitoring	Groundwater sampling for Nitrate, as required by State Board precedent	Annual

Coalitions

- Coalitions would be allowed to form to support compliance with the program
- Enrollees may join coalitions or enroll individually
- Coalitions will:
 - Collect fees
 - Manage communications between enrollees and the State Water Board and North Coast Water Board
 - Develop outreach and educational materials for enrollees
 - Fulfill monitoring requirements
 - Manage data collected for monitoring
- Coalitions will be approved by the North Coast Water Board

Regulatory Conceptual Framework

- Informed by Finding 18 of the 2018 Waivers
- Acknowledge proactive restoration, past compliance, and minimized risk of discharge
- Multiple categories of enrollment with distinct levels of monitoring and reporting
- Following framework is based on conversations with the TAG and internal discussions

Monitoring, Planning and Cost of Compliance

Requirements Affecting Cost of Compliance	Categories of Sites	
	Sites with Approved Compliant Plans and no WQT	All Other Sites
Monitoring		
· Watershed Status & Trends Monitoring	X	X
· BMP Effectiveness Monitoring		As Needed
Planning		
· Farm Evaluation (Everyone)	Already Approved	X
· Agriculture Water Quality Management Plan	N/A	As Needed
o Riparian Management		
o Irrigation Management		
o Road Management		
o Ag Infrastructure Management		
o Progressive adaptive management		
· Instream Work Plan (only sites needing instream work)	As Needed	As Needed
o Tailwater disconnection projects		
o Stabilization of cattle access areas		
o Stream crossing upgrades		
o Bank stabilization		

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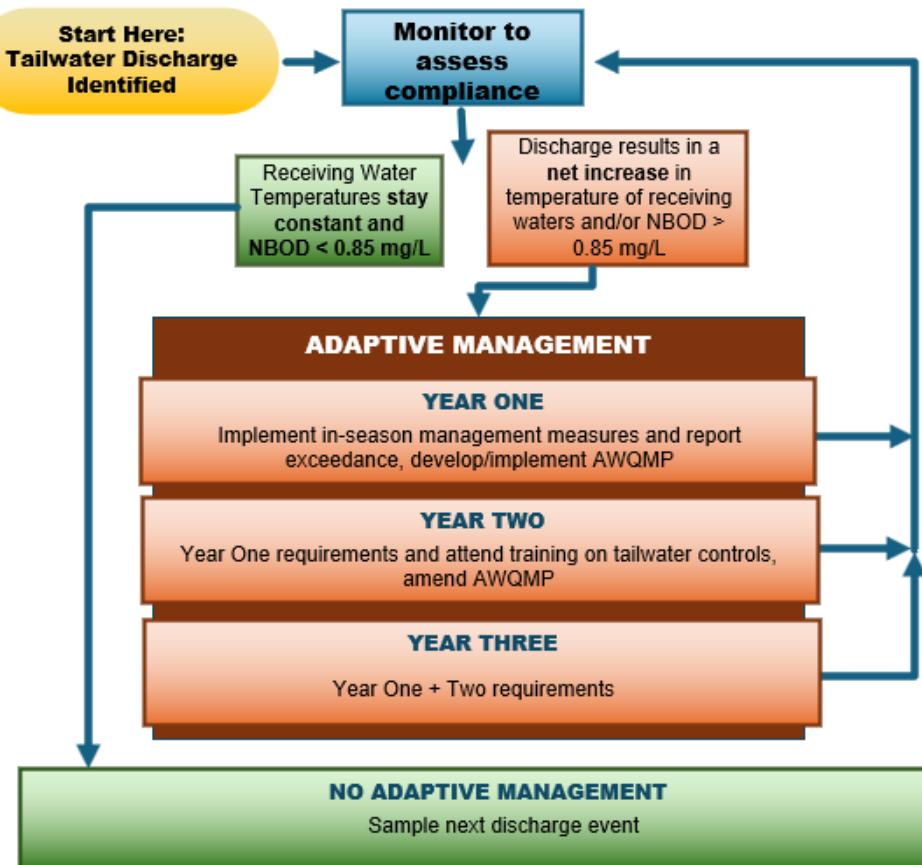
Scott and Shasta Order Conceptual Framework, October 2025

What is Adaptive Management in the Order?

The previous pages have described the baseline requirements of the Order and the verification (monitoring) required to demonstrate that baseline requirements are sufficient to control pollutants from reaching surface or groundwater. Where existing practices are not sufficient, Adaptive Management may be required. The scenario below describes the Adaptive Management process.

Adaptive Management Scenario 1: Tailwater Discharge Monitoring

Note: tailwater discharges are prohibited unless they can be shown to not exceed water quality objectives. This process outlines how that monitoring may occur and how it may result in additional management practice implementation and planning if water quality objectives are not met.

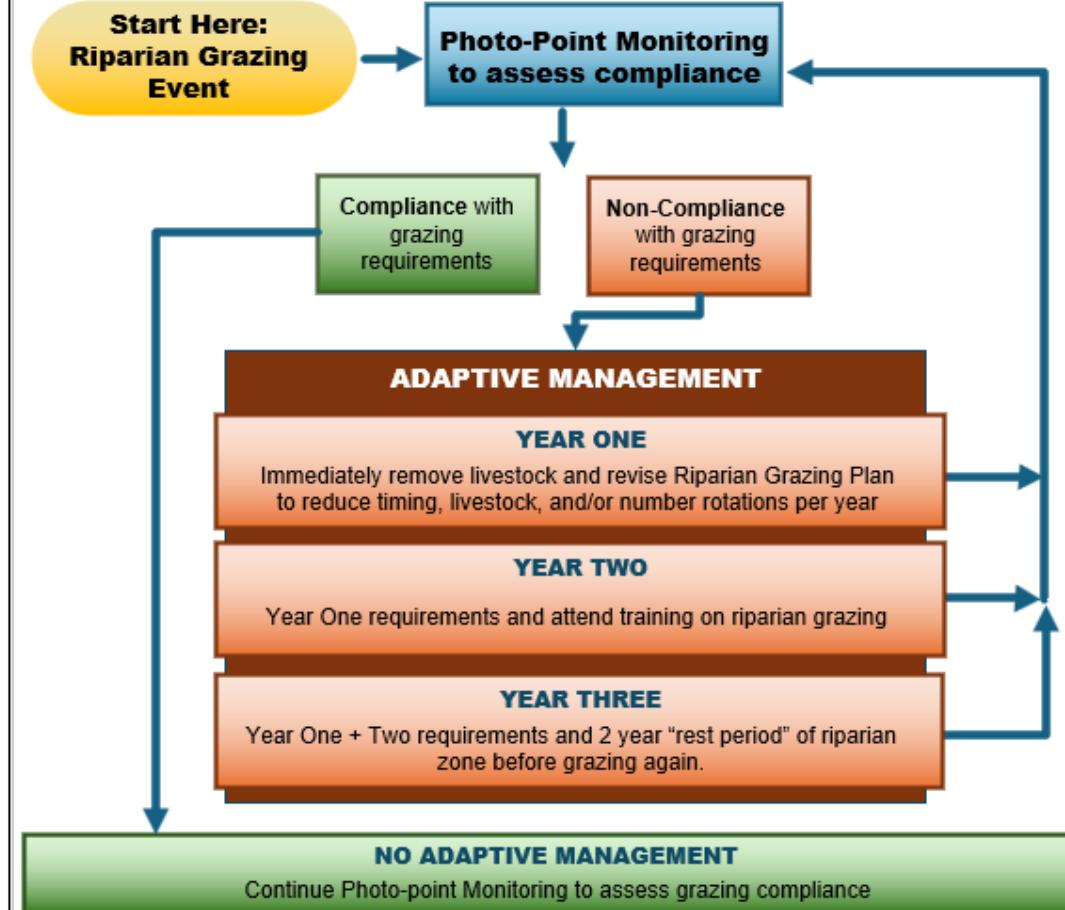


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Adaptive Management Scenario 2: Riparian Grazing Monitoring

Note: Riparian grazing is prohibited without an approved Riparian Grazing Plan



Proposed Schedule





Board Member Questions and Public Comment

Scott and Shasta Order Conceptual Framework, October 2025

The North Coast Regional Water Board (North Coast Water Board) Scott and Shasta Order requires producers to address discharges of waste on their properties that can reach surface or groundwater and manage riparian conditions and irrigation practices that are controllable water quality factors. The Scott and Shasta Order also includes statewide rules that protect drinking water through domestic well testing and fertilizer management. This Enrollee Help Guide is intended to help Enrollees understand their responsibilities under the order and their compliance options.

