

## V. EXHIBITS FOR THE RECORD

### EXHIBIT IDENTIFICATION INDEX

**Stay Hearing on Provisions of Order No. R3-2012-0011, Agricultural Order, and associated Monitoring and Reporting Programs, Order No. R3-2012-0011-01, -02, -03  
Before the  
State Water Resources Control Board  
August 30, 2012**

<b>EXHIBIT NO.</b>	<b>DESCRIPTION</b>
A	Summary of Testimony of Michael Thomas, Assistant Executive Officer Angela Schroeter, Senior Engineering Geologist, Agricultural Regulatory Program Manager Monica Barricarte, Water Resources Control Engineer, Agricultural Regulatory Program Staff
B	Testimony Presentation Slides
1	Order No. R3-2012-0011 (2012 Order, Conditional Waiver of Waste Discharges) and Order No.s R3-2012-0011-01, -02, -03 (Monitoring and Reporting Programs for Tiers 1, 2, 3)
2	Order No. R3-2004-0017
3	Harter, T. et al. UC Davis Groundwater Nitrate Project, Implementation of Senate Bill X2 1. Prepared for California State Water Resources Control Board January 2012. Addressing Nitrate in California's Drinking Water.
4	Staff Report to the Board, Item 14 , [Agricultural Order], March 2011
5	Appendix G, Staff Report to the Board, Item 14, [Agricultural Order], March 2011
6	Enrollment Information in the Water Board's GeoTracker data management system as of Aug. 1, 2012
7	Management Practice Implementation, Comment Letters and Hearing Testimony from growers and grower representatives, March 17, 2011
8	Central Coast Water Board. June 2007. 2006 Management Practice Checklist Summary Report.
9	Appendix F, Staff report for Board Meeting Item 14, [Agricultural Order], March 2011
10	Staff Report to the Board, Item 18, Summary of Water Board Grant Funding for Agriculture, February 2011
11	Nutrient Management Goals and Management Practices for Cool-Season Vegetables. UCANR Publication 8097.

12	USDA NRCS Agricultural Handbook No. 590.1997. Ponds – Planning, Design, and Construction.
13	USDA NRCS Conservation Practice Standard, Pond-Code 378 and Irrigation Reservoir-Code 436
14	USDA NRCS Guidance on Riparian Areas
15	Bianchi, M., D. Mountjoy, and A. Jones. 2004. Farm Water Quality Plan. UCANR Publication 8332.
16	Central Coast Agricultural Water Quality Coalition. 2011. Farm Water Quality Planning Template.
17	USDA NRCS Conservation Practice Standard, Irrigation Management-Code 449 and Nutrient Management-Code 590
18	Presentation by Rio Farms to the State Water Board on May 23, 2012.
19	Presentation by the California Strawberry Commission to the Central Coast Water Board on May 4, 2011 (Slides 5-11)
20	USDA NRCS Conservation Practice Standard, Well Water Testing, Code 355
21	Price Quotes from Laboratories for Groundwater Sampling and Analysis
22	Management Practice Checklist, Reporting Form for Order No. R3-2004-0117
23	Annual Compliance Form, Screen Shots
24	Draft Central Coast Agriculture’s Alternative Proposal for the Regulation from Irrigated Agricultural Lands, CA Farm Bureau Federation, December 3, 2010
25	Nitrate Loading Risk, Nitrate Hazard Index Tool
26	Photo Monitoring Protocols
27	Photo Point Monitoring Handbook, USDA
28	Monitoring Parameters, Price Quotes for Laboratory Analysis and Cost Calculations
29	Agricultural Order, 5-Year Compliance Calendar
30	Monterey County Crop Report, 2011
31	Curricula Vitae – Michael Thomas, August 2012, Angela Schroeter, August 2012, Monica Barricarte, August 2012
32	Farm Specific Enrollment

# Stay Hearing



**“Every citizen of California has the right to pure and safe drinking water.”**

# Basis and Assumptions for Cost Estimates

- Assume growers largely complied with the 2004 Order
  - Protection of water quality
  - Farm Plans and management practices
    - Nutrient management
    - Irrigation management
    - Erosion control
    - Pesticide management
  - Effectiveness evaluations
  - Iterative improvement to achieve water quality standards over time

# Basis and Assumptions for Cost Estimates

- Many costs are not new
- Management practices are not new
- Farm plans are not new
- Effectiveness evaluation is not new
- Compliance with water quality standards is not new

# Basis and Assumptions for Cost Estimates

- Iterative approach over time to achieve compliance is not new
  - Immediate compliance with wq standards is not required (and not physically possible)
- Water Boards have allocated hundreds of millions in grants to Ag
- NRCS and RCDs have provided services for decades

# Basis and Assumptions for Cost Estimates

- Some things are new, or partly new
  - Backflow prevention
  - Practice effectiveness reporting
  - Groundwater data reporting
  - Annual compliance form reporting
  - Nitrate loading risk and total nitrogen applied reporting
  - Photo monitoring
  - Individual surface water monitoring

# Basis and Assumptions for Cost Estimates

- Non compliance with the 2004 Order is not:
  - a valid basis for claiming high costs now
  - a reason for a Stay

Issue	Provision	Estimated Cost per Farm
1a	Backflow prevention devices	\$0 - \$435
1b	Maintenance of containment structures	\$0 - \$1440
1c	Maintenance of riparian vegetative cover	\$0
1d	Practice effectiveness and compliance reporting	\$0 - \$3600
1e	Groundwater monitoring	\$0 if no groundwater wells on farm  \$400 - \$1200 for Tier 1 and Tier 2  \$600 - \$1800 for Tier 3

Issue	Provision	Estimated Cost per Farm
1f	Annual compliance form reporting	\$0 – \$1440 for Tier 2 and Tier 3
1g	Determination of nitrate loading risk factors and determination of total nitrogen applied	\$0 – \$720 for Tier 2 and Tier 3
1h	Photo monitoring	\$0 - \$1440 per half-mile of stream for Tier 2 and Tier 3
1i	Individual surface water discharge monitoring and reporting	\$0 if no discharge \$6,301 to \$8551 for Tier 3 Only

# Total Costs for Each Tier Through 2013 Per the Hearing Notice

- Tier 1: \$0 to \$6,675
- Tier 2: \$0 to \$10,275
- Tier 3: \$0 to \$19,426

# Costs Can Vary Greatly

- 2012 Order Costs for 2013 can vary greatly depending on:
  - Approach used to comply (Order is highly flexible)
  - Specific management practices, expert services used
  - Cooperative versus individual effort
  - Degree of compliance with the 2004 Order
  - Work done above and beyond the 2012 Order
  - Great deal of misinformation and fear

# Standards in Practice Certification

- Standards look at the farm in its entirety:
  - the worker
  - soil fertility
  - cover crops
  - wildlife
  - native plants
  - Irrigation
  - and more



# Benefits of Requirements

- Annual Compliance Form
- Nitrate Loading Risk and Total Nitrogen Applied
- Individual Surface Water Monitoring

# Individual Surface Water Monitoring

\_\_\_\_\_ Tier 1: 2024 farms

\_\_\_\_\_ Tier 2: 1546 farms

\_\_\_\_\_ Tier 3: 110 Farms

\_\_\_\_\_ Tier 3 subset: 66 farms



Order 2012 allows alternatives

# What Actions Are required to Comply?

- **Water Quality Standards**
  - Continue to update Farm Plan
  - Continue implementing MPs, make progress, report progress annually

# What Actions Are required to Comply?

- “The Central Coast Water Board recognizes that growers may not achieve immediate compliance with all requirements. Thus, this Order provides reasonable schedules for growers to reach full compliance over many years by implementing management practices and monitoring and reporting programs that demonstrate and verify measurable progress annually.”

# What Actions Are required to Comply?

- Maintenance of Containment Structures
  - Continue to update the Farm Plan
  - Continue to implement MPs
  - Asses site specific conditions, minimize risk
  - Report progress annually

# What Actions Are required to Comply?

- Maintenance of Riparian Areas
  - Maintain existing vegetation
  - Do not denude vegetation
  - Minimize degradation of vegetation
  - Allows permitted activities

# Closing Statement

- 2012 Order is built on the 2004 Order
  - Many of the same basic requirements
  - Reporting is different and necessary to better inform, track, prioritize, and take action to protect water quality and public health
- Iterative costs are reasonable
- Higher costs from Petitioners may also be reasonable to protect water quality
- Criteria to grant a Stay are not met
- Note we are including the testimony and exhibits and attachments into the record.

END



# Conditional Waiver of Waste Discharge Requirements Enforcement Approach

**2012 Conditional Waiver includes administrative type requirements:**

Enrollment

Fees

On-line Report Submittal Due Dates

Staff can pursue enforcement for violations of these administrative requirements.

**Typical Sequence:**

Phone call or email

Letter to discharger

Notice of Violation

2<sup>nd</sup> Notice of Violation

Propose Fine

Board Hearing

# Conditional Waiver of Waste Discharge Requirements Enforcement Approach

What about enforcement of water quality standards?

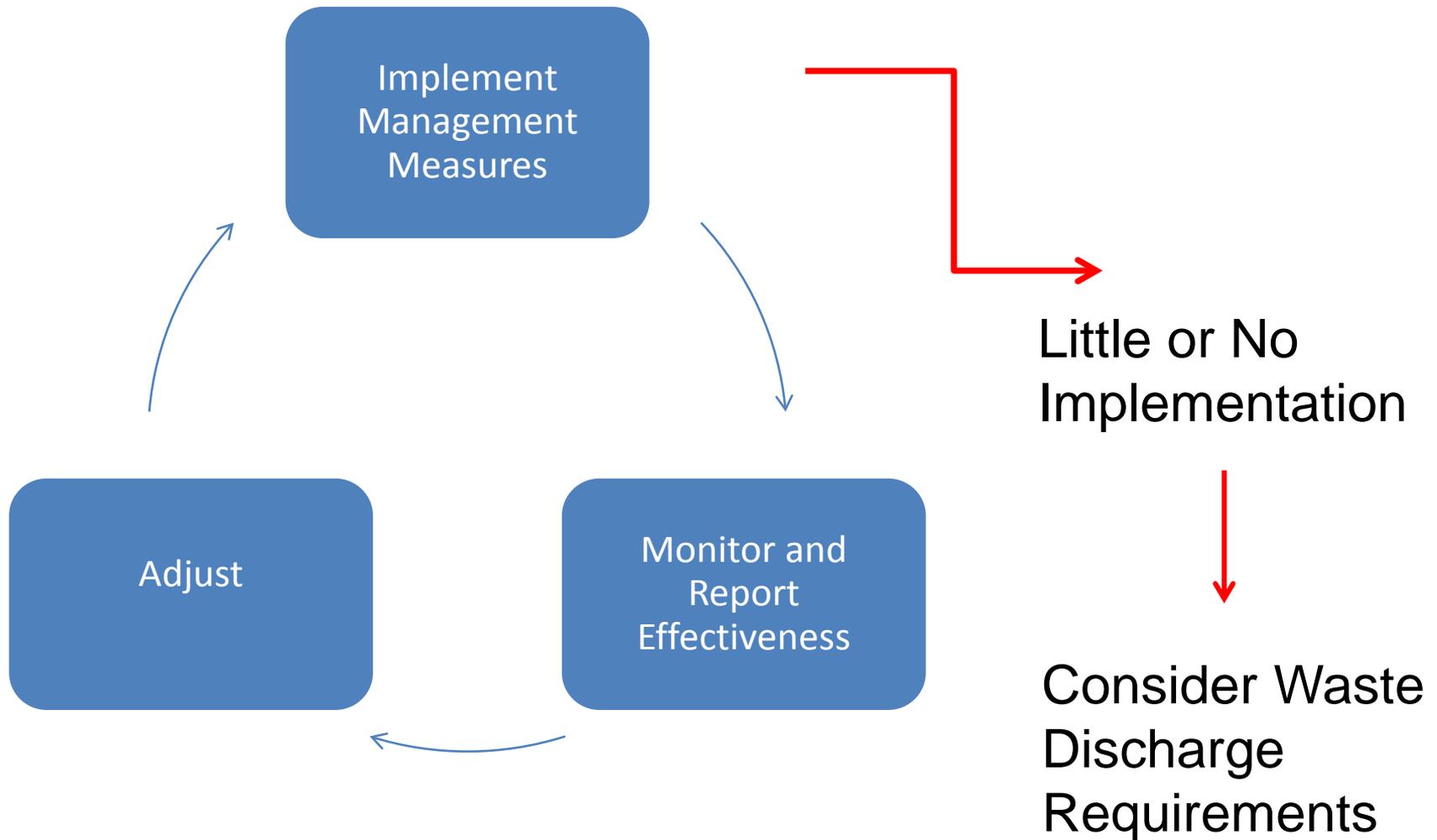
Will farmers be in violation and subject to enforcement when the Order is adopted? **No.**

Permits States (Attachment A, page 2):

*The Central Coast Water Board recognizes that Dischargers may not achieve immediate compliance with all requirements. Thus, this Order provides reasonable schedules for Dischargers to reach full compliance over many years by implementing management practices and monitoring and reporting programs that demonstrate and verify measurable progress annually.*

# Meeting Water Quality Objectives Over Time

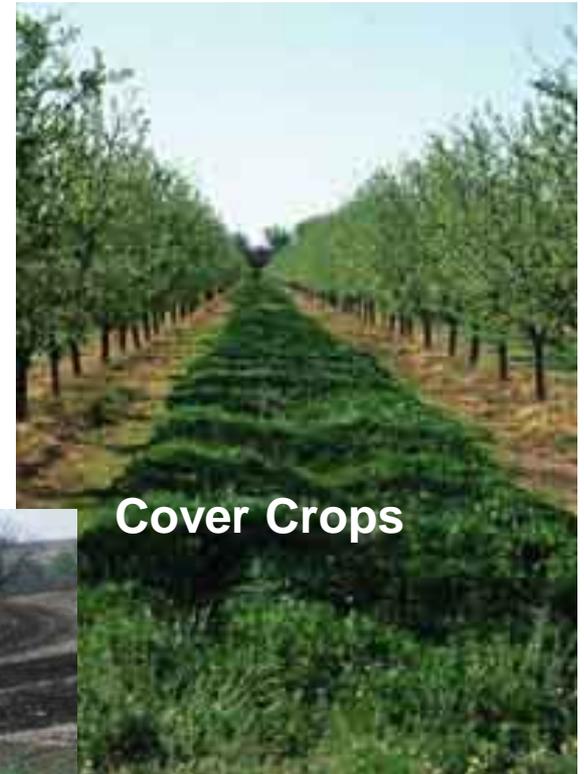
## Iterative Process





# The Best Defense is a Good Offense

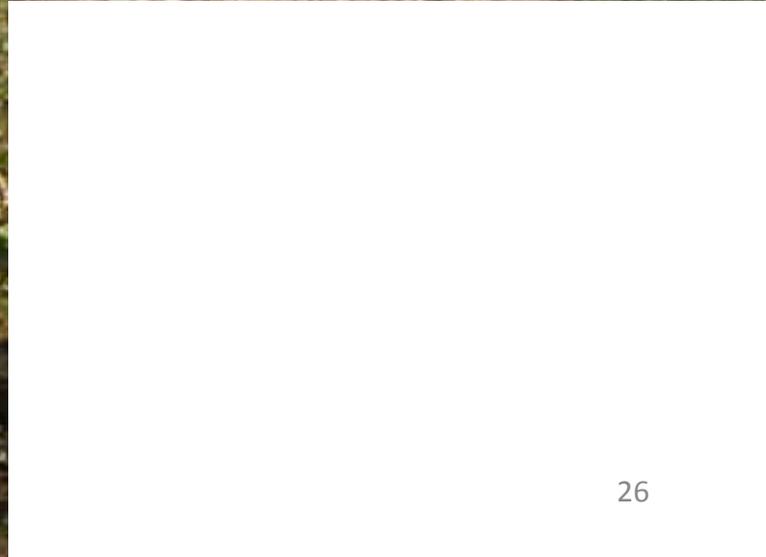
## Erosion Control/Vegetative Management



**Riparian Corridor**

**Grassed Waterways**

**Cover Crops**



# Standards in Practice Certification

- Standards look at the farm in its entirety:
  - the worker
  - soil fertility
  - cover crops
  - wildlife
  - native plants
  - Irrigation
  - and more



# Staff Resources Dedicated

- **Lisa McCann**
- **Angela Schroeter**
- **Monica Barricarte**
- **Matt Keeling**
- **Karen Worcester**
- Shanta Keeling
- Dominic Roques
- Mary Adams
- Elaine Sahl
- John Robertson
- Harvey Packard
- Jill North
- Chris Rose
- Cecile DeMartini
- Katie DiSimone
- Hector Hernandez
- Corinne Huckaby
- Dean Thomas
- Peter Meertens
- Sorrel Marks
- Kim Sanders
- Steve Saiz
- Sheila Soderberg
- Todd Stanley
- Donette Dunaway
- John Goni
- Phil Hammer
- Mike Higgins
- Alison Jones
- Howard Kolb
- John Mijares
- Thea Tryon
- Cyndee Jones
- Gary Nichols
- Stacy Denney
- Barbara Brooks

# Priorities Deferred

- **Ag Program Implementation (Compliance Eval., Assistance and Enforcement)**
- **Public Health Protection: Drinking Water**
- **Total Maximum Daily Load Orders: Address severe Ag issues**
- **Basin Plan Amendments**

The Water Board's mission is:

*To preserve, enhance, and restore the quality of California's water resources... for the benefit for present and future generations.*



Our Environmental Justice Policy goal is to:

*Integrate Environmental Justice considerations into the development, adoption, implementation and enforcement of Board decisions, regulations and policies.*



Sonia Lopez and her son Leonardo

“Our problem is going to be your problem,” she said. “It’s everyone’s problem. There are solutions, but we need the people in charge of our communities to do something about it.”

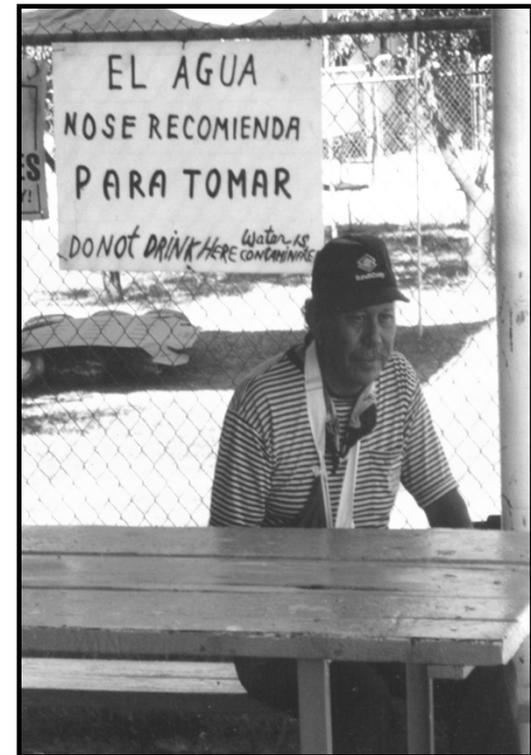
Porter Cologne says the Water Board:

*...must be prepared to exercise its full power and jurisdiction to protect the quality of waters in the state from degradation...*



“Every citizen of California has the right to pure and safe drinking water.”

Section 116270(a) of the California Health and Safety Code





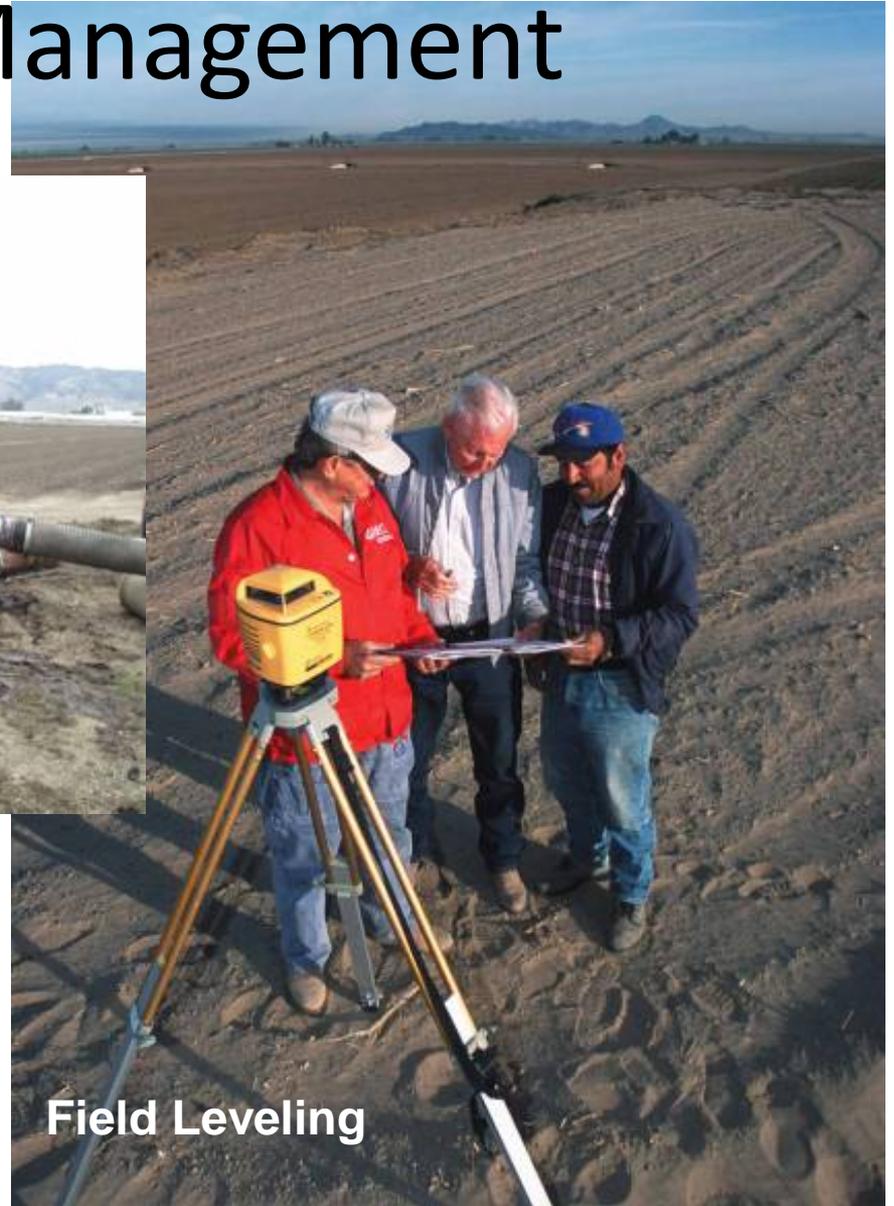
# Nutrient Management



# Irrigation Management



Ag Mobile Lab



Field Leveling



Drip System

# Pesticide Management



**Identifying Pests**



**Spot Application**

# Moro Cojo Wetland Restoration

- 200 acre restoration site
- Wetlands drastically reduced exotic mouse populations
- Nearby growers are donating water to the project
- Several other local property owners interested in selling property

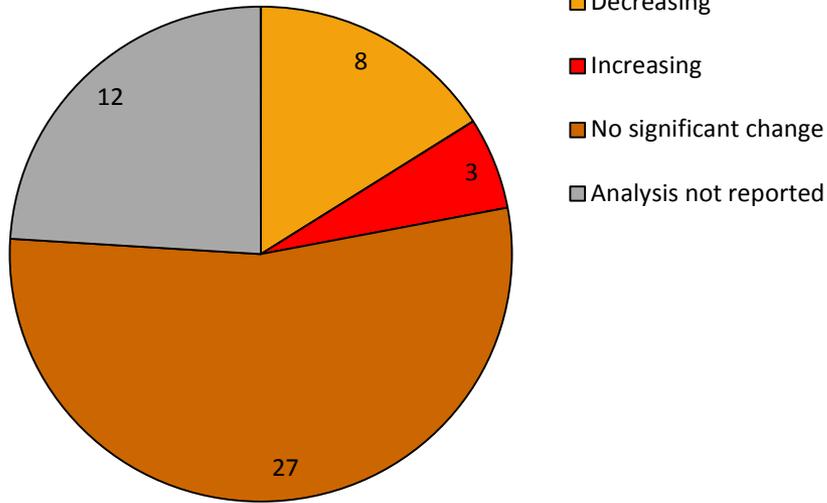


# Moro Cojo Wetland Restoration

- Monitoring water quality, wildlife
- NO<sub>3</sub> dropped from 45mg/L to 4mg/L in restored wetland

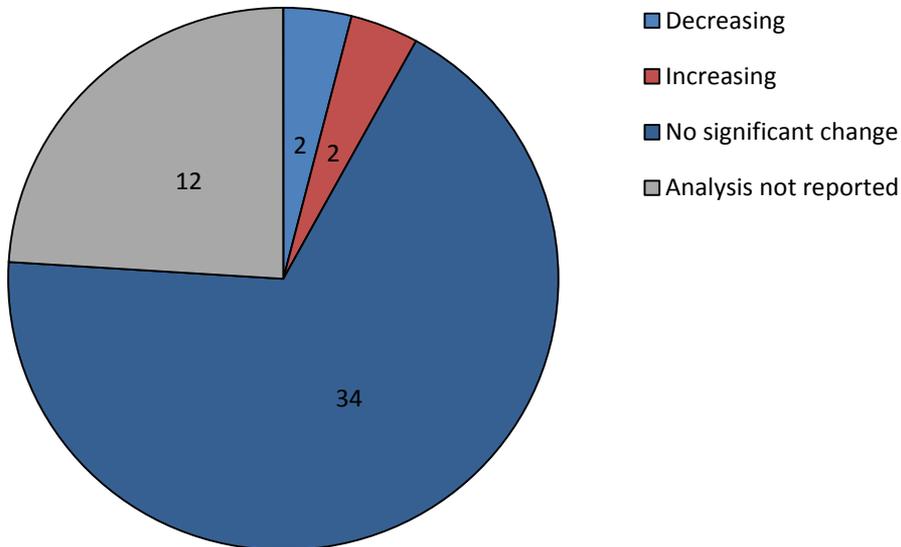


## Dry Weather Nitrate Trends



Trend	Dry Weather Nitrate Trends	
Decreasing	8	
Increasing	3	
No significant change	27	
Analysis not reported	12	
	50	

## Wet Weather Nitrate Trends



Trend	Wet Weather Nitrate Trends	
Decreasing	2	
Increasing	2	
No significant change	34	
Analysis not reported	12	

## 2004 NPS Policy:

There are many different ways for the RWQCBs to ensure compliance. In the event of noncompliance, a RWQCB could rescind a waiver, or terminate its applicability to individual dischargers, and issue WDRs in its place. If the waiver leaves significant discretion with the discharger to determine how to comply with the waiver's conditions, the RWQCB could adopt a new waiver that is more directive in terms of the actions that the dischargers must take in order to comply with the waiver. In order to be enforceable, waiver conditions should be clearly specified.

# Management Measures versus Water Quality Objectives

Simplicity



Iterative  
Management  
Measures...

With enforceable  
requirements

Enforceable  
Water Quality  
Limits

# Self Monitoring

When is self monitoring effective?



When there is an established limit, enforcement, and consequences.