

California
Central Valley Region
Protecting California's Water



Status Update of Irrigated Lands Regulatory Program

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Outline

- Background
- State Water Board Petition Response
- ILRP Groundwater Protection
- Nitrogen Management Plan Summary Analysis

Central Valley Water Board

Mission: Protect the quality of the Region's waters for all beneficial uses

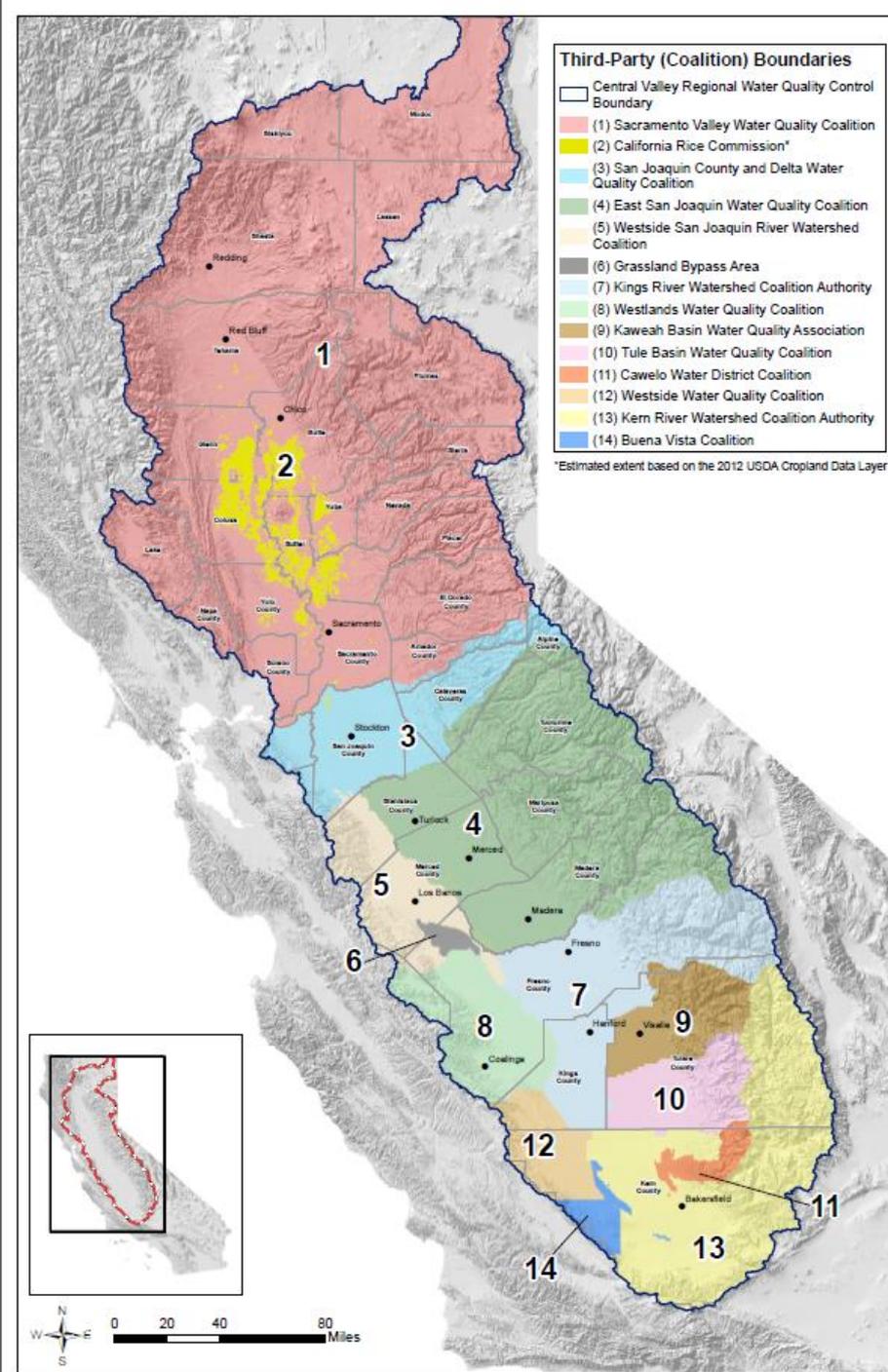
- Region 5 - largest of 9
- ~ 40% of State's area



Irrigated Lands Regulatory Program

Goal: Ensure irrigated lands discharges don't impact water quality

- ~75% CA irrigated ag
- ~7 million acres
- 9 General WDRs
- 14 Coalitions



Irrigated Lands Regulatory Program

▶ Conditional Waiver of WDRs

▶ Waiver Update and Renewal

▶ WDRs covering surface and groundwater

Petition Response ▶

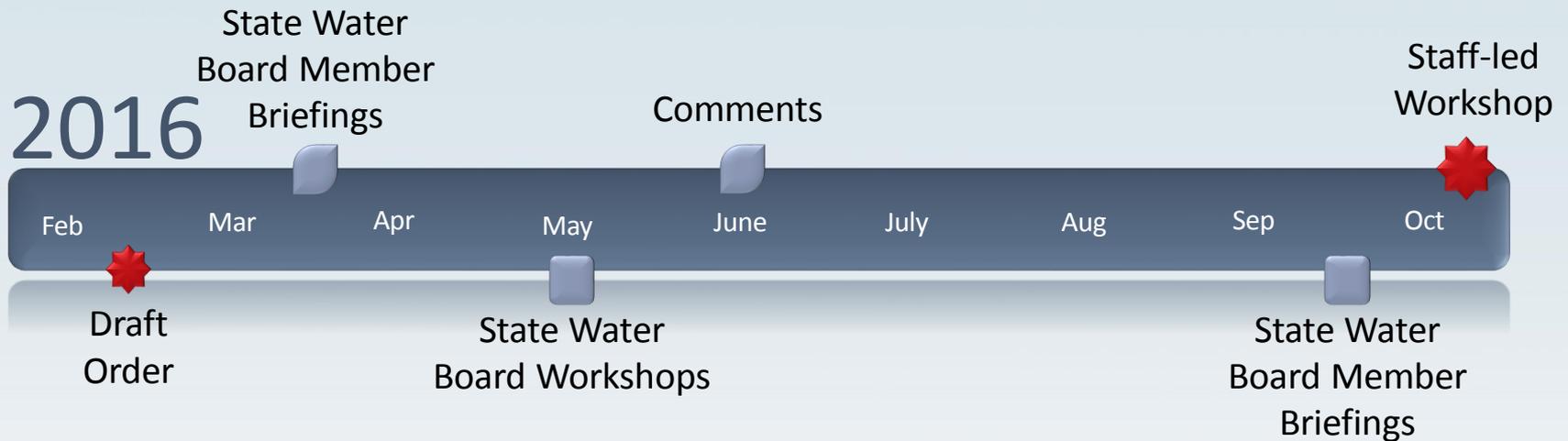


State Water Board Petition

Draft Precedential Order

- Removes vulnerability areas
 - All to certify NMPs and submit summary reports
 - All to submit farm evaluations annually
- Requires domestic well monitoring and reporting
- Requires field-level data reporting to Water Board
- Requires numeric metric for nitrogen loading

State Water Board Petition

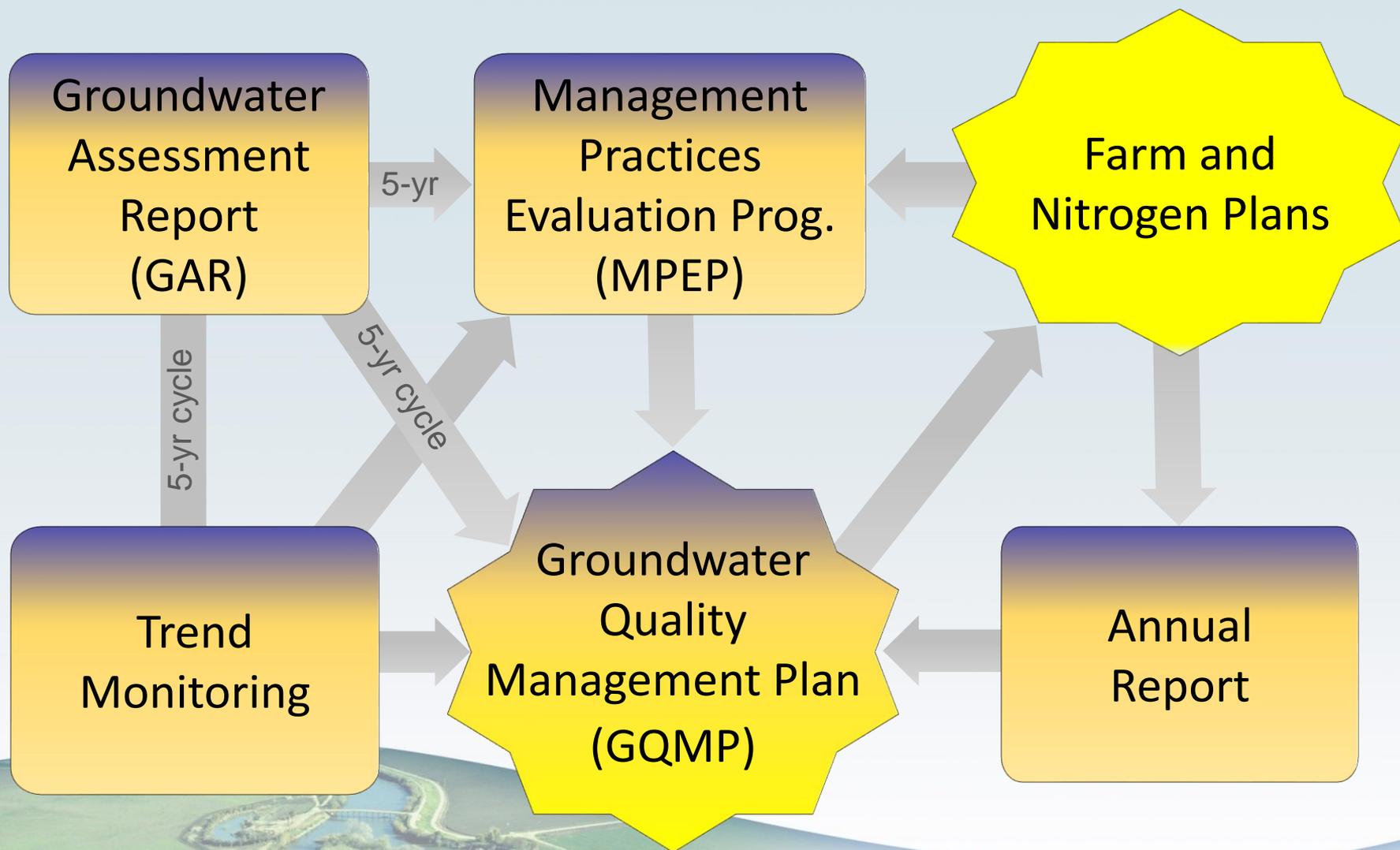


www.swrcb.ca.gov/public_notices/petitions/water_quality/a2239_sanjoaquin_ag.shtml

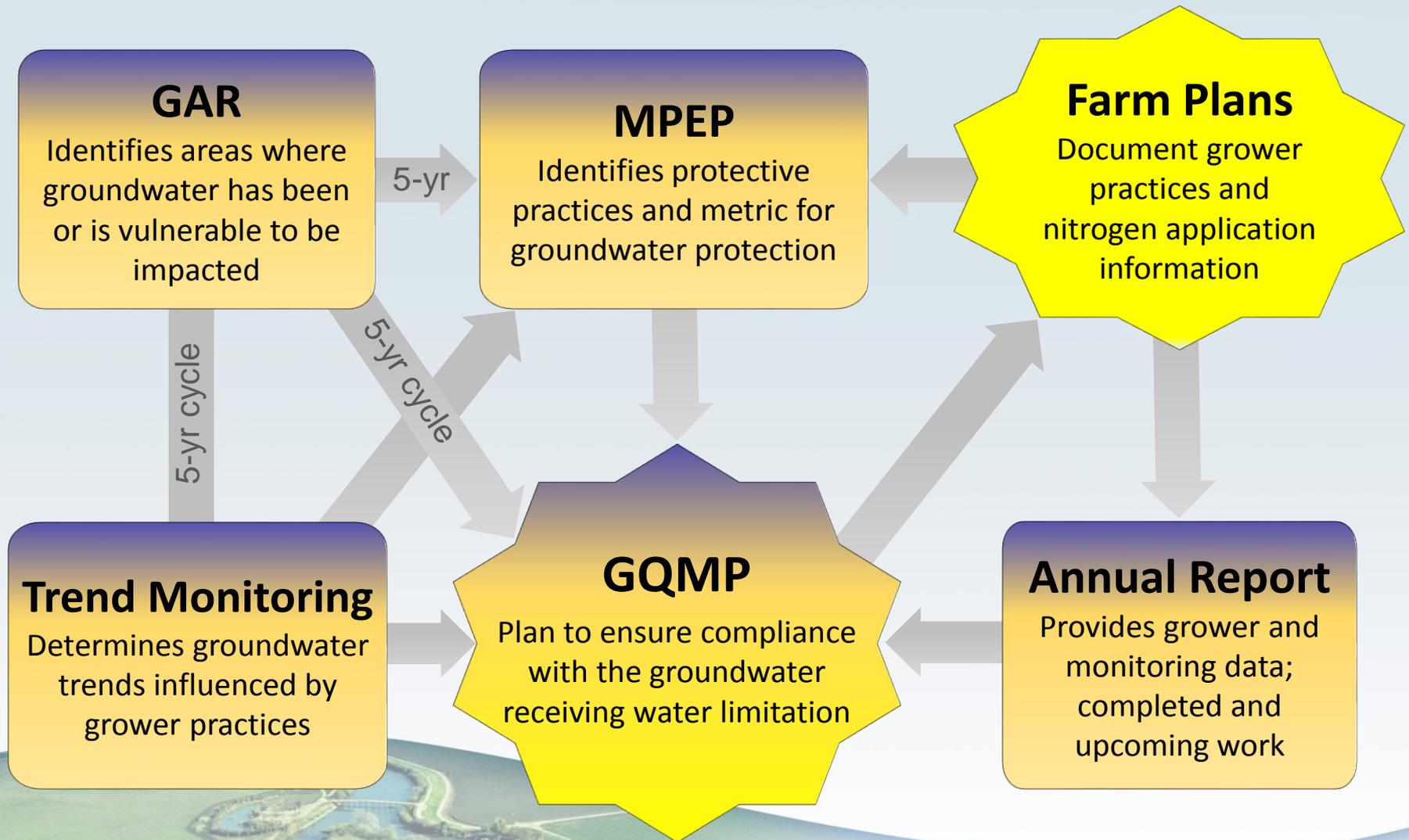
State Water Board Briefings

- Highlight ILRP successes
- Field-level reporting to Water Board
- Reporting frequency
- NMP Certification
- ILRP groundwater protection

ILRP Groundwater Protection



ILRP Groundwater Protection



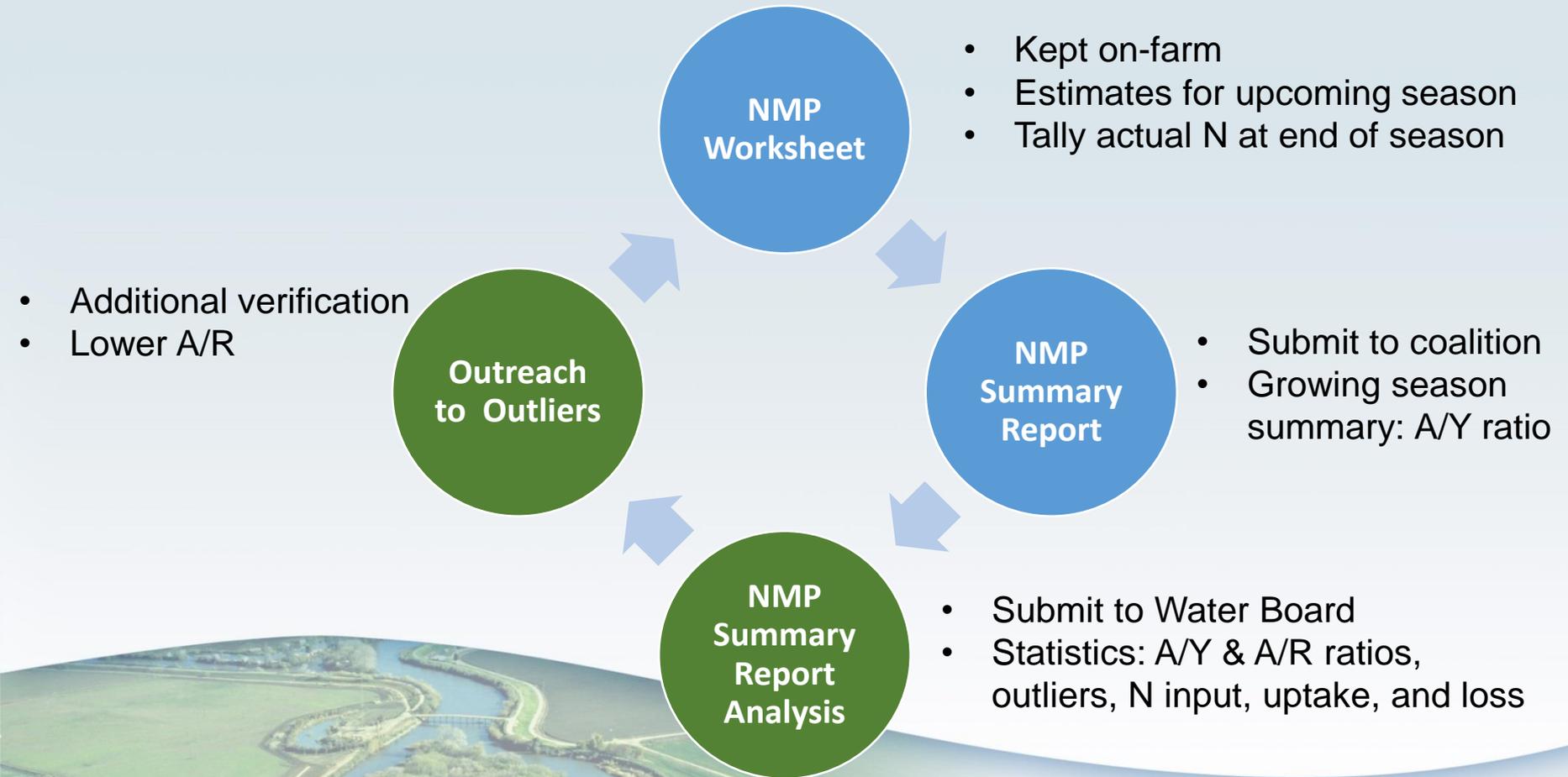
Management Practices Evaluation Program

- Identifies whether existing management practices are protective of groundwater quality
- Determines if new management practices would improve groundwater quality;
- Estimates effect members' discharges have on groundwater quality, using mass balance or conceptual model
- Determines if practices implemented at represented member farms need to be improved

GQMP Requirements

- High vulnerability areas
- Specific performance measures for outreach & implementation of management practices
- Justified time schedule to meet receiving water limitation
- Effectiveness monitoring
- Annual updates and progress reports

Nitrogen Tracking & Management Annual Process



Nitrogen Management Plan (NMP)



26 October 2016

NITROGEN MANAGEMENT PLAN WORKSHEET

1. Crop Year (Harvested): _____	4. APN(s): _____	5. Field(s) ID	
2. Member ID# _____			
3. Name: _____			

CROP NITROGEN MANAGEMENT PLANNING		N APPLICATIONS/CREDITS	26. Recommended/Planned N	27. Actual N
6. Crop		15. Nitrogen Fertilizers		
7. Production Units		16. Dry/Liquid (lbs/ac)		
8. Projected Yield (Units/Acre)		17. Foliar N (lbs/ac)		
9. N Recommended (lbs/ac)		18. Organic Material N		
10. Acres		19. Available N in Manure/Compost (lbs/ac estimate)		
Post Production Actuals				
11. Actual Yield (Units/Acre)		20. Total Available N Applied (lbs per acre)		
12. Total N Applied (lbs/ac)		21. Nitrogen Credits (est)		
13. ** N Removed (lbs N/ac)		22. Available N carryover in soil; (annualized lbs/acre)		
14. Notes:		23. N in Irrigation water (annualized, lbs/ac)		
		24. Total N Credits (lbs per acre)		
		25. Total N Applied & Available		
PLAN CERTIFICATION				
28. CERTIFIED BY:		29. CERTIFICATION METHOD		X
		30. Low Vulnerability Area, No Certification Needed		
		31. Self-Certified, approved training program attended		
DATE:		32. Self-Certified, UC or NRCS site recommendation		
		33. Nitrogen Management Plan Specialist		

** Your Coalition will provide the method to be used to estimate N Removed.
 Provided by the Central Valley Water Board 23 December 2014.

Nitrogen Management Plan Summary Report

Crop Harvested Year (1): _____ Submittal Date: _____

Member ID (2): _____ Member Name (3): _____

NMP Summary Report

	Site Location Information ¹	Crop (6)	Total Acres (10)	Total Available N Applied (20+23) pounds per acre	A/Y Total Available N (20+23) / Actual Yield (11) ²	Production Unit (7)
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

¹Site Location Information refers to information to be used to link a parcel enrolled in a coalition to the reported information; this may be the Assessor Parcel Number (APN).

²For No Yield, fill in NY. For Non Bearing, fill in NB.



Coalition Review of Grower Data

Grower Reporting Errors:

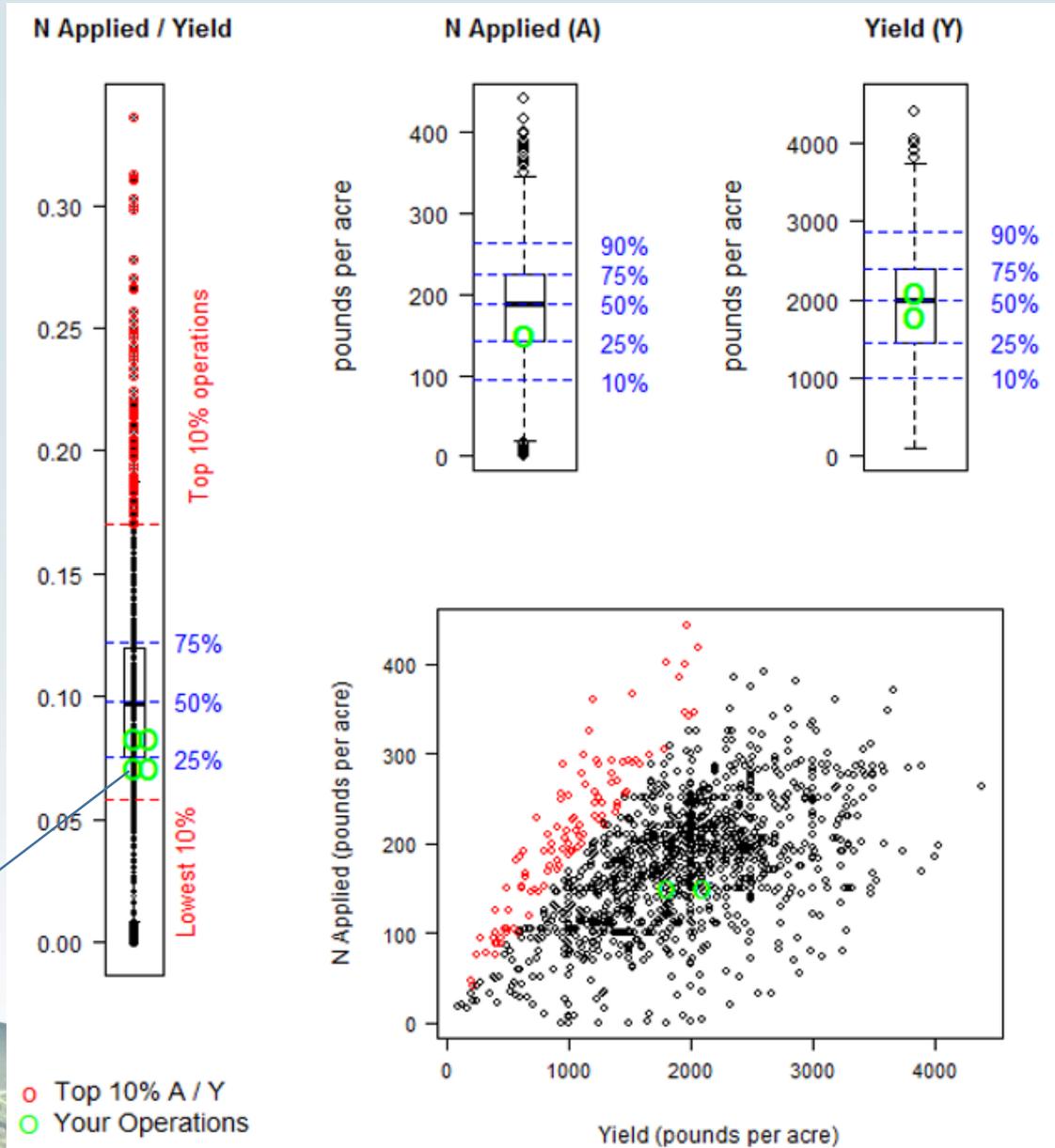
- Pounds total fertilizer vs. pounds nitrogen
- Whole-farm N vs. N per acre
- Whole-farm yield vs. yield per acre
- Millions vs. thousands of pounds crop yield
- Crop yield units: tons or boxes vs. pounds
- Transcription errors

NMP Summary Report Analysis

- Statistical summary of A/R or A/Y
- Box and whisker, scatter plots
- Crop-specific estimates and averages
- Nitrogen inputs, plant uptakes, and environmental losses

Grower Outreach Content

Green circles show grower's standing amongst all growers/locations of a specific crop.



Nitrogen Management Plan Summary Analysis: Lessons Learned

- Importance of grower data review by coalition
- Definition of outliers
- Timing of grower outreach package
- Water Board enforcement of growers who don't submit NMP summary reports

Questions?

