



# ***Emerging Nutrient Regulations***

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## California Legislation

*2014 was a busy year legislatively, while the drought resulted in less focus on water quality there was still two important bills.*

*WPHA was heavily engaged in the following bills:*

*+AB 69 – Assembly member Perea. Would create a new fertilizer mill tax that would start at 10 mills and go to 40 mills in two years. Funding was to go to creating M & O systems for disadvantaged community water systems, and was expanded to fund system infrastructure.*

*+AB 1471/Prop. 1 – Authorized to go to a public vote a water bond in the amount of \$7.5 billion. Approximately \$2.7 billion to be dedicated to surface water storage. Approximately \$1 billion to be dedicated to groundwater remediation or drinking water access and quality.*

*+AB 1739/SB 1168 & 1319 – Assembly member Dickenson/Senator Pavley. Bills authorize authority of groundwater quantity to the State Water Board. While bill is focused on groundwater supply, we should look forward to increasing incorporation of quality issues as part of this program.*

# ***Central Valley Irrigated Lands Program***

## ***Impacted Acreage and Costs***

- ***7 million irrigated acres in Central Valley.***
- ***Over 5.6 million acres enrolled in current program.***
- ***Over 35,000 growers enrolled in the program.***



## ***Components to Ground Water Regulatory Program:***

- ***Nitrogen Testing & Monitoring***
- ***Nitrogen Use Reporting to Coalitions***
- ***Farm Management Plans***
- ***Nitrogen Reporting***
- ***Grower Outreach and Education***
- ***Third Party Certification of Nutrient Management or Certified Grower Nutrient Management Plan***

## ***Grower Coalition Responsibilities for Groundwater Quality Mgmt Plans***

- ***Identify groundwater quality management areas.***
- ***Summarize / assess water quality data for aquifers and parameters.***
- ***Identify irrigated agriculture source(s)—general practice(s) or specific location(s)—that may be cause of water quality problem.***
- ***Develop total nitrogen applied tracking & reporting system.***
- ***Implement “Management Practices Evaluation Plans (MPEP)”***

***In lieu of conducting additional source analysis, MP can focus on ensuring that all growers are implementing practices that achieve Best Practical Treatment Controls for constituent(s) of concern.***

# ***Waste Discharge Requirements***

## ***Irrigated Lands Regulatory Program***

### ***Dates for***

- Decision from CVRWQCB this week***
- Nitrogen management plans to members***
- Nitrogen reporting to coalitions***
- CCA sign off of N plans***

<b><i>Coalition</i></b>	<b><i>N Plan to Member</i></b>	<b><i>Report N use to Coalition (High Vulner.)</i></b>	<b><i>CCA sign-off of plan</i></b>
<i>East SJ</i>	<i>March '15</i>	<i>March '16</i>	<i>March '15</i>
<i>Westside SJ</i>	<i>April '15</i>	<i>April '16</i>	<i>April '15</i>
<i>Delta</i>	<i>March '15</i>	<i>March '16</i>	<i>March '16</i>
<i>Sac Valley</i>	<i>March '15</i>	<i>March '16</i>	<i>March '16</i>
<i>Kings</i>	<i>March '15</i>	<i>March '16</i>	<i>March '15*</i>
<i>South SJV</i>	<i>March '15</i>	<i>March '16</i>	<i>March '15*</i>

***\*Seeking 1 year delay***



# Revised Nitrogen Management Plan Template

1. Crop Year, (Harvested):		4. APN(s):	Field(s) ID		
2. Member ID#					
3. Name:					
<b>CROP NITROGEN MANAGEMENT PLANNING</b>		<b>N APPLICATIONS/CREDITS</b>	<b>10. Planned N</b>	<b>12. Actual N</b>	
5. Crop		<b>Nitrogen Fertilizers</b>			
6. Production Units		Dry & Liquid N (non foliar)			
7. Expected Yield (Units/Acre)		Foliar N fertilizers			
8. N Needed (lbs/acre)		Other N fertilizers			
9. Acres		Organic Material N			
<b>Post Production Actuals</b>		Manure (est)			
13. Actual Yield (Units/Acre)		Compost (est)			
Total N (lbs/acre)		<b>Total N Applied (per acre)</b>			
		<b>Soil Nitrogen Credits (est)</b>			
Notes:		N carryover in soil			
		N in irrigation water (annualized)			
		<b>Total N Credits (lbs per acre)</b>			
		<b>Total N (Applications + Credits)</b>			
<b>11. CERTIFIED BY:</b>		<b>CERTIFICATION METHOD</b>	<b>X</b>		
		Self-Certified, approved training program attended			
		Self-Certified, UC or NRCS site recommendation			
<b>DATE:</b>		* Nitrogen Management Plan Specialist			
		Low Vulnerability Area, No Certification Needed			
		* As defined in the Instructions			

# ***Waste Discharge Requirements***

## ***Irrigated Lands Regulatory Program***

### ***Proposed Timing of information reporting to coalitions***

- ***Propose a phased approach***
  - ***First Phase In Period (1 – 3)***
    - ***Pounds of nitrogen applied to management unit***
  - ***Second Phase in Period (4 – 7)***
    - ***Ratios for major acreage crops***
      - ***Almonds***
      - ***Grapes***
      - ***Walnuts***
      - ***Corn***
      - ***Pistachios***
  - ***Third Phase In Period (Thereafter)***
    - ***All remaining crops***



## ***CDFA Fertilizer Use Reporting***

***Activists have been advocating for the last several years that California should be requiring fertilizer use reporting, much like our pesticide use reporting.***

***WPHA has opposed straight use reporting as deceptive when you take plant needs and uptakes into consideration.***

***Last year CDFA established an advisory committee of diverse interest groups to examine and develop recommendations for use reporting. The proposed program will:***

- ***Require growers to report nitrate tonnage using a mass-balance calculation.***
- ***Growers will report tonnage to coalitions.***
- ***Coalitions will collate information and report to CDFA as part of the Lands Program.***
- ***CDFA will collate information from coalitions and report to State Water Board.***

# *State Water Board Expert Panel*

*This spring, the State Water Board established an “Expert Panel” made up of academic and professional irrigations specialists, agronomists, and extension specialists to examine nitrogen regulations.*

*The panel recommended grower reporting/tracking of nitrogen applications and verification of sound application rates using a ratio demonstrating application to removal rates.*

*As both CDFA and the State Water Board have recommended this, Regional Water Boards will require some sort of nitrogen tracking and reporting.*

- *The Regional Water Board will require an application to removal rate ratio as part of the Nitrogen Plan.*
- *Regional Board will allow yield application rates to substitute for removal rates until removal rates for crops are established.*
- *Regional Boards will substitute into plans whatever the State Board ultimately decides will be required as far ratios when that decision is made.*

# ***Central Valley Salts Coalition***

- ***CV-Salts is a collaborative stakeholder driven and managed program to develop sustainable salinity and nitrate management plans and legal definitions for the Central Valley's Basin Plan.***
- ***Participants are made up of regulatory agencies, including the State & Regional Water Boards, local municipalities, grower coalitions, environmental justice groups, and agricultural associations.***
- ***WPHA serves on the Executive Board of the CV-Salts Coalition.***

# ***CV-Salts Responsibilities***

***Policy: A significant amount of the time and energy of CV-SALTS is dedicated to addressing critical issues related to salts and nitrate in surface and groundwater standards for the basin plans of the Sacramento/San Joaquin and Tulare Lake Basins.***

- These basin plans have elements which date back to the 1970's and do not efficiently or adequately address issues that are currently confounding both the regulators and regulated community.***
- In some communities, despite regulators working hard to help, the costs due to old basin plan requirements can as much as double the costs of wastewater management.***
- In addition, failure to address basin plans will put new plans in violation of both federal regulations and state water quality standards.***



# ***CV-Salts Responsibilities***

***Science: The highest level of CV-SALTS work is the Initial Conceptual Model (ICM), a 22 zone view of the Central Valley for salt and nitrate water balances, salinity and nitrate trends and 20 year projections.***

- Information will be shown in an agricultural zoning map where like areas can be grouped as a tool for better understanding water quality needs and future regulatory needs.***

***Archetypes: Because no plan can address all problems, especially in an area as large as the Central Valley, examples called archetypes are being developed to demonstrate how CV-SALTS addresses both science and policy issues. Archetypes include:***

- Removing inappropriate beneficial uses, where water is demonstrated to be naturally too salty to drink or use for agriculture.***
  - Using the area for salt management is one archetype in the Tulare Lake Bed area.***

# ***Nutrient Surface Water Regulations***

***Being this fall, three different initiatives addressing the need for surface water impacts by nutrients are being launched.***

- ***Delta RMP Initiative – the Delta RMP has authorized a nutrient sub-committee to assess what types of nutrients are impacting water quality and aquatic life forms in the Delta.***
- ***The CVRWQCB has begun a similar initiative assessing nutrient impacts on surface waters in the Central Valley.***
- ***Neither initiative has finalized what nutrient forms or sources will be regulated.***
- ***WPHA has been asked to represent agriculture on these efforts.***



# ***Nutrient Surface Water Regulations***

- ***The State Water Board is beginning an initiative to promulgate surface water quality regulations on all waters of California beginning with wadeable streams.***
- ***These regulations are specifically targeted at impact of fertilizers beginning with N & P.***
- ***The State Board is identifying stakeholders to participate on advisory committees to review scientific data and recommend policy to the State Board.***
- ***CA Farm Bureau and WPHA have been selected by agricultural interests to represent agriculture on policy committees that are anticipated to begin later this fall.***

# ***Nutrient Surface Water Regulations***

- ***The State Water Board has indicated that they are willing to consider narrative regulations along with numeric standards in regulation.***
- ***WPHA is meeting with national industry groups to access regulations being developed in other states.***
- ***State Water Board plans to begin meeting this fall with draft regulations available in 2016 and final regulations in 2017, a very aggressive timeline.***
- ***At this time, there is no methodology or data developed from which assessments can be made.***

***Thank you!***

***Questions?***

***Western Plant Health Association***

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