

Tentative Eastern San Joaquin River Watershed Waste Discharge Requirements (WDRs)

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Presentation Overview

- Background
- Overview of Order Components
- Late Revisions
- Significant Issues
- Summary

Program Background

- Long-term ILRP & EIR initiated by the board (2003 & 2006 conditional waivers)
- Stakeholder Advisory Workgroup
- Draft/Final Program EIR (2010/2011)
 - Certified by the board in April 2011

General Order for Eastern San Joaquin River Watershed

- Scope of coverage:
 - All irrigated agricultural operations within the Eastern San Joaquin River Watershed – including managed wetlands and nurseries
 - Discharges of waste from irrigated lands to surface waters and groundwater

Eastern San Joaquin River Watershed:

- approx. 1 million acres of irrigated lands
- top crops: almonds, hay, corn, grapes, tomatoes, pasture, wheat, cotton, walnuts
- 150,000 acres under the Dairy Order



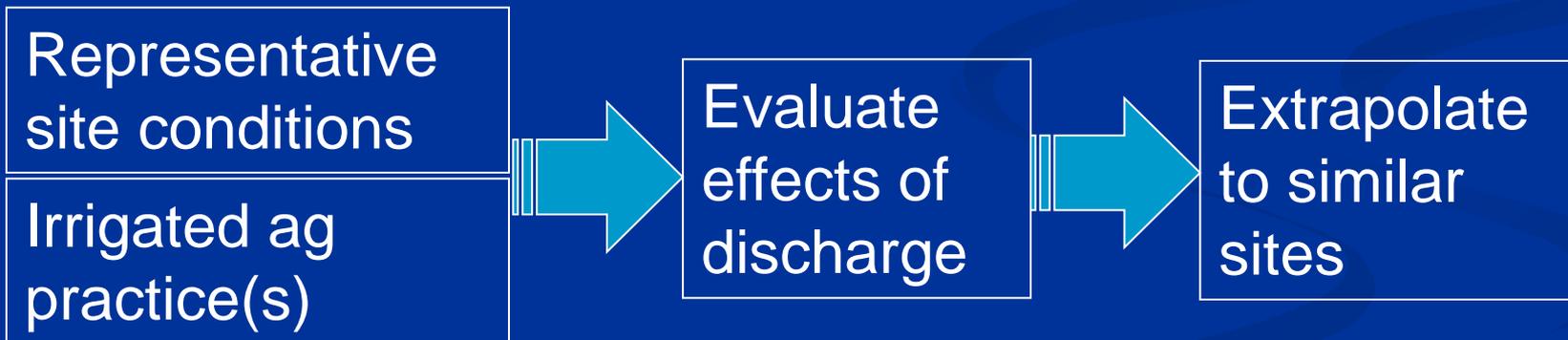


Order Components – Information from Third Party

- Groundwater Quality Assessment Report
 - Identify High and Low Vulnerability Areas
 - Establish priorities for monitoring/studies in High Vulnerability Areas
 - Provide a basis for workplans and management plans

Order Components – Information from Third Party

- Management Practices Evaluation Program
 - Relates practices on the land surface to effect on groundwater quality



Order Components – Information from Third Party

- Trend Groundwater Quality Monitoring
 - Establish baseline water quality in both low and high vulnerability areas
 - Develop information to evaluate regional effects over the long-term
 - Use existing shallow wells

Order Components – Information from Third Party

- Sediment Discharge and Erosion Assessment Report
 - Identify areas subject to erosion that may degrade surface waters
- Surface Water Quality Monitoring
 - Broad suite of parameters monitored at 6 core sites
 - Other sites monitored, if problems at core sites
 - Sites under a management plan/TMDL monitored for constituents of concern
- Special Project Monitoring – Surface Water
 - If needed, to identify sources/effectiveness of practices

Order Components – Information from Third Party

- Annual Reporting
 - Discussion/evaluation of water quality data
 - Actions taken to address exceedances
 - Summary of nitrogen information
 - Summary of management practice information
- Templates
 - Farm Evaluation
 - Nitrogen Management Plan/Nitrogen Management Plan Summary Report
 - Sediment and Erosion Control Plan

Order Components – Information from Member

- Farm Evaluation/Practices
 - Crops grown/acreage
 - Practices implemented to meet performance standards
 - ID sediment/erosion risk areas
 - ID whether surface water leaves property
 - ID wellhead protection/backflow prevention practices

Order Components – Information from Member

- Nitrogen Management Plan Summary Report
 - High Vulnerability areas
 - Ratio total nitrogen available/estimated crop consumption of nitrogen
 - Information needed for Management Practices Evaluation Program
- Enrollment with the Third-Party
 - Existing Member provide Notice of Confirmation
 - New Members join Third-Party

Order Components – Implement Management Practices: Third Party

- Groundwater Quality Management Plan
- Surface Water Quality Management Plan
 - Regional plans to address identified water quality problems/ high vulnerability areas
 - Outreach to Members
 - Identification/evaluation of practices
 - Schedule / milestones for implementation of practices
 - Any additional monitoring, if needed

Order Components – Implement Management Practices: Member

- Nitrogen Management Plan (high & low vulnerability areas)
- Sediment and Erosion Control Plan
- Member implements practices
 - Consistent with the Nitrogen Management Plan and Sediment and Erosion Control Plan
 - Consistent with Practices identified as protective through Management Practices Evaluation Program
 - To meet Farm Management Performance Standards

Joe Karkoski, Program Manager Irrigated Lands Regulatory Program



Late Revisions - Findings

- Finding 5 – clarifies that Order is not intended to regulate on-farm supply/drainage ditches
- Finding 23 – added discussion to identify the various requirements that will allow the board to determine compliance
- Finding 49 – add priority for enforcement : practices found protective of groundwater quality through management practices evaluation program

Late Revisions - WDR

- Provision IV.B.13 – property access/inspections will be conducted in accordance with Water Code & applicable law (i.e., with consent unless exceptions apply)
- Provision IV.B.16 – construction of settling ponds, basins, etc., shall be consistent with NRCS standard, UC Extension/NRCS recommendation or equivalent

Late Revisions - WDR

- Provision IIV.B.1.b – Farm Evaluation for Low Vulnerability areas change from 2014 to 2015 for large farming operations

Late Revisions - WDR

- Provision VII.D.2 - Nitrogen Management Plans for Low Vulnerability
 - Low vulnerability areas have “high quality water”
 - Degradation could occur, so Best Practicable Treatment or Control (BPTC) must be attained
 - All growers “...implement practices that minimize excess nutrient application relative to crop need.”
 - NMP provides documentation that the performance standard is being met

Late Revisions - WDR

- Provision X – clarified that requests for individual Member information would come from the Executive Officer

Late Revisions –MRP

- Management Practices Evaluation Program – objective changed from annual estimate of loading of nitrogen to providing a mass balance for constituents of concern
 - MPEP applies generally to constituent of concern in high vulnerability areas
 - Mass balance provides a more complete picture of what is applied on the land surface and what reaches groundwater...
 - Add to late revision, 3rd bullet under “...or equivalent method approved by the Executive Officer.”

Late Revisions –Definitions

- High Vulnerability Areas
 - Pulls wording in from the Order rather than referencing the Order section

Late Revisions –Information Sheet

- Various – to reflect late revisions in the WDR and MRP and provide additional clarification

Issues – Estimated Average Annual Costs Per Acre

	Order	Current program	Change
Administration	0.84	0.77	0.07
Farm plans	0.71	--	0.71
Monitoring/reporting /tracking	3.66	1.18	2.48
Management practices	113.34	112.50	0.84
Total	118.55	114.45	4.10

Growers currently implementing practices protective of Water Quality will have no additional management practice cost –
 Growers implementing new practices to protect Water Quality will have additional costs

Significant Issues – Fertilizer Use Reporting

- NO CHANGE PROPOSED
- Fertilizer use provides incomplete picture
- Greater use does not equal greater threat to groundwater –higher yields =more fertilizer, but may be more efficient
- Ratio of total N available to N consumption by crop should be good indicator
- Management Practices Evaluation Program will help identify key parameters
- Any use reporting would be driven by legislation with CDFA as likely lead

Significant Issues – Pesticide Monitoring of Groundwater

- Evaluated DPR's Groundwater Protection Program/ DPR at August Board meeting
- 6800(a) pesticides have use restrictions in groundwater protection areas; DPR has monitoring well network to track effectiveness
- 6800(b) pesticides are prioritized for monitoring & extensive evaluation conducted for detections related to legal ag use
- Board retains authority, but requirements to monitor would be duplicative/not a good use of limited resources

Significant Issues – Public Review of Templates, Plans, and Reports

- Provisions for public review of templates and groundwater quality/surface water quality management plans prior to EO approval
- Public review provisions not included for assessment reports or workplans
- Expect to have information items to report progress

Public Review of Third-party Reports

Report	Public Review Process?
Application to serve as a third-party	No
Templates	Yes
Groundwater Assessment Report	No
GW/SW Management plans	Yes
Trend Monitoring/MPEP Workplans	No

Significant Issues – Compliance/Enforcement

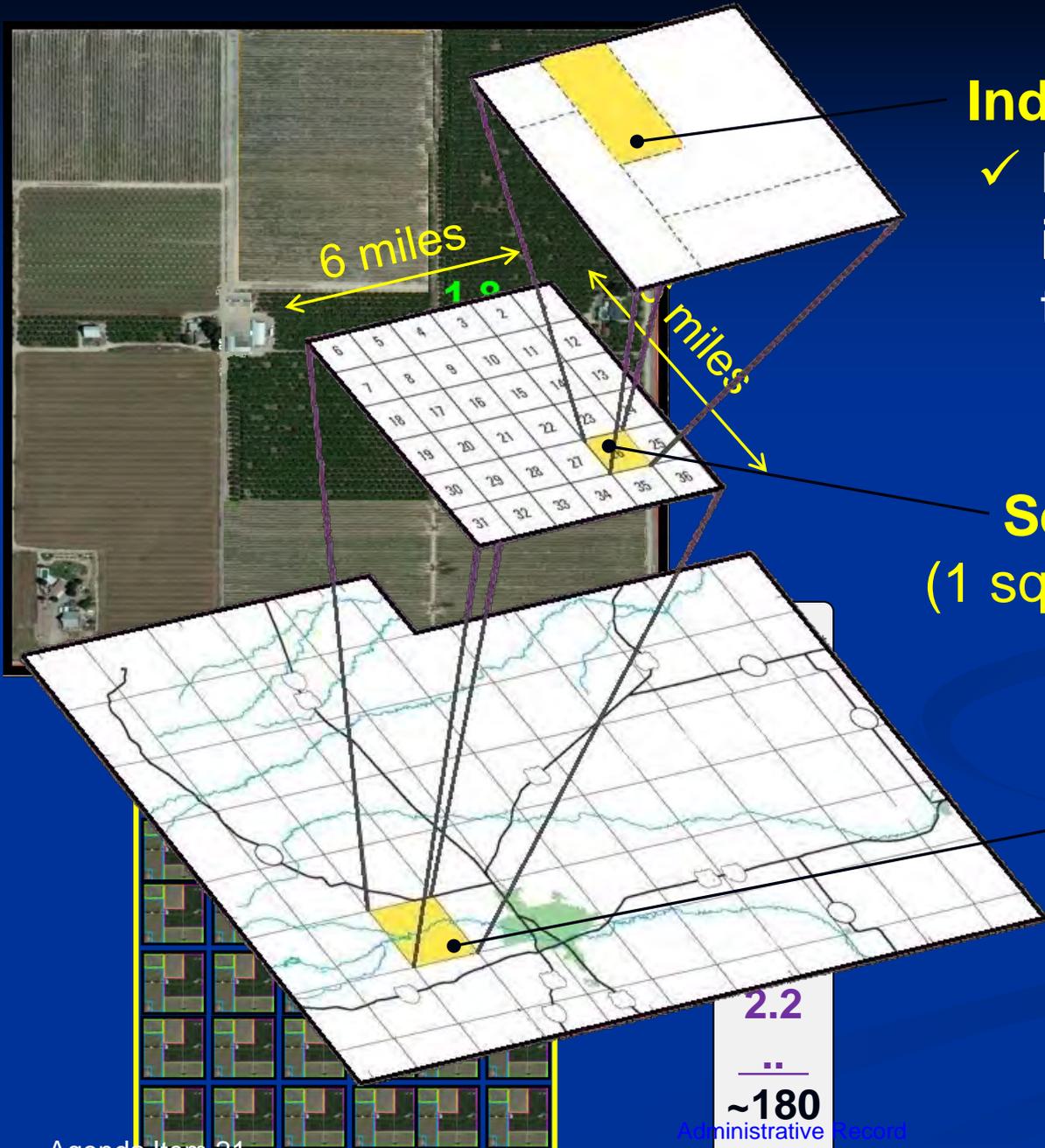
- Near-term compliance evaluation
 - Membership in third-party
 - Backflow prevention
 - Wellhead protection
 - Sediment discharge evaluation
 - Member complete plans (e.g., sediment and erosion/nitrogen management)

Significant Issues – Compliance/Enforcement

- Long-term compliance evaluation
 - Are practices protective of water quality?
 - Informed by monitoring, management plans, MPEP
 - Are Members implementing effective practices?
 - Management plan implementation and review of monitoring data

Significant Issues - Third-Party Reporting of Data

- Third-party reporting of Member information associated to “township” (36 sq mi) vs. “section” (1 sq mi)
- For database/mapping, viable options include parcel, section, township, subwatershed, etc.
- Concerns regarding management of data / ready availability of farm-specific information
- Third-party does not provide anonymity of farm-specific information – must be provided when requested by the Board



Individual parcels

- ✓ Members submit information to third-party

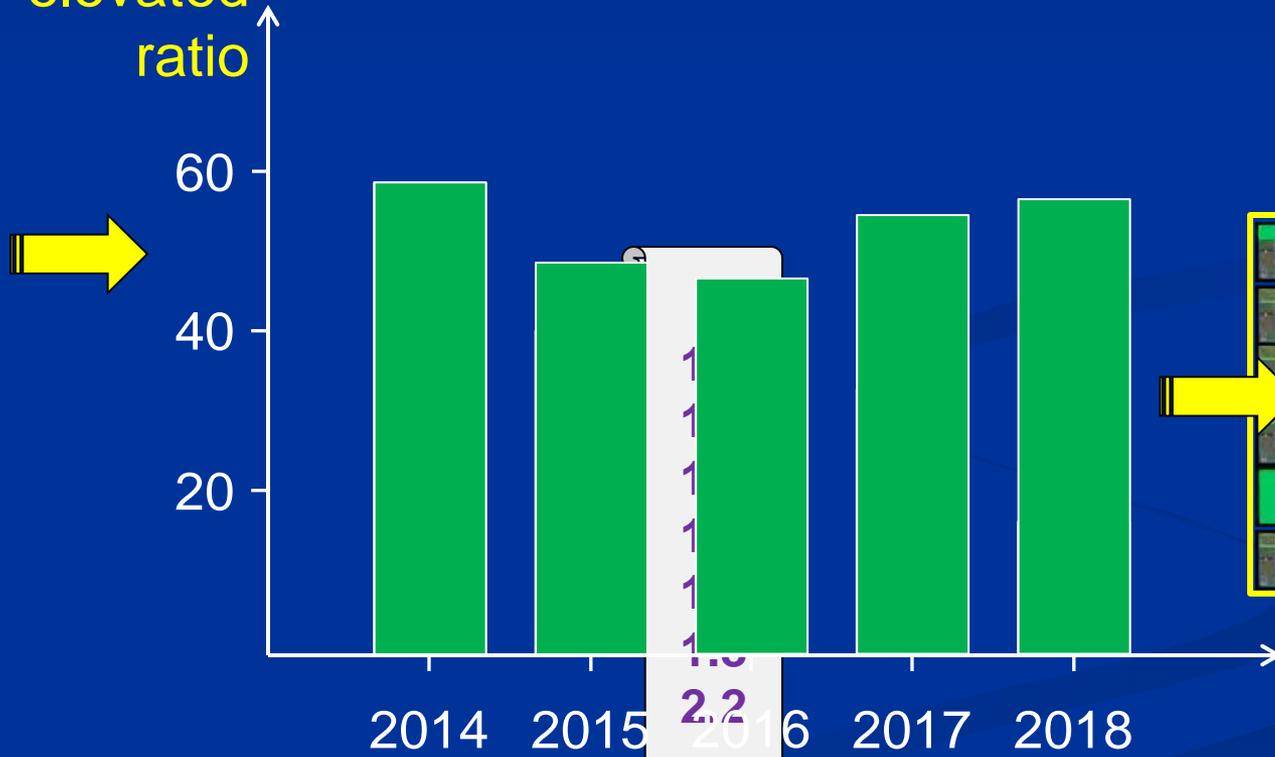
Section (1 square mile)

Township (36 square miles)

- ✓ Third-party reports data by township

Data Summarized by Township

Parcels with elevated ratio



✓ Identify individual parcels if needed



Summary

- Four years of stakeholder dialogue / multiple board meetings
- First of multiple WDRs to implement Long-term Irrigated Lands Regulatory Program

Summary



Summary

- Recommend adoption w/late revisions

Questions ?

