

Precedential Petition Order on the Eastern San Joaquin Agricultural General WDRs



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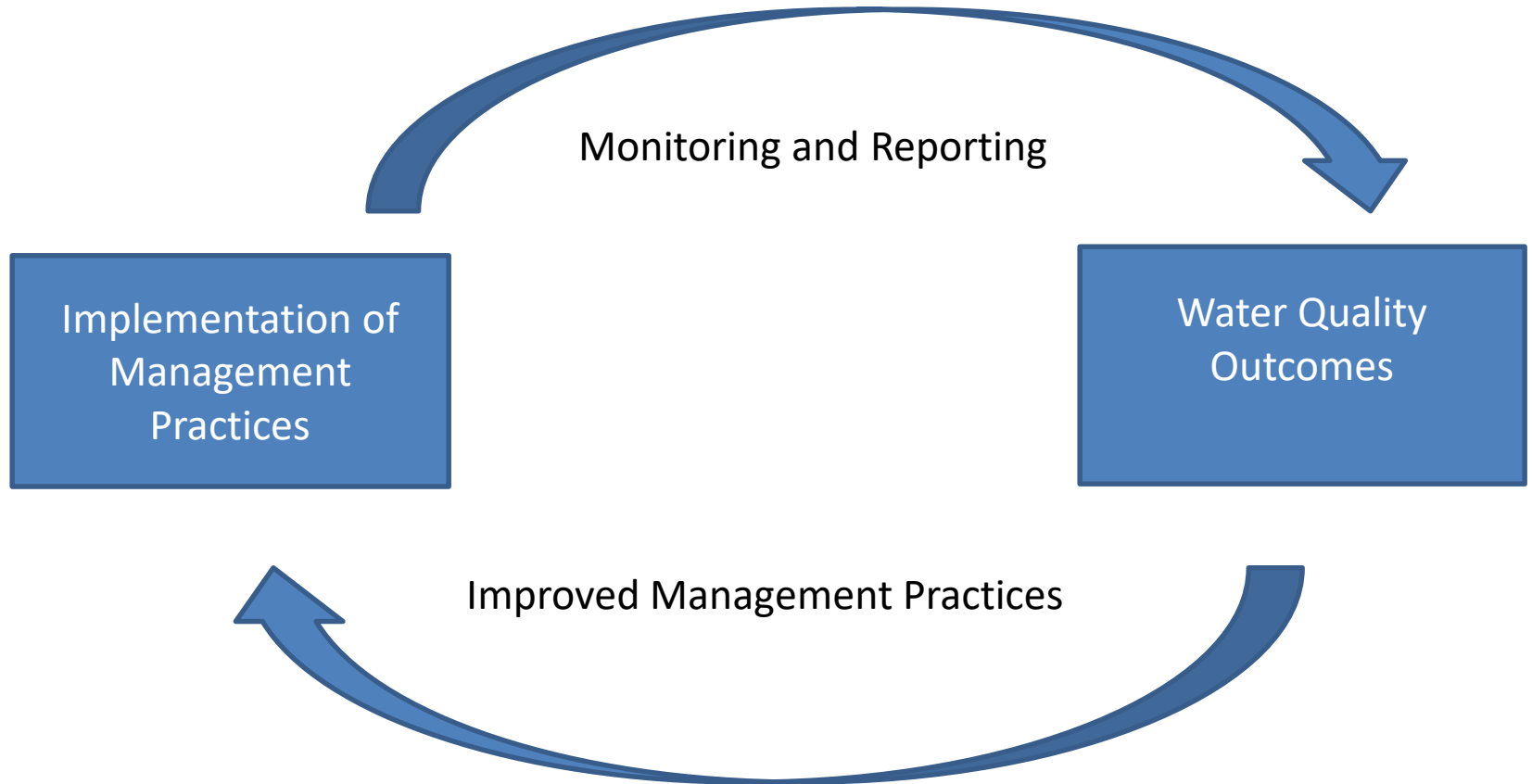
Background

- Petition Order adopted by State Water Board February 7, 2018
- Reviewed 2012 Central Valley Water Board agricultural order for the Eastern San Joaquin coalition
- Eastern San Joaquin permit one of several third-generation permits issued to growers in region with new requirements to regulate agricultural discharges to groundwater

Background

- Why is the Petition Order relevant for the Central Coast Region?
 - Precedential for agricultural programs statewide, including Central Coast Region
 - Requirements for accounting for and beginning to minimize the amount of nitrogen that is applied to agricultural fields with the potential to reach drinking water

Nonpoint Source Policy: Feedback Mechanism



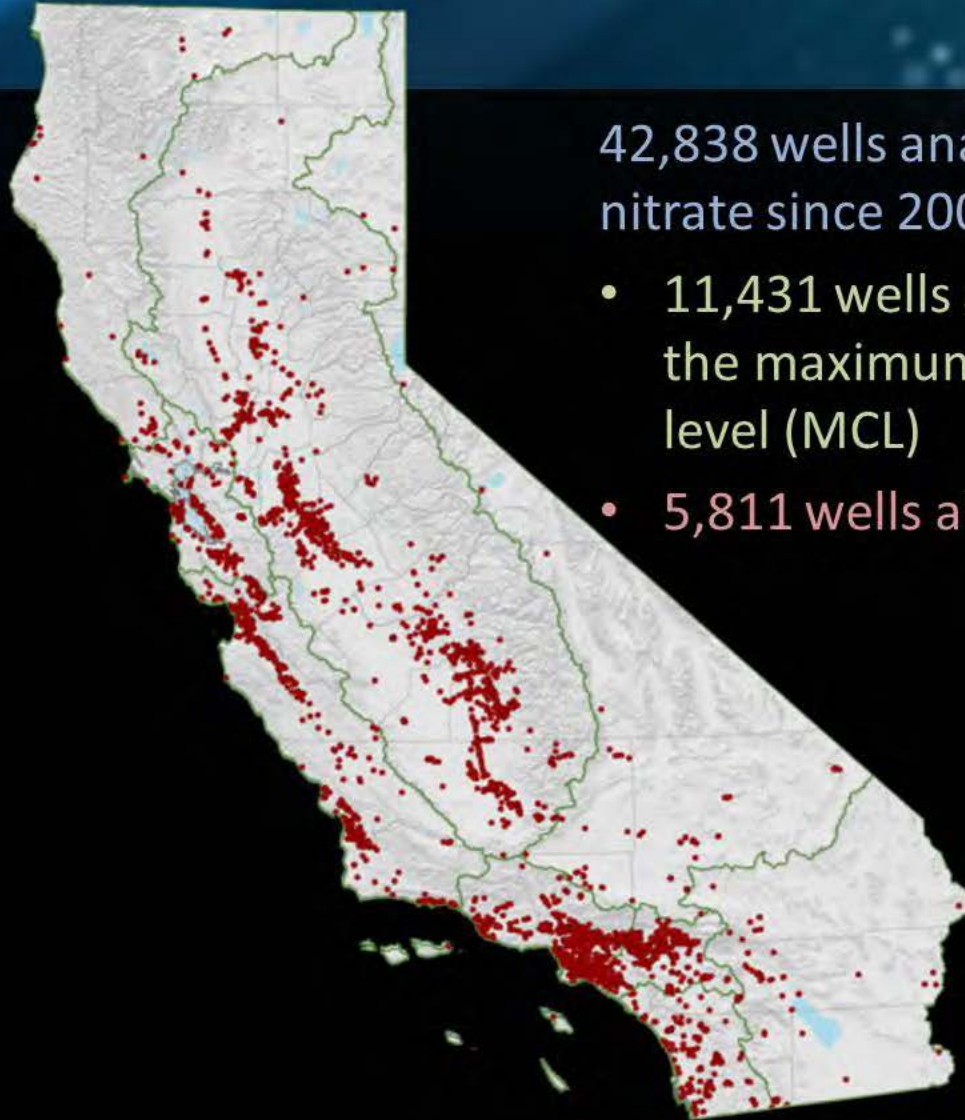
Background

- State Water Board first considered groundwater impacts from agricultural discharges in precedential Central Coast Agricultural Order adopted September 2013
 - Reporting of nitrogen applied to the fields
 - Sampling of on-farm drinking water supply wells
- Ongoing litigation: Adverse decision from Superior Court, currently on appeal

Background

- 2012 UC Davis Nitrate Report and State Water Board Report to the Legislature
- Nitrogen Tracking Task Force issued recommendations, December 2013
- Agricultural Expert Panel issued recommendations, September 2014

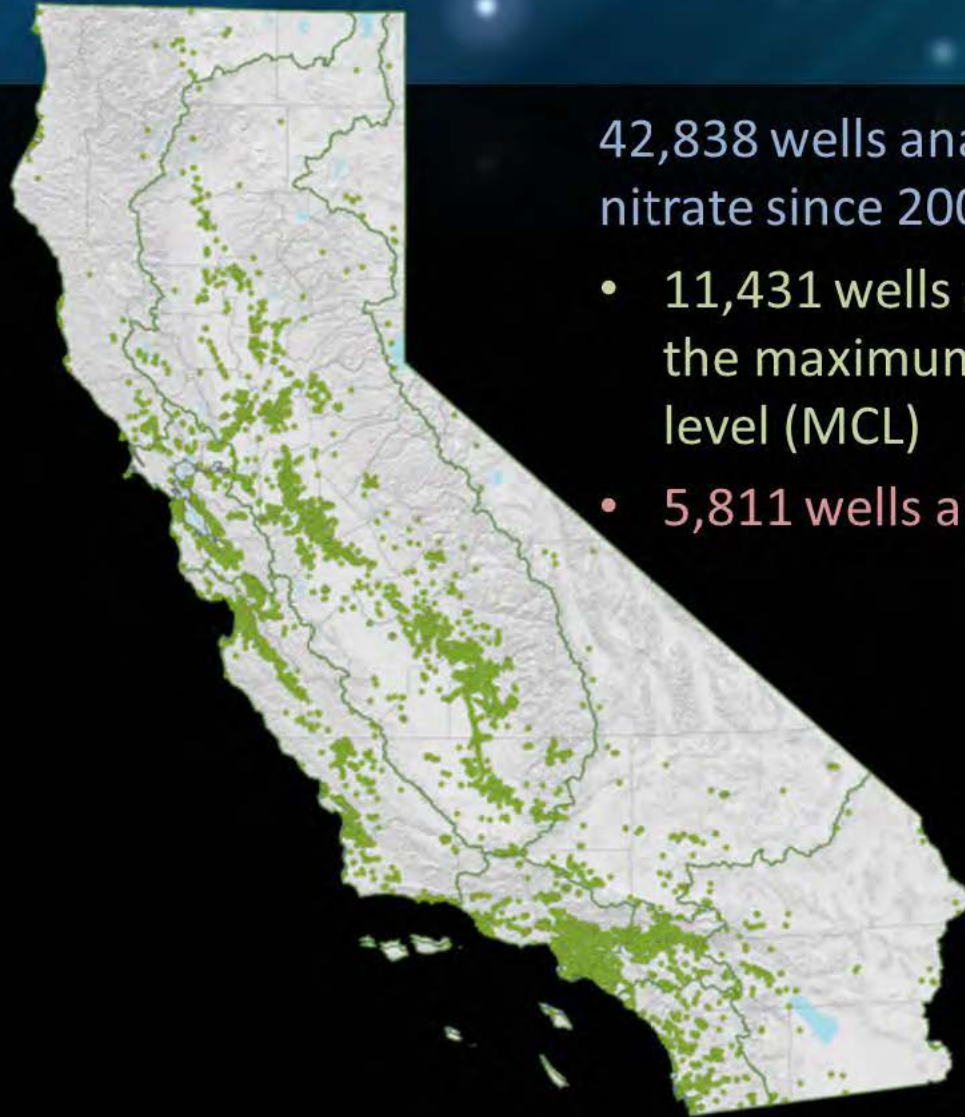
Framing the Issue – Nitrate in Groundwater



42,838 wells analyzed for nitrate since 2000

- 11,431 wells above one-half the maximum contaminant level (MCL)
- 5,811 wells above the MCL

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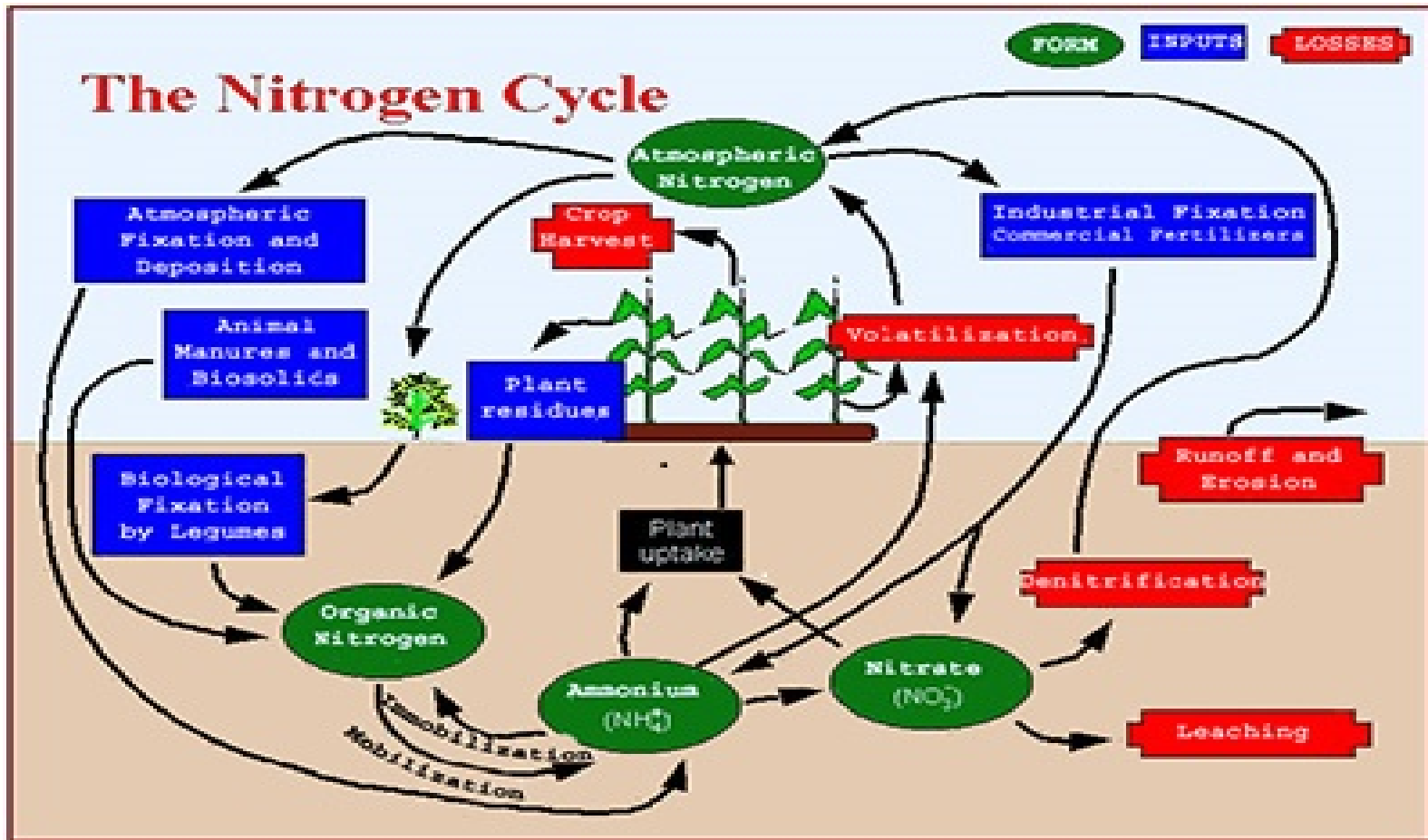
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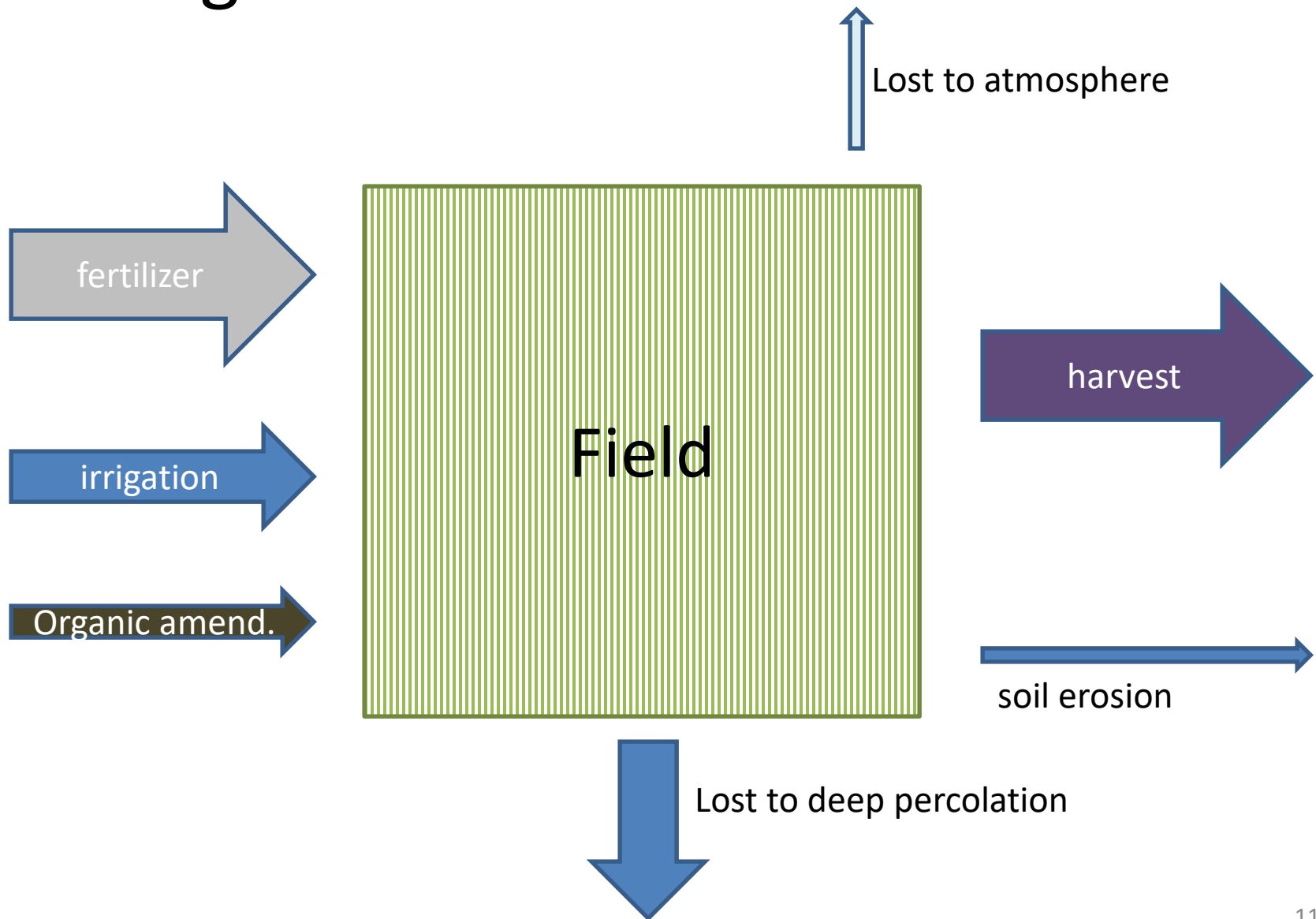
Approach to Managing Nitrogen

- Challenges in directly measuring the discharge
- Management practices are numerous and interdependent
- Efficiency measurement: proxy for direct measurement, efficacy of management practices

Nitrate in Groundwater



Nitrogen Fluxes



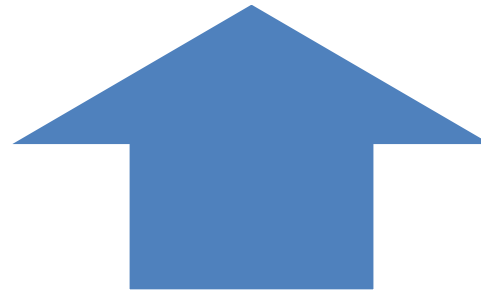
Nitrogen Management

- Tracking applied nitrogen (A) and removed nitrogen (R) – A/R and A-R; multi-year values

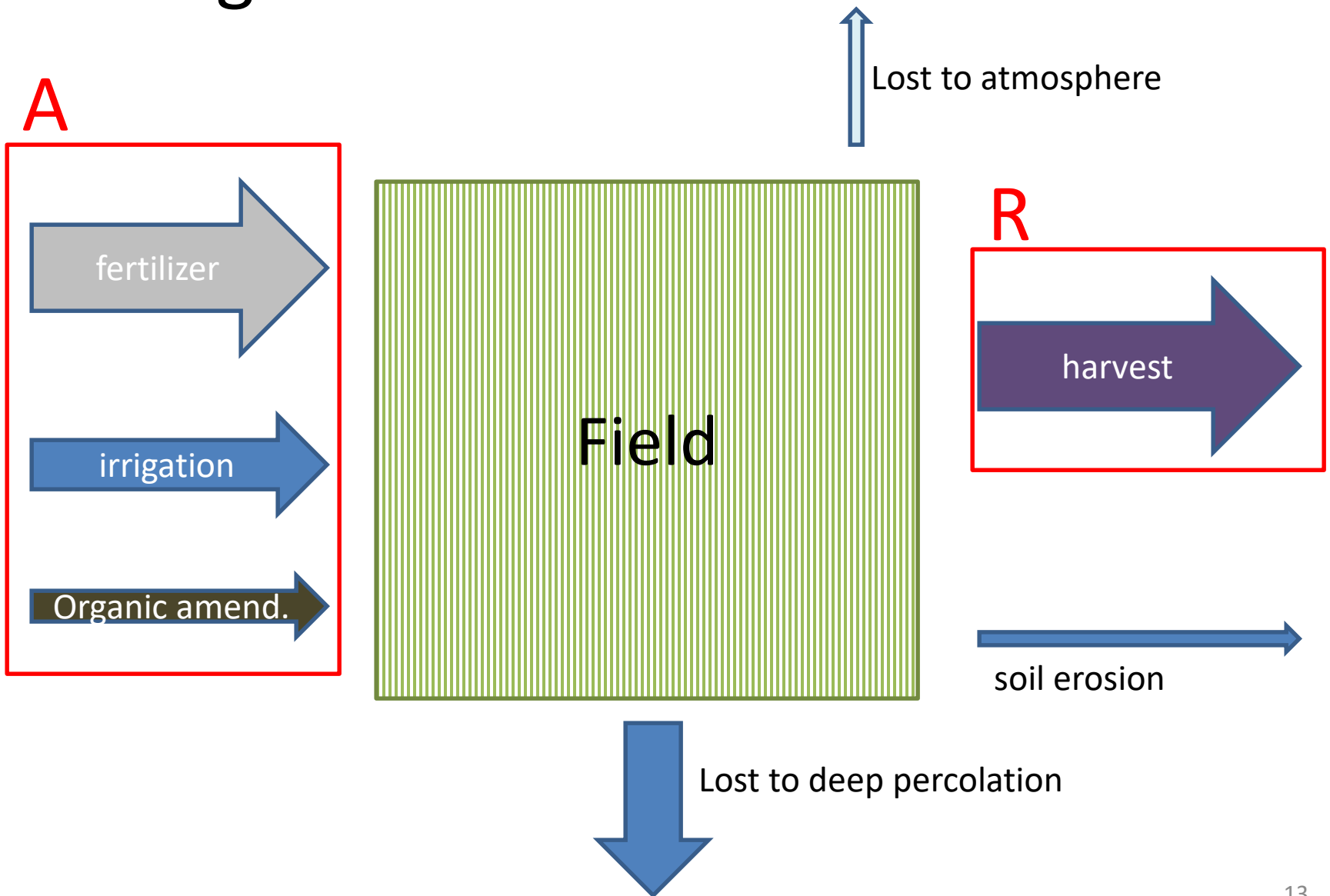


A: Nitrogen applied to the field
in fertilizer, organic
amendments, and irrigation
water

R: Nitrogen removed from field in
harvested or other materials or as
sequestered in permanent crops



Nitrogen Fluxes



Nitrogen Management

- All growers must prepare an irrigation and nitrogen management plan
 - Irrigation management required component of plan
 - Certification of plans
 - Precedential language that clarifies liability of certifiers

Nitrogen Management

- Reporting of nitrogen applied (A) and removed (R) values for all growers

Nitrogen Management

- Proposal developed by group of coalition representatives and environmental justice representatives with regard to reporting of grower names and field locations
- Coalition-based regulatory programs provide for anonymous data reporting
- Direct reporting under Central Coast ag waiver

Nitrogen Reporting

Exceptions:

- Not precedential where a category of growers affirmatively demonstrates that applied nitrogen is not expected to seep below the root zone in amounts that could impact groundwater and is not expected to discharge to surface water
- Limited or delayed nitrogen reporting for some categories of growers

Use of Nitrogen Data

- Regional water boards ensure that appropriate follow up is conducted and responsive management practices are implemented
- Regional water boards may correlate and analyze management practice implementation data and AR data to identify effective management practices

Use of Nitrogen Data

- Regional water boards to approve groundwater protection targets for nitrogen loading within high priority townships or other geographic areas
- Regional water boards to evaluate field-level data for development of acceptable ranges for multi-year A/R ratio target values

Sampling of On-Farm Drinking Water Supply Wells

- Existing program in Central Coast region; establishes requirement statewide
- Precedential requirements limited to sampling for nitrates, but regional water board may require sampling of additional constituents
- Notification provided by grower if sample exceeds health standards

Other Precedential Requirements

- All growers must participate in outreach events
- All growers must report management practices
- Growers with potential to discharge sediment that may degrade surface waters must implement sediment and erosion control practices

Water Quality Monitoring

- Surface water monitoring provisions not precedential
- Requirement for groundwater quality trend monitoring is precedential, however, specific requirements and monitored constituents left to the discretion of regional water boards

Antidegradation

- Landscape-level, generalized analysis is reasonable for diffuse non-point source discharges
- Maximum benefit and best practicable treatment or control analysis must evolve as understanding of impacts to water quality and methods of control advances

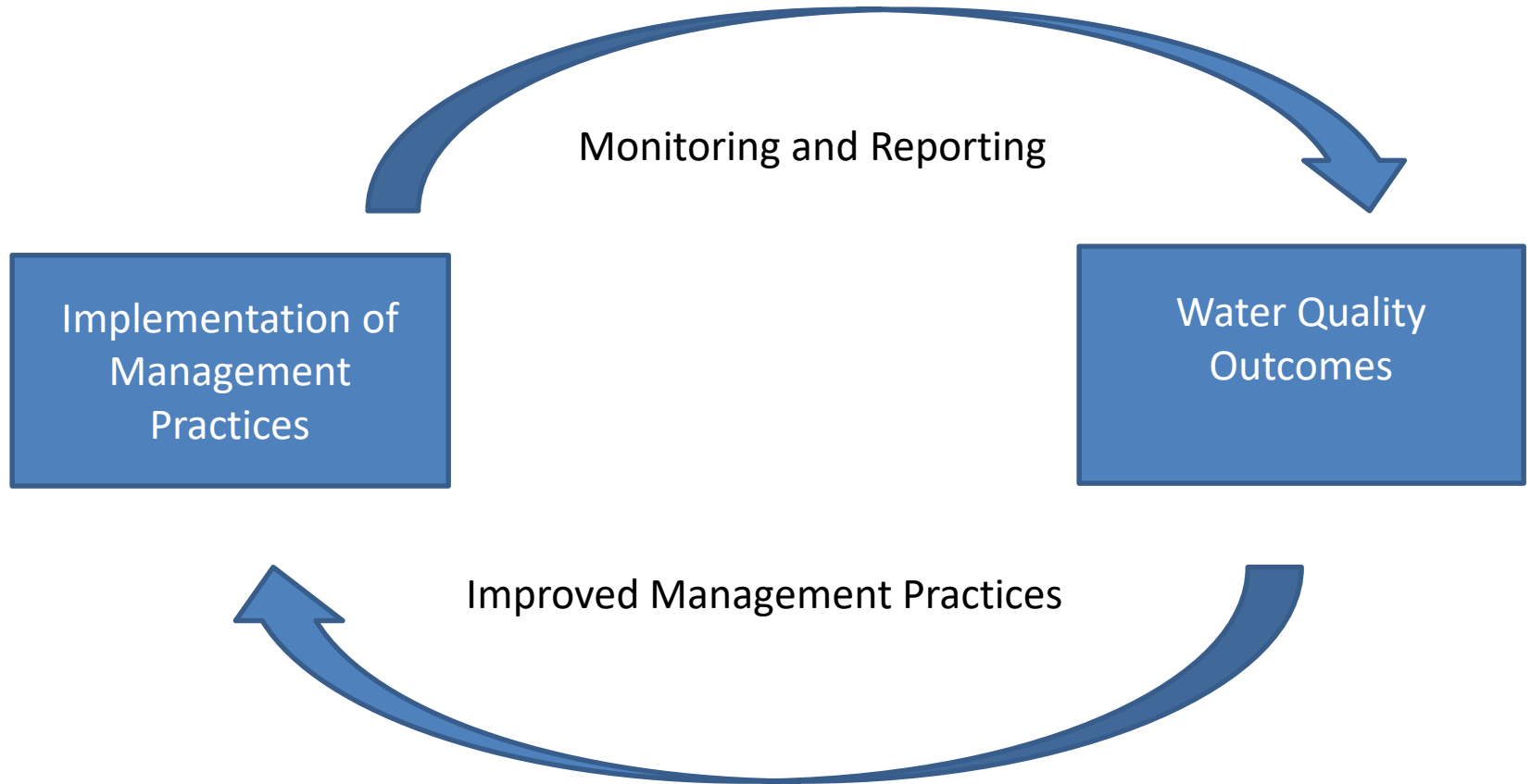
Going Forward

- State Water Board Division of Water Quality preparing FAQs and reaching out to regional water boards to assist with implementation
- Three lawsuits filed challenging compliance of the petition order with the Nonpoint Source Policy and the Antidegradation Policy

Triennial Reporting to State Water Board

- State Water Board to provide additional direction
- Anticipated that regional water boards will report:
 - Progress on precedential aspects of order
 - Progress on outreach for management practice implementation
 - Progress on enrollment of non-filers

Nonpoint Source Policy: Feedback Mechanism





CALIFORNIA

Water Boards

STATE WATER RESOURCES CONTROL BOARD

REGIONAL WATER QUALITY CONTROL BOARDS