

Management Zones, Nitrate Control Program, and Dairies



October 11 Dairy Petition Ex Parte Discussion

What is CV-SALTS?

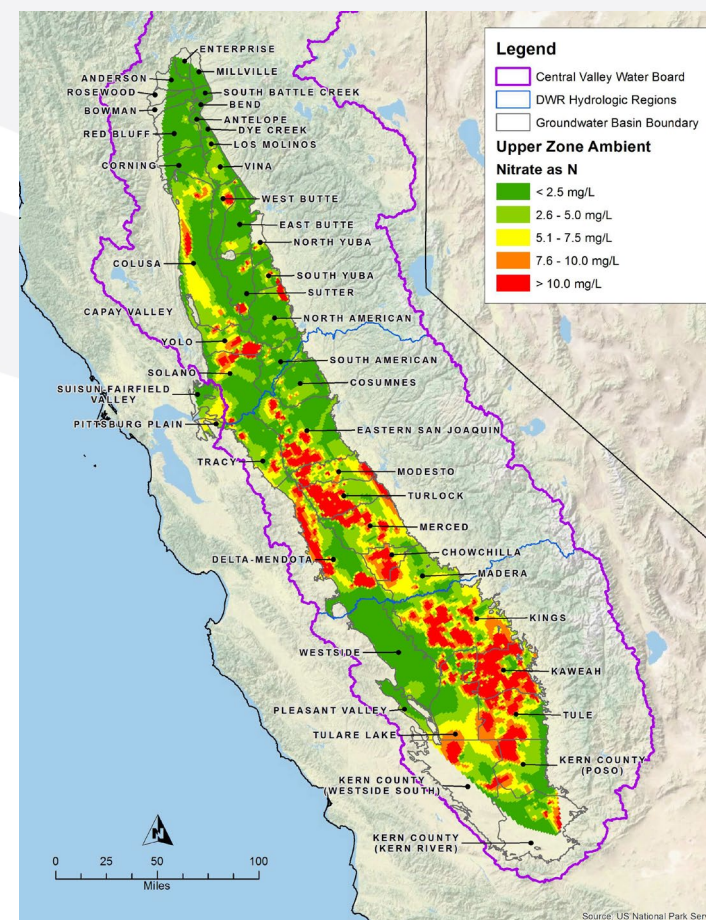
Central Valley Salinity Alternatives for Long-Term Sustainability

- Collective stakeholder effort to address water quality
- Central Valley Salinity Coalition formed to fund studies

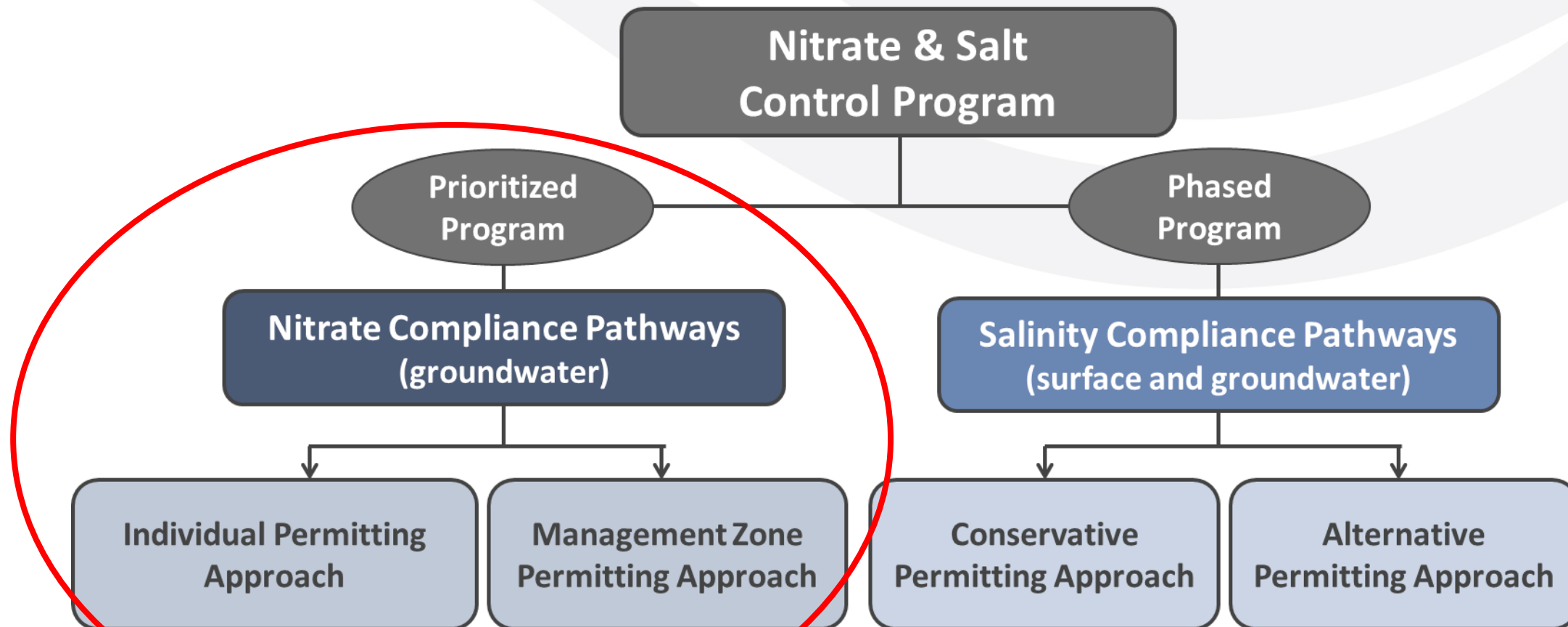


Central Valley Nitrate Issues

- Legacy and existing conditions
- Direct impacts to drinking water supplies
- Significant economic costs
 - Treatment
 - Alternate supply
- Diverse sources of nitrate to be managed



Nitrate Control Program – Overview



Nitrate Control Program Elements

Traditional Regulatory Option	Nitrate Control Program
Many discharges not able to meet water quality objectives with current technologies	35-year timeframe to develop new technology to meet objectives
No approved option for collective solutions	Management Zones allow pooling of resources
No solution for impacted water users (aside from Cleanup and Abatement Orders requiring replacement water)	Drinking water provided by Management Zones or Individual Dischargers under Exception Policy



Prioritized Nitrate Control Program

Priority 1 Area (Red)

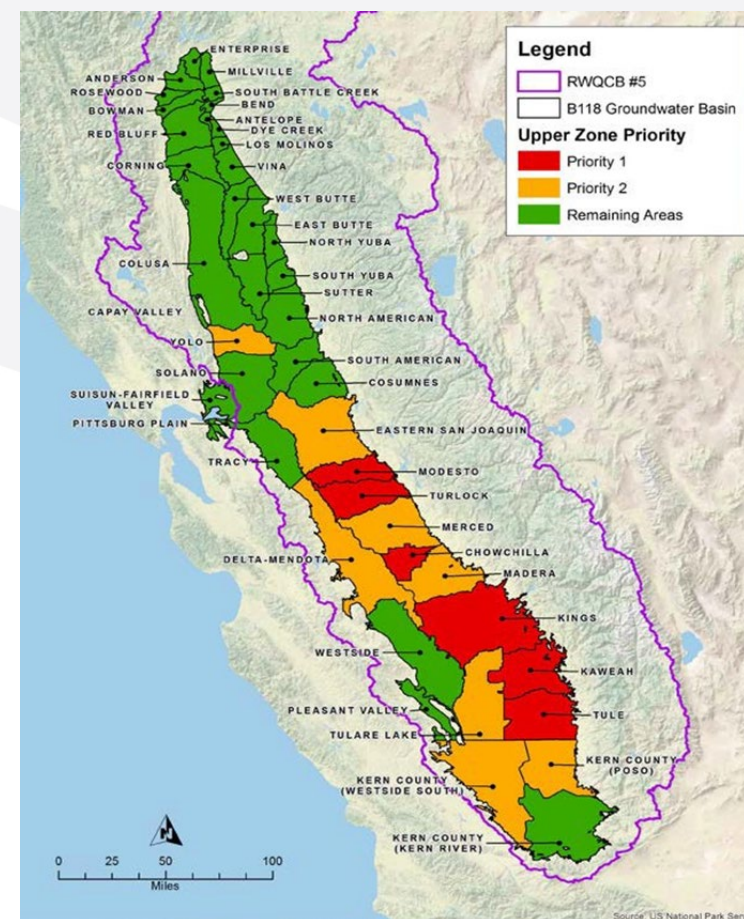
EAP Implementation begins **May 2020**

Priority 2 Area (Orange)

Anticipated to be in **2022**

Remaining Areas (Green)

Implementation to be phased in after priority areas



Priority 1 Groundwater Basins

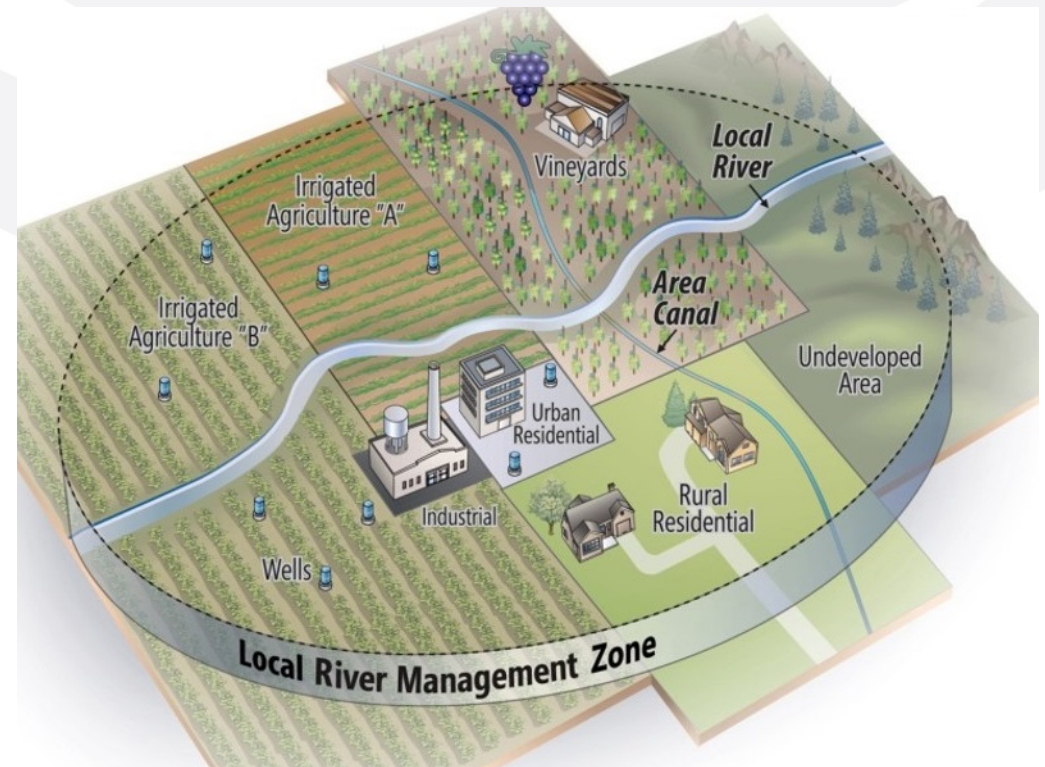
DWR No.	Groundwater Basin
5-22.11	Kaweah
5-22.03	Turlock
5-22.05	Chowchilla
5-22.13	Tule
5-22.02	Modesto
5-22.08	Kings

Individual Permitting Approach (Path A)

Category	Discharge Characteristics
1 – No Degradation, In Compliance	Discharge meets requirements, better than ambient groundwater
2 – <i>De Minimis</i> Degradation	Ambient groundwater good quality (below 7.5 mg/L), slight degradation and degradation will not exceed this threshold
3 – Degradation Below Trigger	Ambient groundwater good quality (below 7.5 mg/L), degradation but groundwater will not exceed 7.5 mg/L
4 – Degradation Above Trigger	Ambient groundwater good quality (below 7.5 mg/L), degradation but groundwater will remain lower than 10 mg/L
5 – Discharge Above Objective (Management Zone of 1)	Discharge will cause pollution of high-quality groundwater, or discharge and ambient groundwater are both above standard

Management Zone Approach (Path B)

- Shared responsibility for implementation.
- Exception from nitrate standard
- Must provide safe drinking water to affected communities/residents
- Enforced through discharge permit provisions



Management Zone Timeline

- Notices to Comply issued **May 2020**
- Preliminary Management Zone Proposal/EAPs
March 8, 2021
- Implementation of Early Action Plans **May 7, 2021**
- Preliminary Management Zone Proposal Review
Currently Underway
- Final Management Zone Proposal
6 Months After Board Comment
- Management Zone Implementation Plan
6 Months after Final Management Zone Proposal

Early Action Plans

- Process to identify affected residents
- Outreach to ensure residents have opportunity to participate in development of Early Action Plan
- Process for coordinating with others (affected residents, water systems, environmental justice organizations) to address drinking water issues
- Specific actions and implementation schedule
- Funding mechanism for implementing the EAP

Preliminary Management Zone Proposal

- Proposed boundaries
- Participants and dischargers
- Initial assessment of groundwater conditions
- Current treatment and control efforts
- Initial identification of public water supplies or domestic wells with nitrate concentrations exceeding water quality objective
- Early Action Plan

Management Zone Characteristics

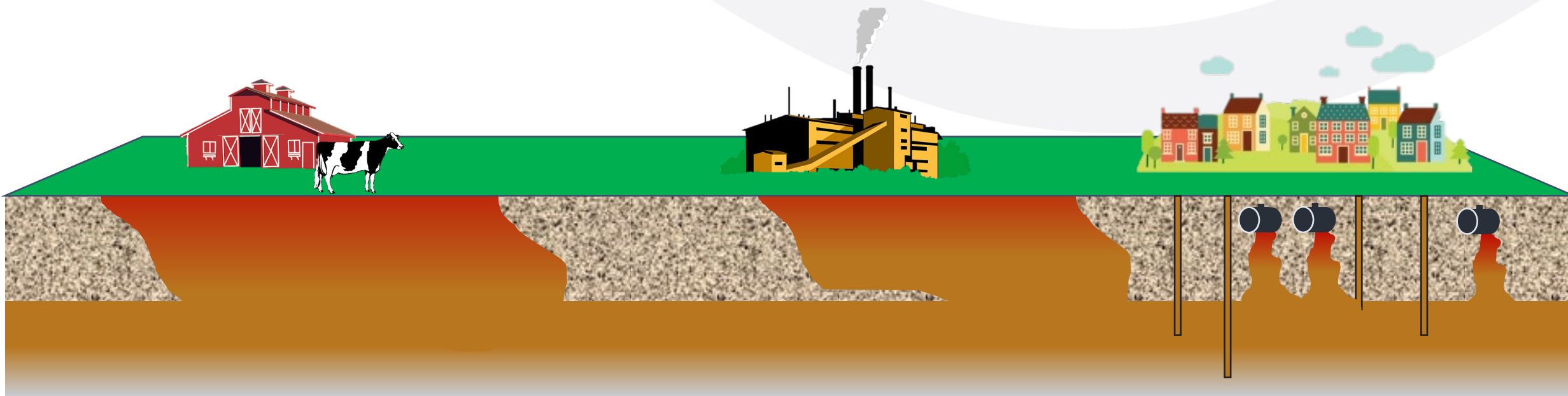
- Integrated approach to developing local solutions for localized areas of contaminated groundwater
- Defined area that serves as a discrete regulatory compliance unit for complying with the Nitrate Control Program for multiple permittees
- Individual nitrate discharges from permittees participating in a Management Zone not categorized like discharges in Path A; impacts instead assessed collectively in the upper zone
- Requirements imposed “collectively for the Management Zone, and its permittee participants, that recognize the need to prioritize nitrate management activities over time...”

Management Zone Implementation Plan

- Show how the Management Zone plans to reduce nitrate loading
- Enforceable and quantifiable interim deadlines
- Short (≤ 20 years) and long-term (> 20 years) projects, especially in prioritized areas, to make progress towards attaining each of the management goals identified by the Nitrate Control Program
- Offsets that cannot result in unmitigated localized impairments (e.g., “hotspots”) to sensitive areas or have a disproportionate impact on a disadvantaged community

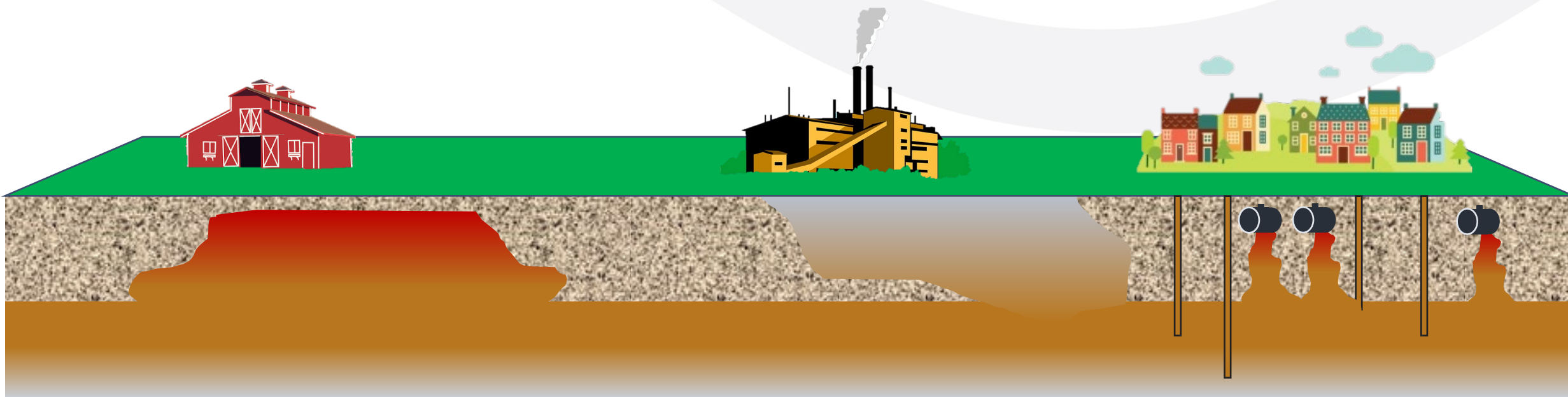
Current Scenario

2021: Dairy Polluting Groundwater, Industrial Site
Polluting Groundwater, Septic Systems Polluting
Groundwater, Well Contamination



No Change Scenario

2029: Dairy Closed (contamination still present),
Industrial Site In Compliance, Septic Systems Polluting
Groundwater, Well Contamination



CV-SALTS Nitrate Control Plan Scenario

2029: Dairy Working to Address Compliance Issues, Industrial Site In Compliance, Septic Tanks Decommissioned, Well Contamination, but also Drinking Water Program

