

New Nitrate Control Program

Coming Together to Resolve the Safe Drinking Water Challenge

Challenges and Choices

A new Nitrate Control Program is now in place in the Central Valley to address historical nitrate problems, which have left some households that rely on groundwater without a source of safe drinking water. The program includes twin imperatives for the Valley:

- Providing safe drinking water, especially for residents in affected areas as quickly as possible.
- Managing nitrate discharges to reduce or eliminate impacts to groundwater.

The program is being administered by the Central Valley Regional Water Quality Control Board (Regional Board).¹ Under the program, regulated dischargers²—including owners and operators of irrigated crop land, dairies, ranchers, poultry producers, food processors, wineries, and municipalities—will face new requirements for compliance with swift timelines.

The Nitrate Control Program will begin in Priority 1 groundwater subbasins that include: Kaweah, Turlock, Chowchilla, Tule, Modesto, and Kings (red areas on map). Once the Regional Board sends Notices to Comply in late March 2020, dischargers will have limited time to choose between two compliance pathways:

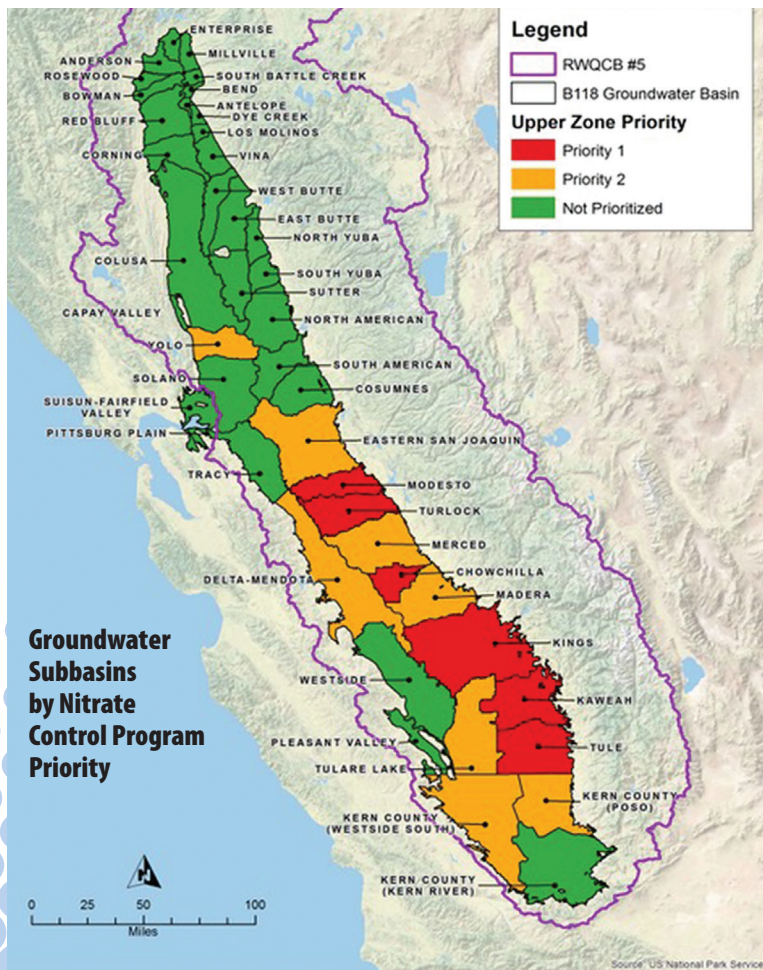
A **Pathway A:** Proceeding under an individual permit. (See page 4 for details.)

B **Pathway B:** Joining a Management Zone. (See pages 2-4 for details.)

Pathway B: Joining a Management Zone is an alternative means of nitrate compliance that offers regulated dischargers something they have never had before: An opportunity to work cooperatively to manage nitrate discharges more cost-effectively and to provide safe drinking water to adversely affected residents.

Management Zone Benefits:

- Ensure safe drinking water to those who need it.
- Avoid “going it alone” under demanding individual permit (Pathway A).
- Establish local control and more flexibility than under past regulations.
- Adapt management to local conditions.
- Share resources, funding, and knowledge.
- Protect water resources over the long-term.



¹ The new Nitrate Control Program is contained within Basin Plan Amendments for the Sacramento, San Joaquin River, and Tulare Lake Basins, as approved by the Central Valley Regional Water Quality Control Board in 2018 and State Water Resources Control Board in 2019. ² Regulated dischargers are holders of Waste Discharge Requirements (WDR) permits for discharges to groundwater.

PATHWAY

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Understanding Management Zones

Whether you are a regulated discharger or other interested party, the new Nitrate Control Program regulations include many new requirements, challenges, and opportunities

that will require swift and unprecedented cooperation, leadership, outreach, and enterprise among numerous people, including growers, food processors, industry, water suppliers, cities, counties, and community, Tribal, and environmental interests.

Here are facts and guideposts for navigating the new program successfully.

What is a Management Zone?

A Management Zone is a formally defined area with specific boundaries where a formal contractual arrangement among regulated dischargers will be required to provide safe drinking water and to manage nitrate. Flexibility, local discretion, and cooperation are hallmarks of the Management Zone approach. Through this choice, the new Nitrate Control Program recognizes diverse demographic, climate, hydrologic, and geologic conditions and allows local interests to determine the best steps for providing safe drinking water, managing nitrate discharges, and safeguarding water resources and the economy.

Threshold Decisions When You Receive Your Notice to Comply

Don't wait. Choose a Pathway. Consider your situation, evaluate both pathways and pick what is right for you.



Pathway A (see page 4): Go it alone.



Pathway B: Join with others in forming a Management Zone.

Key considerations for joining a Management Zone: Determine who else is working on nitrate management issues in your area. Reach out to them and explore the choices and issues. Will it be possible to work cooperatively to meet the program requirements?

Learn more about forming a Management Zone.

Go to cvsalts.info and click on the brown box "Join a Management Zone for Nitrate Compliance."



Deadlines for Priority 1 Subbasins

Regulated dischargers face tight timelines for forming Management Zones. Each of these steps is subject to Regional Board and public review.

Within 9 months of Notice to Comply:

Submit Preliminary Management Zone Proposal, which includes an Early Action Plan to provide safe drinking water, to Regional Board.

Within 11 months of Notice to Comply:

Begin Early Action Plan implementation for provision of drinking water to affected people within the Management Zone.

Within 16 months of Notice to Comply:

Submit Final Management Zone Proposal to Regional Board.

Month 17 and beyond:

Continue to implement Early Action Plan while also developing Management Zone Implementation Plan for Regional Board approval.

PATHWAY

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Getting Started in Forming a Management Zone

The following immediate activities are needed to form the foundation for your Preliminary Management Zone Proposal, due within nine months of receiving Notice to Comply.

1 Identify stakeholders and participants, including those who will benefit, who must cover costs, or who can help contribute to solutions. Potential participants:

- Regulated dischargers and their representatives.
- City, county, and other government representatives, and entities that manage water supplies, such as municipalities, utilities, and small water agencies.
- Community, Tribal, civic, and environmental justice leaders and voices.
- Stakeholders related to potential substitute drinking water locations, such as convenience marts and churches.

2 Begin discussions immediately on how you will share actions, costs, and decision-making.

Completing the Preliminary Management Zone Proposal will involve numerous cooperative decisions, data collection, and technical evaluation. Sharing costs and forming a Management Zone will require decisions about governing structures, decision processes, and cost allocation. These can be complex issues that will take time, creativity, and collaboration to resolve. Take practical steps:

1. Identify early who can launch the effort, become the convener, or constitute a steering committee? Who is best equipped to do outreach? Host public meetings? Engage technical experts?
2. Establish governance, leadership, and decision-making structures.
3. Establish a contracting entity or mechanism such as a Joint Powers Authority or Memorandum of Understanding.
4. Devise a fair means of cost allocation.

3 Delineate the boundaries of the Management Zone.

The boundary of a Management Zone is proposed by regulated dischargers and local stakeholders and submitted in a Preliminary Management Zone Proposal to the Regional Board. In addition to hydrogeology, relevant considerations include institutional boundaries, land uses, groundwater quality, sources of supply, and water resources management strategies.

4 Characterize the Management Zone.

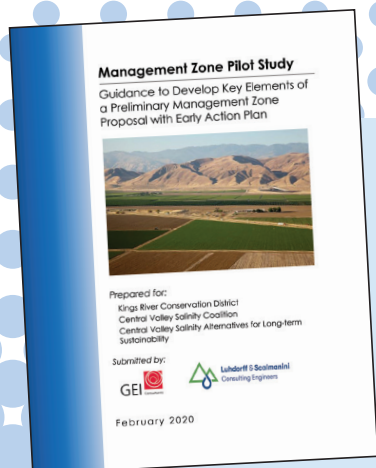
Compile existing data on nitrate conditions and discharges, hydrogeology, and drinking water supplies and users to include in the Preliminary Management Zone Proposal and inform management actions.

5 Identify populations and geographies where people will require delivery of clean drinking water.

- Identify areas where nitrate in groundwater exceeds safe drinking water standards. Consider who may be getting drinking water from these areas, including households, businesses, and small drinking water supply systems, and those already served by replacement water stations/kiosks. Identify safe drinking water efforts that may be underway in the area.
- Keep in mind the public and longstanding nature of this work. Transparent procedures and a reliable record-keeping system should be maintained.
- Widespread, consistent outreach and inclusivity will be essential.



Photo: Steve Payer, California Department of Water Resources



Two Pilot Management Zones

To help establish Management Zone examples, two grant-funded pilot Management Zones were formed. They provide useful lessons about the challenges and how to move forward collaboratively. One is in the Turlock Subbasin. The other involves the Alta Irrigation District and Kings River East Groundwater Sustainability Agency within the Kings Subbasin.

The two pilot efforts developed **Preliminary Management Zone Proposals**, which include **Early Action Plans**. An informative guidance document to assist others forming Management Zones in Priority 1 subbasins is available here: <https://rebrand.ly/ManagementZonePilots>

PATHWAY

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Initial Management Zone Deliverables

Due within 9 months of receipt of Notice to Comply, Preliminary Management Zone Proposals must be submitted to the Regional Board. A Final Management Zone Proposal is

then due six months after receipt of the Regional Board's response to the preliminary proposal, followed by a Management Zone Implementation Plan six months after that.

The Preliminary Management Zone Proposal:

- Identifies participating regulated dischargers.
- Documents outreach to other regulated dischargers.
- Characterizes groundwater quality to identify where high nitrate levels may be affecting residents who rely on groundwater as a drinking water source.
- Assesses current treatment and control efforts.
- Includes an Early Action Plan that identifies how the Management Zone will provide short-term safe drinking water supplies to households affected by high nitrate levels in their groundwater source.

A Management Zone must begin implementation of the Early Action Plan no later than two month following submittal of the Preliminary Management Zone Proposal. Tasks include:

- **Conducting outreach to affected** residents and communities, elected officials, and community leaders during development and implementation of the Early Action Plan is essential as is development of a funding mechanism.
- **Identifying potentially affected residents** and ensuring they have an opportunity to participate in designing and accessing proposed safe drinking water solutions.
- **Developing specific actions** for providing interim replacement drinking water to affected residents within the Management Zone. Key things to consider:
 - Input from local communities.
 - Types of facilities and operational agreements with water filling stations or vendor-supplied facilities.
 - Alternatives such as home bottled water delivery or point-of-use treatment.
 - Well water sampling and groundwater quality analyses.

PATHWAY



Pathway A: Individual Permitting

Pathway A provides that a regulated discharger or groups of dischargers subject to a single WDR may opt to comply under individual permit provisions that:

- Define requirements to protect shallow groundwater.
- Establish five discharge categories with associated compliance requirements.
- Establish trigger levels for additional required actions.
- Ensure that those affected by nitrate in the discharge area have safe drinking water.

Timeline: Within 11 months of Notice to Comply, submit Notice of Intent **with:** (a) initial nitrate assessment of your ability to meet the water quality objective for nitrates, and (b) if your discharge is causing any well used for drinking water in your area to exceed the nitrate water quality objective, then prepare and implement an Early Action Plan to provide safe drinking water, and (c) if required for your nitrate category, prepare and implement an Alternative Compliance Project; **OR**, switch to Pathway B and join the Management Zone in your area.

Pathway A compliance options are difficult and expensive if there are drinking water wells near your facility that are high in nitrates, if your discharge is high in nitrates, or if local shallow groundwater exceeds 75% of the nitrate drinking water standard. If any of these conditions are true, Pathway A may require you to undertake some or all of the following:

- Make significant upgrades to your facility
- Conduct extensive monitoring of discharge and local groundwater
- Provide replacement drinking water to local residents
- Provide rigorous technical hydrogeologic justification of what groundwater will look like in your area in 20 years



For Helpful Resources for Forming
Management Zones, visit cvsalts.info