

New Nitrate Control Program to Offer Choices for Compliance

The Nitrate Challenge in the Central Valley

Over the last 150 years, increased agricultural, industrial, and municipal activities, coupled with population growth, have resulted in dramatic increases in nitrates in groundwater in the Central Valley (Valley). The Central Valley Regional Water Quality Control Board (Regional Water Board) regulates nitrate discharges to groundwater from these activities. Improved management practices have been implemented to reduce nitrate discharges, but compliance with current regulations is difficult and, in some areas of the Valley, even impossible. New, updated regulations have been developed through the CV-SALTS initiative (see below) that better address natural diversities (e.g., climatic, hydrologic, and geologic conditions) while protecting water quality over the long-term and maintaining a strong economy in the Valley. In areas of the Valley where drinking water supplies have been impacted, the new regulatory options focus on managing nitrates locally while providing safe drinking water supplies to those that rely on groundwater that currently exceeds nitrate drinking water standards.

CV-SALTS Initiative and Nitrate Control Plan

The [Central Valley Salinity Alternatives for Long-Term Sustainability](#) (CV-SALTS) was formed more than a decade ago as a collaborative stakeholder group tasked with developing a sustainable salt and nitrate management program for the Central Valley. To help fund the scientific and technical studies necessary to support the development of alternative regulatory approaches for nitrates, the Central Valley Salinity Coalition (CVSC) was established in 2008. Working directly with the Regional Water Board, the CV-SALTS initiative released a technical plan – *Salt and Nitrate Management Plan* (SNMP) – in January 2017. The SNMP recommended modifications to regulations for nitrates that are discharged to groundwater and the establishment of a **Nitrate Control Program**. In March 2017, the Regional Water Board accepted the SNMP recommendations. On May 31, 2018, the Regional Water Board approved amendments to the Central Valley’s Water Quality Control Plans (i.e., Basin Plans) based on the SNMP, which included a **Nitrate Control Program** as well as a Salt Control Program (described in a separate fact sheet).

Nitrate Control Program included in Basin Plan Amendments

The new **Nitrate Control Program** supported in the Basin Plan Amendments has three goals: (1) address drinking water issues first, (2) provide the Regional Water Board with flexibility in how it regulates nitrate discharges, and (3) address nitrate in groundwater over the long-term. The Nitrate Control Program is a prioritized program in that the Regional Water Board evaluated Central Valley water quality and established immediate priority areas for implementation but will consider other areas in the future.

Priority Areas for Nitrate Control	Groundwater Basin/Subbasin	Notice to Comply Timeline
Priority 1 Areas	Kaweah, Turlock, Chowchilla, Tule, Modesto, Kings	Notice to Comply <i>within one year</i> of Basin Plan Amendments becoming effective
Priority 2 Areas	Yolo, Merced, Kern County (west side south), Tulare Lake, Kern County (Peso), Delta-Mendota, Eastern San Joaquin, Madera	Notice to Comply <i>within 2-4 years</i> of Basin Plan Amendments becoming effective
Non-Priority Areas		Implementation to be phased in at a later date

As with all Basin Plan Amendments, the Nitrate Control Program must be approved by the State Water Resources Control Board (State Water Board) as well as the Office of Administrative Law prior to becoming effective. If approved by the State Water Board (anticipated to be considered April 2019), the **Nitrate Control Program** will provide the Regional Water Board with revised, more flexible authorities for nitrate regulation, including (1) Exceptions for dischargers in meeting the nitrate water quality objective, (2) Establishment of management zones to foster collaborative nitrate solutions, and (3) Offset Projects for groundwater that are an alternative means of achieving compliance with Waste Discharge Requirements (WDRs).

Two Nitrate Compliance Pathways for Dischargers to Choose

Once approved by the State Water Board (anticipated April 2019), and Office of Administrative Law regulated dischargers of nitrate in priority areas will receive a notice to comply with the new Nitrate Control Program. They will be able to choose one of two pathways for compliance.

Pathway A: Individual Permitting Approach

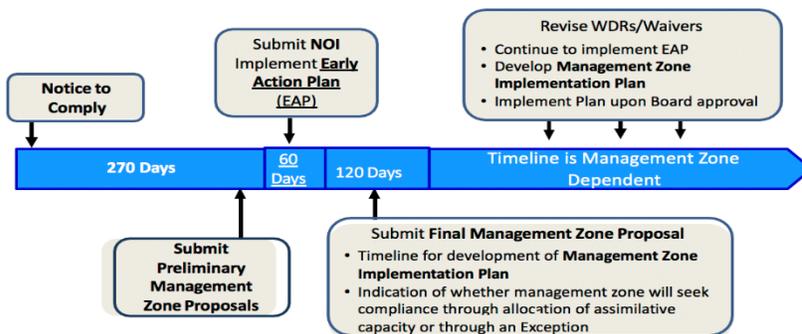
A discharger or groups of dischargers subject to a single order may opt to comply under the individual permit requirements established in the Nitrate Control Plan. This defines requirements to protect shallow groundwater, establishes five discharge categories and associated compliance requirements, and establishes trigger levels for consideration. If applicable, dischargers opting for pathway A may also need to ensure that those impacted by nitrates have safe drinking water.

Pathway B: Management Permitting Approach

For those dischargers that cannot meet the conservative nitrate standard in Pathway A, they must then use Pathway B. When selecting this pathway, dischargers opt to work collectively with other dischargers through a management zone. The management zone is a defined area, e.g., a portion of a larger groundwater basin/subbasin. A management zone serves as a discrete regulatory compliance unit for nitrate compliance. Dischargers would ensure that those impact by nitrates have safe drinking water within the zone while continuing to implement best practices and nitrogen management plans. In turn, dischargers may be allowed greater flexibility and more time to achieve nitrogen balance and restore nitrate affected water bodies.

Joining a management zone offers **several key benefits** for dischargers choosing to work together to achieve compliance. Benefits include:

- Promotes coordinated water resource management among various dischargers as well as others.
- Promotes prioritization of resource allocation, which translates to more efficient use of funds.
- Working collectively to ensure that much needed safe drinking water is provided to those adversely affected residents.



Timeline for Forming Management Zones in Priority 1 Areas

While some priority areas are already working to develop management zones proposals to get ahead of the deadlines, the Basin Plans, once approved by the State Water Board, have the following timeline for

developing management zones. Assuming State Water Board approval in April, full approval of the Basin Plans is expected in summer 2019. The Regional Water Board would issues notices to comply shortly after their approval.

Early Action Plans

Regardless of whether a discharger chooses Pathway A or B, all dischargers must assess nitrate levels to ensure safe, reliable drinking water by monitoring groundwater used for municipal supplies that may be affected by nitrate discharge(s). If affected, and where the discharger (or dischargers) is causing an exceedance of nitrate in the groundwater, then the discharger will submit an **Early Action Plan (EAP)** that includes specific actions and an implementation schedule to address the immediate needs of those drinking groundwater that exceeds the nitrate drinking water standard. EAPs will ensure that the first goal of the Nitrate Control Plan -- to address drinking water issues first -- is achieved by allowing participants to work together regionally to meet this need, saving money and sharing costs as locally appropriate.

As management zones are implemented with their early action plan they provide **alternative compliance** opportunity for those who cannot comply with nitrate standards or for whom participating in a management zone in their local area is a better business decision than trying to demonstrate compliance alone.