

**27-28 April 2023 BOARD MEETING
DISCUSSION AGENDA ITEM**

AGENDA ITEM: 8

SUBJECT:

Irrigated Lands Regulatory Program Groundwater Protection Targets Update

BOARD ACTION:

Information Item Only

BACKGROUND:

Irrigated Lands Regulatory Program staff will provide an update to the Board on current progress toward the development of Groundwater Protection Targets.

In its review of the [Eastern San Joaquin River Watershed General Order](https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2018/wqo2018_0002_with_data_fig1_2_appendix_a.pdf) (https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2018/wqo2018_0002_with_data_fig1_2_appendix_a.pdf), the State Water Board directed a 3-phase process to develop Groundwater Protection Targets for townships within the region designated as highly vulnerable to nitrate contamination. Phase 1 established a method (Groundwater Protection Formula) for estimating current nitrogen loading to groundwater from commercial irrigated agricultural lands. Phase 2 used this method to calculate the estimated nitrogen loading rate for each township (Groundwater Protection Values). Phase 3 (current phase) is to estimate the nitrogen loading needed for Receiving Water Limits to be met (Groundwater Protection Targets).

To accomplish the Phase 3 task, agricultural coalitions have utilized a groundwater flow and transport model, the Nonpoint Source Assessment Tool, to simulate groundwater quality outcomes throughout the region under alternative nitrogen loading scenarios. Current irrigated agricultural discharges were considered in conjunction with other sources of nitrogen loading and recharge, and iteratively reduced to identify an appropriate nitrogen loading rate for each township. These Groundwater Protection Targets, once approved, will be incorporated into Groundwater Quality Management Plans within the region and guide the Coalition's groundwater protection strategies moving forward. The Groundwater Protection Targets will also be reviewed and revised as necessary every five years.

An initial report containing proposed Groundwater Protection Targets and supporting documentation was submitted to the Board on 19 July 2022 and made available for a 45-day public comment period. Based on written and verbal comments received, the coalitions submitted a revised report on 15 December 2022. The revised report was also made available for another 45-day public comment, and two additional comment letters were received from the same entities that commented on the initial report. A joint letter submitted by Clean Water Action, Community Water Center, California

Coastkeeper Alliance, and Leadership Counsel for Justice & Accountability addressed milestones, steps to address data uncertainty, and consideration of local community impacts. A second comment letter from the Environmental Law Foundation raised concern regarding the accessibility of the data used to develop the Groundwater Protection Targets, the appropriateness of the proposed milestones, evidentiary support for the proposed targets, and a need for further antidegradation analysis.

RECOMMENDATION:

Not applicable

REVIEWS:

Reviewed by	Initials and Date of Review
Management:	SYM 3/30/23
Legal:	JMJ 4/6/2023

BOARD MEETING LOCATION:

Kern County Board of Supervisors Chambers
1115 Truxtun Avenue
Bakersfield, CA 93301

Hybrid Meeting