

FAQs on State Water Board Second Proposed Order Revising the Eastern San Joaquin Agricultural General Waste Discharge Requirements

1. Why did the State Water Board issue the Proposed Order?

The Regional Water Boards protect water quality by issuing waste discharge requirements, including waste discharge requirements for irrigated agricultural operations. Parties may file petitions with the State Water Board to review waste discharge requirements issued by the Regional Water Boards. Three petitions were filed with the State Water Board to review the Eastern San Joaquin Agricultural General Waste Discharge Requirements issued by the Central Valley Water Board. The Proposed Order addresses the issues raised in the petitions and provides additional guidance to all Regional Water Boards regarding their irrigated lands regulatory programs to better protect water quality by minimizing over-application of nitrogen fertilizers, improving grower management practices, and creating a foundation for developing and sharing best farming practices on a statewide basis. The Proposed Order is the second draft order issued to address the petitions and revises a first draft order issued in February 2016.

2. Is the Proposed Order final?

No. The State Water Board is soliciting written comments on the Proposed Order. The deadline for written comments is noon on December 15, 2017. The State Water Board will also hold a public workshop on December 6, 2017, to allow all interested persons to address the Board. The State Water Board will consider all comments, and may make revisions before making a final decision on the Proposed Order. The State Water Board is expected to make a final decision on the Proposed Order at its January 23, 2018, board meeting. Information on the comment period and public workshop can be found at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/a2239_sanjoaquin_ag.shtml.

3. Whom does the Proposed Order affect?

The Proposed Order would directly affect growers that are members of the East San Joaquin Water Quality Coalition. The Proposed Order would also give direction to the Central Valley Water Board and the other Regional Water Boards to update their irrigated lands regulatory programs to be consistent with many aspects of the Proposed Order; so the Proposed Order would indirectly affect all growers that are included in all of the Regional Water Boards' irrigated lands regulatory programs.

4. What was considered in the development of the Proposed Order?

In addition to the issues raised in the petitions, recommendations from the Nitrogen Tracking Task Force and the Agricultural Expert Panel were considered in developing the Proposed Order. The Nitrogen Tracking Task Force was convened by the California Department of Food and Agriculture (CDFA) to recommend a nitrogen tracking system that would provide meaningful and high quality data to help better protect groundwater quality. The Agricultural Expert Panel was convened by the State Water Board to assess existing agricultural nitrate control programs and develop recommendations to ensure that ongoing efforts are protective of groundwater quality.

This Proposed Order is the second draft order issued by State Water Board. The first draft was released in February 2016. The State Water Board held several public workshops, including two held by the full Board, to hear oral comments on the 2016 draft order. The State Water Board also accepted written comments on the 2016 draft order. The Proposed Order takes into consideration oral and written comments provided through these processes, as well as information provided to individual Board members in communications that have been disclosed to all stakeholders. Notices and transcripts for the State Water Board workshops, written comments submitted, notices and minutes for the staff workshops, and disclosures for Board member communications are available at http://www.swrcb.ca.gov/public_notices/petitions/water_quality/a2239_sanjoaquin_ag.s.html.

5. How does the Proposed Order differ from the draft order released in February 2016?

The Proposed Order modifies some of the revisions proposed in the February 2016 draft order in response to comments received. The goal of the Proposed Order is to minimize increases in the reporting burden for growers and the coalition, while at the same time ensuring that the Central Valley Water Board receives data with sufficient specificity to exercise oversight over the program for continued improvement in water quality and for continued transparency. For example, the 2016 draft order removed distinctions for high and low vulnerability areas. The Proposed Order would reinstate these distinctions, but, with a few exceptions, require the same nitrogen reporting requirements in low and high vulnerability areas after three years. As another example, the 2016 draft order directed the East San Joaquin Agricultural Coalition to submit field-level data from the Farm Evaluation and the Nitrogen Management Plan to the Central Valley Water Board with the names and locations of the growers identified. The Proposed Order would continue to require submission of field-level data to the Central Valley Water Board, but would allow the coalition to submit the field-level data without grower name and location. The specific changes proposed by the Proposed Order, as compared to the existing Eastern San Joaquin waste discharge requirements, are described below.

6. What are the significant revisions to the existing waste discharge requirements in the Proposed Order?

The significant revisions are:

- Growers in low vulnerability areas will now be required to participate in outreach events, but may do so remotely;
- Growers will now report their information on four reporting forms: the Farm Evaluation, the Nitrogen Management Plan (renamed the Irrigation and Nitrogen Management Plan or INMP), and the Nitrogen Management Plan Summary Report (renamed the INMP Summary Report), and on a new report termed the Management Practice Implementation Report (MPIR); however, submission of the Farm Evaluation will be required only every five years in both low and high vulnerability areas;
- Growers in low vulnerability areas will now be required to have certified INMPs (with the option of self certification) beginning in 2020, and will be required to submit INMP Summary Reports beginning in 2021;
- Some of the field-level data submitted by the members to the East San Joaquin Water Quality Coalition will now be regularly submitted by the coalition to the Central Valley Water Board; however, the submission will not disclose names of growers or the location of fields unless they are specifically directed to do so by the Regional Board's Executive Officer for a specific purpose, such as for following up with growers whose data indicate they appear to be routinely applying excessive amounts of nitrogen;
- Each farm will be required to monitor its drinking water wells beginning in 2019 if not already required to do so by law.

7. What changes would be made to the outreach requirements?

Under the Proposed Order, all members, including growers in low vulnerability areas, would have to participate in outreach events annually; however growers may do so remotely without attending an outreach event in person.

8. What changes would be made to the Farm Evaluation?

Under the Proposed Order, the checklist of management practices for irrigation management and nitrogen management will be moved to the INMP and reported on the INMP Summary Report. The Proposed Order additionally reduces the reporting frequency for the Farm Evaluation. Growers in both high and low vulnerability areas must submit the report every five years. Previously, growers in high vulnerability areas had to submit the Farm Evaluation

annually. Instead, growers with fields in areas subject to a Surface Water Quality Management Plan (SQMP) and/or Groundwater Quality Management Plan (GQMP) would be required to submit an additional report, the MPIR, to the coalition summarizing management practices implemented in response to the SQMP or GQMP, on at least an annual basis.

9. What changes would be made to the INMP?

Under the Proposed Order, management practices related to irrigation management and nitrogen management will be recorded on the INMP instead of the Farm Evaluation. The Proposed Order would continue to require reporting of the amount of nitrogen applied to the field, require reporting of crop yield so that the nitrogen removed from the field can be determined, and would continue to require this reporting on a field-by-field basis; but would revise the specific types of measurements that would be reported. Recording irrigation and nitrogen management data on a field-by-field basis is consistent with existing farming best practices. Currently, only growers in high vulnerability areas must have a certified INMP. The Proposed Order would require growers in low vulnerability areas to have certified INMPs beginning in 2020 with an option for self-certification provided.

10. What changes would be made to the INMP Summary Report template?

The INMP Summary Report contains a reduced set of information from the INMP template. Data from the INMP Summary Report would be reported by a grower to the coalition. In particular, the INMP Summary Report would require the reporting of nitrogen applied and crop yield on a field-by-field basis. Currently, only growers in high vulnerability areas must submit an INMP Summary Report. The Proposed Order would require growers in low vulnerability areas to submit INMP Summary Reports beginning in 2021.

11. What would happen with data submitted to the coalition on the Farm Evaluation, the MPIR, and on the INMP Summary Report?

The coalition would conduct data comparison analyses after receiving the Farm Evaluation data, the MPIR data, and INMP Summary Report data. The coalition would use the management practice implementation data on these forms to verify that growers are implementing appropriate practices and to inform the development and recommendation of effective management practices.

The coalition would use the nitrogen application and yield data reported on the INMP Summary Report to estimate the nitrogen use efficiency for each field. To do so, the coalition would convert the yield number for each field to a number representing nitrogen removed from that field. Nitrogen removed is calculated from the total amount of crop material removed from the field. The coalition would develop crop-specific coefficients representative of the amount of nitrogen removed per pound for each crop. The coalition would then calculate the nitrogen applied over nitrogen removed ratio (A/R

ratio) for each field and the nitrogen applied minus nitrogen removed difference (A-R difference) for each field.

12. What is the A/R ratio and why would it be calculated by the coalition?

The A/R ratio, as recommended by the Agricultural Expert Panel, is a metric for nitrogen use efficiency. The A/R ratio is simply the amount of nitrogen applied to a field in a year divided by the amount of nitrogen removed from the same field during the same year. The coalition would use the annual A/R ratio data to calculate a multi-year average A/R ratio which could be used to compare, across a single commodity, the extent to which nitrogen is being applied efficiently. When averaged over several years, a high A/R ratio may be an indication that nitrogen has not been applied efficiently in that field. The Agricultural Expert Panel concluded that, in many cases, the A/R ratio is an appropriate alternative to monitoring the amount of nitrate that is leaching to groundwater under each field.

13. What is the A-R difference and why would it be calculated by the coalition?

The A-R difference represents the mass difference between the nitrogen applied to a field and the nitrogen removed from the field. A-R difference provides an additional indication of whether nitrogen is being applied efficiently to a field and the magnitude of any potential over-application.

14. Why would the Central Valley Water Board receive Farm Evaluation, MPIR, and INMP Summary Report data?

The Agricultural Expert Panel recommended that it be a regulatory goal to learn the ranges of multi-year A/R ratios for multiple crops and situations, in order to develop acceptable target values. The Agricultural Expert Panel did not make any recommendations about whether the A/R ratio data would be submitted to the Central Valley Water Board. The proposed order concludes that the Central Valley Water Board, in coordination with the coalitions, should develop acceptable multi-year A/R ratio ranges, and that to do so, the Central Valley Water Board should receive all of the A/R ratio data. This process for calculating acceptable multi-year A/R ratio ranges would be based on grower-reported data, rather than estimates or numbers derived through isolated studies.

Additionally, receiving the management practice data from the Farm Evaluation, MPIR, and INMP Summary Report would allow the Central Valley Water Board to evaluate the effectiveness of current management practices in fostering efficient nitrogen application and in protecting surface water and groundwater quality.

Finally, individual grower data would also allow the Central Valley Water Board to verify the summary analyses of the grower-submitted data prepared by the coalition and verify that the coalition is following up with growers needing assistance.

15. The Nitrogen Tracking Task Force recommended that the individual grower nitrogen data be submitted only to the coalitions. Why would the Proposed Order require the coalition to send individual field-level nitrogen data to the Central Valley Water Board?

The Nitrogen Tracking Task Force recommended that data related to nitrogen application be aggregated before being reported to the Regional Water Boards. However, the Nitrogen Tracking Task Force released its recommendations prior to the establishment of the Agricultural Expert Panel. The Agricultural Expert Panel report recommended that nitrogen application data be used to develop nitrogen application target ranges. The Nitrogen Tracking Task Force did not anticipate that this data would be used to develop target ranges. The proposed order concludes that the Central Valley Water Board should develop acceptable multi-year A/R ratio ranges, and that to do so, the Central Valley Water Board should receive individual field A/R ratio data. The submission of the data to the Central Valley Water Board is also consistent with State Water Board policies regarding program oversight.

16. Would the Central Valley Water Board be able to identify the grower or location associated with the individual field-level data it receives from the coalition?

The coalition would submit the data to the Central Valley Water Board identified only by anonymous identifiers unique to each grower and to each APN. The Central Valley Water Board would not know the identity of the grower or the location associated with the field unless it submitted a specific request to the coalition for such identification, as also permitted under the existing order. The Central Valley Water Board and the State Water Board will periodically evaluate the approach of using anonymous identifiers and may determine in the future that data should be reported without anonymity.

17. Why would the Central Valley Water Board want to develop target ranges for multi-year A/R ratios and how would the Central Valley Water Board use those ranges?

The Central Valley Water Board would want to develop target ranges for multi-year A/R ratios to help growers apply nitrogen efficiently as a management practice. These multi-year A/R ratio target values would be calculated based on real-world farming practices, i.e. data reported from growers rather than estimates derived from isolated field studies. The multi-year A/R ratio ranges are expected to reflect reasonable and realistic targets for nitrogen application. Additionally, because the multi-year A/R ratios are based on averaging multiple years of A/R ratios, they will account for year-to-year variations.

Nevertheless, the Proposed Order acknowledges that it is too early at this point to predict exactly how these ranges may be used.

The Proposed Order anticipates that it will take five or more years to develop initial multi-year A/R ratio ranges. The Proposed Order also requires the Central Valley Water Board to report periodically during this time to the State Water Board on its progress in developing target multi-year A/R ratios. The Proposed Order further anticipates that the State Water Board will consult with an expert panel before the ranges are fully developed. Therefore, the Proposed Order anticipates multiple opportunities for public participation and comment in this process in the coming years.

18. Why would the Proposed Order require monitoring of on-farm drinking water wells? How much would this cost?

Nitrate pollution in groundwater can pose a serious health risk and drinking water wells in farming communities have been found to have high levels of nitrate. Testing of on-farm drinking water wells is the only way to determine if the water is safe to drink. Typically the cost associated with testing a drinking water well for nitrates is less than \$40 per sample for the lab test. The State Water Board is aware of ongoing discussions for statewide legislation to require drinking water well sampling. The on-farm drinking water well sampling requirements of the Proposed Order would not be effective until 2019 to allow time for these discussions to proceed.

19. Would the Proposed Order require a grower to send farm plans or other operational/ management documents to the Regional Water Board?

No. The only documents that would be required to be sent to the Regional Water Board are the INMP Summary Report, the Farm Evaluation, and the MPIR. The INMP form would be required to be maintained on the farm and available for inspection, but would not have to be submitted to the coalition or Regional Water Board.

20. Does the Proposed Order require growers to publicly disclose trade secrets or sensitive business information through submission of data from the Farm Evaluation, the MPIR, and INMP Summary Report to the Central Valley Water Board?

No, it is not anticipated that the types of information submitted on the Farm Evaluation, the MPIR, and INMP Summary Report would be trade secrets or sensitive business information. Moreover, the data submitted to the Central Valley Water Board will not be identified by grower name or field location. However, if a grower believes a particular submission, or a portion of a submission, should be kept confidential, the grower can indicate so on the cover of the form. The Central Valley Water Board will review the information to determine if it meets the legal standard for confidentiality.

21. Would the Proposed Order require growers to work with the Central Valley Water Board instead of the coalition? Would the role of the coalition change?

No, under the Proposed Order, the coalitions would remain the first line of contact for all growers. Growers would not see a change in their working relationship with the coalition. The State Water

Board continues to support coalitions as the best entities to work directly with growers to increase understanding of the permit and provide outreach and follow up for management practice selection. The State Water Board also continues to support coalitions as the best entities to conduct regional and representative monitoring.

22. Would the Central Valley Water Board use data from the Farm Evaluation, the MPIR, and the INMP Summary Report to take enforcement action?

The primary purpose of collecting Farm Evaluation, MPIR, and INMP Summary Report data would be for the purpose of evaluating the effectiveness of management practices and developing recommended management practices for protection of water quality. The emphasis of the Irrigated Lands Regulatory Program would continue to initially be the protection of water quality through education and outreach and the Program would continue to rely on the coalitions to follow up with growers where appropriate prior to initiating any enforcement actions.

23. Would grower costs increase under the Proposed Order?

The State Water Board anticipates that growers in low vulnerability areas will have increased costs associated with obtaining certification of the INMP and submission of the INMP Summary Report, beginning in 2020 and 2021 respectively. Additionally, the coalition will incur additional costs in submitting some of the data from the Farm Evaluation, the MPIR, and the INMP Summary Report to the Central Valley Water Board and may have to increase grower fees to cover these costs. The State Water Board does not anticipate that there would be a substantial increase in grower costs as a result of the Proposed Order.

24. How would the Proposed Order protect users of drinking water supply wells on farms?

Beginning in 2019, the Proposed Order would require members to sample their drinking water supply wells and provide notification to users if nitrate concentrations exceed safe drinking water levels.

25. Why doesn't the Proposed Order require growers to provide alternate water supplies if on-farm drinking water supply wells are polluted?

The State Water Board expects that the Central Valley Water Board will, where appropriate, act promptly to require the Member to provide users with safe drinking water for consumption.

26. How would the Proposed Order assist communities that are reliant on groundwater supplies that have already been impacted by high levels of nitrates?

The Eastern San Joaquin Agricultural General Waste Discharge Requirements regulate current discharges. If water bodies already have high pollutant levels, the Regional Water Board may

rely on other authorities to address the issue. The Water Boards will continue to work with all communities impacted by poor drinking water supplies. For example, the State Water Board has focused many of its grant and loan programs to provide communities with needed assistance while longer term approaches continue to evolve.

27. Does the Proposed Order revise the existing surface receiving water monitoring program for the East San Joaquin Agricultural Coalition?

The Proposed Order would not, at this point, modify the surface receiving water monitoring program. However, the Proposed Order would direct the convening of an expert panel to make recommendations on a framework for surface receiving water monitoring to inform irrigated lands programs statewide.

For more information visit the State Water Board's [Eastern San Joaquin River Watershed Agricultural Order](#) webpage.

This fact sheet was last updated on October 10, 2017.

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