

Response to General Comments on the Second Statewide Agriculture Expert Panel

The following tables are State Water Resources Control Board (Water Board) response to comments received on the Second Statewide Agriculture Expert Panel draft questions and expertise.

Table 1: General Comments

General Comment	Response
The Panel should also consider surface water quality in addition to groundwater quality when making its recommendations.	The role of the Expert Panel as described in the Eastern San Joaquin and Central Coast Ag Water Quality Orders is focused on irrigated agriculture’s nitrogen impacts to groundwater. Therefore, staff is proposing to keep the focus of the Expert Panel on nitrogen and groundwater.
The Panel should evaluate other water quality constituents in addition to nitrogen.	The role of the Expert Panel as described in the Eastern San Joaquin and Central Coast Ag Water Quality Orders is focused on irrigated agriculture’s nitrogen impacts to groundwater. Therefore, staff is proposing to keep the focus of the Expert Panel on nitrogen and groundwater.
The Panel should evaluate specialty cropping systems, such as nurseries, wineries, you-pick, etc. that have different farming practices.	A question has been added to ask the Expert Panel whether there are any categories of growers for which there is sufficient data to support additional exceptions from the Eastern San Joaquin Water Quality Order Nitrogen Management requirements.

General Comment	Response
<p>There is not enough program data for a Panel to evaluate.</p>	<p>Water Board staff recognize a significant amount of resources have been spent implementing this program. Rather than wait, staff are proposing to move forward with the data available to get recommendations as early as feasible in program implementation while there is still room for flexibility. Staff see the value in an expert evaluation of current reporting practices in addition to recent research to ensure that the program is headed in the right direction.</p>
<p>Certain sectors of the agricultural industry should be exempt from the ILRP or exempt from certain precedential requirements.</p>	<p>This is a policy-related issue and will not be addressed by this Panel. As stated in WQ-2018-0002, if a demonstration can be made to the Board showing nitrogen does not seep below the root zone, the Board will consider an exemption for Irrigation and Management Plan (INMP) reporting.</p>
<p>The Panel must consider regional differences in farming practices and hydrogeology when making their recommendations.</p>	<p>The Panel will consider regional differences when making their recommendations. The public will also have an opportunity to provide comments to the Panel at a public workshop.</p>
<p>The Panel recommendations should elaborate on limitations to their recommendations.</p>	<p>The Panel will include any limitations to their recommendations in their responses to the questions.</p>
<p>Several questions can be streamlined for clarity.</p>	<p>The last sub-question in Question 1 has been deleted to remove repetition. Questions 1 and 2 have both been modified to remove phrases stated, “that are protective of groundwater beneficial uses,” as the standard for recommended limits has already been established earlier in Question 1. Edits were also made to Questions 4, 7, and 8 to streamline and improve clarity regarding the intent of the questions.</p>

General Comment	Response
<p>Water Code §13267 requires the Water Boards to evaluate the economic burden of implementing additional requirements.</p>	<p>The convening of the Panel to consider questions and provide scientific recommendations to the Water Board is not subject to Water Code §13267.</p>
<p>The Panel should focus solely on scientific review. The Panel should not have policy deliberations and have no policy-making authority.</p>	<p>The Panel will provide scientific recommendations to the Water Board; it is the discretion of the Water Board whether to adopt any of the recommendations.</p>
<p>The Panel must consider the benefits of using organics, cover cropping, and other best management practices.</p>	<p>The Panel is evaluating the use of these practices in Question 7.</p>
<p>There were several requests to include additional questions and research topics.</p>	<p>The role of the Expert Panel as described in the Eastern San Joaquin and Central Coast Ag Water Quality Orders is focused on irrigated agriculture’s nitrogen impacts to groundwater. Therefore, staff is proposing to keep the focus of the Expert Panel on nitrogen and groundwater.</p>

Table 2: General Comments on Question 1

General Comment – Question 1	Response
<p>The Panel should not consider the economic viability of the agriculture industry when suggesting potential limits and instead should only focus on the protection of water quality.</p>	<p>The question was modified to be consistent with the language in WQ-2023-0081.</p>
<p>The term “limits” might be interpreted as only a numeric value.</p>	<p>The question was updated to include “metrics.” The panel will consider both general and specific limits.</p>
<p>Due to the variability across commodities and cropping systems, there should not be a single limit across the program.</p>	<p>The question was modified to include “crop-specific” limits.</p>
<p>Any limits suggested by the Panel would be premature because there is incomplete data.</p>	<p>If limits are recommended by the Panel, they should be based on available data and science. Staff will evaluate the Panel’s recommendations in conjunction with public comment and other considerations before making a recommendation to the Board for consideration.</p>
<p>It is not appropriate for the Water Board to delegate authority to the Panel and ask it to set regulatory limits. It is the responsibility of the Water Boards to protect water quality.</p>	<p>This Panel serves to provide expert recommendations and does not have decision making authority. It is the Water Board’s discretion to adopt any suggested limits.</p>
<p>Asking questions with the preface “If no...” and “If yes...” can limit the answer given by the Panel.</p>	<p>The question was revised to remove any potential limiting language.</p>

Table 3: General Comments on Question 2

General Comment – Question 2	Response
<p>The Water Board should ask the Panel if limits can be set given the current data and scientific research before asking what the limits should be.</p>	<p>The Panel will provide recommendations based on available data. The Panel will include a discussion to accompany their responses and include any limitations to their recommendations.</p>
<p>Any limits suggested by the Panel would be premature because there is incomplete data.</p>	<p>If limits are recommended by the Panel, staff will evaluate the recommendations in conjunction with public comment and other considerations before making a recommendation to the Board for consideration.</p>
<p>The term “limits” might be interpreted as only a numeric value. Is the question to identify numeric measurements that will signify progress or to identify actions that need to be taken to achieve progress?</p>	<p>Any recommended limits can be general or specific. The Panel will consider both general and specific limits when providing their recommendations.</p>
<p>The Water Board should ensure that interim limits demonstrate progress in preventing nitrogen discharges from causing or contributing to exceedances of water quality objectives.</p>	<p>The question was updated to ask the Panel for a series of increasingly stringent interim limits.</p>

Table 4: General Comments on Question 3

General Comment – Question 3	Response
The Panel should also consider demographic (cultural and socio-economic) considerations to this question.	Adding demographic considerations is out of scope for this Panel. The Panel is focusing solely on scientific recommendations. However, the Water Board will be evaluating all considerations if it decides to implement components of the recommendations.
The Panel should evaluate the current coalition approach in addition to any scientific or technical considerations.	The use of coalitions in this program is a policy matter and is out of scope for this Panel.
The Water Board should provide the Panel background on the program and standards for implementation so there is necessary context when answering this question.	The Panel will be provided relevant program background before making their recommendations.
The Panel should not focus on “enforceability,” but rather programmatic approaches that will reduce the amount of nitrogen seeping below the rootzone.	The question was revised to clarify intent and edited to include other implementation considerations.
The Water Board should ask the Panel to provide scientific or technical considerations on the direct enforcement of limits as opposed to the “enforceability” of said limits.	The Water Board is responsible for enforcement of requirements under its purview. It is not appropriate for the Panel to provide recommendations on enforcement actions. The question was revised to clarify intent and to include other implementation considerations.

Table 5: General Comments on Question 4

General Comment – Question 4	Response
Using the word “appropriate” allows the Panel to evaluate policy decisions.	The question was revised to include clarification that the Water Board is seeking scientific analysis.
The Panel should evaluate whether there are methods or metrics besides A-R and A/R to help quantify nitrogen discharges.	The question was revised to include this discussion.
This question requires the Panel to reconsider the recommendations of the First Agricultural Panel.	The First Agricultural Panel did not include the recommendation to use A-R, but rather was added by the Water Board to help evaluate the potential for nitrogen to seep below the root zone. The intent of this question is for the Panel to assess the value in collecting A-R data.
This question is too narrow in that it does not ask the Panel to consider if current calculations of A and R are comprehensive of the nitrogen cycle.	The intent of this question is to evaluate whether the general calculation of A-R is appropriate to quantify nitrogen discharges to groundwater. The question remains general to prevent the Panel from limiting specific components of the nitrogen cycle that may be utilized in future A and R calculations. The Panel will include a discussion to accompany their responses and include any limitations to their recommendations.

Table 6: General Comments on Question 5

General Comment – Question 5	Response
<p>In addition to the Irrigation and Nitrogen Management Plan (INMP) Summary Reports, the Panel should evaluate the regional Groundwater Trend Monitoring Reports, Groundwater Quality Management Plans, Annual Reports, monitoring plans, and other requirements throughout the program.</p>	<p>The Panel can consider available data, but the scope is limited to providing statewide recommendations. Evaluation of regional components is outside the scope of this effort.</p>
<p>Question 5c should be revised to clarify that there are no official Quality Assurance Plans required, as there are no precedential requirements for Quality Assurance Plans with INMP reporting.</p>	<p>The question was revised for clarification.</p>
<p>It is unclear if the purpose of question 5d is to evaluate intentional false reporting or other factors. The intent regarding evaluation of anonymity should be clarified.</p>	<p>This question was revised to clarify the intent to have the Panel evaluate Regional Board auditing practices and determine if changes are needed to ensure the reliability of the data.</p>
<p>Only certain regions have begun collection of INMP Summary Reports. Therefore, there is not enough data to effectively evaluate INMP data on a statewide level.</p>	<p>While INMP data is limited, there is value in the Panel assessing current reporting practices and recent research to provide a recommendation for program direction.</p>

Table 7: General Comments on Question 6

General Comment – Question 6	Response
<p>There is not enough data to determine if nitrogen application via fertilizer (AFER) limits included in the Central Coast Ag Order are appropriate.</p>	<p>The question was revised to clarify the intent to ask the Panel about the approach of using nitrogen application limits, rather than assessing the values presented in the Central Coast Ag Order.</p>
<p>The AFER limits included in the Central Coast Ag Order should not be adopted statewide due to regional diversity.</p>	<p>The question was revised to clarify the intent to ask the Panel about the approach of using nitrogen application limits to protect groundwater quality, rather than assess whether the values presented in the Central Coast Ag Order are appropriate for statewide use.</p>
<p>Using the word “appropriate” allows the Panel to evaluate policy decisions.</p>	<p>The Panel will respond to each question based on the panel member’s area of expertise. While the question calls for the Panel’s expert opinion, the Board has discretion to implement the recommendations.</p>

Table 8: General Comments on Question 7

General Comment – Question 7	Response
<p>The panel should evaluate all components of the nitrogen cycle’s removal factors in addition to the components of R (RSCAVENCE, RTREAT, ROTHER) included in the Central Coast Ag Order.</p>	<p>The Panel will evaluate available data and provide recommendations for measuring and reporting components to accurately evaluate the potential to discharge to groundwater. Additionally, the Panel should include a discussion of their answer and any limitations of their evaluation. Evaluating all components of the nitrogen cycle is beyond the scope of this Panel.</p>
<p>The Panel should host a public workshop to discuss the nitrogen cycle and organic amendments.</p>	<p>Members of the Panel will have expertise in the nitrogen cycle; therefore, hosting a workshop specifically to discuss the nitrogen cycle is unnecessary and outside the scope of the Panel. However, prior to drafting preliminary recommendations, the Panel will host a public listening session during which members of the public can provide comments.</p>
<p>The Central Coast Ag Order included discount factors in A and R calculations to incentivize practices that could potentially improve water quality.</p>	<p>The Panel is charged with assessing whether the use of discount factors will result in accurate accounting of A and R. In addition to this analysis, the Panel will provide recommendation on how to incentivize best management practices.</p>
<p>This question should be clarified to ensure the Panel does not evaluate these factors solely for the Central Coast Region, but rather as a statewide approach.</p>	<p>The question was revised to ensure the Panel assesses the approach for statewide application.</p>

General Comment – Question 7	Response
<p>In part 7d, the Board should not ask the Panel if there should be incentives to use high nitrogen irrigation water. Instead, the Panel should evaluate the scientific basis of using of high nitrogen irrigation water and whether doing so would reduce the amount of nitrogen discharged to groundwater.</p>	<p>In Order WQ-2023-0081, the Water Board expected to ask the Panel if using incentives for high nitrogen irrigation water is the most appropriate approach for evaluating and controlling discharges to groundwater. The question was revised to reflect language from Order WQ-2023-0081 and an additional question has been added for the Panel to evaluate any other incentives for using high nitrogen irrigation water. The Panel will be evaluating the question based on the panel members' areas of expertise.</p>

Table 9: General Comments on Question 8

General Comment – Question 8	Response
<p>In addition to small operations, the Panel should also consider diversified operations (i.e. operations growing multiple different commodities).</p>	<p>The question was revised to include consideration of small diversified operations.</p>
<p>The Panel should also consider socioeconomic and sociocultural background.</p>	<p>While these are important factors to consider when implementing policy changes, these factors are outside the scope for the Panel.</p>
<p>The Water Board should ask the Panel to evaluate certain specialty crops (e.g. wine grapes, nursery stock, etc.) and whether there are sufficient differences in growing practices that warrant exemptions from certain reporting requirements.</p>	<p>A question has been added to ask the Expert Panel whether there are any categories of growers for which there is sufficient data to support additional exceptions from the Eastern San Joaquin Water Quality Order Nitrogen Management requirements.</p>
<p>Several of the specialty crops do not have established crop coefficient values, which is necessary to calculate R values. The panel should consider whether an estimated R value can be used for crops without crop coefficients or if there is an alternative formula that would provide similar data but be more accessible.</p>	<p>The Water Board understands the need for additional research with specialty crops. In the interim, the Water Board allows yield to be reported as a proxy for R, or if there is a similar crop with an established crop coefficient, R can be estimated using that value.</p>
<p>The Panel should evaluate the effects of small operations specifically on water quality impact, as opposed to environmental impacts as a whole.</p>	<p>The question was revised to clarify the intent.</p>
<p>The Panel should define the criteria for these operations.</p>	<p>The question was revised to ask the Panel for threshold criteria for operations, if any, that demonstrate reduced water quality impacts.</p>

General Comment – Question 8	Response
<p>The Water Board should ask the Panel to evaluate the impacts of small operations in comparison to larger operations, instead of asking if the small operations warrant an exclusion. Asking the Panel to consider exclusions is a policy decision that should be held by the Water Board after review of the recommendation.</p>	<p>The question was revised to remove the discussion of exclusions.</p>

Table 10: General Comments on Expert Panel Expertise

General Comment – Expert Panel Expertise	Response
The Panel should have an expert in agricultural economics.	This Panel is charged with providing recommendations based on science, rather than the economic impact of its recommendations.
The Panel should have members who have practical experience.	The Panel will include at least one member who has practical experience.
There should be members on the Panel that have expertise in certain specialty crops and cropping systems (wine grapes, nurseries, berries, vegetables, etc.)	The Panel will include at least one member who has knowledge of statewide farming practices.
The Panel should have an expert in human health.	The Panel will not be evaluating questions related to human health as it is outside the scope for this Panel.

Table 11: Recommended Areas of Expert Panel Expertise

Recommended Areas of Expert Panel Expertise
Agricultural scientist with a specialty in nitrogen
UCCE Farm Advisors/Certified Crop Advisors (CCAs)
Agronomist
Growers
Hydrogeologist
Soil Scientist
Irrigation Specialist
Environmental Justice
Bilingual
Rural sociology
Human health
Nonpoint Source Policy (NPS)
Regulatory compliance
Municipal drinking water
Agricultural economics

Recommended Areas of Expert Panel Expertise
Statistics
Organic agriculture
Nitrogen applied (A) and nitrogen removed (R) formula
Water quality
Salinity in crop production
Nutrient cycle
Statewide knowledge of various growing conditions
Statewide knowledge of various growing practices, including wine grapes, nursery crops, perennial cropping systems, berry and vegetable cropping systems, and other small/diversified cropping systems