California Regional Water Quality Control Board,
Central Valley Region

RESPONSE TO WRITTEN COMMENTS CONCERNING THE PRIORITY 1 MANAGEMENT ZONE IMPLEMENTATION PLANS FOR THE NITRATE CONTROL PROGRAM

In May 2018, the Central Valley Regional Water Quality Control Board (Central Valley Water Board or Board) adopted new Salt and Nitrate Control Programs (SCP and NCP, respectively) and adopted State Water Board-directed revisions to those programs in December 2020. The Priority 1 Management Zone Implementation Plans (MZIP) for the NCP were due on 5 September 2023 and interested persons were provided the opportunity to submit written comments from 1 November 2023 through 22 December 2023.

Written comments were received on 22 December 2023 from the following:

Name, Title, Organization
Erin Noel, Legal Director, California Rural Legal Assistance, Inc. Iris Stewart-Frey, Professor, Environmental Justice and the Common Good, Santa Clara University Department of Environmental Studies and Sciences
Nick Jensen, Community Equity Initiative Staff Attorney, California Rural Legal Assistance, Inc. Iris Stewart-Frey, Professor, Environmental Justice and the Common Good, Santa Clara University Department of Environmental Studies and Sciences Erin Noel, Legal Director, California Rural Legal Assistance, Inc. Jake Dialesandro, Water Justice Fellow, California Rural Legal Assistance, Inc.
Kija Rivers, Policy Advocate, Community Water Center Michael Claiborne, Directing Attorney, Leadership Counsel for Justice and Accountability Nathaniel Kane, Executive Director, Environmental Law Foundation Jennifer Clary, California Director, Clean Water Action Tutuy Montes, Member, Asociación de Gente Unida por el Agua
Charles Delgado, Policy Director, Sustainable Conservation

The Central Valley Water Board has prepared responses to written comments received regarding the Priority 1 MZIPs. In some cases, the responses reference a 14 March 2024 letter to the Central Valley Water Board from the Management Zones that provides collective responses to key topics and issues raised in one or more of the comment letters. This letter is henceforth referred to as the Management Zone MZIP Comment Response Letter. This document is available at the Central Valley Water Board's website:

(https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/nitrate_mz/#nmz).

CALIFORNIA RURAL LEGAL ASSISTANCE, INC. AND SANTA CLARA UNIVERSITY (CRLA-1 et al.)

Comments were received on 22 December 2023 from Erin Noel, Legal Director representing the Community Equity Initiative of California Rural Legal Assistance, Inc. (CRLA); and Iris Stewart-Frey, Professor representing the Environmental Justice and the Common Good Initiative of Santa Clara University Department of Environmental Studies and Sciences. The comments are specifically focused on the Kings Basin MZIP.

CRLA-1 et al. Comment No. 1: The Central Valley Water Board should not find the MZIP complete until the MZIP is modified to address data transparency, methodology, and availability issues.

> **RESPONSE:** The determination of completeness means that the MZIP provided information, actions, and timelines that address the key elements identified in the Basin Plan. The technical information and the regulatory proposals in the MZIPs will be subject to further review during the development of permits and environmental documents. The processes for permits and environmental review are transparent public processes that will subject the proposals in the MZIPs to additional scrutiny to ensure that they adequately meet the needs of communities and individuals dependent on nitrate-impacted drinking water sources.
>
> Comments and community feedback may initiate further changes to proposed actions. The Staff review of the MZIP did not reveal any inconsistencies with data transparency, methodology, and availability, and the requirements of the Nitrate Control Program. Staff will continue to work with the Management Zone to further refine and make data sets more accessible to facilitate public engagement.

CRLA-1 et al. Comment No. 2: The MZIP fails to make clear which data sets were used in its analysis and fails to explain how inconsistent data sets and/or sources were compiled in order to yield the resulting conclusions. KWA does not explain how data from UCD CASTING have been compiled and it is not clear whether the data was mistakenly left out of the data released to the public or simply excluded from analysis.

> **RESPONSE:** The Management Zone utilized all publicly available nitrate data for its analysis. All data underwent a quality assurance quality control (QA/QC)

process prior to being used for the analyses. Appendix GWQ-1 provides more detail on the QA/QC process that includes standardizing naming, formatting, measurement units, removing duplicate entries, marking questionable sample results that appear to be misreported, statistical outliers identified, and imputations applied.

The Board shares CRLA's specific concern regarding that data from the UCD CASTING may not have been compiled and included in the nitrate analysis, as it was not included in the publicly shared dataset. The Board will work with the Management Zone to provide clarity to this issue.

CRLA-1 et al. Comment No. 3: Data should be provided in a searchable and accessible format to members of the public and collaborating agencies and organizations. Well water data was released in a timely manner, however the data was in a condition that needed to be cleaned. Data was also provided in the form of two separate Excel spreadsheets that needed to be joined together for data analysis. This access issue inhibits meaningful public access to key drinking water quality information, particularly for elderly, disabled, and low-income populations that already face barriers to technological access.

RESPONSE: The Board understands CRLA's concern regarding meaningful accessibility of the well and nitrate data. The well and nitrate data are organized in an appropriate manner to avoid overloading of information. A "README" tab was also provided to help spreadsheet users better understand and navigate the data. However, a third tab that combines the information will be a helpful addition to the public. The Board will work with the Management Zone to provide a joined version of the spreadsheet for the well and nitrate data. See also Management Zones MZIP Comment Response Letter pgs. 25-26.

CRLA-1 et al. Comment No. 4: The metadata provided lacked the explanation needed to understand the nature of the data being presented as it can lead to potentially significant and misleading conclusions drawn. Specifically, there are two attributes of concern from the nitrate dataset: "GM_RESULT_PROCESSED" and "SAME_DAY_MEASUREMENT". Methods to eliminate or include data is unclear.

RESPONSE: The Management Zone provided metadata that clearly defines each attribute that is provided in the Excel spreadsheet.

"GM_RESULT_PROCESSED" (Column K) is defined as processed results with imputed values where possible for non-detects and outliers. Non-detects and outliers were not removed from the dataset. Instead, an additional result is imputed. The original result remains in the "GM_RESULT" (Column J). Results in Column K will differ from Column J whenever there is a non-detect or outlier present. This can be cross referenced with "IMPUTATION_TYPE" (Column M) and "IMPUTATION_METHOD" (Column N). Methods of calculating the

processed result include regression on order statistics, natural cubic spline, and nearest neighbor.

"SAME_DAY_MEASUREMENT" (Column O) is defined as samples that were collected on the same day. Same day measurements consistently had the same result. The Board understands the concern that keeping duplicate data can impact trend analysis and interpolation. However, because the data is gathered from publicly available sources, removing the same day measurements is inconsistent with its source.

The Board will coordinate with the Management Zone in providing any necessary clarifying details to the metadata. See also Management Zone MZIP Comment Letter pg. 25.

CRLA-1 et al. Comment No. 5: Parameters for geospatial interpolation should be transparent, replicable, and scientifically defensible. The MZIP defines the interpolated surface of groundwater ambient nitrate levels as "high resolution", but no spatial resolution value is given. Additionally, no projected coordinate system is given for Kriging interpolation. Both resolution and projection have a large influence on the interpolation results, and their incomplete description in Section 2 makes them less capable of being replicated as well as leading to a risk of inaccuracies in correctly identifying well contamination hotspots.

RESPONSE: The Board recognizes the need for transparency for the specific methodologies used in the interpolation. The analysis in the MZIP has been used to help understand and prioritize outreach within Management Zone areas and to develop potential initial focus areas for long-term solutions. This helps provide a good starting point for understanding landscape level nitrate conditions. The methodologies followed are consistent with best practices and have been conducted by professionals registered by the State of California to make geologic findings.

Board staff review of the data and analysis has not revealed any inconsistencies. However, it must be understood that the analysis conducted is a starting point for future, more in-depth analysis associated with potential permitting and environmental review. As stated by the commenter, a more granular analysis may be needed to better understand "hotspots." It is expected that further data review for potential hotspots will be considered in future iterations of the Nitrate Control Program; specifically as part of permit updates and environmental review.

Furthermore, future coordination between the Central Valley Water Board, CRLA et al., and KWA can occur concerning sufficient detailing of parameters for all applicable analyses. See also Management Zones MZIP Comment Response Letter pg. 24.

CRLA-1 et al. Comment No. 6: The MZIP's method of averaging well data are likely to result in significant inaccuracies and potentially underestimates the potential nitrate contamination in drinking water supplies. The averaging methodology does not take into account nitrate level fluctuations that may occur seasonally or over different water years. The well data provided also does not have exhaustive coverage of the year it is intended to represent.

RESPONSE: See Response to Comment No. 5 above. While methods of averaging may lead to estimates that differ from episodic measurements, they are appropriate for landscape level consideration as described in the MZIPs. As described, the landscape level analysis has been used to generally understand nitrate conditions and prioritize outreach and potential focus areas. It is expected that further data review will be considered in future iterations of the Nitrate Control Program; specifically as part of permit updates and environmental review. See also Management Zones MZIP Comment Response Letter pgs. 23-24.

CRLA-1 et al. Comment No. 7: Trend analysis by the Management Zone separated wells into lower and upper zone wells, however it is not explained how the determination of lower and upper zones were made when well or screen depths were missing. The limitations of the trend analysis include lack of sufficient number of repeat measurements to calculate trend.

RESPONSE: The Board understands CRLA's concern that the data for domestic wells may not be sufficient. The Management Zone utilized all readily and publicly available nitrate data in the analysis. In addition, the Management Zone understands the need for additional data and is focused on getting as many domestic wells sampled as possible.

Well depth zone assignments are detailed in Section 2.1.1.3 of the MZIP. Assignments were determined with the following criteria: (1) well depth and bottom of screened interval depth, (2) well type, (3) estimated well depth based on DWR's well completion report, and (4) comparison of well's actual or estimated depth with CV-SALTS delineation of the bottom of the upper zone. Whenever screen depth is missing, the depth is determined by a combination of the above criteria. There will be a future refinement on the methodology to better assess the wells in upper and lower zones. The Board will work with the Management Zone on refining this methodology as more well information becomes available.

See also Management Zones MZIP Comment Response Letter pgs. 23-24.

CRLA-1 et al. Comment No. 8: The MZIP's data have a number of inconsistencies and parameters that are either not specified or not sufficiently justified. Without more complete data, the MZIP's characterization of the Management Zone's nitrate conditions as well as other findings, are scientifically inadequate and therefore must be regarded

as incomplete. The Central Valley Water Board should require the MZIP to be amended to include a comprehensive and systematic well-testing strategy that will yield a data set robust enough to deliver reliable nitrate conditions characterization for the inhabitants of the Modesto and Turlock subbasins.

RESPONSE: See Response to Comment No. 5 above and the Management Zones Comment Response Letter pgs. 23-25.

CRLA-1 et al. Comment No. 9: There is a lack of data and analysis pertaining to CAFOs throughout the MZIP. The data provided in the MZIP does not appear to include all CAFOs and all wells that should be tested. In addition, the locations of animal feeding operations should be made publicly available as dairies are consistently the worst polluters of aquifers in California.

RESPONSE: Domestic well testing is not part of the Central Valley Dairy Representative Monitoring Program (CVDRMP). However, facilities permitted under the Board's confined animal facility General Orders and participants in the CVDRMP do test domestic wells and submit findings directly to the Board. The Board will work with the Management Zone in future iterations of the Nitrate Control Program; specifically as part of permit updates and environmental review to include this dataset. Additionally, the facility names and facility addresses for confined animal facilities can be found in Appendix P-1.

CRLA-1 et al. Comment No. 10: The MZIP must include an outreach plan that reaches the most vulnerable and disadvantaged residents within the Management Zone's highest Nitrate Risk "Hot Spots" by diversifying methods to suit communities. Focus should be placed on increasing tabling events, door to door outreach, in-person workshops, media advertising, providing Spanish translation, and engaging non-environmental justice groups.

RESPONSE: Appendix O provides a detailed community engagement and outreach plan. KWA intends to continue to modify and incorporate community input as needed to optimize engagement. Equity and inclusivity considerations will be further developed and considered as part of the MZIP implementation and permit revision process in full compliance with the requirements of Assembly Bill 2108. Board staff and the Management Zone look forward to working with the commenter to better understand specific recommended approaches for outreach to ensure equity for people impacted by the program.

CRLA-1 et al. Comment No. 11: KWA must amend the Initial Focus Area (IFA) methodology to better capture the characteristics and needs of low-income, disadvantaged residents of the Kings Basin and ensure that the MZIP's long-term goals are equitable. The next round of IFA identification should at least look at densely populated areas within disadvantaged unincorporated communities, areas with lack of infrastructure investment, other pollution rates, and whether the community experienced redlining to better address the urgent need for clean water in the many communities. In

addition, special attention should be paid to situations in which worker housing on irrigated lands or dairy operations might result in high risk of exposure to nitrate contamination to a particularly disadvantaged and vulnerable population, and additional outreach to both the landowner and residents should be made.

> **RESPONSE:** As detailed in Appendix LT-1, seven main factors were examined to determine which Management Zone characteristics could be used to potentially identify IFAs. The seven main factors were: ambient nitrate concentrations, trends in nitrate concentrations, SAFER drinking water needs assessment and risk status, nitrogen loading locations, disadvantaged and severely disadvantaged communities and income status, domestic well density and population density in areas of elevated nitrate, and locations of EAP-implemented bottled water delivery/kiosks. The final selection of the IFAs were prioritized based on disadvantaged and severely disadvantaged communities and income status, and domestic well density and population density in areas of elevated nitrate. Although the analyzed datasets are robust, additional factors could be included to better capture the needs of the community further. Further refinement of the prioritization of IFA's and factors to be considered is expected to continue throughout program implementation and guided by outreach findings. The Board will work with the Management Zone in future iterations of the Nitrate Control Program; specifically as part of permit updates and environmental review to ensure that the MZIP's long-term goals are equitable. See Management Zones Comment Response Letter pgs. 17-18.

CRLA-1 et al. Comment No. 12: The Central Valley Water Board must mandate that KWA eliminate the property owner consent requirement and, instead, implement a mandatory seasonal well testing requirement for all well owners and public well systems. An issue CRLA often sees is farmworkers living in vulnerable living conditions and often live in fear of asking their landlords for any request out of fear of being displaced. This is especially true with farm worker communities who receive threats of deportation or homelessness and possible loss of employment.

> **RESPONSE:** The Board shares the concern regarding the possibility of tenants not receiving replacement water and well testing due to the lack of consent from property owners. The Management Zone has indicated that landowners are generally cooperative, and specific examples of landowners refusing to allow their tenants to authorize the Management Zone to conduct sampling have thus far proven elusive. The Management Zone will continue to provide information on any water testing/delivery applications that have been rejected due to inability to obtain landowner consent. This information will be tracked and may become part of compliance requirements when permits are adopted to incorporate the MZIPs. Where needed, the Board will seek to exercise any available enforcement authority to compel cooperation by landowners.

CRLA-1 et al. Comment No. 13: There are an insufficient number of filling stations in the Management Zone. KWA should establish a time frame and deadline for

establishing additional filling stations to continue providing immediate access to safe water for residents reliant on contaminated water. The MZIP provides information on the process to develop a new fill station but fails to identify a deadline by which the additional station will be operational.

> **RESPONSE:** The Management Zone is committed to seeking stakeholder input prior to prioritizing the establishment of replacement drinking water fill stations. Based on previous State Water Board experiences, the complexities and logistics involved with a diligent, compliant, and community-accepted implementation of a water filling station can take a long time to develop and implement. Section 3.2.1.3.2 in the KWA MZIP details the siting and use criteria for identifying water fill station locations, which indicate that there is a large emphasis placed on community input.

CRLA-1 et al. Comment No. 14: KWA must provide more frequent no cost well retesting and expand well testing to include other co-contaminants.

> **RESPONSE:** The KWA is in the process of finalizing cost-sharing agreements with the State Water Board's Safe and Affordable Funding for Equity and Resilience (SAFER) program. The Board agrees it is important that the cost-sharing agreements are established, and the Management Zones are working diligently with the State Water Board's SAFER program to finalize the agreements so that the KWA can provide co-contaminant testing.

CALIFORNIA RURAL LEGAL ASSISTANCE, INC. AND SANTA CLARA UNIVERSITY (CRLA-2 et al.)

Comments were received on 22 December 2023 from Nick Jensen, Community Equity Initiative Staff Attorney; Erin Noel, Legal Director; and Jack Dialesandro, Water Justice Fellow, representing the Community Equity Initiative of California Rural Legal Assistance, Inc.; and Iris Stewart-Frey, Professor representing the Environmental Justice and the Common Good Initiative of Santa Clara University Department of Environmental Studies and Sciences. The comments are specifically focused on the Modesto and Turlock MZIPs.

CRLA-2 et al. Comment No. 1: The Central Valley Water Board should not find the MZIP complete until the MZIP is modified to address data transparency, methodology, and availability issues.

> **RESPONSE:** The Board will continue to work with the Management Zone to ensure that the MZIP provides data transparency, methodology, and availability. See Response to CRLA-1 et al. Comments No. 1 and No. 5.

CRLA-2 et al. Comment No. 2: The MZIP fails to make clear which data sets were used in its analysis and fails to explain how inconsistent data sets and/or sources were compiled in order to yield the resulting conclusions presented. Valley Water

Collaborative (VWC) does not explain how data from UCD CASTING have been compiled and it is not clear whether the data was mistakenly left out of the data released to the public or simply excluded from analysis.

RESPONSE: See Response to CRLA-1 et al. Comment No. 2.

CRLA-2 et al. Comment No. 3: Data should be provided in a searchable and accessible format to members of the public and collaborating agencies and organizations. Well water well data was released in a timely manner, however the data was in a condition that needed to be cleaned. Data was also provided in the form of two separate Excel spreadsheets that need to be joined together for data analysis. This access issue inhibits meaningful public access to key drinking water quality information, particularly for elderly, disabled, and low-income populations that already face barriers to technological access.

RESPONSE: See Response to CRLA-1 et al. Comment No. 3.

CRLA-2 et al. Comment No. 4: The metadata provided lacked the explanation needed to understand the nature of the data being presented as it can lead to potentially significant and misleading conclusions drawn. Specifically, there are two attributes of concern from the nitrate dataset: “GM_RESULT_PROCESSED” and “SAME_DAY_MEASUREMENT”. Methods to eliminate or include data is unclear.

RESPONSE: See Response to CRLA-1 et al. Comment No. 4.

CRLA-2 et al. Comment No. 5: Parameters for geospatial interpolation should be transparent, replicable, and scientifically defensible. The MZIPs define the interpolated surface of groundwater ambient nitrate levels as “high resolution” but no spatial resolution value is given. Additionally, no projected coordinate system is given for Kriging interpolation. Both resolution and projection have a large influence on the interpolation results, and their incomplete description in Section 2 makes them less capable of being replicated as well as leading to a risk of inaccuracies in correctly identifying well contamination hotspots.

RESPONSE: See response to CRLA-1 Comment No. 5.

CRLA-2 et al. Comment No. 6: The MZIP’s method of averaging well data are likely to result in significant inaccuracies and potentially underestimates the potential nitrate contamination in drinking water supplies. The averaging methodology does not take into account nitrate level fluctuations that may occur seasonally or over different water years. The well data provided also does not have exhaustive coverage of the year it is intended to represent.

RESPONSE: See response to CRLA-1 Comment No. 6.

CRLA-2 et al. Comment No. 7: Trend analysis by the Management Zone separated wells into lower and upper zone wells, however it is not explained how the determination

of lower and upper zones were made when well or screen depths were missing. The limitations of the trend analysis include lack of sufficient number of repeat measurement to calculate trend. And where there is repeat measurement, the timeframe only spans 2-5 years which is not long enough to understand how nitrate levels are changing over time.

> **RESPONSE:** See Response to CRLA-1 et al. Comment No. 7. Well depth zone assignments are detailed in Section 2.3 of the Modesto and Turlock MZIP.

CRLA-2 et al. Comment No. 8: There is a lack of data and analysis pertaining to CAFOs throughout the MZIP. Analysis conducted by CRLA shows that there is very little testing on or near CAFO operations. Data transparency is important as agriculture workers live on the dairy itself or in nearby areas likely rely on groundwater for drinking water. The IFAs proposed could be improved to include these areas, especially west and southwest of Turlock where many dairies are located.

> **RESPONSE:** Domestic well testing is not part of the Central Valley Dairy Representative Monitoring Program (CVDRMP). However, facilities permitted under the dairy/confined bovine feeding operation General Orders and participants in the CVDRMP do test domestic wells and submit findings directly to the Board. The Board will work with the Management Zone and CVDRMP to include this dataset. The long-term drinking water solutions program will start with IFAs and will expand over time to include remaining areas of the Management Zone where nitrate contamination concern exists. The Board will work with the Management Zone to ensure that additional IFAs are added, as needed. See also Management Zones MZIP Comment Response Letter pgs. 17-18.

CRLA-2 et al. Comment No. 9: The MZIP's outreach strategies must be amended to ensure that future outreach efforts, both short and long-term, are conducted equitably and inclusively. VWC needs to diversify channels of outreach. The reach of organizations based in urbanized areas may not extend to the hyper rural areas. Additional efforts to reach the Spanish speaking population of the County are necessary in order to reach the remote and isolated residents who live near CAFOs and other agricultural operations.

> **RESPONSE:** Outreach by the Management Zone is conducted broadly to as many residents as possible, including outreach in many languages other than English. Outreach to Spanish speakers in the Management Zone occurred in the form of mailers, flyers, street signs, tabling events with fluent Spanish-speaking staff, and Spanish radio commercials on local Spanish radio channels. Door-to-door canvassing was also conducted with fluent Spanish speaking staff. In addition, Management Zone staff attend Municipal Advisory Council meetings which involve smaller rural communities in unincorporated areas of Stanislaus and Merced counties.

Equity and inclusivity considerations will be further developed and considered as part of the MZIP implementation and permit revision process in full compliance with the requirements of Assembly Bill 2108. Board staff and the Management Zone look forward to working with the commenter to better understand specific recommended approaches for outreach to ensure equity for people impacted by the program.

See also Management Zones MZIP Comment Response Letter pgs. 26-27.

CRLA-2 et al. Comment No. 10: Management Zone website maintenance has been inconsistent; outreach should be improved by ensuring the website provides accurate and up-to-date information. VWC must develop a plan in the MZIP to commit to a policy of more regular and frequent updates.

RESPONSE: The Board will work with the Management Zone to ensure that the website is more regularly updated to provide the most up-to-date information to the public.

CRLA-2 et al. Comment No. 11: Community outreach meetings need to be held at regular intervals, with significant advanced notice via multiple channels. These meetings should also be made hybrid. The MZIP should develop a strategy for identifying key areas, time periods, and program development phase during which in-person, local meetings will be most helpful to obtain resident feedback.

RESPONSE: The Management Zone conducted several community outreach meetings where all interested parties, including community participants, were invited. During COVID restrictions all meetings were held virtually. However, by 2021, all community and stakeholder meetings were hybrid meetings with some attending virtually via Zoom or attending in person. During the first year of MZIP implementation, meetings will be held quarterly to inform the community of upcoming plans to initiate the long-term drinking water solutions program in IFAs. After the first year, meetings will occur at a frequency based on need and community feedback. The Board will continue to evaluate the efficacy of the full suite of outreach efforts being employed by the Management Zones through the implementation of the MZIP. See also Management Zones MZIP Comment Response Letter pg. 27.

CRLA-2 et al. Comment No. 12: Bottled water delivery coordination should be clarified for residents. There is widespread confusion among residents regarding how to manage or change water bottle deliveries. To address the confusion, VWC should provide upfront instructions in the form of pamphlets and flyers for bottled water delivery recipients.

RESPONSE: To the extent practicable, the resident is responsible for working with the third-party vendor to schedule delivery of water bottled water and pickup of empty bottles. However, where necessary, the Management Zone will provide

scheduling support. After implementation of bottled water delivery services at a residence, Management Zone staff will contact the residence by email, phone, or other means deemed appropriate by sending a survey. This survey provides an opportunity for residents to provide feedback. The resident also has the option to have the Management Zone follow up on their experience after the survey. The Board agrees with CRLA that outreach should continue to be improved and looks forward to working with CRLA and the Management Zones on future outreach strategies. See also Management Zones MZIP Comment Response Letter pg. 27.

CRLA-2 et al. Comment No. 13: Water fill stations need a more concrete and well-developed outreach strategy to obtain sufficient and equitable community input in the remote rural areas.

RESPONSE: The IFAs identified by the Management Zone include disadvantaged and severely disadvantaged communities. These communities are often located in rural areas. The Management Zone will be conducting outreach to these communities for feedback on fill stations. For example, based on community feedback to date, the areas served by fill stations should not be too large to minimize the distance a resident will need to drive to obtain water. The number, locations and scheduling of fill stations will be based on community consensus. See also Response to CRLA-2 et al. Comment No. 9 and Management Zones MZIP Comment Response Letter pgs. 17-18.

CRLA-2 et al. Comment No. 14: Program implementation metrics should include the number of renters/owners in each participant category, the number of Spanish vs. English speaking applicants, and a distinction between general canvassing and canvassing involving face-to-face conversations.

RESPONSE: Due to the unique nature of the drinking water program, it has proven difficult to find analogous metrics to gauge program success.

With respect to the CRLA et al. comment that metrics should include number of Spanish vs. English speaking applicants, the Board acknowledges that such information could be useful in developing additional outreach and engagement strategies, but the collection of this information raises privacy concerns that might prove counterproductive to the overall success of the program. Engagement specialists that the Board and Management Zones have worked with have expressed reservations about asking questions on ethnicity or national origin, since such questions can feel invasive or uncomfortable to some residents or interested persons and could potentially dissuade participation in the program. However, as the MZIP is implemented, we will seek to utilize non-invasive ways to better understand the efficacy of outreach efforts, including evaluating the success of outreach efforts based on a comparison of replacement water subscriptions and census data and other existing data and tools (including

EnviroScreen 4.0 (https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40)).

As the Board develops waste discharge requirements based on the MZIP, it will seek to establish reasonable and meaningful metrics for well testing and drinking water solutions.

CRLA-2 et al. Comment No. 15: The MZIP should include an accurate analysis of long-term operation and maintenance costs of the proposed methods of providing water on long-term infrastructure investment in disadvantaged communities.

RESPONSE: The Board agrees that the MZIP must address the future operations and maintenance cost increases, especially with regard to the additional costs associated with potential drinking water solutions in Disadvantaged Communities and Severely Disadvantaged Communities. The Board shared a similar comment in the Findings of Completeness Letter issued to the Modesto and Turlock Management Zone on 20 November 2023. See also Response to CWC et al. Comment No. 10 and Management Zones MZIP Comment Response Letter pgs. 13-14.

CRLA-2 et al. Comment No. 16: The MZIP should ensure, and should not be deemed complete, until the proposed plan includes full coordination with the Irrigated Lands Regulatory Program (ILRP).

RESPONSE: The Board agrees that the MZIP should include a proposed plan for coordination between the Management Zone and ILRP. The Board shared a similar comment in the Findings of Completeness Letter issued to the Modesto and Turlock Management Zone on 20 November 2023. The Board will work with the Management Zone to ensure a plan will be included in future iterations of the Nitrate Control Program; specifically as part of permit updates and environmental review.

CRLA-2 et al. Comment No. 17: Many residents are confused and are not receiving adequate explanation of their testing results. The MZIP should include additional section for providing technical assistance to well testing recipients who test positive for things other than nitrates and have good quality guidance available online and in physical copy to explain how to read well testing results received from the consultant.

RESPONSE: If a well is sampled for co-contaminants through the SAFER grant process and the test results indicate constituents other than nitrate are detected in levels over the drinking water standard, the Management Zone will work with each resident and partnering entities to determine the best way to access safe drinking water that may be available from other regional programs that are providing interim drinking water for constituents other than nitrate. Based on participation in coordination meetings with State Water Board's SAFER Program and Management Zone leads, it is Board staff's understanding that pamphlets

and guidance documents are being developed for whenever co-contaminants are detected at levels over the drinking water standard. Co-contaminant testing guidance is not a requirement in the MZIP, however the Board will continue to coordinate with the SAFER Program, Self-Help Enterprises, and the Management Zone and encourage that relevant, accurate, and meaningful guidance is provided to residents who receive co-contaminant testing through the SAFER grant process. See also Management Zones MZIP Comment Response Letter pg. 27.

CRLA-2 et al. Comment No. 18: CRLA and Santa Clara University survey research indicates that Latino dairy and farmworkers disproportionately lack access to information about VWC's programs, and even after being given information about the programs expressed hesitation due to fear or repercussions from their landlords/employers. Neither the MZIP's short nor its long-term drinking water solution plans include a program or policy that will ensure this problem is solved.

RESPONSE: The Board shares CRLA's concern regarding the possibility of tenants not receiving replacement water and well testing due to lack of landowners/employer cooperation. The Management Zones have indicated that landowners are generally cooperative, and specific examples of landowners refusing to allow their tenants to authorize the Management Zone to conduct sampling have thus far proven elusive. The Management Zone will continue to provide information on any water testing/delivery applications that have been rejected due to inability to obtain landowner consent. This information will be tracked and may become part of compliance requirements when permits are adopted for the Management Zones. Where needed, the Board will seek to exercise any available enforcement authority to compel cooperation by landowners.

Board staff note that the commenter has conducted outreach involving canvassing, in person interviews, and surveys of residents living in areas with highest nitrate in the Modesto and Turlock Management Zones. Staff look forward to collaboration with the commenter and the Management Zone in reviewing the findings of the research study as we all strive to increase the effectiveness of the program's outreach.

CRLA-2 et al. Comment No. 19: Section 3.1.3.3 and Section 4 provides details regarding the IFAs, however the model falls short, particularly with respect to the population of low income Latino dairy and farmworkers/tenants who live in the highest nitrate areas. Factors used in identifying IFAs include using density of domestic wells and population in elevated nitrate areas, however there is no explanation as to why these factors were used over other possible metrics.

RESPONSE: Appendix LT-1 of the Modesto and Turlock MZIP provides details regarding the process that was used to select IFAs. Seven main datasets were examined to determine which Management Zone characteristics could be used to

potentially identify the IFAs for long-term drinking water solutions, which includes the following: ambient nitrate concentrations, trends in nitrate concentrations, SAFER drinking water needs assessment and risks status, nitrogen loading locations, disadvantaged and severely disadvantaged communities and income status, domestic well density and population density in areas of elevated nitrate, and locations of Early Action Plan-implemented bottled water delivery/kiosks. In addition, the final delineation of IFAs considers local knowledge from Management Zone stakeholders and the results of program outreach. Further refinement of the prioritization of IFA's and factors to be considered is expected to continue throughout program implementation guided by outreach findings. The Board will work with the Management Zone in future iterations of the Nitrate Control Program; specifically as part of permit updates and environmental review to ensure that the MZIP's long-term goals are equitable. See also Management Zones MZIP Comment Response Letter pg. 18.

CRLA-2 et al. Comment No. 20: The Central Valley Water Board should not find the MZIP complete until its monitoring program is altered to reflect the pressing need for more plentiful, more frequently captured well testing data in the MZ.

RESPONSE: The Surveillance and Monitoring Program (SAMP) tracks and assesses expected progress towards the attainment of management goals, including nitrate reduction and long-term managed aquifer restoration to maintain or improve groundwater quality conditions specifically at the Management Zone scale. The SAMP maximizes the use of existing monitoring programs to provide needed data and avoid duplication of efforts.

One of the monitoring programs the SAMP will utilize is the ILRP Drinking Water Well Testing Program, which tested a total of 1,620 wells within the Modesto and Turlock Management Zones' area. Under this program, landowners are required to sample their on-farm drinking water wells for 3 consecutive years and if the sampling result is below 8 mg/L for Nitrate as Nitrogen or Nitrate+Nitrite as Nitrogen, sampling frequency is reduced to once every 5 years. If the result is between 8 and 10 mg/L, the landowner will continue to sample annually. In addition, the Management Zone conducted well testing of a total of 414 wells within the Modesto and Turlock Management Zones' area, as part of their Early Action Plan implementation efforts. The Management Zone will retest drinking water wells when the result is above 7.5 mg/L for Nitrate as N. Assessment of ambient conditions and trend analyses will be completed once every 5 years, aligning with the requirements of a status report every five years by the Basin Plan's Exception Policy. The Management Zone is committed to coordinating with ILRP, Groundwater Sustainability Agencies, and other local entities to achieve the goals of the Nitrate Control Program. The Board will continue to work with the Management Zone to ensure that the SAMP is an adequate monitoring program and will be revised, if necessary.

COMMUNITY WATER CENTER, LEADERSHIP COUNSEL FOR JUSTICE AND ACCOUNTABILITY, ENVIRONMENTAL LAW FOUNDATION, CLEAN WATER ACTION, AND ASOCIACIÓN DE GENTE UNIDA POR EL AGUA (CWC et al.)

Comments were received on 22 December 2023 from Kija Rivers, Policy Advocate representing Community Water Center; Michael Claiborne, Directing Attorney representing Leadership Counsel for Justice and Accountability; Nathaniel Kane, Executive Director representing the Environmental Law Foundation; Jennifer Clary, California Director representing Clean Water Action; and Tutuy Montes, Member representing Asociación de Gente Unida por el Agua.

CWC et al. Comment No. 1: Nitrate impacted communities were not consulted during the development of the MZIPs. Management Zones had the opportunity to consult with impacted communities about the MZIPs since development of the Early Action Plans began in 2021 but failed to do so. Community consultation is needed for all required elements of the MZIP (i.e., nitrate reduction and aquifer restoration). The MZIPs only include a community engagement plan for communities benefiting from long-term drinking water solutions and, in doing so, fail to meet requirements of both the Nonpoint Source Policy and Basin Plan Amendment. Management Zones must prioritize community engagement as the MZIPs are implemented and updated. The Regional board must ensure that communities are consulted as the MZIPs are being implemented and that a community engagement plan is created for all MZIP sections.

> **RESPONSE**: The Board and the Management Zones share a joint responsibility to ensure that communities participate in the development and implementation of the MZIPs. Board staff acknowledge that outreach and engagement expectations may not have been met during the MZIP development. However, the Board has since provided opportunities for public participation regarding the MZIPs that were submitted to the Central Valley Water Board on 5 September 2023, and additional opportunities will be provided as the proposals in the MZIPs are refined and translated into enforceable permit terms.
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> The MZIPs were made available for public comment from 1 November 2023 to 22 December 2023 and a public workshop was held on 7 December 2023 to receive public input. The Board hearing planned for April 2024 will provide yet another opportunity for communities and stakeholders to be engaged in discussions with Board members regarding the MZIPs. Furthermore, the Management Zones and the Board are committed to ensuring that communities are given the opportunity to provide input as the MZIPs are incorporated into waste discharge requirements. The Board anticipates that the process associated with the adoption of new permit provisions will include outreach to satisfy applicable requirements under CEQA, AB 2108, and the Porter-Cologne Water Quality Control Act. Board staff look forward to working with the commenter and Management Zones to identify additional engagement strategies for long-term drinking water solutions, nitrate reduction programs, and aquifer restoration.

CWC et al. Comment No. 2: The commenter requests that MZIPs are updated with more detailed timelines and actions for long-term drinking water solutions and IFAs. The MZIPs must identify nitrate impacted communities' drinking water needs and how the community may be working towards a long-term drinking water solution. MZIPs must also clearly outline the timeline, milestones and action needed to reach a long-term drinking water solution for each identified community...The Regional Board must not accept MZIPs until Management Zones identify long-term solutions for all households impacted by nitrate contamination.

> **RESPONSE:** The Basin Plan Amendments for the Nitrate Control Program requires that, MZIPs are reviewed periodically and modified periodically to incorporate changes based on new data or information and that any modification to the MZIPs that "impact or change timelines, milestones, or deliverables identified in the Implementation Plan must be approved by the Central Valley Water Board." As the MZIPs proposals are considered in the development of permits and environmental documents, the Board will work to ensure that the Management Zones provide additional information on timelines and actions on long-term drinking water solutions and that they are meeting the drinking water needs of all communities affected by nitrate contamination. See also Management Zone MZIP Comment Response Letter pgs. 14-15.

CWC et al. Comment No. 3: MZIPs should identify known long-term solution efforts in identified communities and they should outline what actions need to be taken by the Management Zones to complement ongoing efforts. Management Zones should contact all technical assistance and project funding agencies to identify active technical assistance providers and projects that address drinking water access in the region. Following this coordination, the corresponding MZIPs should be updated to detail what actions the Management Zone will take to support ongoing efforts.

> **RESPONSE:** The Board agrees that close coordination between the Management Zones and existing and ongoing efforts to address drinking water access is critical to ensure that all nitrate impacted communities are receiving well testing and replacement drinking water. The Board will work to ensure that the Management Zones are supporting ongoing efforts in the community to meet the drinking water needs of all residents affected by nitrate contamination. See also Management Zone MZIP Comment Response Letter, pg. 17.

CWC et al. Comment No. 4: Management Zone boundaries and IFA boundaries must be reviewed and updated in the MZIPs if dischargers plan to continue to contaminate groundwater. Every 5 years Management Zones must use water quality monitoring data to review Management Zone and focus area boundaries to ensure they adequately capture the extent of nitrate contamination.

RESPONSE: Board staff agree that regular monitoring of nitrate contamination is important for effective implementation of long-term drinking water solutions. The MZIPs describe that the status of the long-term drinking water solutions program in IFAs and

identification of additional Focus Areas will be provided in the Annual Progress Reports and Five-Year Exceptions Status Reports submitted to the Central Valley Water Board. Board staff look forward to working with the commenter, Management Zones, and stakeholders in further refining and developing IFAs as new data are available and in the consideration of permits and environmental documents. These are public processes that will continue to engage communities as the program evolves and solutions are developed.

CWC et al. Comment No. 5: The commenter expressed that drinking water kiosks are an unsustainable interim solution because residents are required to travel to kiosk fill stations long-term in order to have safe drinking water. Management Zones should continue to deliver bottled water and conduct outreach to potentially impacted households until a sustainable drinking water solution is identified.

> **RESPONSE:** Where domestic wells are infeasible for consolidation, the Board and the Management Zones will ensure that community input is provided prior to the establishment of drinking water kiosks. Although other proposed long-term drinking water solutions, such as physical consolidation, exploring alternate water sources, or drilling deeper wells, are more sustainable and reliable, a drinking water fill station may be the more desirable solution to certain communities. See also Management Zone MZIP Comment Response Letter, pgs. 15-17.

CWC et al. Comment No. 6: The use of point of use (POU) or point of entry systems (POE) as a long-term solution should, in most cases, be a last resort and, in all cases, must include a commitment for long-term operations and maintenance.

> **RESPONSE:** The Board agrees that POU/POE systems are viable long-term drinking water solutions only when there is an adequate program to ensure long-term operations and maintenance of these systems. The Board will coordinate with the Management Zones and the State Board's Division of Drinking Water to ensure operations and maintenance plans are in place before POU/POEs are deployed.

CWC et al. Comment No. 7: Management Zones must expect to continue to fund long-term drinking water solutions under the MZIPs, even in the absence of State Funds to support the projects…The feasibility of a potential drinking water solution should not consider if State funding is available to fund the project.

> **RESPONSE:** The Basin Plan Amendments for the Nitrate Control Program, states that a required element of a MZIP is to "identify funding or cost-share agreements, or a process for developing such funding or cost-share agreements, to implement intermediate and long-term nitrate management projects/activities, which may include identification of local, state and federal funds that are available for such purposes." The intent of this provision was to verify that funding from one or multiple sources is identified and available to implement the requirements of the Nitrate Control Program. The Board expects that long-term

drinking water solutions will be identified by the Management Zones in coordination with local, state, and other partnerships. However, the Basin Plan does not stipulate where funding needs to come from for full implementation. It is anticipated that funding for the numerous long-term drinking water solutions will need to come from Management Zones and through local, state, or federal partnerships. Ultimately, a Management Zone must demonstrate that, "an adequate supply of clean, safe, reliable and affordable drinking water is available for those who have been adversely affected by the non-compliant discharge(s)" in order to sustain an exemption.

CWC et al. Comment No. 8: Management Zones must update their MZIPs with justification for why certain homes served by domestic wells are infeasible for certain long-term solutions, such as consolidation, drilling deeper replacement wells, or connections to alternative sources of safe drinking water.

RESPONSE: The Basin Plan Amendment for the Nitrate Control Program requires that the MZIPs identify how emergency, interim and permanent drinking water needs for those affected by nitrates in the Management Zone are being addressed. It is the Board's expectation that Management Zones will work with local communities on the consideration of available options and development of long-term drinking water solutions for households impacted by nitrate. See Management Zone MZIP Comment Response Letter pgs. 15-17.

CWC et al. Comment No. 9: MZIPs should be updated every five years with cost estimates for individual drinking water projects and how the projects will be funded. MZIPs should also be updated with how cost-share agreements will be used to fund aspects of drinking water solutions which don't address nitrate contamination.

RESPONSE: The Board agrees that regular updates on project cost estimates and funding mechanisms will be beneficial. The MZIPs describe that updates on funding will be provided in the Annual Progress Reports and Five-Year Exceptions Status Reports submitted to the Central Valley Water Board. As the Board reviews the required progress and status reports, Board staff will coordinate with the Management Zones to make sure that information on drinking water project cost estimates and funding mechanisms is provided.

CWC et al. Comment No. 10: Although the MZIPs state that operations and maintenance costs of long-term drinking water solutions will be evaluated when considering the feasibility of the project, Management Zones do not address how additional costs to communities will be addressed. Management Zones must state how they intend to fund increased operations and maintenance costs to communities when State funding is not available, including provision of operations and maintenance funds to cover expected costs for the life of a project.

RESPONSE: Board staff agree that the MZIPs must consider potential future operations and maintenance cost increases when proposing a long-term drinking

water solutions. The Board expects that operation and maintenance costs of long-term drinking water solutions would be described and coordinated with community needs. This is yet one more reason why community engagement and outreach will be critical to the success of the MZIPs. See Responses to CRLA-2 et al. Comment No. 15 and CWC et al. Comment No. 7.

CWC et al. Comment No. 11: The MZIPs cannot rely on township-level averaging as the final compliance metric…As the use of acre-weighted averaging is not authorized by State Board Resolution 2019-0057, the revised basin plan amendments, or binding State Board policy, and because the use of township-level averaging allows for "hot spots" of nitrate pollution in groundwater, the approach must be rejected by the Regional Board. The Regional Board must instead direct the Management Zones to revise the MZIPs to use township-level targets only as interim milestones and propose new final compliance metrics that apply on a discharger, facility, or field-scale as appropriate.

RESPONSE: As stated in State Water Board Order WQ 2018-0002, in response to the petition of the Waste Discharge Requirements for Growers Within the Eastern San Joaquin River Watershed that are Members of a Third-Party Group, "*A nonpoint source regulatory program simply may not yield enough data to conclusively establish whether a specific individual discharger is in fact causing or contributing to exceedances. Recognizing this challenge, the Nonpoint Source Policy provides that, although management practice implementation is not a substitute for actual compliance with water quality requirements, a schedule of management practice implementation, assessment, and adaptive management may act as a proxy for assessing regulatory program progress*."

Groundwater Protection Targets represent one of many valuable sources of information which the Central Valley Water Board may utilize to assess regulatory program progress. With regard to enforcement metrics, the Nitrate Control Program requires only that MZIPs contain proposals for "enforceable and quantifiable interim deadlines" to define the timeline by which compliance must occur, not how it should be assessed. The Central Valley Water Board holds the primary responsibility for determining individual discharger compliance with its regulations, and establishment of any methods/metrics for doing so.

As permits and environmental documents are developed in consideration of MZIP proposals, the Board will work with the Management Zones to ensure that interested parties and the public have the opportunity to provide input on the development of methodologies and metrics for assessing compliance with the Nitrate Control Program. Metrics may include effluent limits (for point source dischargers), Groundwater Protection Targets (as proposed), A-R metrics for ILRP, specific management practices, or a combination of other metrics depending on specific characteristics and site conditions of dischargers.

CWC et al. Comment No. 12: The 35-year compliance time schedules for dairies and irrigated agriculture are not as short as practicable, nor are they adequately justified. The Regional Board must ensure that compliance with water quality objectives is achieved in a period that is "as short as practicable". The Regional Board must require the Management Zones to accelerate progress and ultimate compliance.

> **RESPONSE:** The Basin Plan Amendments for the Nitrate Control Program, states that *"Central Valley Water Board shall have the discretion to adopt an exception for up to 35 years for nitrate if the applicant(s) can demonstrate that it is necessary to further the management goals of the Salt and Nitrate Control Program."* In addition, a status report will be required every 5 years that summarizes compliance with exception terms and conditions. The Basin Plan Amendments also describe that Board review of exceptions will occur in a public hearing and *"as part of this public review, the Central Valley Water Board will consider the length of the exception's term, and revise the length of terms if appropriate"*. Board staff acknowledges that a 35-year time schedule is unprecedented and requires periodic review and discussion of the justification for why compliance on a shorter time scale is infeasible. If new information and technology shows that dischargers in a Management Zone can meet a time schedule that is shorter than 35 years, then the Board will work to shorten the time schedule.

CWC et al. Comment No. 13: The MZIPs rely on unjustified assumptions that are not protective of groundwater quality (i.e., assumed 40% nitrogen volatilization rate, average nitrogen export rate applies equally to all dairies). It is critical that all key estimates and assumptions are conservative and consistent with the precautionary principle. The Regional Board must carefully review the assumption and estimates made in the MZIPs to ensure that the Management Zones are erring in favor of protecting groundwater quality and beneficial users.

> **RESPONSE:** As the MZIP proposals are considered in permit updates, the Board will work with the Management Zones, and all sectors (dairy, bovine, ILRP, etc.) to ensure that the methodologies used to determine the estimated nitrogen loading in a Management Zone will be updated with justified assumptions, based on best available science. The Nitrate Reduction Programs that will be implemented for each sector will include interim milestones that involve acquiring more data which will feed into updating the nitrogen loading analysis. The Board also anticipates that requirements specific to the confined animal facility sector will be subject of additional discussion as the State Water Board continues to evaluate petition A-2283(b), the petition of the Board's 2013 Dairy General Order. See Management Zones MZIP Comment Response Letter pgs. 4-5.

CWC et al. Comment No. 14: The MZIPs fail to provide a plan to restore basins within 50 years, as required by the amended basin plan. The MZIPs rely on coordination with Groundwater Sustainability Agencies as their sole restoration action…A viable plan would contain a variety of strategies and actions, along with milestones and timelines to

achieve compliance, in combination with a robust monitoring plan. MZIPs must prove how restoration projects will minimize nitrate contamination and protect beneficial uses.

> **RESPONSE:** The Board will work with the Management Zones to make sure that the aquifer restoration plans are developed in more detail as the MZIPs are implemented and as coordination and discussions continue with the Groundwater Sustainability Agencies and State Water Board regarding the Sustainable Groundwater Management Act (SGMA) process.

SUSTAINABLE CONSERVATION

Comments were received from Charles Delgado, Policy Director representing Sustainable Conservation, on 22 December 2023.

Sustainable Conservation Comment No. 1: The commenter recommends that the MZIPs expand on groundwater recharge in addressing nitrate contamination. Specifically, they recommend that water quality protection in relation to impacts of groundwater recharge and groundwater recharge project planning be addressed in detail throughout all MZIPs.

> **RESPONSE**: Groundwater recharge is an aquifer restoration strategy, where recharge projects can potentially protect long-term drinking water quality. However, the Board acknowledges the possibility of groundwater contamination due to movement of nitrate that could impact drinking water quality. The Board will work with the Management Zones to ensure that more detail is developed regarding groundwater recharge plans and aquifer restoration plans. See also the response to CWC et al. Comment No. 14 and Management Zones MZIP Comment Response Letter pgs. 8-12.

Sustainable Conservation Comment No. 2: Coordination efforts with other regulatory programs such as the SGMA, Safe and Affordable Funding for Equity and Resilience (SAFER), Irrigated Lands Regulatory Program (ILRP), State Water Board Dairy General Order, and other funding programs should increase and be addressed in detail in the MZIPs.

> **RESPONSE:** The Board agrees with the commenter and is committed to coordinating on the ongoing implementation of SGMA as it relates to the Nitrate Control Program and ensuring that the Management Zones do the same. The Management Zones are already working with the State Board's SAFER Program to receive funding for co-contaminant testing. See Response to CRLA-2 et al. Comment No. 17.
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> The Board agrees that Nitrate Control Program implementation would benefit from alignment with the ILRP and State Water Board's Dairy General Order. See Response to CRLA-2 et al. Comment No. 16. The MZIPs are not self-implementing and will require updates to general permits, including the ILRP

General Orders, Dairy General Order, and individual permits to include detailed enforceable requirements for Nitrate Control Program implementation.

Sustainable Conservation Comment No. 3: Implementation of the MZIPs will result in significant expansion of data collection practices, as well as management of existing and potentially new databases. The MZIPs should address how data collection, data management practices, and data integration will be standardized and improved.

RESPONSE: As MZIP proposals are considered in permit revisions, the Board will work with the Management Zones and dischargers to develop consistency across all Management Zones for data collection and management practices that would allow adequate assessment of the effectiveness of short- and long-term drinking water solutions, nitrate reduction practices, and aquifer restoration activities. For example, the Nitrate Reduction Program for the dairy sector includes an interim milestone to develop a web-portal based Data Management System (DMS) that will help create consistency with annual reporting to the Central Valley Dairy Representative Monitoring Program and improved tracking and assessment of the industry's progress in meeting Nitrate Control Program requirements.

Sustainable Conservation Comment No. 4: The commenter recommends that the MZIPs include, no later than one year after final adoption, a comprehensive evaluation that includes baseline evaluation of available practices and technologies for compliance, new practices and technologies for managing nitrate, impacts of existing practices, and a plan detailing how Management Zones will invest in and promulgate new practices and technologies using available resources.

RESPONSE: The next steps for the Nitrate Control Program are for MZIP proposals to be considered in permitting program updates and environmental document development. The commenters proposed analysis will be conducted as part of the permit update for each entity discharging nitrates. Board staff look forward to working with the commenter as permitting program updates are considered.

Sustainable Conservation Comment No. 5: In the appendices to the MZIPs, the Management Zones are seeking an exception for ILRP-covered growers in their jurisdictions. The basis for this request does contain substantial analysis of nitrate concentrations in groundwater…However, this analysis is as yet incomplete, given the potential consequences of delaying compliance for these growers. The commenter recommends the following additional elements be included: an analysis of factors contributing to nitrate concentrations (i.e., current practices and performance compared to available alternatives) and accompanying qualitative and quantitative data regarding discharger nitrogen management performance.

RESPONSE: The next steps for the Nitrate Control Program are for MZIP proposals to be considered in permitting program updates and environmental

document development. The commenters proposed analysis will be conducted as part of the permit update for irrigated lands. See Response to CWC et al. Comment No. 12.

Sustainable Conservation Comment No. 6: Implementation timeliness to address nitrate contamination should be prioritized. The milestones within the MZIPs are not ambitious enough. The commenter recommends that an evaluation of the MZIPs be conducted for the purposes of identifying which milestones can be accelerated, and which milestones should already have been met, within a year of final adoption of the plans…We recommend that the Management Zones be tasked with incorporating substantive changes to the draft MZIPs over a period after adoption lasting no longer than one year.

RESPONSE: See Response to CWC et al. Comment No. 12.