CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

APPENDIX 3

MONITORING AND REPORTING REQUIREMENTS

GROUP ENROLLMENT – VENTURA COUNTY

UNDER

ORDER NO. R4-2023-0353

WASTE DISCHARGE REQUIREMENTS
FOR
DISCHARGES FROM IRRIGATED AGRICULTURAL LANDS

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Monitoring and Reporting Requirements

These Monitoring and Reporting Requirements are issued by the Regional Water Quality Control Board, Los Angeles Region (Los Angeles Water Board) pursuant to Water Code 13267, which authorizes the Los Angeles Water Board to require preparation and submittal of technical and monitoring reports.

The Los Angeles Water Board require the technical and monitoring reports to implement and determine compliance with the Waste Discharge Requirements for Discharges from Irrigated Agricultural Lands, Order No. R4-2023-0353 (General WDRs). The General WDRs authorize Dischargers to obtain coverage under the General WDRs as an individual or as a member of a Discharger Group (Member). These Monitoring and Reporting Requirements include requirements for Discharger Groups representing Members who discharge in Ventura County. It also contains additional monitoring and reporting requirements for Members that are subject to discharge limitations.

As required by the General WDRs, Discharger Groups shall develop a Monitoring and Reporting Plan (MRP) to verify the adequacy and effectiveness of the requirements contained in the General WDRs. The MRP shall be sufficient to (1) assess the impacts of waste discharges from irrigated agricultural lands on waters of the state, (2) evaluate the effectiveness of management practices to control waste discharges, (3) track progress in reducing the amount of waste discharged to waters of the state to improve water quality and protect beneficial uses, and (4) assess compliance with discharge limitations, where applicable.

The Executive Officer of the Los Angeles Water Board may revise the monitoring and reporting requirements as appropriate or necessary to ensure that the monitoring and reporting conducted pursuant to this Appendix is adequate to achieve this purpose.

These Monitoring and Reporting Requirements conform to the goals of the Policy for Implementation and Enforcement of the Nonpoint Source (NPS) Pollution Control Program (NPS Policy). These Monitoring and Reporting Requirements also incorporate the precedential elements of the State Water Board Order WQ 2018-0002 (ESJ Order)[1], adopted on February 7, 2018.

[1] State Water Board adopted Order WQ 2018-0002 (ESJ Order) available at https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2018/wqo2018_0002_with_data_fig1_2_appendix_a.pdf (as of October 7, 2022)

1 Monitoring and Reporting Plan

Discharger Groups shall submit an MRP to the Los Angeles Water Board for Executive Officer approval within six months after adoption of Order No. R4-2023-0353. The sections below outline the minimum requirements for the MRP. Until Executive Officer approval of the MRP, Discharger Groups shall continue to implement the existing MRP approved for Order 2016-0143 and subsequent extensions.

Other Los Angeles Water Board programs (e.g., TMDLs) may contain requirements similar to the monitoring requirements for Discharger Groups. Discharger Groups may request modifications to the MRP requirements to coordinate monitoring tasks with other monitoring programs required by other Los Angeles Water Board Programs. No Discharger Group may implement changes to the MRP without prior approval from the Executive Officer. If a Discharger Group has approval to use other Los Angeles Water Board programs (e.g., TMDLs) to satisfy any of its monitoring requirements, the results of that monitoring must still be reported the Los Angeles Water Board in the annual monitoring report as required in Section 2.2 of this document.

1.1 Surface Water Quality Monitoring Requirements

1.1.1 Monitoring Sites

Discharger Groups shall establish monitoring locations in surface waters that receive direct or indirect discharges from irrigated agricultural operations owned and/or operated by the members of the Discharger group. The number and location of monitoring sites must be based on specific watershed characteristics and be supported by scientific rationale and a detailed discussion of drainage characteristics.

The identification of waterbodies and locations for monitoring should be based on, but are not limited to, the following:

- waterbodies for which TMDLs have been developed
- size and complexity of watershed
- watershed hydrology
- size of waterbodies
- flow of waterbodies
- proximity to agriculture operations
- safe all-weather access locations

The MRP shall describe the characteristics of each monitoring site and provide a map and GPS coordinates for each monitoring site. The MRP shall list the Discharger Group member sites that are being represented by each monitoring site. Adding a monitoring site or relocating of an existing monitoring site shall be subject to Executive Officer approval.

Discharger Groups covered by Order No. R4-2021-0045-A02 shall maintain any monitoring sites and analyses approved under that Order (15 sites for constituents specified in Table 1[2] and 8 sites for constituents specified in both Table 1 and Table 2) and add an additional monitoring site for Table 1 constituents that captures agricultural discharges to Channel Islands Harbor.

1.1.2 Monitoring Frequency and Seasonality

The frequency of monitoring for Table 1 constituents (with the exception of toxicity) shall be four times per storm year (i.e., October 15-October 14): twice during the dry season and twice during the wet season. Toxicity shall be monitored during one wet season event and the second dry-season sampling event each storm year. The minimum frequency for fish tissue analysis shall be once every three years. Based on a review of annual monitoring reports, the Executive Officer may increase or decrease the frequency of monitoring. Factors that may be considered in the Executive Officer's evaluation of the monitoring frequency include, but are not limited to, the exceedances or attainment of applicable water quality benchmarks and the effectiveness of any management measures as a result of WQMP implementation.

Monitoring shall be conducted during the dry season and wet season. The dry season is from May 15 to October 15. The wet season is from October 15 to May 15. The wet season samples shall be collected within the first 24 hours of a storm with greater than 0.5-inch rain as measured by the nearest National Weather Service rain gauge, to the extent practicable. Practical constraints on wet season sampling events include but are not limited to (1) lab closures on weekends and holidays, (2) sample holding times, and (3) safety of the monitoring team. The first wet season samples shall be collected after the first storm of the year. The dry season samples shall be collected after the majority of Members in the area draining to the monitoring site have applied fertilizers and during a period where irrigation is required.

1.1.3 Monitoring Constituents

The MRP shall include monitoring for all constituents listed in Table 1.

Table 1: Constituents to be Monitored at All Sites

Constituent	Unit
Flow	CFS (Ft^3/Sec)
pH	pH units
Temperature	^0F
Dissolved Oxygen	mg/L
Turbidity	NTU
Total Dissolved Solids	mg/L

[2] Referred to as "Conditional Waiver constituents" under Order No. R4-2021-0045-A02.

Constituent	Unit
Total Suspended Solids	mg/L
Hardness (as $CaCO_3$)	mg/L
Chloride	mg/L
Ammonia	mg/L
Nitrate-Nitrogen	mg/L
Total Nitrogen	mg/L
Phosphate	mg/L
Total Phosphorus	mg/L
Sulfate	mg/L
Total Copper	µg/L
Organophosphate Suite[3]	µg/L
Organochlorine Suite[4]	µg/L
Toxaphene	µg/L
Pyrethroids Suite[5]	µg/L
Neonicotinoids Suite[6]	µg/L
Chronic Toxicity	Pass/Fail and %[7]
E. coli	cfu/100 mL
Trash	Observations[8]

For irrigated agricultural lands discharging to the subwatersheds subject to TMDLs, the MRP shall also include monitoring for the additional constituents specified in Table 2.

Table 2: Constituents to be Monitored in Specific Subwatersheds Based on TMDL Requirements

Subwatershed	Constituent	Units
Calleguas Creek - Reach 2 Revolon Slough Mugu Lagoon	Nickel	µg/L

[3] Organophosphate Suite: Bolstar, Chlorpyrifos, Demeton, Diazinon, Dichlorvos, Dimethoate, Disulfoton, Ethoprop, Fenchlorophos, Fensulfothion, Fenthion, Malathion, Merphos, Methyl Parathion, Mevinphos, Phorate, Tetrachlorvinphos, Tokuthion, Trichloronate

[4] Organochlorine Suite: 2,4' – DDD, 2,4' – DDE, 2,4'DDT, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, Aldrin, BHC-alpha, BHC-beta, BHC-delta, BHC-gamma, Chlordane-alpha, Chlordane-gamma, Dieldrin, Endosulfan sufate, Endosulfan-I, Endosulfan-II, Endrin, Endrin Aldehyde, Endrin Ketone

[5] Pyrethroid Suite: allethrin, bifenthrin, cyfluthrin, cypermethrin, danitol, deltamethrin, esfenvalerate, fenvalerate, lambda-cyhalothrin, permethrin, and prallethrin

[6] Neonicotinoids Suite: acetamiprid, clothianidin, dinotefuran, imidacloprid, nitenpyram, nithiazine, thiacloprid and thiamethoxam.

[7] Results obtained from toxicity tests shall be reported as either a "pass" or a "fail," and the percent effect at the Instream Waste Concentration (IWC) for each endpoint.

[8] The assessment methodology should produce consistent results across watersheds and across counties, this may include the assessment methodology in previously approved MRPs under Order No. R4-2021-0045-A02 or adopted Trash TMDLs

Subwatershed	Constituent	Units
Calleguas Creek - Reach 2 Revolon Slough Mugu Lagoon	Selenium	µg/L
Calleguas Creek - Reach 2 Revolon Slough Mugu Lagoon	Mercury	µg/L
Mugu Lagoon Calleguas Creek Revolon Slough Arroyo Las Posas Arroyo Simi Conejo Creek	In Sediment: PCBs[9] Chlordane Dieldrin Toxaphene 4,4 DDD 4,4 DDE 4,4 DDT	ng/g
Simi Revolon Slough	Boron	mg/L
Channel Islands Harbor	Total Coliform Fecal Coliform Enterococcus	MPN/100 mL
Santa Clara River Estuary	<u>In Fish Tissue[10]:</u> Chlordane Dieldrin Toxaphene <u>In Water:</u> Chlordane Dieldrin Toxaphene <u>In Suspended Sediment[11]:</u> Chlordane Dieldrin Toxaphene	µg/kg µg/L µg/kg
Malibu Creek Watershed – Hidden Valley Creek	Total Nitrogen Total Phosphorus	mg/L

[9] For polychlorinated biphenyls (PCBs) in aqueous samples, Individual dischargers are encouraged to conduct their analysis using a high-resolution EPA-approved method with recommended Reporting Levels of at least 170 pg/L for for each congener. At a minimum, PCBs shall be analyzed for all 55 PCB congeners listed in Table A-7 of the Water Quality Control Plan for Enclosed Bays and Estuaries, Sediment Quality Provisions or the arochlors listed in the California Toxics Rule (as appropriate).

[10] The minimum frequency for fish tissue analysis in the Santa Clara River Estuary shall be once every three years.

[11] Santa Clara River Estuary monitoring for constituents in suspended sediment is only required during wet weather events.

Subwatershed	Constituent	Units
Santa Clara River Bacteria TMDL	Total Coliform Fecal Coliform Enterococcus *E. coli*	MPN/100 mL
Ventura River Algae TMDL	Total Nitrogen Total Phosphorus	mg/L
Oxnard Drain #3 Pesticides, PCBs, and Sediment Toxicity TMDL	<u>In Water and Sediment</u>: Chlorpyrifos 4-4'-DDT 4,4'-DDE 4,4'-DDD Dieldrin PCBs Sediment toxicity Toxaphene <u>In Water:</u> Bifenthrin Chlordane	 µg/L µg/dry kg µg/L

1.2 Groundwater Monitoring and Reporting Requirements

1.2.1 Groundwater Monitoring

The groundwater monitoring shall (1) assess trends in groundwater quality beneath irrigated agricultural lands through a Groundwater Quality Trend Plan and (2) set targets to achieve groundwater water quality benchmarks through the Groundwater Protection Formulas, Values, and Targets.

1.2.2 Groundwater Quality Trend Monitoring

Discharger Groups shall analyze monitoring data from groundwater basins below irrigated agricultural lands (Discharger Groups may utilize groundwater data collected by other entities). Discharger Groups may rely on existing ground water trend plan from previous Order No. R4-2021-0045-A02 or propose a new Groundwater Quality Trend Plan, due December 15, 2024, with wells to evaluate long-term groundwater trends. A Groundwater Quality Trend Monitoring Report shall be submitted every three years.

1.2.3 Groundwater Protection Formulas, Values and Targets

The purpose of the Groundwater Protection Targets is to set a desired target that is intended for all members collectively to achieve compliance with water quality benchmarks for groundwater.

By September 1, 2026, the Discharger Group shall propose a Groundwater Protection Formula to the Executive Officer for approval after opportunity for public review and comment. The Groundwater Protection Formula will generate a numeric value (expressed as either a nitrogen loading number or a concentration of nitrate in water). This value will reflect the total applied nitrogen, total removed nitrogen, recharge conditions, and other relevant and scientifically supported variables that influence the potential average concentration of nitrate in water expected to reach groundwater in a given high priority area over a given time period.

The Discharger Group shall propose Groundwater Protection Values to the Executive Officer for approval after opportunity for public review and comment within six months of Executive Officer approval of the Groundwater Protection Formula. The Discharger group shall propose Groundwater Protection Targets to the Executive Officer for approval after opportunity for public review and comment within one year of Executive Officer approval of the Groundwater Protection Values.

The Discharger Group shall develop Groundwater Protection Targets for each high priority area for which a Groundwater Protection Values was computed the prior year. The Groundwater Protection Targets shall be reviewed and revised as necessary every five years.

A high priority area is an area where the Executive Officer has determined that irrigated agriculture may be causing or contributing to exceedances of water quality objectives or a trend of degradation of groundwater that may threaten applicable basin plan beneficial uses. More specifically, this includes those basins monitored as part of Section 1.2.2, that had one or more wells with a documented mean Nitrate-N concentration of greater than 10 mg/L or 5-10 mg/L and increasing concentration trend. The Executive Officer has identified the following high priority areas: Fillmore Basin, Upper Ventura River Basin, Ojai Valley Basin, Oxnard Basin, Arroyo Santa Rosa Valley Basin, and Tierra Rejada Basin. High priority areas will be re-evaluated every 3 years based on the results of the Groundwater Quality Monitoring Trend Report.

1.3 Methods and Quality Assurance Project Plan

A discussion of monitoring event preparation and field protocols for sample collection and sample handling (including chain of custody requirements) shall be included in the MRP. Additionally, the MRP shall present the quality control (QC) samples that will be collected in conjunction with environmental samples to verify data quality. All samples shall be collected utilizing field techniques consistent with the State Water Resources Control Board's (State Water Board) Surface Water Ambient Monitoring Program (SWAMP). Moreover, all monitoring instruments and devices used by the Discharger

Group for the prescribed field monitoring and sample collection shall be properly maintained and calibrated to ensure proper working condition and continued accuracy.

The MRP shall include a Quality Assurance Project Plan (QAPP). The QAPP shall describe the quality assurance requirements for the MRP. The QAPP will ensure that data are collected and analyzed consistent with State and Los Angeles Water Board monitoring programs and are of high quality. The QAPP shall be consistent with the SWAMP QAPP. As such, the Discharger Group's QAPP shall include at least the following four sections (1) Project Management, (2) Data Generation and Acquisition, (3) Assessment and Oversight, and (4) Data Validation and Usability. A QAPP template is available through the SWAMP website at http://www.waterboards.ca.gov/water_issues/programs/swamp/tools.shtml.

The QAPP shall include the location of sample site(s) and the sampling schedule. The QAPP shall include data quality objectives including, but not limited to the following:

- Representativeness
- Comparability
- Accuracy
- Precision
- Recovery
- Reporting limits
- Completeness

The analytical methods, including method detection limits and reporting limits shall be presented in the QAPP. In general, the method detection limits shall be at or below applicable water quality benchmarks. However, several of the constituents of concern have water quality benchmarks that are lower than the readily available detection limits. As analytical methods and detection limits continue to improve (i.e., development of lower detection limits) and become more environmentally relevant, Discharger Groups shall incorporate new method detection limits in the MRP and QAPP. In the meantime, the detection limits for these constituents shall be set at levels achievable by professional analytical labs, subject to Discharger Group's request and Executive Officer approval.

A laboratory that is certified by the State Water Board's Environmental Laboratory Accreditation Program (ELAP) shall conduct all laboratory analysis according to standard methodologies (e.g., USEPA methods and/or Standard Methods for the Examination of Water and Wastewater). The QAPP shall include the laboratory's Standard Operating Procedures (SOPs). Laboratory analytical methods must be included as an appendix of the QAPP. All data shall be submitted in electronic format to the Los Angeles Water Board in CEDEN-compatible format (http://www.ceden.org/ceden_datatemplates.shtml).

Toxicity testing will be conducted and implemented in accordance with the *State Policy for Water Quality Control: Toxicity Provisions* as revised on October 5, 2021 or as

further updated and other State Water Board and Los Angeles Water Board toxicity plans, policies and guidance at the time that toxicity monitoring is conducted.

Chronic toxicity testing shall be analyzed using the Test of Significant Toxicity using a chronic freshwater method based on the 2021 Revised State Policy for Water Quality Control: Toxicity Provisions. The Discharger Group shall conduct chronic toxicity testing using the most sensitive of the three test species: *Pimephales promelas* (fathead minnow), *Ceriodaphnia dubia* (water flea) and *Selenastrum capricornutum* (green algae). The Discharger Group shall document its selection rationale in its annual monitoring report and the selection may be based on test results obtained under Order No. R4-2016-0143. If sampling sites are located in tidally influenced areas, alternative species that are suitable for more brackish conditions may be selected for toxicity testing, subject to Executive Officer approval.

The results of chronic toxicity testing will be used to trigger further investigations to determine the cause of observed toxicity. If chronic toxicity tests indicate the presence of significant toxicity in the sample, Toxicity Identification Evaluation (TIE) procedures shall be initiated to investigate the cause of toxicity. For the purposes of triggering a TIE, significant toxicity is defined as at least 50% mortality. This threshold is consistent with the approach recommended in guidance published by US EPA for conducting TIEs (US EPA, 1996b). During the field collection of samples an adequate volume of water to conduct both toxicity tests and TIEs should be collected from each monitoring site.

1.4 Irrigation and Nutrient Management Plan and Report Requirements

1.4.1 Irrigation and Nutrient Management Plan

All Members must prepare and implement an Irrigation and Nutrient Management Plan (INMP) that provides information on which irrigation and nutrient associated management practices will be implemented for the upcoming crop year. At a minimum the INMP should include all the elements in the approved INMP template developed by their Discharger Group. INMPs must be certified[12] unless the Member's total farming operation consists of less than 10 acres and the Member has not been designated as

[12] A certified nutrient management plan must be certified in one of the following ways:
a) Self-certified by the Member who attends a California Department of Food and Agriculture, or other Executive Officer approved training program for nutrient plan certification
b) Self-certified by the Member that the plan adheres to a field-specific recommendation from the Natural Resources Conservation Service (NRCS) or the University Cooperative Extension
c) Certified by a Crop Advisor certified by the American Society of Agronomy, or Technical Service Providers certified in nutrient management by NRCS

an outlier[13] by its Discharger Group. All Members must prepare their first INMP by March 1, 2025, and update it annually thereafter. INMPs are to be kept on-farm.

1.4.2 Irrigation and Nutrient Management Report

All Members must also prepare an Irrigation and Nutrient Management Report (INMR) that provides field-level information on the irrigation and nitrogen application practices for the previous year. An INMR must include the information used by the Discharger Group in calculating an Applied/Removed (A/R) ratio for nitrogen, and an Applied-Removed (AR) difference for nitrogen, as defined in the equations in sections 1.4.4.1 – 1.4.4.5 below. All Members must submit the first INMR to the Discharger Group on March 1, 2026, and annually thereafter. The INMRs submitted by Members shall be reported by field[14] and include nitrogen applied values[15] and crop yield. The INMR must include the information unless otherwise specified.

1.4.2.1 Total Nitrogen Applied

All Members must report total nitrogen applied each year in the INMR. The total nitrogen applied includes all nitrogen proactively added to a field from any source such as organic amendments, synthetic fertilizers, manure, and irrigation water.

1.4.2.2 Total Nitrogen Removed

All Members must report the crop yield each year in the INMR unless the Member meets one of the criteria for alternative reporting requirements below. With approval from the Executive Officer, the following Members may initially report the Total Nitrogen Applied value only:

- Growers that (1) operate in areas with evidence of no or very limited nitrogen impacts to surface water or groundwater, (2) have minimal nitrogen inputs, and (3) have difficulty measuring yield;

- Diversified socially disadvantaged growers, as defined by the Farmer Equity Act of 2017,117 with (1) a maximum total acreage of 45 acres, (2) gross annual sales of less than $350,000, and (3) a crop diversity greater than 0.5 crops per acre (one crop for every two acres); or

[13] Outliers are growers that apply an excess amount of nutrients. Outliers will be identified by the Discharger Group annually based on the INMR submitted that particular year. The Discharger Group shall propose an approach to determine outliers and the Executive Officer shall approve after public notice and comment. When applicable the approach shall consider multi-year data.
[14] A field is a contiguous piece of land that has the same crop planted on it. There can be multiple fields on a single parcel and a field can span across multiple parcels.
[15] Nitrogen applied values include any nitrogen that is applied to a field such as organic amendments, synthetic fertilizers, manure, and irrigation water.

- Growers with (1) a maximum total acreage of 20 acres, and (2) a crop diversity greater than 0.5 crops per acre (one crop for every two acres).

The Discharger Group shall prepare an assessment report as part of its WQMP for Executive Officer approval that demonstrates that any Member seeks submit the A value only meets these criteria.

The Los Angeles Water Board may begin requiring the reporting of Total Nitrogen Removed by growers previously exempted from the nitrogen management requirements at any time and may accept alternative methodologies for reporting Total Nitrogen Removed.

1.4.3 Exemption from Nitrogen Management Reporting Requirements

Notwithstanding the provisions above, for Members where applied nitrogen is not expected to seep below the root zone in amounts that could impact groundwater and is further not expected to discharge to surface water, the INMPs, INMRs, and calculations in Sections 1.4.4.1 – 1.4.4.5 are not required.

The Discharger Group shall prepare an assessment report as part of its WQMP and submit it to the Executive Officer for approval, demonstrating Members meet the criteria for exemption from nitrogen management requirements.

1.4.4 INMR Data Evaluation

For each field, the Discharger Group shall calculate Nitrogen Removed (Section 1.4.4.1), Annual and Multi-year Nitrogen Applied/Nitrogen Removed (A/R Ratio) (Sections 1.4.4.2 and 1.4.4.3), and Annual and Multi-year Nitrogen Applied-Nitrogen Removed (A-R Difference) (Sections 1.4.4.4 and 1.4.4.5) as indicated below.

1.4.4.1 Total Nitrogen Removed Crop Coefficients

The Discharger Group shall calculate the total nitrogen removed by multiplying the crop yield by a crop-specific coefficient. The total nitrogen removed includes the nitrogen present in all harvested/sequestered materials removed from the field. The Discharger Group shall use Executive Officer approved crop-specific coefficients to calculate Total Nitrogen Removed values based on the crop yield values reported in the INMRs. For crops without existing coefficients, the Discharger Group shall determine, through literature review, nitrogen removed testing, and research, the most appropriate coefficients for converting crop yield to total nitrogen removed, according to the following schedule:

- By May 1, 2024, the Discharger Group shall submit a list of coefficients to the Los Angeles Water Board for approval by the Executive Officer for crops that cover 82% of irrigated acreage within Ventura County.
- By May 1, 2026, the Discharger Group shall submit a revised list of coefficients to the Los Angeles Water Board for approval by the Executive Officer for crops that cover 87% of irrigated acreage in Ventura County.
- By January 1, 2028, the Discharger Group shall submit a revised list of coefficients to the Los Angeles Water Board for approval by the Executive Officer for crops that cover 92% of irrigated acreage in Ventura County.

For the crops that do not have a developed and approved crop-specific coefficient, it is acceptable to use approved coefficients based on similar crop types where appropriate. Until crop-specific coefficients have been approved for a particular crop, the Discharger Group may only report the crop yield[16]. Once the crop-specific coefficient is approved the Discharger Group shall retroactively calculate the total nitrogen removed values and submit these values with the next Discharger Group INMR reporting.

1.4.4.2 Annual Nitrogen Applied/Nitrogen Removed Ratio (A/R Ratio)

The Discharger Group shall calculate the A/R ratio as the ratio of total nitrogen applied to total nitrogen removed. The formula for calculating the annual A/R ratio is below.

$$\text{A/R (1 year)} = \frac{\text{Nitrogen Applied during current reporting cycle}}{\text{Nitrogen Removed during current reporting cycle}}$$

1.4.4.3 Multi-Year Applied/Nitrogen Removed Ratio (A/R Ratio)

For each field for which three consecutive years of A/R ratio is available, the Discharger Group shall calculate the multi-year A/R ratio as the ratio of total nitrogen applied to total nitrogen for the three prior consecutive years. The formula for calculating the multi-year A/R ratio is below.

$$\text{A/R (3 year)} = \frac{\text{Sum of Nitrogen Applied during current and two previous reporting cycles}}{\text{Sum of Nitrogen Removed during current and two previous reporting cycles}}$$

[16] Published values for many crop-specific coefficients are already available in scientific literature and others are expected to become available in the near future. The Los Angeles Water Board acknowledge that some of these crop-specific coefficients warrant further refinement, such as crop coefficients based on crop varietals or regional characteristics. Nevertheless, the Los Angeles Water Board encourages the Discharger Group to start using available crop-specific coefficients to calculate total nitrogen removed and to perform relevant analysis prior to the 2024, 2026, and 2028 deadlines, and refine the coefficients over time.

1.4.4.4 Nitrogen Applied – Nitrogen Removed Difference (A-R Difference)

The Discharger Group shall calculate the A-R difference as the numerical difference between total nitrogen applied and total nitrogen removed. The formula for calculating the annual A-R Difference is below.

$$\text{A-R (1 year)} = \text{Nitrogen Applied (current reporting cycle)} - \text{Nitrogen Removed (current reporting cycle)}$$

1.4.4.5 Multi-Year Applied/Nitrogen Removed Difference (A-R Difference)

Beginning the third year of reporting, for those locations with data available for three years, the Discharger Group shall calculate and report a three-year running total for the A-R difference. The formula for the 3-year A-R differences is shown in the equation below.

$$\text{A-R (3 year)} = \begin{array}{l}[\text{Sum of Nitrogen Applied (current and two previous reporting cycles)}] \\ - [\text{Nitrogen Removed (current and two previous reporting cycles)}\end{array}$$

1.4.5 Discharger Group INMR Reporting

The Discharger Group shall report the following data in a tabular form to the Los Angeles Water Board with the annual monitoring report beginning December 15, 2026:

1) Anonymous Member ID: Each Anonymous Member ID may be associated with more than one field.
   i. Anonymous Field ID
2) Crop type
3) Nitrogen applied via fertilizers (lbs/acre)
4) Nitrogen applied via organics and compost (lbs/acre)
5) Nitrogen applied via irrigation water (lbs/acre)
6) Total Nitrogen applied (lbs/acre) which is sum of nitrogen from fertilizer, organics/compost, and irrigation water
7) Nitrogen removed per acre (lbs/acre)[17]
8) A/R ratio
9) A-R difference (lbs/acre)
10) 3-year A/R ratio, if available
11) 3-year A-R difference, if available

The Discharger Group shall submit individual field AR data by anonymous Member and Field level ID. The Los Angeles Water Board may request names or locations of the individual field AR data on a case-by-case basis.

[17] Until crop-specific coefficients have been approved for a particular crop, the Discharger Group may only report the crop yield.

1.4.6 Discharger Group INMR Outlier Methodology

The Discharger Group shall develop and submit for approval the outlier determination methodology and the follow-up program that shall include training for the identified outliers by August 1, 2025.

2 Water Quality Management Plan

A Discharger Group shall develop a water quality management plan (WQMP) to address exceedances of water quality benchmarks. The WQMP shall outline specific steps with milestones that work toward attainment of water quality benchmarks through the implementation of management practices. For existing Discharger Groups, the first WQMP shall be submitted on December 15, 2024, based on water quality monitoring data from 2007-2023 and a report of existing management practices obtained from surveys completed by Members. The WQMP shall be updated according to the schedule in 2.4 based on results of revised Farm Evaluation Survey completed by Discharger Group members as described in Section 2.1.c. WQMPs are subject to Executive Officer approval and shall be noticed for public comment prior to Executive Officer approval. The elements of the WQMP shall include:

2.1 Summary of Existing Conditions

The WQMP shall be organized by monitoring site. For each monitoring site provide:

a. A map showing the monitoring site, the land area draining to the monitoring site, the responsibility area, and the enrolled and non-enrolled irrigated agricultural parcels within each responsibility area. Maps shall be submitted electronically in GIS format in addition to being included in the written WQMP.

b. For each constituent that has exceeded a water quality benchmark (considering applicable averaging periods[18]), a graph showing the concentrations and the trends of the constituent over time since 2007.

c. A grower-specific field-level report, submitted with Anonymous Member IDs, of existing management practices[19] being implemented in the responsibility area. In addition to adoption rates, report on the degree of implementation

[18] The averaging period is typically defined in the Basin Plan, as part of water quality criteria promulgated by the USEPA, or as part of the criteria being used to interpret narrative objectives. If averaging periods are not defined in the Basin Plan, USEPA promulgated criteria, or other water quality criteria, or approved water quality trigger, the Discharger Group shall use the averaging period determined by the Los Angeles Water Board under Order R4-2016-0143.

[19] To determine existing management practice implementation, a discharger group must compile information from Farm Evaluation Surveys completed by members. The Farm Evaluation Surveys must be specific enough to produce the required level of detail for management practice reporting.

(e.g., size of area treated), for each type of management practice, as follows:

- For all types of management practices that require linear installation, report linear feet installed per corresponding total length. For example, list how many feet of windbreak are installed on the property per total wind-facing property line.
- For all types of management practices that require linear installation to treat an area of irrigated agricultural land, report linear feet installed and acres treated. For example, list how many feet of filter strip are installed at the property to treat how many acres of land.
- For all types of management practices that are installed to treat a specific area, report acres treated. For example, for a sedimentation retention basin, report how many acres of runoff from agricultural land are treated by this basin.

d. A pesticide use evaluation assessment, including the timing of pesticide applications, the application rates, the amounts of pesticide applied, and the points of application. Compare changes in pesticide concentrations at specific monitoring sites to pesticide use patterns for land area draining to the monitoring site.

e. Comparison of existing management practice implementation (type of management practices, adoption rates, and degree of implementation specified in Section 2.1.c.) in the responsibility area draining to the monitoring site to long-term monitoring data for the monitoring site using graphical comparisons, as specified in Section 2.1.b., in order to assess management practice effectiveness and determine if additional or upgraded management practices are necessary to meet water quality benchmarks.

2.2 Proposed Additional or Upgraded Management Practices

Based on the analysis completed under Section 2.1.e., for each monitoring site provide:

a. Description of additional or upgraded management practices, which shall be implemented by members in the land area draining to the monitoring site and in the responsibility area to address water quality benchmark exceedances, as follows:

- For exceedances of water quality benchmarks for nutrients, the WQMP must specify the following types of management practices:
  - Improved irrigation efficiency to reduce runoff

- Treatment systems or control systems, such as bioreactors, to remove nitrogen from discharges
- Practices to reduce erosion and sediment in runoff
- Vegetated practices, such as riparian buffers and vegetated channels

- For exceedances of water quality benchmarks for historic pesticides and their degradation products, such as DDT, DDE, chlordane, and dieldrin, the WQMP must specify the following types of management practices:
  - Improved irrigation efficiency to reduce runoff
  - Practices to reduce erosion and sediment in runoff
  - Stormwater runoff filtration and/or infiltration
  - Vegetated practices, such as riparian buffers and vegetated channels

- For exceedances of water quality benchmarks for copper and current use pesticides, such as diazinon, and pyrethroids, the WQMP must specify the following types of management practices:

  - Pesticide management plans
  - Improved irrigation efficiency to reduce runoff
  - Practices to reduce erosion and sediment in runoff
  - Stormwater runoff filtration and/or infiltration
  - Vegetated practices, such as riparian buffers and vegetated channels
  - Because source reduction and non-structural management practices have already been fully or nearly fully implemented[20] by all members in the land area draining to the monitoring site, the WQMP must specify implementation of structural/treatment management practices.

b. Description of TMDL-specific management practices, which shall be implemented by members in watersheds addressed by TMDLs to a degree appropriate to achieve TMDL load allocations, as follows:

- For the McGrath Lake OC Pesticides and PCBs TMDL, practices to reduce sediment runoff and improve irrigation efficiency on individual farms, and reduce sediment runoff in the Central Ditch

- For the Santa Clara River Estuary Toxaphene TMDL, practices to reduce sediment runoff and improved irrigation efficiency

c. For irrigated agricultural areas that are subject to erosion and may discharge sediment that may degrade surface waters, the WQMP must specify sediment and erosion control management practices.

[20] Or cannot be fully implemented. For example, if irrigation runoff cannot be reduced or eliminated by replacing inefficient irrigation systems with drip irrigation because of plant propagation needs or other considerations, then irrigation runoff must be treated before leaving the property or recycled (tailwater recovery).

d. A time-certain schedule that is as short as possible, but in no case more than 10 years, for implementation of additional or upgraded management practices to ultimately attain water quality benchmarks, unless otherwise specified in Table 3.

2.3 Outreach Plan

The WQMP shall include a strategy for communicating to members the need to implement additional or upgraded management practices. The outreach shall be culturally relevant and offered in appropriate languages. For each monitoring site:

a. Provide regular communication (a minimum of twice per year) to members alerting them of additional and upgraded management practice requirements specific to their monitoring site/responsibility area or TMDL watershed as specified in Section 2.2.

b. Provide education classes, referrals to technical assistance providers, and notices of available funding to members, targeting the constituents specific to their monitoring site/responsibility area or TMDL watershed as specified in Section 2.2.

2.4 WQMP Process

The Discharger Group shall submit the first WQMP by December 15, 2024, based on data collected since 2007 and results from surveys completed by its members. The Discharger Group shall update the WQMP with the latest monitoring data since 2007; new information about existing management practices based on updated field-level reports completed by its members, according to Section 2.1; and additional or new management practices proposed for the next year, according to Section 2.2; as well as an updated outreach plan, according to Section 2.3. The schedule for submittal of updated WQMPs is as follows:

Submit first WQMP: December 15, 2024, and every three years thereafter.

3 Individual Discharge Limitation Reporting

If a TMDL-associated water quality benchmark in Appendix 5 is not met at a Discharger Group monitoring site by the deadline in Table 3, then all Members in the responsibility area for the group monitoring site shall be subject to a discharge limitation equal to the water quality benchmark from the deadline forward. Members will be subject to individual discharge limitation until the group monitoring site is meeting the water quality benchmark. The Discharger Group shall continue to monitor, evaluate, and address water quality benchmark exceedances after Table 3 deadlines have passed as outlined in Section 2 of this Appendix.

Table 3 Water Quality Benchmark Compliance Deadlines

TMDL Constituents	Compliance Date
Malibu Creek Watershed Nutrients TMDL	October 14, 2022
Santa Clara River Nitrogen Compounds TMDL	March 23, 2004
Ventura River Estuary Trash TMDL	March 6, 2010
Calleguas Creek Nitrogen Compounds and Related Effects TMDL	July 16, 2010
Revolon Slough and Beardsley Wash Trash TMDL	March 6, 2010
Upper Santa Clara River Chloride TMDL	April 6, 2010
Calleguas Creek Watershed and Mugu Lagoon Siltation TMDL	March 24, 2015
Calleguas Creek Watershed and Mugu Lagoon Toxicity, Chlorpyrifos, and Diazinon TMDL	March 24, 2016
Ventura River Algae TMDL	June 28, 2019
McGrath Lake OC Pesticides and PCBs TMDL	June 30, 2021
Malibu Creek Watershed Sedimentation and Nutrients TMDL	October 14, 2022
Calleguas Creek Watershed and Mugu Lagoon Metals and Selenium TMDL	March 26, 2022
Calleguas Creek Watershed Boron, Chloride, Sulfate and TDS (Salts) TMDL	Dec. 23, 2023
Santa Clara River Estuary Toxaphene TMDL	October 7, 2025
Calleguas Creek Watershed and Mugu Lagoon OC Pesticides & PCBs TMDL	March 24, 2026
Oxnard Drain #3 Pesticides, PCBs, and Sediment Toxicity TMDL	April 14, 2026
Santa Clara River Bacteria TMDL	March 21, 2023 dry March 21, 2029 wet

3.1. Discharge Limitation Compliance Implementation

a. Members are subject to discharge limitations for exceedances of water quality benchmarks in Appendix 5 unless there is substantial evidence that agriculture discharges did not cause or contribute to that exceedance (e.g., the exceedance was the result of the intentional act of a third party, lab error, or other non-controllable

factor). For exceedances of water quality benchmarks for trash, evidence that Members are implementing a Minimum Frequency of Assessment and Collection (MFAC) Program will be considered when determining if agricultural discharges are causing or contributing to the exceedance. At a minimum, this evidence must include a demonstration that trash is not accumulating in deleterious amounts between trash assessments and collection events.

b. Members may demonstrate compliance with a discharge limitation by either:

- Track 1: implementing an individual MRP to directly demonstrate that applicable discharge limitations are being met at an edge of field compliance point(s); or
- Track 2: implementing a farm-level Management Practice Plan certified by a qualified professional that implementation of the selected management practices in the plan is assured of meeting discharge limitations. The Track 2 compliance alternative is only available to Members in good-standing[21]. A Member will only be deemed in compliance with the discharge limitation via Track 2 if the Member is engaged in the adaptive management process described in section 3.4.4.

c. Members are considered in compliance with the discharge limitations upon submitting the written notice to the Los Angeles Water Board identifying their intent to comply through either Track 1 or Track 2.

3.2 Required Notices

a. On or before December 15, 2023, the Discharger Group shall notify the Los Angeles Water Board of exceedances documented under Order 2021-0045-A2 that trigger individual discharge limitations and begin outreach to potentially affected Members in the Responsibility Area for these exceedances.

b. Within 45 days of identifying any new exceedance of a water quality benchmark that would trigger individual discharge limitations, the Discharger Group must notify the Los Angeles Water Board of the exceedance and, upon Water Board concurrence, begin outreach to potentially affected Members in the Responsibility Area for these exceedances. An exceedance is considered identified when the lab analysis is received by the Discharger Group for all water quality benchmarks except those for the Calleguas Creek Metals TMDL, Calleguas Creek Salts TMDL, Calleguas Creek Siltation TMDL, and

[21] To be a Member in "good-standing" the Member must:
- Be enrolled with the Discharger Group
- Be up-to-date on educational credits
- Be up-to-date on the Field Evaluation Survey submittal

Santa Clara River Bacteria TMDL which must be calculated on a yearly basis. Therefore, for the Calleguas Creek Metals TMDL, Calleguas Creek Salts TMDL, Calleguas Creek Siltation TMDL, and Santa Clara River Bacteria TMDL an exceedance is considered identified when it is reported in the Annual Monitoring Report due on December 15th of each year.

c. If a new exceedance is identified, each Member subject to an individual discharge limitation shall submit a written notice to the Los Angeles Water Board **within two months of receiving the notification by the Discharger Group** that includes the following:

- whether the Member will implement Track 1 or Track 2 to comply with the applicable individual discharge limitations and
- a statement attesting that they are a Member in good-standing

A template notice is available on the Los Angeles Water Board website.

3.3 Track 1: Implementation of Individual MRPs

3.3.1 Individual MRP

Individual MRPs shall be submitted directly to the Los Angeles Water Board with a copy to the Discharger Group. The Discharger Group shall not be held responsible for failure of a member to submit an individual MRP.

Dischargers shall begin implementation of their individual MRP within 10 days of approval by the Executive Officer.

The individual MRP shall include:

- A site description
- The number and location of individual discharge monitoring points to serve as compliance points. Individual discharge monitoring points must be selected to adequately characterize the majority of the discharge from the member site, based on its typical discharge patterns, including tail water discharges, discharges from tile drains, and stormwater runoff.
- GPS coordinates and a map of the member site with drainage patterns and planned discharge monitoring points identified.
- An QAPP section with the following information:
    - A description of sample collection procedures including field parameters needed.

- Description of how samples will be handled, transported, and received by the laboratory.

A laboratory that is certified by the State Water Board's Environmental Laboratory Accreditation Program (ELAP) shall conduct all laboratory analysis according to standard methodologies (e.g., USEPA methods and/or Standard Methods for the Examination of Water and Wastewater). Laboratory analytical methods must be included in the QAPP section. All data shall be submitted in an electronic CEDEN-compatible format (compatible formats available at http://www.ceden.org/ceden_datatemplates.shtml) to the Los Angeles Water Board. The QAPP section shall include the laboratory's Standard Operating Procedures (SOPs).

Samples shall be collected from each individual discharge monitoring point. If a water quality benchmark exceedance occurred during a wet weather event, two samples shall be collected per year in wet weather. If a water quality benchmark exceedance occurred during a dry weather event, two samples shall be collected per year in dry weather. If a water quality benchmark exceedance occurred in both and wet and dry weather event then four samples (two in wet weather and two in dry weather) shall be collected per year.

Dry-weather monitoring must be conducted during an irrigation event of the type and length that would produce the most runoff on the portion of the site draining to the monitoring point. If there is no runoff at the monitoring point, then the observation of no runoff shall be documented in the field data sheet. The sampling event shall be rescheduled, or the Discharger shall submit a declaration that their irrigation practices produce no runoff. Dry-weather sampling for toxicity and for currently applied pesticides (e.g., chlorpyrifos, diazinon, pyrethroids) must occur during the first irrigation event following pesticide application.

Wet-weather monitoring must occur within 24 hours of a storm that produces enough rain to generate runoff from the member site, preferably between half an hour and 6 hours after runoff starts.

Samples shall be collected until water quality benchmarks are attained at each individual discharge monitoring point for two consecutive years. After attainment, each individual discharge monitoring point shall be monitored every five years by the Member.

A template individual MRP is on the Los Angeles Regional Water Board website.

3.3.2 Individual Annual Monitoring Report

Results must be submitted annually, with an individual Annual Monitoring Report (AMR) beginning December 15th. The individual AMR shall include:

1. Sampling and analytical methods used
2. For each monitoring site:
    a. Site description, including photographs
    b. GPS coordinates of the site and a map showing the property boundary and discharge monitoring points
    c. Parameters monitored and frequency
    d. Water quality benchmark exceedances and tabulated results of trend analysis
    e. Data interpretation including assessment of compliance and/or noncompliance with water quality benchmarks and/or discharge limitations
    f. Results of toxicity tests and results of TIE, where performed
3. Copy of chain of custody, submitted electronically
4. Associated laboratory and field quality control samples results,
5. Summary of precision and accuracy
6. Quality control data interpretation, including assessment of data quality objectives
7. Analytical results submitted in a CEDEN compatible tabular format

3.4 Track 2: Individual Farm-Level Management Practice Plans

The farm-level Management Practice Plans (MPPs) are due to the Los Angeles Water Board for Executive Officer approval according to the following schedule:

Table 4. Track 2 - MPP Submission Due Dates based on Geographical Prioritization if water quality benchmarks are exceeded after the TMDL Compliance Deadline.

Priority	Responsibility Area or Subwatershed[A]	Associated VCAILG Monitoring Site	Date MPP Due (all, except Diversified Socially Disadvantaged Growers)	Date MPP Due (Diversified Socially Disadvantaged Growers)
1	McGrath Lake Drainage	OXD_CENTR	5/15/2024	5/15/2025
2	Lower Ventura	V02D_SPM	9/15/2024	9/15/2025
	Tapo Canyon	S04T_TAPO		
3	Boulder Creek	S03T_BOULD	1/15/2025	1/15/2026
4	Bardsdale	S03D_BARDS	5/15/2025	5/15/2026
5	Arroyo Simi	06T_LONG2	9/15/2025	9/15/2026
6	Arroyo Conejo	06T_LONG2	1/15/2026	1/15/2027
7	Bearsdley	05T_HONDO	5/15/2026	5/15/2027
	Malibu			

8	Las Posas	06T_LONG2	9/15/2026	9/15/2027
9	Ventura River Inland	VRT_THACH	1/15/2027	1/15/2028
10	San Antonio Creek	VRT_SANTO	5/15/2027	5/15/2028
	LaVista Drain	05D_LAVD		
	Santa Paula Creek	S03T_TIMB		
11	Todd Barranca	S02T_TODD	9/15/2027	9/15/2028
12	Lower Calleguas Creek	04D_ETTG	1/15/2028	1/15/2029
	Etting-Wood	04D_ETTG		
	Ellsworth Barranca	S02T_ELLS		
	South Revolon	04D_LAS		
13	Mugu Lagoon	01T_ODD3_EDI	5/15/2028	5/15/2029

[A]Responsibility Areas and monitoring sites may be realigned to more closely reflect TMDL boundaries, with approval of Executive Officer.

Farm-level MPPs shall be submitted directly to the Los Angeles Water Board with a copy to the Discharger Group. The Discharger Group shall not be held responsible for failure of a member to submit a farm-level MPP.

If an exceedance is first identified after a MPP submittal date or if TMDL benchmark exceedances occurs for a responsibility area not specified in Table 4, the MPP will be due 6 months after a member notifies the Los Angeles Water Board that they will comply through Track 2.

3.4.1 Contents of a Farm-Level MPP

The farm-level MPP shall include:

- The constituent(s) to be addressed.
- A map of the site.
- A site analysis, including the crops being grown, the frequency of crop rotation and how that might affect runoff quality, and the drainage points.
- All the management practices currently being implemented on the site.
- All the management practices that will be implemented on the site.
- A quantitative demonstration that all the management practices currently being implemented and that will be implemented will cumulatively address the constituent(s) of concern. The assessment shall be based on the location, size,

and volume retention capacity or pollutant reduction efficiency of the management practices.

- The plan for ongoing maintenance of the management practices to ensure continued effectiveness.
- The farm-level MPP shall include structural management practices.

A template farm-level MPP is on the Los Angeles Water Board website.

3.4.2 Certification Requirements

Farm-level MPPs must be certified by RCD or NRCS staff, or equivalent professional expert with knowledge and experience in:

- Erosion control
- Hydrology
- Environmental engineering
- Hydraulic engineering
- Agricultural engineering

Specifically, equivalent professional experts must have knowledge and experience related to the management of constituent(s) being addressed in the farm-level MPP as follows:

- For nutrient exceedances, equivalent professional experts shall have knowledge and experience in:
    - Filter strips
    - Tailwater recovery systems
    - Riparian buffers
    - Bioreactors
- For historic pesticides and their degradation products, such as DDT, DDE, chlordane, and dieldrin, equivalent professional experts shall have knowledge and experience in:
    - Filter strips
    - Stormwater infiltration
    - Riparian buffers
    - Erosion control
- For metals and current use pesticides, such as diazinon, and pyrethroids exceedances, equivalent professional experts shall have knowledge and experience in:

  - Filter strips
  - Stormwater infiltration
  - Riparian buffers
  - Erosion control

- For bacteria exceedances, equivalent professional experts shall have knowledge and experience in:

  - Tailwater recovery systems
  - Stormwater infiltration

Failure to meet the knowledge and expertise requirement may result in the rejection of the certified farm-level MPP.

3.4.3 Farm-Level MPP Implementation Schedule

The farm-level MPP must be implemented in accordance with the following schedules:

a. Implementation schedules for all members, except diversified socially disadvantaged growers

- Vegetated management practices (e.g., filter strips, grassed waterways, etc.) within five months of Executive Officer approval of the farm-level MPP;

- Structural non-treatment management practices (e.g., sedimentation basins, etc.) within eight months of Executive Officer approval of the farm-level MPP;

- Treatment management practices (e.g., engineered wetlands, in-ground bioreactors, modular bioreactors, etc.) and regional projects within fifteen months of Executive Officer approval of the farm-level MPP; and

- Vegetated management practices that are installed as part of a conversion from conventional farming practices to regenerative farming practices within fifteen months from Executive Officer approval.

b. Implementation schedules for diversified socially disadvantaged growers

- Vegetated management practices (e.g., filter strips, grassed waterways, etc.) within seven months of Executive Officer approval of the farm-level MPP;

- Structural non-treatment management practices (e.g., sedimentation basins, etc.) within eleven months of Executive Officer approval of the farm-level MPP;

- Treatment management practices (e.g., engineered wetlands, in-ground bioreactors, modular bioreactors, etc.) and regional projects within eighteen months of Executive Officer approval of the farm-level MPP; and

- Vegetated management practices that are installed as part of a conversion from conventional farming practices to regenerative farming practices within eighteen months from Executive Officer approval.

The Executive Officer may approve longer schedules on a case-by-case basis. Members seeking longer schedules to implement the farm-level MPP must include a justification for the proposed schedule and milestones. These requests must be posted on the Los Angeles Water Board's website for a minimum of 30 days prior to approval.

3.4.4 Farm-Level MPP Adaptive Management

If inspections or Discharger Group monitoring data show water quality is not improving at the group monitoring site an updated MPP may be required unless a Member can demonstrate that it has eliminated all discharges to surface waters of the constituent(s) addressed by the MPP. An updated MPP may be required at any time but no sooner than two years from the Los Angeles Water Board approval of the initial MPP. The Los Angeles Water Board will consider implementation status of other Member's MPPs in the same responsibility area prior to directing a Member to update the MPP.

Within 60 days of notification by the Los Angeles Water Board that new or modified management practices are needed, a Member shall submit a revised farm-level MPP with modified and/or upgraded management practices and revised implementation schedules. In no case shall the revised schedules be longer than the schedules in section 3.4.3 unless more time is justified and approved by the Executive Officer.

3.4.5 Farm-Level MPP Enforcement

Sites addressed by a farm-level MPP are subject to inspection by the Los Angeles Water Board. If inspections show that the farm-level MPP is not being implemented as approved, Members may be subject to enforcement.

4 Reporting Requirements Discharger Group

The Discharger Group shall submit the following reports and templates to the Los Angeles Water Board by the deadlines identified below.

4.1 Monitoring and Reporting Plan

Due: six months from the adoption of Order No. R4-2023-0353, and updated, if needed, within three months of the submittal of the Annual Monitoring Report.

The MRP must include the components of the monitoring and reporting requirements as stated in this Appendix. The MRP shall also include the following elements:

1) Title page and Table of Contents
2) Description of the Discharger Group, including formation and background information
3) Summary of Discharger Group membership and setting, including characteristics relevant to the monitoring
4) Summary of the historical data and/or on-going monitoring at each monitoring site
5) GPS coordinates for each monitoring site
6) Maps showing property boundaries, land use, topography, waters of the state, crop types, and any other features which may affect water quality
7) Summary of current pesticide use practices (including top 5 pesticides applied by volume and 5 most frequently applied pesticides).
8) Monitoring constituents and frequency of sampling to include all constituents in Tables 1 and 2
9) A QAPP consistent with the requirements described in section 1.3
10) Documentation of monitoring protocols including sample collection and handling methods
11) Discharger Group contact information

4.2 Annual Monitoring Report

Due: Annually beginning December 15th

The Discharger Group shall prepare the Annual Monitoring Report (AMR) after monitoring events have been completed and it shall include a review of the results of the data collected and data evaluation and a WQMP progress report. The AMR shall include the following components:

1) Title page and Table of contents

2) Description/Summary of Discharger Group membership and setting

3 Updated membership list, submitted electronically

4) Monitoring objectives

5) Parameters monitored and frequency, including sampling and analytical methods used

6) Monitoring Sites Information. Including for each monitoring site:

   a. Site description, and photographs

   b. GPS coordinates of the site and a map showing the responsibility area and the land area draining to the site.

7) Monitoring Events Records, Copies of all field documentation. Documentation should include the following information for each site and sampling event:

a. Date and time of sampling

b. Sample location (GPS coordinates)

c. Photograph(s) of the site

d. Individual(s) who performed the sampling or measurements

e. Observed Field parameters (such as pH and other field measured parameters) and including (where available): description of the weather, rainfall, temperature, photographs, stream flow, color of the water, odor, farm conditions which may affect water quality (crop type, cultivation practices and pesticide, fertilizer or sediment control measures) and other relevant information that can help in data interpretation.

8) Monitoring Data Results, for each site and sampling event. All monitoring data shall be submitted in an electronic CEDEN-compatible format. Data shall include:

a. Date(s) analyses were performed

b. Laboratory and/or individual(s) who performed the analyses

c. Analytical techniques or method used along with method detection limits and reporting limits

d. Results of analyses

9) Monitoring Data Analysis

a. Comparison of data with applicable water quality benchmarks.

b. Water quality benchmark exceedances and tabulated results of trend analysis.

c. Data analysis including assessment of compliance and/or noncompliance with water quality benchmarks.

10) Discharger Group INMR Reporting

11) Quality Control Section, including:

a. Copy of chain of custody, submitted electronically

b. Associated laboratory and field quality control samples results

c. Summary of precision and accuracy

d. Quality control data interpretation, including assessment of data quality objectives

12) WQMP Progress Report

For each responsibility area:

a. List of enrolled and non-enrolled parcels

b. Copies of outreach materials (mailings, handouts from education classes)

c. Report on members who have completed and not completed:
   a. field-level reports
   b. education requirements
   c. INMP or certified INMP
   d. INMR

4.3 Farm Evaluation Survey Template

The Discharger Group shall submit the template Farm Evaluation Survey to the Executive Officer for review and approval within 120 days of the adoption of Order No. R4-2023-0353 and shall make the Farm Evaluation Survey template available to its members according to the schedule in Section 2 of these monitoring and reporting requirements.

4.4 Water Quality Management Plan

First WQMP due: December 15, 2024, then every three years thereafter

For existing Discharger Groups, the first WQMP shall be based on water quality monitoring data from 2007-2023 and the results of surveys completed by its members. The Discharger Group shall begin surveying its members with the field-level reports within six months of the adoption of Order No. R4-2023-0353 in order to submit the first WQMP. The WQMP shall include a list of any Members that meet the criteria for alternative nitrogen reporting or that are exempt from nitrogen management requirements.

All Discharger Groups shall update the WQMP every three years using all monitoring data collected by the Discharger Group since its inception. The required elements of a WQMP are presented in Section 2 of these Monitoring and Reporting Requirements.

4.5 Irrigation and Nutrient Management Plan and Report Templates

The Discharger Group shall develop templates for the INMP and the INMR and submit the drafts to the Executive Officer for approval three months after the adoption of Order R4-2023-0353.

The templates shall include the following language:

For any INMP reports that are required to be certified, the report shall include the following certification language:

The person signing this report certifies, under penalty of law, that the report was prepared under their direction and supervision, that the information and data reported is to the best of their knowledge and belief, true, accurate, and complete, and that they are aware that there are penalties for knowingly submitting false information. The qualified professional signing the report may rely on the information and data provided by the Discharger and is not required to independently verify the information and data.

The person signing the report below further certifies that they used sound irrigation and nitrogen management planning practices to develop irrigation and nitrogen application recommendations and that the recommendations are informed by applicable training for meeting the crop's agronomic needs while minimizing nitrogen loss to surface water and groundwater. Where the person signing the INMP is not the Member, he/she is not responsible for any damages, loss, or liability arising from subsequent implementation of the INMP by the Member in a manner that is inconsistent with the INMP's recommendations for nitrogen application. This certification does not create any liability for claims for environmental violations.

Qualified Professional Certification:

I, _____, certify this INMP in accordance with the statement above.
_____ *(Signature)*

The Discharger additionally agrees as follows:

I, _____, Member, have provided information and data to the certifier above that is, to the best of my knowledge and belief, true, accurate, and complete, that I understand that the certifier may rely on the information and data provided by me and is not required to independently verify the information and data, and that I further understand that the certifier is not responsible for any damages, loss, or liability arising from subsequent implementation of the INMP by me in a manner that is inconsistent with the INMP's recommendations for nitrogen application. I further understand that the certification does not create any liability for claims for environmental violations.
_____ (Signature

4.6 Irrigation and Nutrient Management Plan and Report

First INMP due: March 1, 2025, and annually thereafter

First INMR due: March 1, 2026, and annually thereafter

The Discharger Group shall review each Members' INMR and independently calculate and report both the A/R ratio and the A-R difference for each reporting cycle. Beginning the third year of reporting, for those locations with data available for three years, the Discharger Group shall calculate and report a three-year running total for both the A/R ratio and the A-R difference.

The Discharger Group shall submit the reports by anonymous Member ID and field level ID. The Los Angeles Waterboard may request names or locations of the individual field AR data on a case-by-case basis.

4.7 Outlier Methodology

Due: August 1, 2025, revised as necessary

The Discharger Group shall identify the outliers for AR data, subject to follow up actions, and the standard used to make that determination.

4.8 Groundwater Trend Monitoring Plan

Groundwater Trend Monitoring Plan due: December 15, 2024

4.9 Groundwater Trend Monitoring Report

Groundwater Trend Monitoring Report due: December 15, 2025, and every three years thereafter.

4.10 Groundwater Protection Formula, Values, and Targets

Groundwater Protection Formula due: September 1, 2026

Groundwater Protection Values due: 6 months after Executive Officer approval of the Groundwater Protection Formula

Groundwater Protection Targets due: 1 year after Executive Officer approval of the Groundwater Protection Values, and be reviewed and revised as necessary every 5 years.

5 Reporting Requirements Individual Members of a Discharger Group

Members subject to individual discharge limitations shall submit the following reports to the Los Angeles Water Board by the deadlines identified below.

5.1 Track 1 - Individual MRP

5.1.1 Individual MRP

Due: Six months after receiving notice from the Discharger Group of an exceedance of a water quality benchmark

Individual MRPs shall be submitted directly to the Los Angeles Water Board.

5.1.2 Individual AMR

Due: December 15th and annually thereafter until 2 consecutive years of no water quality benchmark exceedances. After demonstrating 2 years of no exceedances, the individual AMR is due every 5 years provided there are no further documented exceedances.

5.2 Track 2 - Farm-Level MPP

Due: According to the schedule in Table 4.

Individual MPP shall be submitted directly to the Los Angeles Board.

5.2.1 Implementation of MPP

The MPP must be fully implemented within three months to one year of approval by the Executive Officer, according to the schedule in section 3.4.3.

Due: According to the schedule in section 3.4.3, self-attestation, under penalty of perjury, the MPP is fully implemented.

6 Other Reporting Requirements for Discharger Group and Discharger Group Members

1) A transmittal letter shall accompany each report. This letter shall include a brief discussion of any violations of the General WDRs that were found during the reporting period and cite to the pages in the report that note these violations. The transmittal letter shall be signed and shall contain a perjury statement by the Discharger Group's authorized agent or Discharger Group Member. This statement shall state:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who

manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment for perjury."

2) If a Discharger Group or individual discharger monitors any constituent (at MRP-established locations), for the purposes of evaluating compliance with the provisions of this General Order, more frequently than required by the General WDRs, the Discharger shall submit the monitoring results to the Los Angeles Water Board.

The Discharger Groups and Discharger Group Members shall retain records of all monitoring information including all calibration and maintenance records, copies of all reports required by this General Order, and records of all data used to complete the application for this General Order.

3) Records shall be maintained for a minimum of ten years from the date of the sample, measurement, or report. Back up files of these records must be stored in a secure, offsite location managed by an independent entity. This period may be extended during the course of any unresolved enforcement action, including, but not limited to, litigation regarding this discharge, or when requested by the Executive Officer.

4) Each monitoring report must affirm in writing that "All analyses were conducted at a laboratory certified for such analyses by the Environmental Laboratory Accreditation Program, and in accordance with current USEPA guideline procedures, or as specified in this Monitoring Program."

5) If there is no discharge during any reporting period, the report shall so state. Monitoring reports must be provided in electronic format to be specified by the Executive Officer.

6) Records and reports submitted to the Los Angeles Water Board are public documents and shall be made available for inspection during normal business hours at the Los Angeles Water Board office except for reports, or portions of such reports, subject to an exemption from public disclosure in accordance with California law and regulations, including the Public Records Act, Water Code section 13267(b)(2), and the California Food and Agriculture Code. If the Discharger Group or Member of the Discharger Group asserts that all or a portion of a report is subject to an exemption from public disclosure, it must clearly indicate on the cover of the report that it asserts that all or a portion of the report is exempt from public disclosure, a general description of the redacted information and the basis for that redaction. Any Discharger Group or Member that submits redacted information must also submit a complete and unredacted version of the report that is clearly labeled "CONFIDENTIAL". All reports labeled "CONFIDENTIAL" will be maintained by the Los Angeles Water Board in a separate, confidential file unless the Los Angeles Water Board determines that the

information is not confidential. Data on waste discharges, water quality, meteorology, geology, hydrogeology, and field-level nitrogen application shall not be considered confidential. NOIs shall generally not be considered exempt from disclosure. If, at any time, the Los Angeles Water Board cannot identify a reasonable basis for treating the information as exempt from disclosure, the Executive Officer will notify the Member or Discharger Group that the information will be placed in the public file unless the Los Angeles Water Board receives, within 10 calendar days, a satisfactory explanation supporting the claimed exemption. Knowingly making any false statements on a monitoring or technical report submitted to the Los Angeles Water Board may result in the imposition of criminal penalties as provided for in Water Code section 13268(a)(2).