

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION**

ORDER R5-2015-XXXX

**WASTE DISCHARGE REQUIREMENTS GENERAL ORDER
FOR
GROWERS IN THE GRASSLAND DRAINAGE AREA**

TABLE OF CONTENTS

Findings	2
I. Coverage	16
II. Prohibitions	17
III. Receiving Water Limitations	17
A. Groundwater Limitations	17
B. Compliance with Receiving Water Limitations	17
IV. Provisions	17
A. General Specifications	17
B. Requirements for Members in the Grassland Drainage Area	18
C. Requirements for the GBD Steering Committee	20
V. Effective Dates	21
VI. Permit Reopening, Revision, Transfer, Revocation, Termination, and Reissuance	21
VII. Required Reports and Notices – Member	22
A. Notice of Intent / Membership Application	22
B. Farm Evaluation	23
C. Nitrogen Management Plan	23
D. Mitigation Monitoring	25
E. Notice of Termination	25
VIII. Required Reports and Notices – GBD Steering Committee	25
A. Membership (Participant) List	25
B. Templates	25
C. Groundwater Quality Assessment Report and Evaluation/Monitoring Workplans	26
D. Monitoring Report	27
E. Groundwater Quality Management Plan (GQMP)	27
F. Technical Reports	28
G. Notice of Termination	29
H. Basin Plan Amendment Workplan	29
IX. Reporting Provisions	29
X. Record-keeping Requirements	30
XI. Annual Fees	30
XII. Time Schedule for Compliance	30

D
R
A
F
T

- Attachment A: Information Sheet
- Attachment B: Monitoring and Reporting Program Order (contains appendices)
- Attachment C: CEQA Mitigation Measures
- Attachment D: Findings of Fact
- Attachment E: Definitions and Acronyms

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The California Regional Water Quality Control Board, Central Valley Region (hereafter, Central Valley Water Board or board), finds that:

Findings

SCOPE AND COVERAGE OF THIS ORDER

1. This Order serves as general waste discharge requirements (WDRs) for waste discharges from irrigated land within the Grassland Drainage Area (GDA) that could affect groundwater of the state. The discharges result from leaching of irrigation water, subsurface drain water, and/or stormwater from agricultural lands that are not captured by subsurface drainage systems in the GDA. Such discharges can reach waters of the state directly or indirectly.¹
2. This Order applies to owners and operators of irrigated lands within the Grassland Drainage Area. Either the owner or operator may enroll an irrigated lands parcel under this Order. The Member is required to provide written notice to the non-Member owner or operator that the parcel has been enrolled under the Order. Enforcement action by the board for non-compliance related to an enrolled irrigated lands parcel may be taken against both the owner and operator. This order applies throughout the Grassland Drainage Area.
3. The Grassland Watershed is a valley floor subbasin of the San Joaquin River Basin, covering an area of approximately 370,000 acres. The Grassland Drainage Area, about 97,400 acres, is located within the Grassland Watershed, roughly between Los Banos to the north and Mendota to the south. The groundwater in the Grassland Drainage Area is generally shallow and high in salts. Subsurface drains (also known as tile drains) are used to collect the high salt drain water and maintain the water table below the crop root zone. Since the tile drains essentially establish the top of the water table, the tile drains intercept much of the discharge from the crop root zone as the discharge reaches first encountered groundwater. Some of the tile drainage is reused either locally or in the San Joaquin River Improvement Project, while the rest of the tile drainage is routed through the Grassland Bypass Project. The Grassland Bypass Project routes this subsurface agricultural drainage from the Grassland Drainage Area through the Grassland Bypass channel to the lower 28 miles of the San Luis Drain, thereby separating drainage discharge from wetland water supply channels.² This Order covers requirements for discharges to groundwater that are not captured by the tile drainage systems in the area. The Grassland Drainage Area water districts prohibit tailwater return flows into district-owned canals. In addition to subsurface drainage, any stormwater runoff is regulated through the waste discharge requirements for the Grasslands

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¹ Definitions for “waste discharges from irrigated lands,” “waste,” “groundwater,” “surface water,” “stormwater runoff,” and “irrigation runoff,” as well as all other definitions, can be found in Attachment E to this Order. It is important to note that irrigation water, the act of irrigating cropland, and the discharge of irrigation water unto itself is not “waste” as defined by the California Water Code, but that irrigation water may contain constituents that are considered to be a “waste” as defined by California Water Code section 13050(d).

² Effluent and discharge limits for the Grassland Bypass Project are in WDR Order R5-2015-XXXX, adopted by the Board on –date-.

Bypass Project. Figure 1 is a map of the Grassland Drainage Area and the areas covered by the water districts.

4. The San Joaquin River Improvement Project (SJRIP) occupies more than 6,000 acres within the Grassland Drainage Area. Approximately 5,200 acres are planted with salt tolerant crops for drainage reuse. The area of the SJRIP that meets the definition of irrigated lands is subject to the same requirements under this Order as other irrigated crop land within the Grassland Drainage Area. The SJRIP area is also used to pilot test various treatment options and may be used to implement long-term drainage treatment or disposal options. This Order generally does not regulate the discharge to land or surface water of treated tile drainage water. However, this Order does regulate treated tile drainage water that is applied to the irrigated cropland in the SJRIP area, if 1) the mass load of the effluent is not greater than the influent; 2) the concentration of the effluent is not greater than the influent; and 3) there is no material in the effluent that was not present in the influent.
5. The Steering Committee of the Grassland Basin Drainage Management Activity is recognized as the third party representing Members under this Order (hereafter “GBD Steering Committee” or “third-party”). The Grassland Basin Drainage Management Activity Agreement is an agreement under the umbrella of the San Luis & Delta Water Authority (Water Authority), a joint powers agency organized pursuant to the California Government Code Section 6500 *et seq.* The GBD Steering Committee is a separate entity with a board of directors which prepares a budget, and may enter into contractual agreements.³ Individual Members under this Order participate by joining a special project of the Activity Agreement. The Grassland Basin Drainage Management Activity Agreement members and GBD Steering Committee have long been involved in developing and implementing near- and long-term solutions for drainage problems in the GDA.
6. “Irrigated lands” means land irrigated to produce crops or pasture used for commercial purposes including lands that are planted to commercial crops that are not yet marketable (e.g., vineyards and tree crops).
7. This Order is not intended to regulate water quality as it travels through or remains on the surface of a Member’s agricultural fields or the water quality of soil pore liquid within the root zone.⁴
8. This Order does not apply to discharges of waste that are regulated under other Central Valley Water Board issued WDRs or conditional waiver of WDRs (waiver).⁵ If the other Central Valley Water Board WDRs/waiver only regulates some of the waste discharge activities (e.g., application of treated wastewater to crop land) at the regulated site, the owner/operator of the irrigated lands must obtain regulatory coverage for any discharges of waste that are not regulated by the other WDRs/waiver. Such regulatory coverage may be sought through enrollment under this Order or by obtaining appropriate changes in the owner/operator’s existing WDRs or waiver.

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³ The GBD Steering Committee budget is tracked as part of the Water Authority budget. “Participants” (individual Members of the GDA) are allowed to join in the Activity Agreement. This structure is similar to the Westside San Joaquin River Watershed Coalition (Westside Coalition) under the umbrella of the San Joaquin Valley Drainage Authority.

⁴ Water that travels through or remains on the surface of a Member’s agricultural fields includes ditches and other structures (e.g., ponds, basins) that are used to convey supply or drainage water within that Member’s parcel or between contiguous parcels owned or operated by that Member.

⁵ Subsurface agricultural drainage from the Grassland Drainage Area is regulated by Waste Discharge Requirements Order R5-2015-XXXX issued to the San Luis & Delta-Mendota Water Authority and the United States Department of Interior, Bureau of Reclamation.

9. This Order implements the groundwater regulation portion of the long-term Irrigated Lands Regulatory Program (ILRP) in the GDA, while Order R5-2015-XXXX regulates discharge of surface water from the GDA. The long-term ILRP has been conceived as a range of potential alternatives and evaluated in a programmatic environmental impact report (PEIR).⁶ The PEIR was certified by the Central Valley Water Board on 7 April 2011; however, the PEIR did not specify any single program alternative. The regulatory requirements contained within this Order fall within the range of alternatives evaluated in the PEIR. This Order, along with other orders adopted for irrigated lands within the Central Valley, will constitute the long-term ILRP.

GROWERS REGULATED UNDER THIS ORDER

10. This Order regulates both landowners and operators of irrigated lands from which there are discharges of waste that could affect the quality of groundwater of the state. In order to be covered by this Order, either the landowners or operators must be a Member. Because this Order regulates both landowners and operators, but does not require enrollment of both parties, the provisions of this Order require that the Member provide notification to the non-Member responsible party of enrollment under this Order. The GBD Steering Committee, representing Members, will assist its Members in complying with the requirements of this Order. Both the landowner and operator are ultimately responsible for complying with the terms and conditions of this Order.
11. The GBD Steering Committee will be responsible for fulfilling the regional requirements and conditions (e.g., groundwater monitoring, regional management plan development and tracking) of this Order and associated Monitoring and Reporting Program Order R5-2015-XXXX (MRP). Any requirements or conditions not fulfilled by the GBD Steering Committee are the responsibility of the individual Member. The Member and non-Member owners and operators are responsible for conduct of operations on the Member's enrolled property.

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REASON FOR THE CENTRAL VALLEY WATER BOARD ISSUING THIS ORDER

12. The Grassland Drainage Area includes 97,400 acres of farmland approximately located between the California Aqueduct on the west and the San Joaquin River on the east within the Grassland Watershed. Approximately 87,000 acres of this land is actively farmed, while approximately 10,400 acres in the Widren Water District and Broadview Water District portion of the GDA are fallowed in most years.
13. The Grassland Drainage Area overlies the Delta-Mendota groundwater subbasin of the San Joaquin Valley groundwater basin. Discharges of wastes from irrigated lands to groundwater could adversely affect the quality of the "waters of the state," as defined in Attachment E to this Order.
14. The Central Valley Water Board's *Irrigated Lands Regulatory Program Existing Conditions Report (ECR)*⁷ identifies waters of the state with impaired water quality attributable to or influenced by irrigated agriculture, including within the Grassland Drainage Area. The *Irrigated Lands Regulatory Program Environmental Impact Report (PEIR)* describes that "[f]rom a programmatic standpoint, irrigated land waste discharges have the potential to cause degradation of surface and groundwater...."

⁶ ICF International. 2011. *Irrigated Lands Regulatory Program, Program Environmental Impact Report*. Final and Draft. March. (ICF 05508.05.) Sacramento, CA. Prepared for: Central Valley Regional Water Quality Control Board, Sacramento, CA

⁷ California Regional Water Quality Control Board, Central Valley Region, and Jones and Stokes. 2008. *Irrigated Lands Regulatory Program Existing Conditions Report*. Sacramento, CA.

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15. Elevated levels of nitrates in drinking water can have significant negative health effects on sensitive individuals. The Basin Plan contains a water quality objective for nitrate to protect the drinking water uses. The water quality objective for nitrate is the maximum contaminant level (MCL) of 10 mg/L for nitrate plus nitrite as nitrogen (or 45 mg/L of nitrate as nitrate) established by the California Department of Public Health (22 CCR § 64431) that has been set at a level to protect the most-at-risk groups – infants under six months old and pregnant women.⁸

In some areas, nitrate from both agricultural and non-agricultural sources has resulted in degradation and/or pollution of groundwater beneath agricultural areas in the Central Valley.⁹ Available data (see Information Sheet and the PEIR) indicate that there are wells within the Grassland Watershed that have exceeded the MCL for nitrate. Groundwater in the Grassland Watershed has been designated for drinking water uses; therefore, the water quality objective of 10 mg/L for nitrate plus nitrite (as nitrogen) applies to groundwater in the Grassland Watershed. Where nitrate groundwater quality data are not available, information on the hydrogeological characteristics of the area suggest that portions of the Grassland Watershed may be vulnerable to nitrate contamination. However, the vulnerability to nitrate contamination of groundwater within the GDA has not been definitively determined. In general, sources of nitrate in groundwater may include leaching of excess fertilizer, confined animal feeding operations, septic systems, wastewater discharge to land, unprotected well heads, improperly abandoned wells, and lack of backflow prevention on wells, although some or all of these sources may not exist in the GDA.

16. The Central Valley Water Board’s authority to regulate waste discharges that could affect the quality of the waters of the state, which includes both surface water and groundwater, is found in the Porter-Cologne Water Quality Control Act (California Water Code Division 7).
17. California Water Code section 13263 requires the Central Valley Water Board to prescribe WDRs, or waive WDRs, for proposed, existing, or material changes in discharges of waste that could affect water quality. The board may prescribe waste discharge requirements although no discharge report under California Water Code section 13260 has been filed. The WDRs must implement relevant water quality control plans and the California Water Code. The Central Valley Water Board may prescribe general waste discharge requirements for a category of discharges if all the following criteria apply to the discharges in that category:
 - a. The discharges are produced by the same or similar operations.
 - b. The discharges involve the same or similar types of waste.
 - c. The discharges require the same or similar treatment standards.
 - d. The discharges are more appropriately regulated under general requirements than individual requirements.

The rationale for developing general waste discharge requirements for irrigated agricultural lands in the Grassland Drainage Area includes: (a) the discharges are produced by similar operations (irrigated agriculture), (b) the waste discharges under this Order involve similar types of wastes (wastes associated with farming), (c) the water quality management practices are similar for irrigated agricultural operations, (d) due to the large number of agricultural operations and their contiguous location, these types of operations are more appropriately regulated under general rather than individual requirements, and (e) the geology and the climate are similar, which will tend to result in similar types of water quality problems¹⁰ and similar types of solutions.

⁸ See, for example, the California Department of Public Health Nitrate Fact Sheet: <http://www.cdph.ca.gov/certlic/drinkingwater/Documents/Nitrate/FactSheet-Nitrate-05-23-2012.pdf>.
⁹ PEIR, Appendix A
¹⁰ “Water quality problem” is defined in Attachment E.

18. Whether an individual discharge of waste from irrigated lands may affect the quality of the waters of the state depends on the quantity of the discharge, quantity of the waste, the quality of the waste, the extent of treatment, soil characteristics, distance to surface water, depth to groundwater, crop type, management practices and other site-specific factors. These individual discharges may also have a cumulative effect on waters of the state. Waste discharges from some irrigated lands have impaired or degraded and will likely continue to impair or degrade the quality of the waters of the state within the Central Valley Region if not subject to regulation pursuant to the Porter-Cologne Water Quality Control Act (codified in California Water Code Division 7).
19. Water Code section 13267(b)(1) states: *“(1) In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports. (2) When requested by the person furnishing a report, the portions of a report that might disclose trade secrets or secret processes may not be made available for inspection by the public but shall be made available to governmental agencies for use in making studies. However, these portions of a report shall be available for use by the state or any state agency in judicial review or enforcement proceedings involving the person furnishing the report.”*
20. Technical reports are necessary to evaluate Member compliance with the terms and conditions of this Order and to assure protection of waters of the state. Consistent with California Water Code section 13267, this Order requires the implementation of a monitoring and reporting program (MRP) that is intended to determine the effects of Member waste discharges on water quality, to verify the adequacy and effectiveness of the Order’s conditions, and to evaluate Member compliance with the terms and conditions of the Order. The requirements for reports and monitoring specified in this Order and attached MRP are based in part on whether an operation is within a high or low vulnerability area. The third-party is tasked with describing high and low vulnerability areas based on definitions provided in Attachment E to this Order and guidance provided in the MRP for development of the Groundwater Quality Assessment Report. The Executive Officer will review third-party proposed high and low vulnerability area designations and make the final determination of vulnerability. High and low vulnerability areas will be reviewed and updated throughout the implementation of this Order. A Member who is covered under this Order must comply with MRP Order R5-2015-XXXX which is part of this Order, and any future revisions thereto by the Executive Officer or board.
21. The water quality monitoring under this Order is representative in nature and does not measure individual field discharge. The benefits of representative monitoring include the ability to determine whether water bodies accepting discharges from numerous irrigated lands are meeting water quality objectives, and to determine if existing high quality waters are being maintained. Further, representative monitoring allows the board to determine whether represented practices are protective of water quality. There is a cost savings with representative monitoring, since all groundwater aquifers that receive irrigated agricultural discharges do not need to be monitored. Groundwater monitoring sites are selected to represent areas with similar conditions (e.g., similar crops grown, similar soil type).

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Through the Management Practices Evaluation Program and Groundwater Quality Management Plans, the third-party must evaluate the effectiveness of management practices in protecting groundwater quality. In addition, Members must report the practices they are implementing to protect groundwater quality.

Where required monitoring, evaluations, and reporting do not allow the Central Valley Water Board to determine potential sources of water quality problems or identify whether management practices are effective, the Executive Officer may require the third-party or individual Members to provide technical reports. Such technical reports are needed when monitoring or other available information is not sufficient to determine the effects of irrigated agricultural waste discharges on state waters. It may also be necessary for the Central Valley Water Board to conduct investigations by obtaining information directly from Members to assess individual compliance.

The Board recognizes that representative monitoring data in and of itself will not allow the Board to determine the specific source or sources of water quality problems; however, subsequent actions, assessments and reporting required of the third party will result in the identification of the source(s) and causes of the water quality problem, the identification of actions implemented by Members to ensure water quality is protected, and the reporting of water quality data to demonstrate the water quality problem has been resolved. Therefore, representative monitoring in conjunction with other requirements in this Order and the board's compliance and enforcement activities will also allow the board to determine whether Members are complying with this Order.

22. The Central Valley Water Board's *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins* (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, contains programs of implementation needed to achieve water quality objectives, and references the plans and policies adopted by the State Water Board. The water quality objectives are developed to protect the beneficial uses of waters of the state. Compliance with water quality objectives will protect the beneficial uses listed in Finding 24.
23. This Order implements the Basin Plan and applicable State policies by requiring the implementation of management practices that are considered to constitute best practicable treatment or control, where applicable, that achieve compliance with applicable water quality objectives and that prevent or correct conditions of pollution or nuisance. The Order requires implementation of a monitoring and reporting program to determine effects of discharges on water quality and the effectiveness of management practices designed to comply with applicable water quality objectives.
24. Pursuant to the Basin Plan and State Water Board plans and policies including State Water Board Resolution 88-63, all ground waters in the region are considered as suitable or potentially suitable at a minimum, for:
 - a. Municipal and Domestic Supply
 - b. Agricultural Supply
 - c. Industrial Service Supply
 - d. Industrial Process Supply.
25. The board recognizes that some areas within the Grassland Drainage Area overlie groundwater containing naturally occurring constituents, including salts that may exceed water quality objectives for specific beneficial use designations. In such cases, the use may be unattainable, even in the absence of any waste discharge, and de-designation or modification of the designated use may be appropriate. It is reasonable, under circumstances described below, to delay the imposition of monitoring and reporting associated with high vulnerability areas in these circumstances. This Order allows, with Executive Officer approval, portions of the high vulnerability areas identified within the Groundwater Quality Assessment Report (GAR) to temporarily operate under reduced

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monitoring and reporting requirements in the event 1) the GBD Steering Committee or other group is actively pursuing a basin plan amendment to de-designate or modify the beneficial use, and 2) the GBD Steering Committee provides the required information indicating that it is reasonably likely that the beneficial use is not appropriate in the area of the proposed de-designation. The requirements for pursuing reduced monitoring and reporting as a condition of a basin plan amendment are described in section VIII.H of this Order and section IV. B of the MRP.

26. In May 2004, the State Water Board adopted the *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program* (NPS Policy). The purpose of the NPS Policy is to improve the state's ability to effectively manage NPS pollution and conform to the requirements of the Federal Clean Water Act and the Federal Coastal Zone Act Reauthorization Amendments of 1990. The NPS Policy requires, among other key elements, an NPS control implementation program's ultimate purpose to be explicitly stated. It also requires implementation programs, to at a minimum, address NPS pollution in a manner that achieves and maintains water quality objectives and beneficial uses, including any applicable antidegradation requirements.

27. This Order constitutes an NPS Implementation Program for the discharges regulated by the Order. Attachment A, Information Sheet, describes the five key elements required by the NPS Policy and provides justification that the requirements of this Order meet the requirements of the NPS Policy. This Order is consistent with the NPS Policy.

28. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This order promotes that policy by, among other things, utilizing a tiered system that imposes more stringent requirements in areas deemed "high vulnerability" based on threat to groundwater quality, requiring groundwater monitoring and management plans, an identification and evaluation of management practices that are protective of groundwater quality, and requiring discharges to meet applicable water quality objectives, which include maximum contaminant levels designed to protect human health and ensure that water is safe for domestic uses. Protection of the beneficial uses of groundwater is described throughout this Order, including the discussion in Attachment A to this Order of State Water Board Resolution 68-16 *Statement of Policy with Respect to Maintaining High Quality Waters in California*.

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CALIFORNIA ENVIRONMENTAL QUALITY ACT

30. For purposes of adoption of this Order, the Central Valley Water Board is the lead agency pursuant to CEQA (Public Resources Code sections 21100 et seq.). Pursuant to board direction in Resolutions R5-2006-0053 and R5-2006-0054, a Program Environmental Impact Report (PEIR) was prepared. In accordance with CEQA, the Central Valley Water Board, acting as the lead agency adopted Resolution R5-2011-0017 on 7 April 2011, certifying the PEIR for the Irrigated Lands Regulatory Program.

31. This Order relies on the environmental impact analysis contained in the PEIR to satisfy the requirements of CEQA. Although the Order is not identical to any of the PEIR alternatives, the Order is comprised entirely of elements of the PEIR's wide range of alternatives. Therefore, the PEIR identified, disclosed, and analyzed the potential environmental impacts of the Order. The potential compliance activities undertaken by the regulated Members in response to this Order fall within the range of compliance activities identified and analyzed in the PEIR. Therefore, all potentially adverse environmental impacts of this Order have been identified, disclosed, and analyzed in the PEIR. If it is determined that a grower filing for coverage under this Order could create impacts not identified in the PEIR, individual WDRs would be prepared for that grower and additional CEQA analysis performed, which would likely tier off the PEIR as necessary (see Title 14, CCR § 15152).

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32. The requirements of this Order are based on elements of Alternatives 2 through 6 of the PEIR. The PEIR concludes that implementation of some of these elements has the potential to cause significant adverse environmental impacts. Such impacts are associated, directly and indirectly, with specific compliance activities growers may conduct in response to the Order's regulatory requirements. Such activities are expected to include implementation of water quality management practices and monitoring well installation and operation. Attachment A of this Order describes example water quality management practices that may be implemented as a result of this Order and that monitoring wells may be installed as a result of this Order. The types and degrees of implementation will be similar to those described in the PEIR for Alternatives 2 through 6. Also, because the cost of this Order is expected to fall within the range of costs described for Alternatives 2 through 6, significant impacts to agriculture resources under this Order will be similar to those described in the PEIR. Because of these similarities, this Order relies on the PEIR for its CEQA analysis. A listing of potential environmental impacts, the written findings regarding those impacts consistent with § 15091 of the CEQA Guidelines, and the explanation for each finding are contained in a separate Findings of Fact and Statement of Overriding Considerations document (Attachment D), which is incorporated by reference into this Order.
33. Where potentially significant environmental impacts identified in Attachment D may occur as a result of Members' compliance activities, this Order requires that Members either avoid the impacts where feasible or implement identified mitigation measures, if any, to reduce the potential impacts to a less than significant level. Where avoidance or implementation of identified mitigation is not feasible, use of this Order is prohibited and individual WDRs would be required. The Monitoring and Reporting Program (MRP) Order, Attachment B, includes a Mitigation Monitoring and Reporting Program to track the implementation of mitigation measures.
34. The PEIR finds that none of the program alternatives will cause significant adverse impacts to water quality. Consistent with alternatives in the PEIR, this Order contains measures needed to achieve and maintain water quality objectives and beneficial uses, reduce current pollutant loading rates, and minimize further degradation of water quality. As such, this Order will not cause significant adverse impacts to water quality.

STATE WATER RESOURCES CONTROL BOARD RESOLUTION 68-16

35. State Water Resources Control Board (State Water Board) Resolution 68-16 *Statement of Policy with Respect to Maintaining High Quality of Waters in California* (Resolution 68-16 or "antidegradation policy") requires that a Regional Water Quality Control Board maintain high quality waters of the state unless the board determines that any authorized degradation is consistent with maximum benefit to the people of the state, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in a Regional Water Quality Control Board's policies (e.g., quality that exceeds applicable water quality objectives). The board must also assure that any authorized degradation of existing high quality waters is subject to waste discharge requirements which will result in the best practicable treatment or control (BPTC) of the discharge necessary to assure that pollution, or nuisance will not occur and the highest water quality consistent with the maximum benefit to the people of the state will be maintained.
36. The Central Valley Water Board has information on groundwater quality in the Delta-Mendota subbasin from the State Water Board Groundwater Ambient Monitoring and Assessment (GAMA)

Program.¹¹ Maximum nitrate levels in the Delta-Mendota subbasin above the applicable water quality objective¹² were found in production and monitoring wells that sampled groundwater at 200 feet or less below ground level.¹³ In the Grassland Drainage Area, there was limited groundwater monitoring, but a maximum nitrate as N concentration of 12.7 mg/L was found at one monitoring well. Monitoring data from the San Luis Drain, which transports tile drainage from the GDA, shows nitrate levels averaging less than 9 mg/L (with a maximum of 19 mg/L) from 2008 to 2013 during the irrigation season from May through July. During this period, the discharge in the San Luis Drain should be primarily tile drainage and representative of shallow groundwater in the GDA.¹⁴ Additional information on groundwater monitoring results is presented in Attachment A.

Appendix A to the PEIR for the Irrigated Lands Program describes that “*there may be cases where irrigated agricultural waste discharges threaten to degrade high quality waters.*” For discharges to water bodies that are high quality waters, this Order is consistent with Resolution 68-16. Attachment A to this Order summarizes applicable antidegradation requirements and provides detailed rationale demonstrating how this Order is consistent with Resolution 68-16. As indicated in the summary, this Order authorizes degradation of high quality waters, not to exceed water quality objectives, threaten beneficial uses, or cause a condition of pollution or nuisance. The Order will also result in the implementation of BPTC by those discharging to high quality waters and assure that any change in water quality will be consistent with maximum benefit to the people of the state.

As authorized by Water Code section 13263(c), achievement of these requirements is in accordance with the Order’s time schedules. Time schedules are necessary because not all growers covered by the Order can immediately comply with the Order’s requirements. Using time schedules to implement antidegradation requirements was explicitly recognized and endorsed by the California Court of Appeal, who wrote with respect to the Central Valley Water Board’s Dairy Waste Discharge Requirements that “[a] phased approach... is reasonable, and is authorized by section 13263, which allows the requirements of a regional water quality control board to contain a time schedule.” *AGUA v. Central Valley Water Board*, 210 Cal.App.4th 1255, 1277.

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CALIFORNIA WATER CODE SECTION 13141 AND 13241

37. California Water Code section 13141 states that “*prior to implementation of any agricultural water quality control program, an estimate of the total cost of such a program, together with an identification of potential sources of financing, shall be indicated in any regional water quality control plan.*” Section 13141 concerns approvals or revisions to a water quality control plan and does not necessarily apply in a context where an agricultural water quality control program is being developed through waivers and waste discharge requirements rather than basin planning. However, the Basin Plan includes an estimate of potential costs and sources of financing for the long-term irrigated lands program. The estimated costs were derived by analyzing the six alternatives evaluated in the PEIR. This Order, which implements the groundwater portion of the long-term ILRP within the Grassland Drainage Area, is based on Alternatives 2-6 of the PEIR;

¹¹ Mathany, T.M., Landon, M.K., Shelton, J.L., and Belitz, Kenneth, 2013. Groundwater Quality Data in the Western San Joaquin Valley Study Unit, 2010 -- Results from the California GAMA Program. U.S. Geological Survey Data Series 706, 102 p.

¹² Maximum contaminant level (MCL) of 10 mg/L nitrate plus nitrite as nitrogen (N).

¹³ Depth to top of perforation was less than 200 feet below surface level. Nitrate as N concentrations ranged from 0.03 mg/L to 23.8 mg/L, with the mean concentration of those wells (total of 14) sampled at 8.5 mg/L nitrates as N.

¹⁴ Tile drains remove perched groundwater containing high salinity, from the root zone of the crop. As the crop is irrigated, the perched groundwater rises until it is removed through the tile drain system.

therefore, estimated costs of this Order fall within the Basin Plan cost range.¹⁵ The total average annual cost of compliance with this Order, e.g., summation of costs for administration, monitoring, reporting, tracking, implementation of management practices, is expected to be approximately \$16.20 per acre.¹⁶ The total estimated average cost of compliance with this Order is expected to be approximately \$1,572,000 dollars per year.

Approximately \$11.82 of the estimated \$16.20 per acre annual average cost of the Order is associated with implementation of management practices for groundwater. This Order does not require that Members implement specific water quality management practices.¹⁷ Many of the management practices that have water quality benefits can have other economic and environmental benefits (e.g., improved irrigation can reduce water and energy consumption, as well as reduce leaching). Management practice selection will be based on decisions by individual Members in consideration of the unique conditions of their irrigated agricultural lands; water quality concerns; and other benefits expected from implementation of the practice. As such, the cost estimate is an estimate of potential, not required costs of implementing specific practices. Any costs for water quality management practices will be based on a market transaction between Members and those vendors or individuals providing services or equipment and not based on an estimate of those costs provided by the board. The cost estimates include estimated fees the GBD Steering Committee may charge to prepare the required reports and conduct the required monitoring, as well as annual permit fees that are charged to permitted dischargers for permit coverage. In accordance with the State Water Board's Fee Regulations, the current annual permit fee charged to Members covered by this Order is \$0.75/acre. The combined total estimated average administrative costs that include GBD Steering Committee and state fees are estimated to be \$2.24/acre annually. These costs have been estimated using the same study used to develop the Basin Plan cost estimate, which applies to the whole ILRP being overseen by the Central Valley Water Board. The basis for these estimates is provided in the *Draft Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program*.¹¹¹⁸ Attachment A includes further discussion regarding the cost estimate for this Order.

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38. California Water Code section 13263 requires that the Central Valley Water Board consider the following factors, found in section 13241, when considering adoption of waste discharge requirements.

- (a) Past, present, and probable future beneficial uses of water.
- (b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
- (c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
- (d) Economic considerations.
- (e) The need for developing housing within the region.
- (f) The need to develop and use recycled water.

¹⁵ When compared on a per irrigated acre basis; as the Basin Plan cost range is an estimate for all irrigated lands in the Central Valley versus this Order's applicability to a portion thereof (irrigated lands in the Grassland Drainage Area).

¹⁶ Cost estimate for all lands in the Grassland Drainage area, regardless of tile drain usage.

¹⁷ Per California Water Code section 13360, the Central Valley Water Board may not specify the manner in which a Member complies with water quality requirements.

¹⁸ ICF International. 2010. *Draft Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program*. Draft. July. (ICF 05508.05.) Sacramento, CA. Prepared for: Central Valley Regional Water Quality Control Board, Sacramento, CA

These factors have been considered in the development of this Order. Attachment A, Information Sheet, provides further discussion on the consideration of section 13241 factors.

RELATIONSHIP TO OTHER ONGOING WATER QUALITY EFFORTS

39. Other water quality efforts conducted pursuant to state and federal law directly or indirectly serve to reduce waste discharges from irrigated lands to waters of the state. Those efforts, including regulation of discharges through the Grassland Bypass Project (Order R5-2015-XXXX), will continue and will be supported by implementation of this Order.
40. The Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative has the goal of developing sustainable solutions to the increasing salt and nitrate concentrations that threaten the achievement of water quality objectives in the Central Valley for surface water and groundwater. This Order requires actions to manage salt discharges to groundwater and should result in practices that also reduce nitrate percolation. The board intends to coordinate all such actions with the CV-SALTS initiative. CV-SALTS may identify additional actions that need to be taken by irrigated agriculture and others to address these constituents. This Order can be amended in the future to implement any policies or requirements established by the Central Valley Water Board resulting from the CV-SALTS process. This Order includes provisions to promote coordination with CV-SALTS and to support the development of information needed for the CV-SALTS process.
41. The General Order for Existing Milk Cow Dairies (R5-2007-0035) and NPDES Dairy General Permit CAG015001 (Dairy General Orders) regulate discharges of waste to surface waters and groundwater from existing milk cow dairies in the Central Valley. Discharges from irrigated agricultural parcels are regulated by the Dairy General Orders if the owner or operator of the parcel applies dairy waste from its dairy operation. Irrigated agricultural parcels that receive dairy or other confined animal facility¹⁹ waste from external sources must obtain regulatory coverage for their discharge under the Dairy General Orders or waste discharge requirements that apply to individual growers. The Central Valley Water Board encourages the dairy industry and the third-party to coordinate the groundwater quality monitoring required of the two orders and their response to identified water quality problems.
42. Water quality monitoring is conducted in water bodies surrounding the Grassland Drainage Area by the Westside Coalition and the San Joaquin County and Delta Coalition of the Irrigated Lands Regulatory Program, the San Joaquin River Restoration Program, the U.S. Bureau of Reclamation, and the San Luis & Delta Mendota Water Authority. Groundwater monitoring may be performed by the third-party as part of the Irrigated Lands Regulatory Program. This monitoring was considered when designing the monitoring and reporting program and data developed through these efforts will be used to help evaluate the impacts of discharges from irrigated lands within the Grassland Drainage Area to groundwater.

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COORDINATION AND COOPERATION WITH OTHER AGENCIES

43. Integrated Regional Water Management Plans: Pursuant to part 2.75 of Division 6 of the California Water Code (commencing with section 10750), local agencies are authorized to adopt and implement groundwater management plans (hereinafter “local groundwater management plans”),

¹⁹ “Confined animal facility” is defined in Title 27 CCR section 20164 as “... any place where cattle, calves, sheep, swine, horses, mules, goats, fowl, or other domestic animals are corralled, penned, tethered, or otherwise enclosed or held and where feeding is by means other than grazing.”

including integrated regional water management plans. The legislation provides recommended components to the plans such as control of saline water intrusion, regulation of the migration of contaminated water, monitoring of groundwater levels and storage, and the development of relationships with regulatory agencies. The information collected through implementation of groundwater management plans can support or supplement efforts to evaluate potential impacts of irrigated agricultural discharges on groundwater. This Order requires the third-party to develop regional groundwater monitoring workplans and, where necessary, groundwater quality management plans (GQMPs). The third party is encouraged to coordinate with local groundwater management plans and integrated regional water management plans, where applicable, when developing regional groundwater monitoring workplans and GQMPs.

- 44. California Department of Pesticide Regulation (DPR): DPR has developed a Groundwater Protection Program under the authority of the Pesticide Contamination Prevention Act (PCPA) (commencing with Food and Agriculture Code section 13142). The program is intended to prevent contamination of groundwater from the legal application of pesticides. In addition to activities mandated by the PCPA, DPR's program has incorporated approaches to identify areas vulnerable to pesticide movement, develop mitigation measures to prevent pesticide contamination, and monitor domestic drinking water wells located in groundwater protection areas. The Groundwater Protection Program can provide valuable information on potential impacts to groundwater from agricultural pesticides. If necessary, DPR and the county agricultural commissioners can use their regulatory authorities to address any identified impacts to groundwater or surface water attributable to pesticide discharges from agricultural fields.
- 45. California Department of Food and Agriculture (CDFA): The CDFA Fertilizer Research and Education Program (FREP) coordinates research to advance the environmentally safe and agronomically sound use and handling of fertilizer materials. Currently, CDFA is developing a nitrogen management training program for farmers and has developed a training program for Certified Crop Advisors (CCA). Among other certification options available for nitrogen management plans, the CDFA training programs will be recognized as providing the training necessary for a farmer or CCA to certify nitrogen management plans in high vulnerability groundwater areas. This Order leverages CDFA's work and expertise with respect to nitrogen management training and technical support to the professionals and third-parties that will be developing nitrogen management plans for individual Members.
- 46. Nitrogen Management and Control: CDFA, in coordination with the Water Boards is convening a Task Force to identify intended outcomes and expected benefits of a nitrogen mass balance tracking system in nitrate high-risk areas. The CDFA Task Force may identify appropriate nitrogen tracking and reporting systems, and potential alternatives, that would provide meaningful and high quality data to help better protect groundwater quality.

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In the Report to the Legislature²⁰, the State Water Resources Control Board (SWRCB) has committed to convene a panel of experts from a broad spectrum of relevant disciplines (Expert Panel) to assess existing agricultural nitrate control programs and develop recommendations, as needed, to ensure that ongoing efforts are protective of groundwater quality. The Expert Panel will evaluate ongoing agricultural control measures that address nitrate in groundwater, and will propose new measures, if necessary. In its assessment of existing agricultural nitrate control programs and development of recommendations for possible improvements in the regulatory approaches being used, the Expert Panel will consider groundwater monitoring, mandatory adoption of best management practices, tracking and reporting of nitrogen fertilizer application,

²⁰ State Water Board Resources Control Board. 2013. Report to the Legislature, Recommendations Addressing Nitrate in Groundwater <http://www.swrcb.ca.gov/water_issues/programs/nitrate_project/docs/nitrate_rpt.pdf>

estimates of nitrogen use efficiency or a similar metric, and farm-specific nutrient management plans as source control measures and regulatory tools.

The deadlines for preparation of a nitrogen management plan and associated reporting allow the board to make any necessary adjustments to this Order based on the findings and recommendations of the CDFA Task Force and the SWRCB Expert Panel and prior to the established compliance dates.

47. The United States Department of Agriculture Natural Resources Conservation Service (NRCS): The NRCS administers a number of programs related to water quality. NRCS can provide technical assistance to growers and has identified practices that are protective of the environment and are feasible in an agricultural setting. The NRCS Environmental Quality Incentives Program (EQIP) provides cost share assistance for management practice installation. The NRCS has also provided assistance with research of management practice effectiveness.

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ENFORCEMENT FOR NONCOMPLIANCE WITH THIS ORDER

48. California Water Code section 13350 provides that any person who violates Waste Discharge Requirements may be: 1) subject to administrative civil liability imposed by the Central Valley Water Board or State Water Board in an amount of up to \$5,000 per day of violation, or \$10 per gallon if the discharge involves a discharge of pollutants; or 2) be subject to civil liability imposed by a court in an amount of up to \$15,000 per day of violation, or \$20 per gallon. The actual calculation and determination of administrative civil penalties must be set forth in a manner that is consistent with the State Water Board's Water Quality Enforcement Policy.
49. The State Water Board's Water Quality Enforcement Policy (Enforcement Policy) endorses progressive enforcement action for violations of waste discharge requirements when appropriate, but recommends formal enforcement as a first response to more significant violations. Progressive enforcement is an escalating series of actions that allows for the efficient and effective use of enforcement resources to: 1) assist cooperative Members in achieving compliance; 2) compel compliance for repeat violations and recalcitrant violators; and 3) provide a disincentive for noncompliance. Progressive enforcement actions may begin with informal enforcement actions such as a verbal, written, or electronic communication between the Central Valley Water Board and a Member. The purpose of an informal enforcement action is to quickly bring the violation to the Member's attention and to give the Member an opportunity to return to compliance as soon as possible. The highest level of informal enforcement is a Notice of Violation.

The Enforcement Policy recommends formal enforcement actions for the highest priority violations, chronic violations, and/or threatened violations. Violations of this Order that will be considered a priority include, but are not limited to:

- a) Failure to obtain required regulatory coverage.
- b) Failure to meet receiving water limitations, unless the Member is implementing a Central Valley Water Board approved GQMP in accordance with the time schedule provisions of this Order (section XII).²¹
- c) The discharge of waste to lands not owned, leased, or controlled by the Member without written permission from the landowner.

²¹ A Member participating in a Management Practices Evaluation Program study (i.e., the study is taking place on the Member's farm) where data indicate the discharge from the study area is not meeting receiving water limitations will not be a priority for enforcement, if the Member is implementing a Central Valley Water Board approved GQMP in accordance with the time schedule provisions of this Order (section XII).

- d) Failure to prevent future exceedances of water quality objectives once made aware of an exceedance.
- e) Falsifying information or intentionally withholding information required by applicable laws, regulations or an enforcement order.
- f) Failure to implement a GQMP.
- g) Failure to pay annual fees, penalties, or liabilities.
- h) Failure to monitor or provide information to the third-party as required.
- i) Failure to submit required reports on time.
- j) Failure to implement the applicable management practices, or equivalent practices, identified as protective of groundwater in the Management Practices Evaluation Report.

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50. Under this Order, the GBD Steering Committee is tasked with developing monitoring plans, conducting monitoring, developing water quality management plans, and informing Members of requirements. It is intended that the following progressive enforcement steps will generally be taken in the event that the GBD Steering Committee fails to comply with the terms and conditions of this Order or attached MRP:

- a) First notification of noncompliance to the GBD Steering Committee. The Central Valley Water Board intends to notify the GBD Steering Committee of the non-compliance and allow a period of time for the GBD Steering Committee to come back into compliance. This notification may be in the form of a verbal notice, letter, or written notice of violation, depending on the severity of the noncompliance.
- b) Second notification of noncompliance to the GBD Steering Committee. If the GBD Steering Committee fails to adequately respond to the first notification, the board intends to provide written notice to the GBD Steering Committee and potentially affected Members of the failure to address the first notice.
- c) Failure of the GBD Steering Committee to adequately respond to the second notification. Failure to adequately respond to the second notification may result in partial (e.g., affected areas or Members) or full disapproval of the GBD Steering Committee to act as a lead entity, depending on the severity of noncompliance. Growers that were Members affected by a partial or full GBD Steering Committee disapproval would be required to obtain coverage for their waste discharge under other applicable general waste discharge requirements or submit a Report of Waste Discharge to the Central Valley Water Board.

GENERAL FINDINGS

- 51. This Order does not authorize violation of any federal, state, or local law or regulation.
- 52. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a "take" will result from any action authorized under this Order, the Member shall obtain authorization for an incidental take prior to construction or operation of the project. The Member shall be responsible for meeting all requirements of the applicable Endangered Species Act.
- 53. This Order does not supersede the Central Valley Water Board's Basin Plans and policies, including prohibitions (e.g., pesticides) and implementation plans (e.g., Total Maximum Daily Loads), or the State Water Board's plans and policies.
- 54. As stated in California Water Code section 13263(g), the discharge of waste into waters of the state is a privilege, not a right, and regulatory coverage under this Order does not create a vested right to

continue the discharge of waste. Failure to prevent conditions that create or threaten to create pollution or nuisance will be sufficient reason to modify, revoke, or enforce this Order, as well as prohibit further discharge.

55. This Order requires Members to provide the GBD Steering Committee with contact information of the person(s) authorized to provide access to the enrolled property for inspections. This requirement provides a procedure to enable board staff to contact grower representatives so that it may more efficiently monitor compliance with the provisions of this Order.
56. Any instance of noncompliance with this Order constitutes a violation of the California Water Code and its regulations. Such noncompliance is grounds for enforcement action, and/or termination of coverage for waste discharges under this Order, subjecting the discharger to enforcement under the Water Code for further discharges of waste to groundwater.
57. All discharges from irrigated agricultural operation are expected to comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges to storm drain systems or to other courses under their jurisdiction.
58. The fact that it would have been necessary to halt or reduce the discharge in order to maintain compliance with this Order shall not be a defense for violations of the Order by the Member.
59. This Order is not a National Pollutant Discharge Elimination System Permit issued pursuant to the Federal Clean Water Act. Coverage under this Order does not exempt a facility from the Clean Water Act. Any facility required to obtain such a permit must notify the Central Valley Water Board.
60. Water Code section 13260(d)(1)(A) requires persons subject to waste discharge requirements to pay an annual fee established by the State Water Board.
61. The Findings of this Order, supplemental information and details in the attached Information Sheet (Attachment A), and the administrative record of the Central Valley Water Board relevant to the Grassland Drainage Area were considered in establishing these waste discharge requirements.
62. The Central Valley Water Board has notified interested agencies and persons of its intent to adopt this Order for discharges of waste from irrigated lands within the Grassland Drainage Area, and has provided them with an opportunity for a public hearing and an opportunity to submit comments.
63. The Central Valley Water Board, in a public meeting, heard and considered all comments pertaining to this Order.
64. Any person affected by this action of the Central Valley Water Board may petition the State Water Board to review this action. The State Water Board must receive the petition within 30 days of the date on which the Central Valley Water Board adopted this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request.

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IT IS HEREBY ORDERED that pursuant to California Water Code sections 13260, 13263, and 13267 and in order to meet the provisions contained in Division 7 of the California Water Code and regulations and policies adopted there under; all Members in the Grassland Drainage Area, their agents, successors, and assigns shall comply with the following:

I. Coverage

1. This Order applies to owners and operators of irrigated lands in the Grassland Drainage Area.

II. Prohibitions

1. The discharge of waste to waters of the state, from irrigated agricultural operations other than those defined in the Findings of this Order, is prohibited.
2. The discharge of hazardous waste, as defined in California Water Code section 13173 and Title 23 CCR section 2521(a), respectively, is prohibited.
3. The discharge of wastes (e.g., fertilizers, fumigants, pesticides) into groundwater via backflow through a water supply well is prohibited.
4. The discharge of any wastes (e.g., fertilizers, fumigants, pesticides) down a groundwater well casing is prohibited.

III. Receiving Water Limitations

A. Groundwater Limitations

1. Wastes discharged from Member operations shall not cause or contribute to an exceedance of applicable water quality objectives in the underlying groundwater or a trend of degradation that may threaten applicable Basin Plan beneficial uses, unreasonably affect applicable beneficial uses, or cause or contribute to a condition of pollution or nuisance.

B. Compliance with Receiving Water Limitations

1. If the discharge of wastes from Member operations does not meet the limitations in **III.A. Groundwater Limitations**, the Member is in compliance with this Order relative to sections III.A for a specific waste parameter provided:
 - a. The GBD Steering Committee is preparing, or has submitted a Groundwater Quality Management Plan for that waste parameter in accordance with Section VIII.H of this Order, and such plan is pending action by the Executive Officer or board; or
 - b. The Executive Officer or board has approved the applicable Groundwater Quality Management Plan for that waste parameter, and
 - i. The Member is implementing or has a documented schedule to implement improved management practices consistent with the approved plan to achieve compliance with III.A, and
 - ii. The Member is in compliance with Section XII. Time Schedule for Compliance of this Order.

IV. Provisions

A. General Specifications

1. The GBD Steering Committee will assist its Members in complying with the relevant terms and provisions of this Order, including required monitoring and reporting as described in MRP Order R5-2015-XXXX. However, individual Members who are subject to this Order continue to bear ultimate responsibility for complying with this Order.
2. Irrigated lands owners or operators with waste discharges to state waters (or “Dischargers”) that are not Members, or whose property is not enrolled by a Member, shall not be subject to coverage provided by the terms of this Order. Such Dischargers shall be required to obtain coverage for their waste discharge under individual waste discharge requirements or any applicable general waste discharge requirements that apply to individuals that are not represented by the GBD Steering Committee.

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3. Members who are subject to this Order shall implement water quality management practices, as necessary, to protect water quality. Water quality management practices can be instituted on an individual basis, or implemented to serve multiple growers discharging to a single location.
4. Installation of groundwater monitoring wells or implementation of management practices to meet the conditions of this Order at a location or in a manner that could cause an adverse environmental impact as identified in the *Irrigated Lands Regulatory Program, Final Program Environmental Impact Report (PEIR)*²² shall be mitigated in accordance with the mitigation measures provided in Attachment C of this Order.
5. The provisions of this Order are severable. If any provision of the Order is held invalid, the remainder of the Order shall not be affected.

B. Requirements for Members in the Grassland Drainage Area

1. Members shall comply with all applicable provisions of the California Water Code, the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, and State Water Board plans and policies.
2. All Members shall comply with the attached Monitoring and Reporting Program (MRP) R5-2015-XXXX, and future revisions thereto.
3. Members who are covered under this Order shall comply with the terms and conditions contained in this Order.
4. Each Member shall participate in GBD Steering Committee outreach events, at least annually, if any of the Member's parcels are in a designated "high vulnerability" area or governed by a GQMP. The Member shall review outreach materials to become informed of any water quality problems to address and the management practices that are available to address those issues. The Member shall provide annual confirmation to the GBD Steering Committee that the Member has attended an outreach event during the previous year and reviewed the applicable outreach materials.
5. All Members shall provide the GBD Steering Committee with information requested for compliance with this Order.
6. All members shall implement water quality management practices as necessary to protect water quality and to achieve compliance with groundwater receiving water limitations of this Order (section III.A).
7. All Members shall implement practices that minimize excess nutrient application relative to crop consumption. Members shall prepare and implement a farm-specific nitrogen management plan as required by section VII.D of this Order.
8. In addition to the reports identified in section VII of this Order, the Executive Officer may require the Member to submit additional technical reports pursuant to California Water Code section 13267.
9. The requirements prescribed in this Order do not authorize the commission of any act causing injury to the property of another, or protect the Member from liabilities under other federal, state,

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²² On 7 April 2011, the Central Valley Water Board adopted Resolution R5-2011-0017, certifying the PEIR for the long-term irrigated lands regulatory program.

county, or local laws. However, enrollment under this Order does protect the Member from liability alleged for failing to comply with California Water Code section 13260.

10. This Order does not convey any property rights or exclusive privileges.
11. This Order shall not create a vested right, and all such discharges of waste shall be considered a privilege, as provided for in California Water Code section 13263.
12. The Member understands that the Central Valley Water Board or its authorized representatives, may, at reasonable hours, inspect the facilities²³ and irrigated lands of persons subject to this Order to ascertain whether the purposes of the Porter-Cologne Act are being met and whether the Member is complying with the conditions of this Order. To the extent required by California Water Code section 13267(c) or other applicable law, the inspection shall be made with the consent of the Member, owner or authorized representative, or if consent is withheld, with a duly issued warrant pursuant to the procedure set forth in Title 13 Code of Civil Procedure Part 3 (commencing with section 1822.50). In the event of an emergency affecting the public health and safety, an inspection may be performed without consent or the issuance of a warrant.
13. The Member shall provide the GBD Steering Committee with the phone number(s) of the individual(s) with authority to provide consent to access its facilities as described in provision IV.B.12 above.
14. The Member shall properly operate and maintain in good working order any facility, unit, system, or monitoring device installed to achieve compliance with the Order.
15. Settling ponds, basins, and tailwater recovery systems shall be constructed, maintained, and operated to prevent groundwater degradation.
16. Where applicable, the Member shall follow state, county or local agency standards with respect to water wells and groundwater quality when constructing new wells, modifying existing wells, or destroying wells. Absent such standards, at a minimum, the Member shall follow the standards and guidelines described in the California Department of Water Resources' *Water Well Standards (Bulletins 74-81 & 74-90 combined)*.
17. The Member shall maintain a copy of this Order, either in hard copy or electronic format, at the primary place of business, or the Member's farming operations headquarters. The Member shall also maintain excerpts of the Order's Member requirements that have been provided by the Executive Officer so as to be available at all times to operations personnel. The Member and his/her designee shall be familiar with the content of this Order.
18. The Member, or the GBD Steering Committee on behalf of the Member as applicable, shall submit all required documents in accordance with section IX of this Order.
19. Members shall, at a minimum, implement water quality management practices that meet the following farm management performance standards:
 - a. Minimize percolation of waste to groundwater,
 - b. Protect wellheads from surface water intrusion.
20. Members shall implement the applicable management practices, or equivalent practices, identified as protective of groundwater in the Management Practices Evaluation Report.

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²³ The inspection of Member's facilities and irrigated lands does not include the Member's private residence.

C. Requirements for the GBD Steering Committee

In order to remain eligible to serve as a third-party representative to Members, the GBD Steering Committee shall perform the following:

1. Provide the Central Valley Water Board documentation of its organizational or management structure. The documentation shall identify persons responsible for ensuring that program requirements are fulfilled. The documentation shall be made readily available to Members.
2. Prepare annual summaries of expenditures of fees and revenue used to comply with this Order. The summaries shall be provided to or made readily available to Members.
3. If the GBD Steering Committee receives a notice of violation (NOV) from the Central Valley Water Board, the GBD Steering Committee must provide to Members in the area addressed by the NOV appropriate information regarding the reason(s) for the violation. The notification must be provided to all Members within the area affected by the NOV within thirty (30) days of receiving the NOV from the board. The GBD Steering Committee must provide confirmation to the board that Members have received notification of the violation. A summary of all notices of violation received by the GBD Steering Committee must be provided to all Members annually. The annual NOV summary may be part of a written or electronic communication to Members.
4. Develop and implement plans to track and evaluate the effectiveness of water quality management practices, pursuant to approved Groundwater Quality Management Plans.
5. Provide timely and complete submittal of any plans or reports required by this Order.
6. Conduct required water quality monitoring and assessments in conformance with quality assurance/quality control requirements.
7. Within 30 days of receiving an NOA from the Central Valley Water Board (as described in section VIII.A), inform Members of this Order's requirements by providing a notice of the deadline and process required to complete the GBD Steering Committee's Special Project Membership application and Farm Evaluation template.
8. Conduct education and outreach activities to inform Members of program requirements and water quality problems, including exceedances of water quality objectives or degradation of water quality, identified by the GBD Steering Committee or Central Valley Water Board. The GBD Steering Committee shall:
 - a. Maintain attendance lists for GBD Steering Committee outreach events, provide Members with information on water quality management practices that will address water quality problems and minimize the discharge of wastes from irrigated lands, and provide informational materials on potential environmental impacts of water quality management practices to the extent known by the GBD Steering Committee.
 - b. Provide an annual summary of education and outreach activities to the Central Valley Water Board. The annual summary shall include copies of the educational and management practice information provided to the growers. The annual summary must report the total number of growers who attended the outreach events and describe how growers could obtain copies of the materials presented at these events.
9. Work cooperatively with the Central Valley Water Board to ensure that all Members are providing required information and taking necessary steps to address water quality exceedances or degradation identified by the GBD Steering Committee or board. As part of the Membership List submittal, identify the growers known by the GBD Steering Committee who have: (1) failed to implement improved water quality management practices within the timeframe specified by an

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applicable GQMP; (2) failed to respond to an information request from the Water Authority associated with any applicable GQMP or other provisions of this Order; (3) failed to participate as requested in GBD Steering Committee studies for which the GBD Steering Committee is the lead; (4) failed to provide confirmation of participation in an outreach event (per section IV.B.4 of this Order); or (5) otherwise failed to maintain good standing of their membership in the GBD Steering Committee.

10. Ensure that any activities conducted on behalf of the GBD Steering Committee by other groups meet the requirements of this Order. The GBD Steering Committee is responsible for any activities conducted on its behalf.
11. Collect any fees from Members required by the State Water Board pursuant to the fee schedule contained in Title 23 CCR. Such fees shall then be submitted to the State Water Board. The fees invoiced by the State Water Board will be based on the Membership List submitted by the GBD Steering Committee. The GBD Steering Committee is responsible for management of fee collection and payment of the State Water Board fees.

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V. Effective Dates

1. This Order is effective upon adoption by the Central Valley Water Board on XXXX and remains in effect unless rescinded or revised by the Central Valley Water Board.
2. Regulatory coverage for Dischargers can be obtained directly by becoming Members with the GDA Groundwater Quality Special Project.
3. Regulatory coverage under this Order is automatically terminated, if the Central Valley Water Board revokes the approval of the GBD Steering Committee representing the Member's area.
4. After XXXXX, regulatory coverage for Dischargers who have not become Members of the GDA Groundwater Quality Special Project under V.2 is effective upon notification by the Central Valley Water Board that this Order applies to the Discharger through the issuance of an NOA. The Central Valley Water Board shall only issue an NOA after it has received a Notice of Intent (NOI) as required by section VII.A, and after the Central Valley Water Board has received notification from the GBD Steering Committee that the Discharger is a Member of the GDA Groundwater Quality Special Project. The Discharger must pay any applicable State Water Board administrative fees associated with the filing of NOIs.

VI. Permit Reopening, Revision, Transfer, Revocation, Termination, and Reissuance

1. This Order may be reopened to address any changes in state statutes, regulations, plans, or policies that would affect the water quality requirements for the discharges, including, but not limited to, the Central Valley Water Board *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins* (Basin Plan).
2. The filing of a request by the GBD Steering Committee on behalf of itself or of its Members for modification, revocation and re-issuance, or termination of the Order, or notification of planned changes or anticipated noncompliance, does not stay any condition of the Order.
3. The GBD Steering Committee, on behalf of its Members, shall provide to the Executive Officer any information which the Executive Officer may request to determine whether cause exists for modifying, revoking and re-issuing, or terminating the Order, or to determine compliance with the requirements of this Order that apply directly to the GBD Steering Committee. Members shall provide to the Executive Officer, any information which the Executive Officer may request to determine whether cause exists for modifying, revoking and re-issuing, or terminating the Order

as applied to the individual Member, or to determine compliance with the provisions of this Order that apply directly to the Member.

4. After notice and opportunity for a hearing, the Order may be terminated or modified for cause as applied to individual Members identified by the Central Valley Water Board. Cause for such termination or modification, includes, but is not limited to:
 - a. Violation of any term or condition contained in the Order;
 - b. Obtaining Order coverage by misrepresentation; or
 - c. Failure to fully disclose all relevant facts.

A Member's regulatory coverage shall be automatically revoked if the GBD Steering Committee's Membership application is not timely submitted (see section VII.A).

5. After notice and opportunity for a hearing, the approval of the GBD Steering Committee to act as a lead entity representing Members may be partially (e.g., affected areas or Members) or fully revoked. Cause for such termination or modification includes, but is not limited to consideration of the factors in Finding 49 of this Order, and/or:
 - a. Violation of any term or condition contained in the Order that applies directly to the GBD Steering Committee;
 - b. GBD Steering Committee misrepresentation;
 - c. Failure by the GBD Steering Committee to fully disclose all known relevant facts; or
 - d. A change in any condition that results in the GBD Steering Committee's inability to properly function as the third-party entity representing Member interests or in facilitating Member compliance with the terms and conditions of this Order.
6. The Central Valley Water Board will review this Order periodically and may revise this Order when necessary.

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VII. Required Reports and Notices – Member

The Central Valley Water Board or the Executive Officer may require any of the following reports and notices to be submitted electronically as long as the electronic format is reasonably available to the Member, and only to the extent that the Member has access to the equipment that allows for them to submit the information electronically. If the Member does not have such access, reports and notices must be submitted by mail. Reports and notices shall be submitted in accordance with section IX, Reporting Provisions, as well as MRP Order R5-2015-XXXX. Due dates for Member required reports are summarized in Table 1 at the end of this Order. Members must prepare and maintain the following reports as instructed below, and shall submit or make available such reports to the GBD Steering Committee or the Central Valley Water Board as identified below.

A. Notice of Intent / Membership Application

1. Within 150 days of the adoption of the Order, growers in the GDA must become Members of the GDA Groundwater Quality Special Project to avoid additional fees and administrative requirements (see section VII.A.3 below). To obtain membership, a grower must submit a completed application for Membership under the GDA Groundwater Quality Special Project to the GBD Steering Committee. As part of the membership application, growers must provide certification that they have provided written notice to any responsible non-Member parties of the Member's enrollment under this Order and of the requirements of this Order. Upon submittal of a complete application, the GBD Steering Committee may confirm membership, after which the Member will be considered covered under this Order.
2. Beginning 151 days after adoption of the Order, any growers within Grassland Drainage Area boundaries that are not Members of the GBD Groundwater Quality Special Project must submit

(1) a completed Notice of Intent (NOI) to the Central Valley Water Board to comply with the conditions of this Order, (2) any required State Water Board administrative processing fee for the NOI, and (3) an application for Membership under the GDA Groundwater Quality Special Project to the GBD Steering Committee. Upon submittal of a complete NOI, and after receiving confirmation from the GBD Steering Committee that the grower is now a Member, the Central Valley Water Board Executive Officer may then issue a Notice of Applicability (NOA), after which the Member will be considered covered under this Order. In lieu of issuing an NOA, the Executive Officer may deny the NOI and require the submittal of a report of waste discharge or issue an NOA for regulatory coverage under any applicable general waste discharge requirements for individual dischargers not represented by a third-party.

3. As an alternative to receiving regulatory coverage under this Order, a discharger may submit a report of waste discharge in accordance with the California Water Code section 13260 or a Notice of Intent for regulatory coverage under any applicable general waste discharge requirements for individual dischargers not represented by a third-party.

B. Farm Evaluation

Members shall complete a Farm Evaluation and submit a copy of the completed Farm Evaluation to the GBD Steering Committee according to the schedule below.²⁴ The Member must use the Farm Evaluation Template approved by the Executive Officer (see section VIII.C below). A copy of the Farm Evaluation shall be maintained at the Member's farming operations headquarters or primary place of business, and must be produced upon request by Central Valley Water Board staff. In addition, Members shall comply with the following requirements where applicable:

1. **All Members must submit the initial Farm Evaluation to the GBD Steering Committee by 1 March 2016.**

2. **Additional Terms for Members in Low Vulnerability Areas (Groundwater)**

Farm Evaluation must be updated and submitted to the GBD Steering Committee every five years, starting on 1 March 2021.

3. **Additional Terms for Members in High Vulnerability Areas (Groundwater)**

An updated Farm Evaluation must be prepared and submitted to the GBD Steering Committee by 1 March 2017 and annually thereafter. As part of the Farm Evaluation, the Member shall provide information on any outreach events attended in accordance with section IV.B.4 of this Order.

After 1 March 2019, the Executive Officer may approve reduction in the frequency of updates and submission of Farm Evaluations, if the GBD Steering Committee demonstrates that year to year changes in Farm Evaluation updates are minimal and the Executive Officer concurs that the practices identified in the Farm Evaluations are consistent with practices that, when properly implemented, will achieve receiving water limitations and, where applicable, achieve best practicable treatment or control.

C. Nitrogen Management Plan²⁵

Members must prepare and implement a Nitrogen Management Plan and submit the Nitrogen Management Plan Summary Report for the previous crop year as described below. The Member must use the Nitrogen Management Plan Template provided by the Executive Officer (see section VIII.C below). The Nitrogen Management Plan and Nitrogen Management Plan Summary Report

²⁴ Any farm map or information on the location of wells on the farm does not need to be provided to the Water Authority .

²⁵ The requirement for a Nitrogen Management Plan does not apply to parcels that are operated exclusively as a managed wetland.

shall be maintained at the Member's farming operations headquarters or primary place of business. The Member must provide the Nitrogen Management Plan and Summary Report to board staff, if requested or, should board staff or an authorized representative conduct an inspection of the Member's irrigated agricultural operation. In addition, Members shall comply with the following requirements where applicable:

1. All Members within a Nitrate High Vulnerability Groundwater Area

For Members located within a high vulnerability groundwater area, for which nitrate is identified as a constituent of concern, the Member must prepare and implement a certified Nitrogen Management Plan. The plan must be certified in one of the following ways:

- Self-certified by the Member who attends a California Department of Food and Agriculture or other Executive Officer approved training program for nitrogen plan certification. The Member must retain written documentation of their attendance in the training program; or
- Self-certified by the Member that the plan adheres to a site-specific recommendation from the Natural Resources Conservation Service (NRCS) or the University of California Cooperative Extension. The Member must retain written documentation of the recommendation provided; or
- Certified by a nitrogen management plan specialist as defined in Attachment E of this Order. Such specialists include Professional Soil Scientists, Professional Agronomists, Crop Advisors²⁶ certified by the American Society of Agronomy, or Technical Service Providers certified in nutrient management in California by the NRCS; or
- Certified in an alternative manner approved by the Executive Officer. Such approval will be provided based on the Executive Officer's determination that the alternative method for preparing the Nitrogen Management Plan meets the objectives and requirements of this Order.

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a. Deadlines for all Members

By 15 April 2016, Members shall prepare, and update by 15 April annually thereafter, a Nitrogen Management Plan. Notwithstanding the provisions of section VII.C.1, members in High Vulnerability Areas are not required to prepare a certified NMP until 15 April 2017. By 15 April 2017, and by 15 April annually, thereafter, all Members shall submit to the GBD Steering Committee the Nitrogen Management Plan Summary Report for the previous year.

b. Deadlines for Members re-designated from Low Vulnerability to High Vulnerability Groundwater Areas

Members with parcel(s) re-designated from low vulnerability to high vulnerability groundwater areas where nitrate is identified as a constituent of concern must prepare a Nitrogen Management Plan in compliance with this section (VII.C.1).²⁷ The schedule for certifying the Nitrogen Management Plan and submitting the initial Nitrogen Management Plan Summary Report will be established by the Executive Officer.

After 15 April 2019, the Executive Officer may approve reduction in the frequency of submission of Nitrogen Management Plan Summary Reports, if the GBD Steering Committee demonstrates that year to year changes in Nitrogen Management Summary Reports are minimal and the

²⁶ Should the California Department of Food and Agriculture and the California Certified Crop Adviser's establish a specific nitrogen management certification, any Certified Crop Adviser who certifies a nitrogen management plan must have a nitrogen management certification.

²⁷ The designation of the vulnerability area may change based on updates to the Groundwater Quality Assessment Report (see the MRP – Attachment B).

Executive Officer concurs that the implemented practices are achieving the performance standard.

2. Members within a Nitrate Low Vulnerability Groundwater Area

By 15 April 2018, all Members within low vulnerability areas, or within high vulnerability groundwater areas for which nitrate is not identified as a constituent of concern, shall prepare, and update by 15 April annually thereafter, a Nitrogen Management Plan. The Member must use the Nitrogen Management Plan Template provided by the Executive Officer (see section VIII.B below), or equivalent. Certification of the Nitrogen Management Plan and submittal of a Nitrogen Management Plan Summary Report are not required.

D. Mitigation Monitoring

As specified in this Order, certain Members are required to implement the mitigation measures included in Attachment C. Such Members shall submit mitigation monitoring by 1 March of each year to the GBD Steering Committee. Mitigation monitoring shall include information on the implementation of CEQA mitigation measures, including the mitigation measure implemented, potential environmental impact the mitigation measure addressed, location of the mitigation measure [parcel number, county], and any steps taken to monitor the ongoing success of the measure.

E. Notice of Termination

If the Member wishes to terminate coverage under this Order and withdraw its membership from the GDA Groundwater Quality Special Project, the Member shall submit a complete notice of termination (NOT) to the Central Valley Water Board and the GBD Steering Committee. Termination of regulatory coverage will occur on the date specified in the NOT, unless the Central Valley Water Board specifies otherwise. All discharges of waste to groundwater shall cease before the date of termination, and any discharges on or after this date shall be considered in violation of the California Water Code, unless other WDRs or waivers of WDRs regulate the discharge.

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VIII. Required Reports and Notices – GBD Steering Committee

The Central Valley Water Board or the Executive Officer may require any of the reports and notices to be submitted electronically, as long as the electronic format is reasonably available to the GBD Steering Committee. The GBD Steering Committee shall submit reports and notices in accordance with section IX, Reporting Provisions. Due dates for GBD Steering Committee required reports are summarized in Table 1 at the end of this Order. The GBD Steering Committee must prepare the following reports:

A. Membership (Participant) List

The GBD Steering Committee shall submit a list of its Members to the Central Valley Water Board annually by 31 July of each year. The membership list shall identify Members. The list shall also identify growers that have had their membership revoked and Members that are pending revocation. The membership list shall contain, at a minimum, the following information for each member: all parcel numbers covered under the membership, the county of each parcel, the section, township, and range associated with each parcel, the number of irrigated acres for each parcel, the Member's name, mailing address, the contact name and phone number of the individuals authorized to provide access to the enrolled parcels, and the name of the farm operator for each parcel, if different from the Member. In lieu of providing Members' phone numbers as part of the membership list, the GBD Steering Committee may provide the office contact name(s) and phone number(s) of a representative of the GBD Steering Committee. Any listed GBD Steering Committee office contact must be available for Central Valley Water Board staff to contact Monday through Friday (except established state holidays) from 8 am to 5 pm.

B. Templates

The Executive Officer will provide templates to the GBD Steering Committee to distribute to its Members. The templates must be used to comply with the requirements of this Order, where applicable. Prior to providing the GBD Steering Committee with the templates, the Executive Officer

will provide the GBD Steering Committee and other interested parties with thirty (30) days to comment on proposed templates. The following templates will be provided: Farm Evaluation; Nitrogen Management Plan; and Nitrogen Management Plan Summary Report.

C. Groundwater Quality Assessment Report and Evaluation/Monitoring Workplans

This Order’s strategy for evaluating groundwater quality and protection consists of 1) a Groundwater Quality Assessment Report, 2) a Management Practices Evaluation Program, and 3) a Groundwater Quality Trend Monitoring Program. Each of these elements has its own specific objectives briefly described below, with more detail provided in the attached MRP.

1. Groundwater Quality Assessment Report

The Groundwater Quality Assessment Report (GAR) provides the foundational information necessary for design of the Management Practices Evaluation Program, the Groundwater Quality Trend Monitoring Program, and the Groundwater Quality Management Plan. To accomplish this purpose, the GAR must include the following:

- Assessment of all available, applicable and relevant data and information to determine the high and low vulnerability areas where discharges from irrigated lands may result in groundwater quality degradation,
- Establish priorities for implementation of monitoring and studies within high vulnerability areas;
- Provide a basis for establishing workplans to assess groundwater quality trends;
- Provide a basis for establishing workplans and priorities to evaluate the effectiveness of agricultural management practices to protect groundwater quality; and
- Provide a basis for establishing groundwater quality management plans in high vulnerability areas and priorities for implementation of those plans.

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The GAR shall include the elements described in MRP section IV. The GAR shall be submitted to the Central Valley Water Board and Central Valley Salinity Coalition within one (1) year of approval of this Order. .

2. Management Practice Evaluation Program Workplan

Upon Executive Officer approval of the GAR, the GBD Steering Committee shall develop, either solely, or as a coordinated effort (see group option below), a Management Practice Evaluation Program Workplan. The workplan must meet the goals, objectives, and other requirements described in section IV of the attached MRP. The overall goal of the Management Practice Evaluation Program (MPEP) is to determine the effects, if any, irrigated agricultural practices have on groundwater under different conditions that could affect the discharge of waste from irrigated lands to groundwater (e.g., soil type, depth to groundwater, irrigation practice, crop type, nutrient management practice). A MPEP must address the conditions relevant to high vulnerability groundwater areas. The GBD Steering Committee may develop the workplan in accordance with one of the options described below.

a. Management Practices Evaluation Program Group Option

The GBD Steering Committee may fulfill its requirements as part of a Management Practices Evaluation Program Group. A Management Practices Evaluation Program (MPEP) Group refers to an entity that is formed to develop and carry out the management practices effectiveness evaluations required of this and other Orders applicable to the irrigated lands in the Central Valley.

At the time the GAR is submitted, the Water Authority must submit a copy of the agreement of the parties included in the MPEP Group. The agreement must include a description of the roles and responsibilities of each of the organizations in the MPEP Group; identification of the technical experts who will prepare and implement the workplans, along with their qualifications; the person(s) responsible for the timely completion of the workplans and reports required by this

Order; and an organizational chart showing the reporting relationships and responsibilities of the participants in the group.

The MPEP Group Workplan shall be submitted to the Central Valley Water Board within one (1) year after written approval of the GAR by the Executive Officer. Alternatively, the GBD Steering Committee may indicate, as part of its GAR submittal, that the GBD Steering Committee is participating in an MPEP Group and the Group Workplan will be submitted in accordance with the time frame of another Order applicable to irrigated lands in the Central Valley.

The GBD Steering Committee may use the group option if approved by the Executive Officer. The Executive Officer may disapprove the use of the group option, if 1) the group fails to meet required deadlines or implement the approved workplans, 2) the agreement submitted is not complete, or 3) the agreement submitted is deficient.

b. GBD Steering Committee Only Management Practices Evaluation Program

Under this option, the GBD Steering Committee MPEP Workplans shall be submitted to the Central Valley Water Board within one (1) year after written approval of the GAR by the Executive Officer.

3. Groundwater Quality Trend Monitoring Workplan

Upon Executive Officer approval of the GAR, the GBD Steering Committee shall develop a Groundwater Quality Trend Monitoring Workplan. The workplan must meet the goals, objectives, and other requirements described in section IV of the attached MRP. The overall objectives of groundwater trend monitoring are to determine current water quality conditions of groundwater relevant to irrigated agriculture and develop long-term groundwater quality information that can be used to evaluate the regional effects of irrigated agricultural practices. The workplan shall be submitted to the Central Valley Water Board within one (1) year after written approval of the GAR by the Executive Officer.

D. Monitoring Report

The GBD Steering Committee shall submit the Monitoring Report to the Central Valley Water Board in accordance with the requirements in section V.B of the MRP.

E. Groundwater Quality Management Plan (GQMP)

1. GQMP General Requirements

GQMPs submitted by the GBD Steering Committee shall conform to the requirements provided in the MRP, Appendix MRP-1. The Executive Officer may require changes to a management plan if the current management plan approach is not making adequate progress towards addressing the water quality problem or if the information reported by the GBD Steering Committee does not allow the Central Valley Water Board to determine the effectiveness of the management plan. Members shall comply with the revised management plans once they are approved by the Executive Officer.

The GBD Steering Committee shall submit a newly triggered GQMP to the Central Valley Water Board within sixty (60) days. For any GQMP that addresses salt or nitrates, the GQMP shall also be submitted to the Chair of the CV-SALTS Executive Committee. This 60-day period begins the first business day after the third party's receipt of the field or laboratory results that reported the triggering exceedance. The Central Valley Water Board will post the proposed GQMP for a public review and comment period. Stakeholder comments will be considered by Central Valley Water Board staff to determine if additional revisions are appropriate. The GBD Steering Committee may, at its discretion, implement outreach or monitoring contained in a proposed management plan before approval.

The GBD Steering Committee shall ensure continued implementation of GQMPs until approved as completed by the Executive Officer pursuant to the provisions contained in the attached MRP,

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Appendix MRP-1, section III. The GBD Steering Committee shall submit a progress report in compliance with the provisions contained in the attached MRP, Appendix MRP-1, section I.F.

2. Conditions Requiring Preparation of GQMP

A GQMP shall be developed by the GBD Steering Committee where: (1) there is a confirmed exceedance²⁸ (considering applicable averaging periods) of a water quality objective or applicable water quality trigger limit (trigger limits are described in section VII of the MRP) in a groundwater well and irrigated agriculture may cause or contribute to the exceedance; (2) in high vulnerability groundwater areas to be determined as part of the Groundwater Assessment Report process (see MRP section IV); (3) the Basin Plan requires development of a groundwater quality management plan for a constituent or constituents discharged by irrigated agriculture; or (4) the Executive Officer determines that irrigated agriculture may be causing or contributing to a trend of degradation of groundwater that may threaten applicable Basin Plan beneficial uses.

If the extent of Member contribution to a water quality exceedance(s) or degradation trend is unknown, the GBD Steering Committee may propose activities to be conducted to determine the cause, or to eliminate irrigated agriculture as a potential source instead of initiating a management plan. Requirements for source identification studies are set forth in the MRP, Appendix MRP-1, section I.G.

3. GQMP Not Required

At the request of the GBD Steering Committee or upon recommendation by Central Valley Water Board staff, the Executive Officer may determine that the development of a GQMP is not required. Such a determination may be issued if there is sufficient evidence indicating that Members discharging waste to the affected groundwater are meeting the receiving water limitations given in section III of this Order (e.g., evidence indicates that irrigated agriculture does not cause or contribute to the water quality problem).

4. Comprehensive Groundwater Quality Management Plan

In lieu of submitting separate groundwater quality management plans in the timeframe identified in section VIII.H.1, the GBD Steering Committee may submit a Comprehensive Groundwater Quality Management Plan along with its Groundwater Quality Assessment Report. With the exception of the timeframe identified in section VIII.H.1, all other provisions applicable to groundwater quality management plans in this Order and the associated MRP apply to the Comprehensive Groundwater Quality Management Plan. The Comprehensive Groundwater Quality Management Plan must be updated at the same time as the Management Plan Status Report (see attached MRP, Appendix MRP-1, section I.F) to address any constituents and areas that would have otherwise required submittal of a Groundwater Quality Management Plan.

F. Technical Reports

Where monitoring required by this Order is not effective in allowing the board to determine the effects of irrigated agricultural waste discharge on state waters or the effectiveness of water quality management practices being implemented, the Executive Officer may require technical reports be provided to determine the effects of irrigated agricultural operations or implemented management practices on surface water or groundwater quality.

²⁸ Exceedances of water quality objectives or water quality triggers will be determined based on available data and application of the appropriate averaging period. The averaging period is typically defined in in the Basin Plan, as part of the water quality standard established 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 standard, or criteria, or approved water quality trigger, the Central Valley Water Board will use the best available information to determine an appropriate averaging period.

G. Notice of Termination

If the GBP Steering Committee wishes to terminate its role in carrying out the third-party responsibilities set forth in section VIII of this Order and other applicable provisions, the GBD Steering Committee shall submit a notice of termination letter to the Central Valley Water Board and all of its Members. Termination of the GBD Steering Committee will occur 30-days from submittal of the notice of termination letter, unless otherwise specified in the letter. With its notice of termination sent to its Members, the GBD Steering Committee shall inform its Members of their obligation to obtain coverage under other WDRs or a waiver of WDRs for their discharges, or inform such Members that they shall cease all discharges of waste to groundwater.

H. Basin Plan Amendment Workplan

In its Groundwater Quality Assessment Report, the GBD Steering Committee may identify high vulnerability areas that do not meet water quality objectives and where groundwater quality likely would not support a designated beneficial use even in the absence of the discharge of waste. In such cases, the GBD Steering Committee has the option of pursuing a basin plan amendment (or identifying an existing basin plan amendment process) to address the appropriateness of the beneficial use. Should the GBD Steering Committee pursue this option, the GBD Steering Committee shall submit a Basin Plan Amendment Workplan (BPAW) to the Central Valley Water Board within 120 days of the approval of the Groundwater Quality Assessment Report. The BPAW must include a demonstration that the groundwater proposed for de-designation meets any criteria set forth in the Basin Plan that the Board considers in making exceptions to beneficial use designations. The BPAW must be prepared in accordance with the requirements in section V.D of the MRP.

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IX. Reporting Provisions

1. Members and the GBD Steering Committee must submit required reports and notices in accordance with the requirements in this Order and attached Monitoring and Reporting Program Order R5-2015-XXXX, unless otherwise requested by the Executive Officer.
2. All reports shall be accompanied by a cover letter containing the certification specified in section IX.3 below. The cover letter shall be signed by a person duly authorized under California law to bind the party submitting the report.
3. Each person signing a report required by this Order or other information requested by the Central Valley Water Board shall make the following certification:

"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 or represented Members 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 violations."

4. All reports prepared and submitted to the Executive Officer in accordance with the terms of this Order will be made available for public inspection at the offices of the Central Valley Water Board, 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 GBD Steering Committee or a Member 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. The complete report must be submitted with those portions that are asserted to be exempt in redacted form, along with separately-bound

unredacted pages (to be maintained separately by staff). The Member/GBP Steering Committee shall identify the basis for the exemption. If the Executive Officer cannot identify a reasonable basis for treating the information as exempt from disclosure, the Executive Officer will notify the Member/GBP Steering Committee that the information will be placed in the public file unless the Central Valley Water Board receives, within 10 calendar days, a satisfactory explanation supporting the claimed exemption. Data on waste discharges, water quality, meteorology, geology, and hydrogeology shall not be considered confidential.

5. To the extent feasible, when the Executive Officer directs a Member to submit a report directly to the board, the report shall be submitted electronically to irrlands@waterboards.ca.gov, unless the Member is unable to submit the report electronically. If unable to submit the report electronically, the grower shall mail or personally deliver the report to the Central Valley Water Board. All reports from the GBD Steering Committee shall be submitted electronically to its Central Valley Water Board-assigned staff liaison. Upon notification by the Central Valley Water Board, all reports shall be submitted directly into an online reporting system, to the extent feasible.

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X. Record-keeping Requirements

The Member and the GBD Steering Committee shall maintain any reports or records required by this Order for five years. Records maintained by the GBD Steering Committee include reports and plans submitted by Members to the GBD Steering Committee for purposes of complying with this Order. Individual Member information used by the GBD Steering Committee to prepare required reports must be maintained electronically and associated with the Member submitting the information. The maintained reports or records, including electronic information, shall be made available to the Central Valley Water Board upon written request of the Executive Officer. This includes all monitoring information, calibration and maintenance records of sampling equipment, copies of reports required by this Order, and records of all data used to complete the reports. Records shall be maintained for a minimum of five years from the date of sample, measurement, report, or application. This five-year period shall be extended during the course of any unresolved litigation regarding the discharge or when requested in writing by the Executive Officer.

XI. Annual Fees

1. California Water Code section 13260(d)(1)(A) requires persons subject to waste discharge requirements to pay an annual fee established by the State Water Resources Control Board (State Water Board).
2. Members shall pay an annual fee to the State Water Board in compliance with the Waste Discharge Requirement fee schedule set forth at 23 CCR section 2200. The GBD Steering Committee is responsible for collecting these fees from Members and submitting them to the State Water Board on behalf of Members.

XII. Time Schedule for Compliance

When a GQMP is required pursuant to the provisions in section VIII.H, the following time schedule shall apply as appropriate in order to allow Members sufficient time to achieve compliance with the groundwater receiving water limitations described in section III of this Order. The Central Valley Water Board may modify these schedules based on evidence that meeting the compliance date is technically or economically infeasible, or when evidence shows that compliance by an earlier date is feasible (modifications will be made per the requirements in section VI of this Order). Any applicable time schedules for compliance established in the Basin Plan supersedes the schedules given below (e.g., time schedules for compliance with salinity standards that may be established in future Basin Plan

amendments through the CV-SALTS process, or time schedules for compliance with water quality objectives subject to an approved TMDL).

Groundwater: The time schedule identified in a GQMP for addressing the water quality problem triggering its preparation must be as short as practicable, but may not exceed 10 years from the date the GQMP is submitted for approval by the Executive Officer. The proposed time schedules in the GQMP must be supported with appropriate technical or economic justification as to why the proposed schedules are as short as practicable.

This Order becomes effective on --date-- and remains in effect unless rescinded or revised by the Central Valley Water Board.

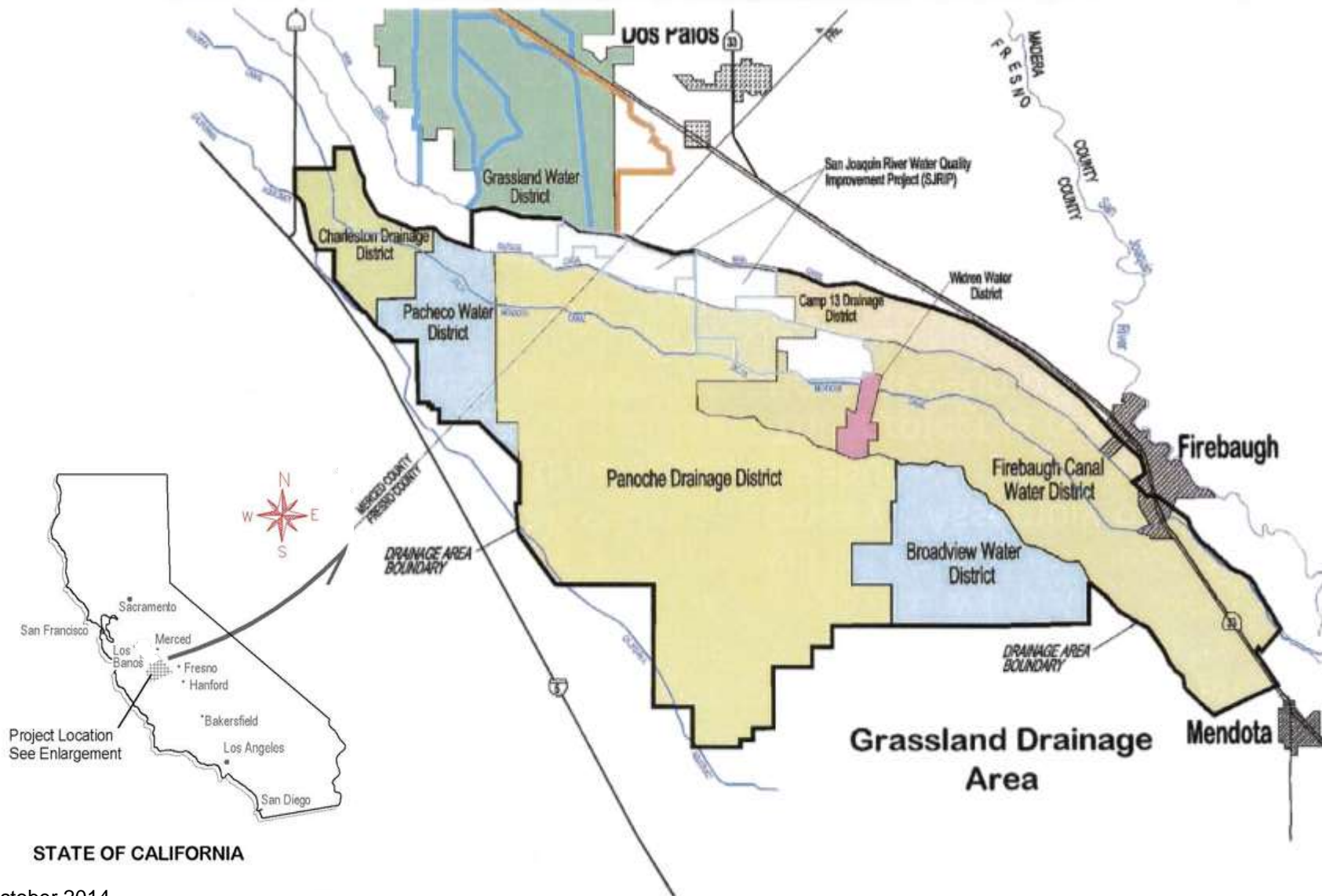
I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region on --date--.

PAMELA C. CREEDON, Executive Officer

Date

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Figure 1. Map of Grassland Drainage Area



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Table 1. Summary of GBD Steering Committee and grower deliverables, required timelines, and approximate due date based on the adoption of the Waste Discharge Requirements for Growers within the Grassland Drainage Area

GBP Steering Committee Requirements		Due Date
Provide Order requirements and describe confirmation process to members		30 days after Order approval
Comment on templates provided by the Executive Officer		30 days after Order approval
Groundwater Quality Assessment Report (GAR) outline		90 days after Order approval
Comprehensive Groundwater Quality Management Plan		1 year after Order approval
Groundwater Quality Assessment Report (GAR)		1 year after Order approval
Management Practices Evaluation Program (MPEP) Group Agreement		1 year after Order approval
EO will review Groundwater Assessment Report (GAR)		
Basin Plan Amendment Workplan		120 days from GAR approval
Trend Monitoring Workplan		1 year from GAR approval
Management Practices Evaluation Program (MPEP) Group Workplan		1 year from GAR approval
Membership List		31 July 2016, each year by 31 July
Groundwater QAPP		1 year from GAR approval
Monitoring Plan Update		30 April, each year
Annual Report		30 April, each year
Grower Requirements		
Enrollment		within five months of Order approval
Farm Evaluations (submit to GBD Steering Committee)		All members: prepare and submit by 15 December 2016 Low vulnerability areas: update and submit 1 March 2021 and every 5 years thereafter High vulnerability areas: update and submit 1 March 2017 and annually thereafter
Nitrogen Management Plan (keep on farm)		Low nitrate vulnerability area: prepare by 15 April 2018 and update annually. High nitrate vulnerability area: prepare by 15 April 2016, certified by 15 April 2017 and updated annually
NMP Summary Report (submit to GBD Steering Committee)		15 April 2017 and annually thereafter

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