
Central Valley Regional Water Quality Control Board

28 February 2020

Agricultural Water Quality Coalitions
[See Attached List]

Revision of Monitoring and Reporting Program Orders to Incorporate a Five-Year Assessment Report for Participants in a Regional Groundwater Quality Trend Monitoring Group

The Irrigated Lands Regulatory Program Orders (MRP Orders) require third-party groups to develop Groundwater Quality Trend Monitoring Workplans. The MRP Orders also allow third-party groups to participate in a Regional Groundwater Quality Trend Monitoring Group. The Central Valley Groundwater Monitoring Collaborative (CVGMC) was formed in 2017 to satisfy the groundwater quality trend monitoring requirements of ten third-party groups.

The CVGMC has proposed to develop and submit a Five-Year Assessment Report in lieu of individual third-party Groundwater Assessment Report updates and groundwater quality trend evaluations. The Five-Year Assessment Report will be an efficient way for the CVGMC to address multiple groundwater quality assessment and reporting requirements at one time. Therefore, I am revising the MRP Orders to align submittal dates and allow submittal of a Five-Year Assessment Report by the CVGMC's participating third-party groups.

If you have any questions regarding this letter, please contact Sue McConnell at (916) 464-4798 or sue.mcconnell@waterboards.ca.gov.

Original signed by

Patrick Pulupa
Executive Officer

Enclosure: Revision of Monitoring and Reporting Program Order for Growers Within the Central Valley that are Members of a Third-Party Group

Coalition Mailing Addresses

East San Joaquin Water Quality Coalition

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Sacramento Valley Water Quality Coalition

Bruce Houdesheldt
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San Joaquin County & Delta Water Quality Coalition

Mike Wackman
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Kings River Watershed Coalition Authority

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Kaweah Basin Water Quality Association

Donald Ikemiya
Post Office Box 2840
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Tule Basin Water Quality Coalition

David DeGroot
324 South Santa Fe Street
Visalia, CA 93292

Kern River Watershed Coalition Authority

Nicole Bell
Post Office Box 151
Bakersfield, CA 93302

Buena Vista Coalition

Tim Ashlock
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Cawelo Water District

David Hampton
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Westside Water Quality Coalition

Kris Lawrence
21908 Seventh Standard Rd.
McKittrick, CA 93251

Westlands Coalition

Edith Ramirez
Post Office Box 6056
Fresno, CA 93703

Western San Joaquin River Watershed and Grassland Drainage Area Coalitions

Joseph McGahan
Post Office Box 2157
Los Banos, CA 93635

Revision of Monitoring and Reporting Program Orders for Growers Within the Central Valley That Are Members of a Third-Party Group:

Tulare Lake Basin Area R5-2013-0120-08

Western Tulare Lake Basin Area R5-2014-0001-07

Eastern San Joaquin River Watershed R5-2012-0116-09

Western San Joaquin River Watershed R5-2014-0002-09

Grassland Drainage Area R5-2015-0095-04

San Joaquin County and Delta Area R5-2014-0029-05

Sacramento River Watershed Area R5-2014-0030-07

The Monitoring and Reporting Program Orders (MRP Orders) of the third-party group Waste Discharge Requirements Orders listed above are hereby revised as shown in Attachment 1 of this Order.

The third-party coalition groups shall comply with the MRP Orders as revised by the Executive Officer:

Buena Vista Coalition

Cawelo Water District Coalition

Kaweah Basin Water Quality Association

Kern River Watershed Coalition Authority

Kings River Water Quality Coalition

Tule Basin Water Quality Coalition

Westside Water Quality Coalition

Westlands Water Quality Coalition

East San Joaquin Water Quality Coalition

Westside San Joaquin River Watershed Coalition

Grassland Basin Drainage Steering Committee

San Joaquin County and Delta Water Quality Coalition

Sacramento Valley Water Quality Coalition

The Coalitions, on behalf of the individual member Dischargers, shall implement the above monitoring and reporting program and modifications as of the date of this revised Order.

Original signed by

3/9/2020

PATRICK PULUPA
Executive Officer

Date

Attachment 1

Revision of Monitoring and Reporting Program Orders for Growers Within the Central Valley That Are Members of a Third-Party Group:

Tulare Lake Basin Area Order R5-2013-0120-08

Attachment B

PART IV. GROUNDWATER QUALITY MONITORING AND MANAGEMENT PRACTICE ASSESSMENT, AND EVALUATION REQUIREMENTS

B. Groundwater Quality Assessment Report

The purpose of the Groundwater Quality Assessment Report (GAR) is to provide the technical basis informing the scope and level of effort for implementation of the Order's groundwater monitoring and implementation provisions. Three (3) months after receiving an NOA from the Central Valley Water Board, the third-party will provide a proposed outline of the GAR to the Executive Officer that describes data sources and references that will be considered in developing the GAR.

The third-party, either solely or in conjunction with other third-party groups,⁸ must review and update the GAR to incorporate new information every five (5) years. The first update shall be due 30 November 2021 in the Five-Year Assessment Report for participants of the Central Valley Groundwater Monitoring Collaborative, and no later than five (5) years after Executive Officer approval of the GAR for all others.

4. Groundwater vulnerability designations. The GAR shall designate high/low vulnerability areas for groundwater in consideration of high and low vulnerability definitions provided in Attachment E of the Order. Vulnerability designations may be refined/ updated periodically during the Monitoring Report process. The third-party must review and confirm or modify vulnerability designations during each GAR five (5) year update. The vulnerability designations will be made by the third-party using a combination of physical properties (soil type, depth to groundwater, known agricultural impacts to beneficial uses, etc.) and management practices (irrigation method, crop type, nitrogen application and removal rates, etc.). If the third-party intends to develop a Basin Plan Amendment Workplan (section VIII.N of the Order), the third-party must identify the areas where a high vulnerability designation results from exceedances due to naturally elevated levels of a constituent. The third-party shall provide the rationale for proposed vulnerability determinations. The Executive Officer will make the final determination regarding vulnerability designations.

⁸ Several third-party groups within the Central Valley have chosen to participate in a collaborative approach to meet the goals and objectives of this MRP, specifically with respect to certain Groundwater Quality Assessment Report and Groundwater Quality Trend Monitoring Requirements contained in section IV.B and IV.D. These third-party groups formed the Central Valley Groundwater Monitoring Collaborative (CVGMC), which has committed to the development and submittal of a Five-Year Assessment Report in lieu of individual third-party GAR updates and groundwater quality trend evaluations.

D. Groundwater Quality Trend Monitoring

3. *Reporting.* The results of trend monitoring are to be included in the third-party's Monitoring Report, unless the third-party is participating in a regional Trend Monitoring Group. Regional Trend Monitoring Group participants shall report the results of trend monitoring separately according to the following schedules:

By 1 May annually, submitted as part of an Annual Groundwater Quality Trend Monitoring Report.¹¹

By 30 November 2021 and every fifth year thereafter, included in the Five-Year Assessment Report.

The annual reports shall include a map of the sampled wells, tabulation of the analytical data, and time concentration charts. Groundwater quality monitoring data are to be submitted electronically to the State Water Board's GeoTracker Database and to the Central Valley Water Board.

PART V. THIRD-PARTY REPORTING REQUIREMENTS

B. Annual Groundwater Monitoring Results

Annually, by 1 May, the third-party shall submit the prior year's groundwater monitoring results as an excel workbook containing an export of all data records uploaded and/or entered into the State Water Board GeoTracker database. If any data are missing from the report, the submittal must include a description of what data are missing and when they will be submitted to the Central Valley Water Board. If data are not loaded into the GeoTracker database, this shall also be noted with the submittal.

E. Monitoring Report

The Monitoring Report shall be submitted by 31 August every year¹³. The report shall cover the previous annual monitoring periods, which is defined as either the water year (1 October through 30 September) or the calendar year. The report shall include [...]

¹¹ An Annual Groundwater Quality Trend Monitoring Report shall not be due during years in which a Five-Year Assessment Report is submitted.

¹³ If the third-party is participating in a regional Groundwater Quality Trend Monitoring Group, Monitoring Report components relevant to Groundwater Quality Trend Monitoring may be submitted separately according to the schedules identified in MRP Section IV.D.3.

Eastern San Joaquin River Watershed R5-2012-0116-09 Attachment B

PART IV. GROUNDWATER QUALITY MONITORING AND MANAGEMENT PRACTICE ASSESSMENT, AND EVALUATION REQUIREMENTS

B. Groundwater Quality Assessment Report

The purpose of the Groundwater Quality Assessment Report (GAR) is to provide the technical basis informing the scope and level of effort for implementation of the Order's groundwater monitoring and implementation provisions. Three (3) months after receiving an NOA from the Central Valley Water Board, the third-party will provide a proposed outline of the GAR to the Executive Officer that describes data sources and references that will be considered in developing the GAR.

The third-party, either solely or in conjunction with other third-party groups,¹¹ must review and update the GAR to incorporate new information every five (5) years. The first update shall be due 30 November 2021 in the Five-Year Assessment Report for participants of the Central Valley Groundwater Monitoring Collaborative, and no later than five (5) years after Executive Officer approval of the GAR for all others.

4. *Groundwater vulnerability designations.* The GAR shall designate high/low vulnerability areas for groundwater in consideration of high and low vulnerability definitions provided in Attachment E of the Order. Vulnerability designations may be refined or updated periodically during the Monitoring Report process. The third-party must review and confirm or modify vulnerability designations during each GAR five (5) year update. The vulnerability designations will be made by the third-party using a combination of physical properties (soil type, depth to groundwater, known agricultural impacts to beneficial uses, etc.) and management practices (irrigation method, crop type, nitrogen application and removal rates, etc.). The third-party shall provide the rationale for proposed vulnerability determinations. The Executive Officer will make the final determination regarding vulnerability designations.

D. Groundwater Quality Trend Monitoring

3. *Reporting.* The results of trend monitoring are to be included in the third-party's Monitoring Report, unless the third-party is participating in a regional Trend Monitoring Group. Regional Trend Monitoring Group participants shall report the results of trend monitoring separately according to the following schedules:

¹¹ Several third-party groups within the Central Valley have chosen to participate in a collaborative approach to meet the goals and objectives of this MRP, specifically with respect to certain Groundwater Quality Assessment Report and Groundwater Quality Trend Monitoring Requirements contained in section IV.B and IV.D. These third-party groups formed the Central Valley Groundwater Monitoring Collaborative (CVGMC), which has committed to the development and submittal of a Five-Year Assessment Report in lieu of individual third-party GAR updates and groundwater quality trend evaluations.

By 1 May annually, submitted as part of an Annual Groundwater Quality Trend Monitoring Report.¹⁴

By 30 November 2021 and every fifth year thereafter, included in the Five-Year Assessment Report.

The annual reports shall include a map of the sampled wells, tabulation of the analytical data, and time concentration charts. Groundwater quality monitoring data are to be submitted electronically to the State Water Board's GeoTracker Database and to the Central Valley Water Board.

PART V. THIRD-PARTY REPORTING REQUIREMENTS

E. Monitoring Report

The Monitoring Report shall be submitted by 1 May every year, with the first report due 1 May 2014, except for report components 17, 18, and 19 which will be due 1 July of each year¹⁹. The report shall cover the monitoring periods from the previous hydrologic water year. A hydrologic water year is defined as 1 October through 30 September. The report shall include [...]

¹⁴ An Annual Groundwater Quality Trend Monitoring Report shall not be due during years in which a Five-Year Assessment Report is submitted.

¹⁹ If the third-party is participating in a regional Groundwater Quality Trend Monitoring Group, Monitoring Report components relevant to Groundwater Quality Trend Monitoring may be submitted separately according to the schedules identified in MRP Section IV.D.3.

WESTERN TULARE LAKE BASIN AREA R5-2014-0001-07

Attachment B

PART IV. GROUNDWATER QUALITY MONITORING AND MANAGEMENT PRACTICE ASSESSMENT, AND EVALUATION REQUIREMENTS

B. Groundwater Quality Assessment Report

The purpose of the Groundwater Quality Assessment Report (GAR) is to provide the technical basis informing the scope and level of effort for implementation of the Order's groundwater monitoring and implementation provisions. Three (3) months after receiving an NOA from the Central Valley Water Board, the third-party will provide a proposed outline of the GAR to the Executive Officer that describes data sources and references that will be considered in developing the GAR.

The third-party, either solely or in conjunction with other third-party groups,⁸ must review and update the GAR to incorporate new information every five (5) years. The first update shall be due 30 November 2021 in the Five-Year Assessment Report for participants of the Central Valley Groundwater Monitoring Collaborative, and no later than five (5) years after Executive Officer approval of the GAR for all others.

4. *Groundwater vulnerability designations.* The GAR shall designate high/low vulnerability areas for groundwater in consideration of high and low vulnerability definitions provided in Attachment E of the Order. Vulnerability designations may be refined/ updated periodically during the Monitoring Report process. The third-party must review and confirm or modify vulnerability designations during each GAR five (5) year update. The vulnerability designations will be made by the third-party using a combination of physical properties (soil type, depth to groundwater, known agricultural impacts to beneficial uses, etc.) and management practices (irrigation method, crop type, nitrogen application and removal rates, etc.). If the third-party intends to develop a Basin Plan Amendment Workplan (section VIII.N of the Order), the third-party must identify the areas where a high vulnerability designation results from exceedances due to naturally elevated levels of a constituent. The third-party shall provide the rationale for proposed vulnerability determinations. The Executive Officer will make the final determination regarding vulnerability designations.

D. Groundwater Quality Trend Monitoring

3. *Reporting.* The results of trend monitoring are to be included in the third-party's Monitoring Report, unless the third-party is participating in a regional Trend Monitoring Group. Regional

⁸ Several third-party groups within the Central Valley have chosen to participate in a collaborative approach to meet the goals and objectives of this MRP, specifically with respect to certain Groundwater Quality Assessment Report and Groundwater Quality Trend Monitoring Requirements contained in section IV.B and IV.D. These third-party groups formed the Central Valley Groundwater Monitoring Collaborative (CVGMC), which has committed to the development and submittal of a Five-Year Assessment Report in lieu of individual third-party GAR updates and groundwater quality trend evaluations.

Trend Monitoring Group participants shall report the results of trend monitoring separately according to the following schedules:

By 1 May annually, submitted as part of an Annual Groundwater Quality Trend Monitoring Report.¹⁰

By 30 November 2021 and every fifth year thereafter, included in the Five-Year Assessment Report.

The annual reports shall include a map of the sampled wells, tabulation of the analytical data, and time concentration charts. Groundwater quality monitoring data are to be submitted electronically to the State Water Board's GeoTracker Database and to the Central Valley Water Board.

PART V. THIRD-PARTY REPORTING REQUIREMENTS

E. Monitoring Report

The Monitoring Report shall be submitted by 1 October every year, with the first report due 1 May 2014¹⁵. The report shall cover the monitoring periods from the previous hydrologic water year. A hydrologic water year is defined as 1 October through 30 September. The report shall include [...]

¹⁰ An Annual Groundwater Quality Trend Monitoring Report shall not be due during years in which a Five-Year Assessment Report is submitted.

¹⁵ If the third-party is participating in a regional Groundwater Quality Trend Monitoring Group, Monitoring Report components relevant to Groundwater Quality Trend Monitoring may be submitted separately according to the schedules identified in MRP Section IV.D.3.

WESTERN SAN JOAQUIN RIVER WATERSHED R5-2014-0002-09

Attachment B

PART IV. GROUNDWATER QUALITY MONITORING AND MANAGEMENT PRACTICE ASSESSMENT, AND EVALUATION REQUIREMENTS

B. Groundwater Quality Assessment Report

The purpose of the Groundwater Quality Assessment Report (GAR) is to provide the technical basis informing the scope and level of effort for implementation of the Order's groundwater monitoring and implementation provisions. Three (3) months after receiving an NOA from the Central Valley Water Board, the third-party will provide a proposed outline of the GAR to the Executive Officer that describes data sources and references that will be considered in developing the GAR.

The third-party, either solely or in conjunction with other third-party groups,⁹ must review and update the GAR to incorporate new information every five (5) years. The first update shall be due 30 November 2021 in the Five-Year Assessment Report for participants of the Central Valley Groundwater Monitoring Collaborative, and no later than five (5) years after Executive Officer approval of the GAR for all others.

4. *Groundwater vulnerability designations.* The GAR shall designate high/low vulnerability areas for groundwater in consideration of high and low vulnerability definitions provided in Attachment E of the Order. Vulnerability designations may be refined/ updated periodically during the Monitoring Report process. The third-party must review and confirm or modify vulnerability designations during each GAR five (5) year update. The vulnerability designations will be made by the third-party using a combination of physical properties (soil type, depth to groundwater, known agricultural impacts to beneficial uses, etc.) and management practices (irrigation method, crop type, nitrogen application and removal rates, etc.). If the third-party intends to develop a Basin Plan Amendment Workplan (section VIII.N of the Order), the third-party must identify the areas where a high vulnerability designation results from exceedances due to naturally elevated levels of a constituent. The third-party shall provide the rationale for proposed vulnerability determinations. The Executive Officer will make the final determination regarding vulnerability designations.

D. Groundwater Quality Trend Monitoring

3. *Reporting.* The results of trend monitoring are to be included in the third-party's Monitoring Report, unless the third-party is participating in a regional Trend Monitoring Group. Regional

⁹ Several third-party groups within the Central Valley have chosen to participate in a collaborative approach to meet the goals and objectives of this MRP, specifically with respect to certain Groundwater Quality Assessment Report and Groundwater Quality Trend Monitoring Requirements contained in section IV.B and IV.D. These third-party groups formed the Central Valley Groundwater Monitoring Collaborative (CVGMC), which has committed to the development and submittal of a Five-Year Assessment Report in lieu of individual third-party GAR updates and groundwater quality trend evaluations.

Trend Monitoring Group participants shall report the results of trend monitoring separately according to the following schedules:

By 1 May annually, submitted as part of an Annual Groundwater Quality Trend Monitoring Report.¹²

By 30 November 2021 and every fifth year thereafter, included in the Five-Year Assessment Report.

The annual reports shall include a map of the sampled wells, tabulation of the analytical data, and time concentration charts. Groundwater quality monitoring data are to be submitted electronically to the State Water Board's GeoTracker Database and to the Central Valley Water Board in a format specified by the Executive Officer.

PART V. THIRD-PARTY REPORTING REQUIREMENTS

A. Annual Groundwater Monitoring Results

Annually, by 1 May, the third-party shall submit the prior year's groundwater monitoring results as an Excel workbook containing an export of all data records uploaded and/or entered into the State Water Board GeoTracker database. If any data are missing from the report, the submittal must include a description of what data are missing and when they will be submitted to the Central Valley Water Board. If data are not loaded into the GeoTracker database, this shall also be noted with the submittal.

D. Monitoring Report

The Annual Monitoring Report (AMR) shall be submitted by 30 June every year, except for report components 19, 20, and 21 which will be due 30 November of each year¹⁷. The report shall cover the monitoring period from 1 March through the end of February, including two rain events. The report shall include [...]

¹² An Annual Groundwater Quality Trend Monitoring Report shall not be due during years in which a Five-Year Assessment Report is submitted.

¹⁷ If the third-party is participating in a regional Groundwater Quality Trend Monitoring Group, Monitoring Report components relevant to Groundwater Quality Trend Monitoring may be submitted separately according to the schedules identified in MRP Section IV.D.3.

GRASSLAND DRAINAGE AREA R5-2015-0095-04

Attachment B

PART III. GROUNDWATER QUALITY MONITORING AND MANAGEMENT PRACTICE ASSESSMENT, AND EVALUATION REQUIREMENTS

B. Groundwater Quality Assessment Report

The purpose of the Groundwater Quality Assessment Report (GAR) is to provide the technical basis informing the scope and level of effort for implementation of the Order's groundwater monitoring and implementation provisions. Three (3) months after the Order approval from the Central Valley Water Board, the Steering Committee will provide a proposed outline of the GAR to the Executive Officer that describes data sources and references that will be considered in developing the GAR.

The Steering Committee, either solely or in conjunction with other third-party groups,² must review and update the GAR to incorporate new information every five (5) years. The first update shall be due 30 November 2021 in the Five-Year Assessment Report for participants of the Central Valley Groundwater Monitoring Collaborative, and no later than five (5) years after Executive Officer approval of the GAR for all others.

4. *Groundwater vulnerability designations.* The GAR shall designate high/low vulnerability areas for groundwater in consideration of high and low vulnerability definitions provided in Attachment E of the Order. Vulnerability designations may be refined/ updated periodically during the Monitoring Report process. The Steering Committee must review and confirm or modify vulnerability designations during each GAR five (5) year update. The vulnerability designations will be made by the Steering Committee using a combination of physical properties (soil type, depth to groundwater, known agricultural impacts to beneficial uses, etc.) and management practices (e.g. irrigation method, crop type, nitrogen application and removal rates, extent of implementation, etc.). If the Steering Committee intends to develop a Basin Plan Amendment Workplan (as described in section VIII.I of the Order), the Steering Committee must identify the areas where a high vulnerability designation results from exceedances due to naturally elevated levels of a constituent. The Steering Committee shall provide the rationale for proposed vulnerability determinations. The Executive Officer will make the final determination regarding vulnerability designations.

D. Groundwater Quality Trend Monitoring

3. *Reporting.* The results of trend monitoring are to be included in the third-party's Monitoring Report, unless the third-party is participating in a regional Trend Monitoring Group. Regional

² Several third-party groups within the Central Valley have chosen to participate in a collaborative approach to meet the goals and objectives of this MRP, specifically with respect to certain Groundwater Quality Assessment Report and Groundwater Quality Trend Monitoring Requirements contained in section III.B and III.D. These third-party groups formed the Central Valley Groundwater Monitoring Collaborative (CVGMC), which has committed to the development and submittal of a Five-Year Assessment Report in lieu of individual third-party GAR updates and groundwater quality trend evaluations.

Trend Monitoring Group participants shall report the results of trend monitoring separately according to the following schedules:

By 1 May annually, submitted as part of an Annual Groundwater Quality Trend Monitoring Report.⁵

By 30 November 2021 and every fifth year thereafter, included in the Five-Year Assessment Report.

The annual reports shall include a map of the sampled wells, tabulation of the analytical data, and time concentration charts. Groundwater quality monitoring data are to be submitted electronically to the State Water Board's GeoTracker Database and to the Central Valley Water Board.

PART IV. STEERING COMMITTEE REPORTING REQUIREMENTS

A. Annual Groundwater Monitoring Results and Annual Monitoring Report

Annually, by 1 May, the Steering Committee shall submit the prior year's groundwater monitoring results as an Excel workbook containing an export of all data records uploaded and/or entered into the State Water Board GeoTracker database. If any data are missing from the report, the submittal must include a description of what data are missing and when they will be submitted to the Central Valley Water Board. If data are not loaded into the GeoTracker database, this shall also be noted with the submittal.

Annual Monitoring Report

The Monitoring Report shall be submitted by 1 May every year, except for report components 18, 19, and 20, which will be due 30 November of each year⁸. The report shall cover the monitoring from the previous calendar year. The report shall include [...]

⁵ An Annual Groundwater Quality Trend Monitoring Report shall not be due during years in which a Five-Year Assessment Report is submitted.

⁸ If the third-party is participating in a regional Groundwater Quality Trend Monitoring Group, Monitoring Report components relevant to Groundwater Quality Trend Monitoring may be submitted separately according to the schedules identified in MRP Section III.D.3.

SAN JOAQUIN COUNTY AND DELTA AREA R5-2014-0029-05 Attachment B

PART IV. GROUNDWATER QUALITY MONITORING AND MANAGEMENT PRACTICE ASSESSMENT, AND EVALUATION REQUIREMENTS

B. Groundwater Quality Assessment Report

The purpose of the Groundwater Quality Assessment Report (GAR) is to provide the technical basis informing the scope and level of effort for implementation of the Order's groundwater monitoring and implementation provisions. Three (3) months after receiving an NOA from the Central Valley Water Board, the third-party will provide a proposed outline of the GAR to the Executive Officer that describes data sources and references that will be considered in developing the GAR.

The third-party, either solely or in conjunction with other third-party groups,⁹ must review and update the GAR to incorporate new information every five (5) years. The first update shall be due 30 November 2021 in the Five-Year Assessment Report for participants of the Central Valley Groundwater Monitoring Collaborative, and no later than five (5) years after Executive Officer approval of the GAR for all others.

4. *Groundwater vulnerability designations.* The GAR shall designate high/low vulnerability areas for groundwater in consideration of high and low vulnerability definitions provided in Attachment E of the Order. Vulnerability designations may be refined/ updated periodically during the Monitoring Report process. The third-party must review and confirm or modify vulnerability designations during each GAR five (5) year update. The vulnerability designations will be made by the third-party using a combination of physical properties (soil type, depth to groundwater, known agricultural impacts to beneficial uses, etc.) and management practices (irrigation method, crop type, nitrogen application and removal rates, etc.). If the third-party intends to develop a Basin Plan Amendment Workplan (section VIII.N of the Order), the third-party must identify the areas where a high vulnerability designation results from exceedances due to naturally elevated levels of a constituent. The third-party shall provide the rationale for proposed vulnerability determinations. The Executive Officer will make the final determination regarding vulnerability designations.

D. Groundwater Quality Trend Monitoring

3. *Reporting.* The results of trend monitoring are to be included in the third-party's Monitoring Report, unless the third-party is participating in a regional Trend Monitoring Group. Regional

⁹ Several third-party groups within the Central Valley have chosen to participate in a collaborative approach to meet the goals and objectives of this MRP, specifically with respect to certain Groundwater Quality Assessment Report and Groundwater Quality Trend Monitoring Requirements contained in section IV.B and IV.D. These third-party groups formed the Central Valley Groundwater Monitoring Collaborative (CVGMC), which has committed to the development and submittal of a Five-Year Assessment Report in lieu of individual third-party GAR updates and groundwater quality trend evaluations.

Trend Monitoring Group participants shall report the results of trend monitoring separately according to the following schedules:

By 1 May annually, submitted as part of an Annual Groundwater Quality Trend Monitoring Report.¹²

By 30 November 2021 and every fifth year thereafter, included in the Five-Year Assessment Report.

The annual reports shall include a map of the sampled wells, tabulation of the analytical data, and time concentration charts. Groundwater quality monitoring data are to be submitted electronically to the State Water Board's GeoTracker Database and to the Central Valley Water Board in a format specified by the Executive Officer.

PART V. THIRD-PARTY REPORTING REQUIREMENTS

B. Annual Groundwater Monitoring Results

Annually, by 1 May, the third-party shall submit the prior year's groundwater monitoring results as an Excel workbook containing an export of all data records uploaded and/or entered into the State Water Board GeoTracker database. If any data are missing from the report, the submittal must include a description of what data are missing and when they will be submitted to the Central Valley Water Board. If data are not loaded into the GeoTracker database, this shall also be noted with the submittal.

E. Monitoring Report

The Monitoring Report shall be submitted by 1 May every year, with the first report due 1 May 2014, except for report components 18, 19, and 20 which will be due 30 November of each year¹⁸. The report shall cover the monitoring periods from the previous hydrologic water year. A hydrologic water year is defined as 1 October through 30 September. The report shall include [...]

¹² An Annual Groundwater Quality Trend Monitoring Report shall not be due during years in which a Five-Year Assessment Report is submitted.

¹⁸ If the third-party is participating in a regional Groundwater Quality Trend Monitoring Group, Monitoring Report components relevant to Groundwater Quality Trend Monitoring may be submitted separately according to the schedules identified in MRP Section IV.D.3.

SACRAMENTO RIVER WATERSHED AREA R5-2014-0030-07

Attachment B

PART IV. GROUNDWATER QUALITY MONITORING AND MANAGEMENT PRACTICE ASSESSMENT, AND EVALUATION REQUIREMENTS

B. Groundwater Quality Assessment Report

The purpose of the Groundwater Quality Assessment Report (GAR) is to provide the technical basis informing the scope and level of effort for implementation of the Order's groundwater monitoring and implementation provisions. Three (3) months after receiving an NOA from the Central Valley Water Board, the third-party will provide a proposed outline of the GAR to the Executive Officer that describes data sources and references that will be considered in developing the GAR.

The third-party, either solely or in conjunction with other third-party groups,⁹ must review and update the GAR to incorporate new information every five (5) years. The first update shall be due 30 November 2021 in the Five-Year Assessment Report for participants of the Central Valley Groundwater Monitoring Collaborative, and no later than five (5) years after Executive Officer approval of the GAR for all others.

4. *Groundwater vulnerability designations.* The GAR shall designate high/low vulnerability areas for groundwater in consideration of high and low vulnerability definitions provided in Attachment E of the Order. Vulnerability designations may be refined/ updated periodically during the Monitoring Report process. The third-party must review and confirm or modify vulnerability designations during each GAR five (5) year update. The vulnerability designations will be made by the third-party using a combination of physical properties (soil type, depth to groundwater, known agricultural impacts to beneficial uses, etc.) and management practices (irrigation method, crop type, nitrogen application and removal rates, etc.). If the third-party intends to develop a Basin Plan Amendment Workplan (section VIII.N of the Order), the third-party must identify the areas where a high vulnerability designation results from exceedances due to naturally elevated levels of a constituent. The third-party shall provide the rationale for proposed vulnerability determinations. The Executive Officer will make the final determination regarding vulnerability designations.

D. Groundwater Quality Trend Monitoring

3. *Reporting.* The results of trend monitoring are to be included in the third-party's Monitoring Report unless the third-party is participating in a regional Trend Monitoring Group. Regional

⁹ Several third-party groups within the Central Valley have chosen to participate in a collaborative approach to meet the goals and objectives of this MRP, specifically with respect to certain Groundwater Quality Assessment Report and Groundwater Quality Trend Monitoring Requirements contained in section IV.B and IV.D. These third-party groups formed the Central Valley Groundwater Monitoring Collaborative (CVGMC), which has committed to the development and submittal of a Five-Year Assessment Report in lieu of individual third-party GAR updates and groundwater quality trend evaluations.

Trend Monitoring Group participants shall report the results of trend monitoring separately according to the following schedules:

By 1 May annually, submitted as part of an Annual Groundwater Quality Trend Monitoring Report.¹²

By 30 November 2021 and every fifth year thereafter, included in the Five-Year Assessment Report.

The annual reports shall include a map of the sampled wells, tabulation of the analytical data, and time concentration charts. Groundwater quality monitoring data are to be submitted electronically to the State Water Board's GeoTracker Database and to the Central Valley Water Board in a format specified by the Executive Officer.

PART V. THIRD-PARTY REPORTING REQUIREMENTS

E. Annual Monitoring Report

The Annual Monitoring Report (AMR) shall be submitted by 1 May every year, with the first report due 1 May 2015, except for report components 19, 20, and 21 which will be due 30 November of each year¹⁹. The report shall cover the monitoring periods from the previous hydrologic water year. A hydrologic water year is defined as 1 October through 30 September. The report shall include [...]

¹² An Annual Groundwater Quality Trend Monitoring Report shall not be due during years in which a Five-Year Assessment Report is submitted.

¹⁹ If the third-party is participating in a regional Groundwater Quality Trend Monitoring Group, Monitoring Report components relevant to Groundwater Quality Trend Monitoring may be submitted separately according to the schedules identified in MRP Section IV.D.3.